UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO**

Commission File Number 001-39206

Schrodinger, Inc.

(Exact name of Registrant as specified in its Charter)

Delaware	**95-4284541**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
120 West 45th Street, 17th Floor New York, NY	**10036**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (212) 295-5800

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value $0.01 per share	SDGR	The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☒NO ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). YES ☒ NO ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☒		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

As of June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was $2,187,273,894 based upon the closing sale price of the registrant's common stock on that date.

As of February 26, 2021, the registrant had 60,848,093 shares of common stock and 9,164,193 shares of limited common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A relating to the 2021 Annual Meeting of Stockholders within 120 days of the end of the registrant's fiscal year ended December 31, 2020. Portions of such definitive proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent stated herein.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS AND INDUSTRY DATA

This Annual Report on Form 10-K, or this Annual Report, contains forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act and Section 21E of the Securities Exchange Act of 1934, as amended, that involve substantial risks and uncertainties. All statements, other than statements of historical fact, contained in this Annual Report, including statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words "anticipate," "believe," "contemplate," "continue," "could," "estimate," "expect," "intend," "may," "might," "plan," "potential," "predict," "project," "should," "target," "will," "would" or the negative of these words or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this Annual Report include, among other things, statements about:

- the potential advantages of our physics-based computational platform;
- our strategic plans to accelerate the growth of our software business;
- our research and development efforts for our internal drug discovery programs and our computational platform;
- the initiation, timing, progress, and results of our internal drug discovery programs or the drug discovery programs of our collaborators;
- our plans to discover and develop product candidates and to maximize their commercial potential by advancing such product candidates ourselves or in collaboration with others;
- our plans to leverage the synergies between our businesses;
- the timing of, the ability to submit applications for and the ability to obtain and maintain regulatory approvals for any product candidates we or one of our collaborators may develop;
- our drug discovery collaborations and our estimates or expectations regarding any milestone or other payments we may receive from such collaborations, including pursuant to our collaboration with Bristol-Myers Squibb Company;
- our expectations regarding our ability to fund our operating expenses and capital expenditure requirements with our cash, cash equivalents, and marketable securities;
- the potential advantages of our drug discovery programs;
- the rate and degree of market acceptance of our software solutions;
- the potential impact of the COVID-19 pandemic on our business, operations, liquidity and prospects;
- the rate and degree of market acceptance and clinical utility of our products;
- our estimates regarding the potential market opportunity for our software solutions and any product candidate we or any of our collaborators may in the future develop;
- our marketing capabilities and strategy;
- our intellectual property position;
- our ability to identify technologies with significant commercial potential that are consistent with our commercial objectives;
- our expectations related to the use of our cash, cash equivalents, and marketable securities;
- our expectations related to the key drivers of our performance;
- the impact of government laws and regulations;
- our competitive position and expectations regarding developments and projections relating to our competitors and any competing products, technologies, or therapies that are or become available;
- our ability to maintain and establish collaborations or obtain additional funding;
- our reliance on key personnel and our ability to identify, recruit, and retain skilled personnel; and

- our expectations regarding the time during which we will be an emerging growth company under the Jumpstart our Business Startup Acts of 2012.

We may not actually achieve the plans, intentions, or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this Annual Report, particularly in "Risk Factor Summary" below and "Risk Factors", that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Moreover, we operate in a competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this Annual Report. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures, or investments we may make or enter into.

You should read this Annual Report and the documents that we file with the Securities and Exchange Commission, or the SEC, with the understanding that our actual future results may be materially different from what we expect. The forward-looking statements contained in this Annual Report are made as of the date of this Annual Report, and we do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete. Our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

This Annual Report includes statistical and other industry and market data that we obtained from industry publications and research, surveys, and studies conducted by third parties as well as our own estimates of potential market opportunities. All of the market data used in this Annual Report involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such data. Industry publications and third-party research, surveys, and studies generally indicate that their information has been obtained from sources believed to be reliable, although they do not guarantee the accuracy or completeness of such information. Our estimates of the potential market opportunities for our product candidates include several key assumptions based on our industry knowledge, industry publications, third-party research, and other surveys, which may be based on a small sample size and may fail to accurately reflect market opportunities. While we believe that our internal assumptions are reasonable, no independent source has verified such assumptions.

Unless the context otherwise requires, we use the terms "company," "we," "us" and "our" in this Annual Report to refer to Schrödinger, Inc. and its consolidated subsidiaries.

RISK FACTOR SUMMARY

Our business is subject to a number of risks of which you should be aware before making an investment decision. Below we summarize what we believe are the principal risk factors but these risks are not the only ones we face, and you should carefully review and consider the full discussion of our risk factors in the section titled “Risk Factors”, together with the other information in this Annual Report.

- We have a history of significant operating losses, and we expect to incur losses over the next several years.
- If we are unable to increase sales of our software, or if we and our current and future collaborators are unable to successfully develop and commercialize drug products, our revenues may be insufficient for us to achieve or maintain profitability.
- Our quarterly and annual results may fluctuate significantly, which could adversely impact the value of our common stock.
- If our existing customers do not renew their licenses, do not buy additional solutions from us, or renew at lower prices, our business and operating results will suffer.
- A significant portion of our revenues are generated by sales to life sciences industry customers, and factors that adversely affect this industry could also adversely affect our software sales.
- The markets in which we participate are highly competitive, and if we do not compete effectively, our business and operating results could be adversely affected.
- We may never realize a return on our investment of resources and cash in our drug discovery collaborations.
- Although we believe that our computational platform has the potential to identify more promising molecules than traditional methods and to accelerate drug discovery, our focus on using our platform technology to discover and design molecules with therapeutic potential may not result in the discovery and development of commercially viable products for us or our collaborators.
- We may not be successful in our efforts to identify or discover product candidates and may fail to capitalize on programs, collaborations, or product candidates that may present a greater commercial opportunity or for which there is a greater likelihood of success.
- As a company, we do not have any experience in clinical development and have not advanced any product candidates into clinical development.
- A widespread outbreak of an illness or other health issue, such as the COVID-19 pandemic, could negatively affect various aspects of our business and make it more difficult to meet our obligations to our customers, and could result in reduced demand from our customers as well as delays in our drug discovery and development programs.
- If we fail to comply with our obligations under our existing license agreements with Columbia University, under any of our other intellectual property licenses, or under any future intellectual property licenses, or otherwise experience disruptions to our business relationships with our current or any future licensors, we could lose intellectual property rights that are important to our business.
- If we are unable to obtain, maintain, enforce, and protect patent protection for our technology and product candidates or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully develop and commercialize our technology and product candidates may be adversely affected.
- Our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.
- We are pursuing multiple business strategies and expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in managing our multiple business units and our growth, which could disrupt our operations.
- Our actual operating results may differ significantly from our guidance.
- Our executive officers, directors, and principal stockholders, if they choose to act together, have the ability to significantly influence all matters submitted to stockholders for approval.

PART I

Item 1. Business.

Overview

We are transforming the way therapeutics and materials are discovered.

Our differentiated, physics-based software platform enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly, at lower cost, and with, we believe, a higher likelihood of success compared to traditional methods. Our software platform is used by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. Our multidisciplinary drug discovery team also leverages our software platform to advance collaborative drug discovery and development programs and our own pipeline of novel therapeutics to address unmet medical needs.

Traditional drug discovery and development efforts have become increasingly complex, lengthy, capital-intensive, and are prone to high failure rates. Traditional drug discovery relies upon many rounds of costly and time-consuming manual molecule design, chemical synthesis, and experimental testing. One of the primary reasons for long timelines, high costs, and high failure rates in drug discovery is that predicting properties of molecules in advance of chemical synthesis is extremely complex and not amenable to traditional approaches.

Over the past 30 years and with the concerted efforts of hundreds of our scientists and software engineers, we have developed a physics-based computational platform that is capable of predicting critical properties of molecules with a high degree of accuracy. This key capability enables drug discovery teams to design and selectively synthesize molecules with more optimal properties, reducing the average time and costs required to identify a development candidate and increasing the probability that a drug discovery program will enter clinical development. Furthermore, we believe that development candidates with more optimized property profiles will have a higher probability of success in clinical development. Additionally, since the physics underlying the properties of drug molecules and materials is the same, we have been able to extend our computational platform to materials science applications in fields such as aerospace, energy, semiconductors, and electronic displays.

We offer our customers a variety of software solutions that accelerate all stages of molecule discovery, design, and optimization. In 2020, all of the top 20 pharmaceutical companies, measured by 2019 revenue, licensed our solutions, accounting for $31.9 million, or 34%, of our software revenue in 2020. The widespread adoption of our software, supported by our global team of sales, technical, and scientific personnel, has driven steady growth in our software revenue. Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate this scaling-up will drive future revenue growth. Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an annual contract value, or ACV, in excess of $100,000. We had 153, 131, and 122 such customers, which represented 79%, 78%, and 77% of our total ACV, for the years ended December 31, 2020, 2019, and 2018, respectively. In addition, our customer retention rate for our customers with an ACV over $100,000 for the year ended December 31, 2020 was 99% and was 96% or higher for each of the previous seven fiscal years. We believe the growth in the number of our customers demonstrates that companies are increasingly recognizing the power and efficiency of our platform while the retention in this group is indicative of the continued value of our platform. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Performance” for additional information regarding ACV and customer retention rate.

We also leverage our platform and capabilities across a portfolio of collaborative and internal drug discovery programs spanning a wide range of disease targets and indications. Our drug discovery group is comprised of a multidisciplinary team of over 80 experts in protein science, biochemistry, biophysics, medicinal and computational chemistry, and discovery scientists with expertise in preclinical and early clinical development. During the year ended December 31, 2020, we collaborated on more than 25 drug discovery programs with more than ten different biopharmaceutical companies, including a number of companies we co-founded. These collaborations generate drug discovery revenue, including upfront payments, research funding payments, and discovery and development milestones, and have the potential to produce additional milestone payments, option fees, and future royalties.

Furthermore, in mid-2018, we launched a pipeline of internal, wholly-owned programs with the goal of rapidly advancing the discovery of best-in-class and first-in-class therapies. Our initial programs are focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Since then, we have expanded into other therapeutic areas, including in the areas of immunology and neurology. We continue to advance multiple internal programs towards investigational new drug, or IND, -enabling studies, and we expect to submit up to three IND applications in 2022, with our first submission expected in the first half of 2022, subject to favorable data from IND-enabling studies. While our revenue-generating collaborations are an important component of our business, our strategy is to pursue an increasing number of wholly-owned programs

and strategically evaluate on a program-by-program basis entering into clinical development ourselves, entering into collaborations, or out-licensing programs to maximize commercial opportunities.

As part of this strategy, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with Bristol-Myers Squibb Company, or BMS, pursuant to which we and BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. The collaboration includes HIF-2 alpha and SOS1/KRAS, which are two of our internal pipeline programs. Under the terms of the agreement, we received a $55.0 million upfront payment from BMS, and we are eligible to receive up to $2.7 billion in total milestones from BMS across all potential targets, as well as a tiered percentage royalty on net sales of each product commercialized by BMS ranging from mid-single digits to low-double digits, subject to certain specified reductions. See "—Collaboration Agreement with Bristol-Myers Squibb Company" for additional information relating to this agreement.

We generated revenue of $108.1 million, $85.5 million, and $66.6 million in 2020, 2019, and 2018, respectively, representing year-over-year growth of 26% and 28%, respectively. Our net loss was $26.6 million, $25.7 million, and $28.4 million for the years ended December 31, 2020, 2019, and 2018, respectively.

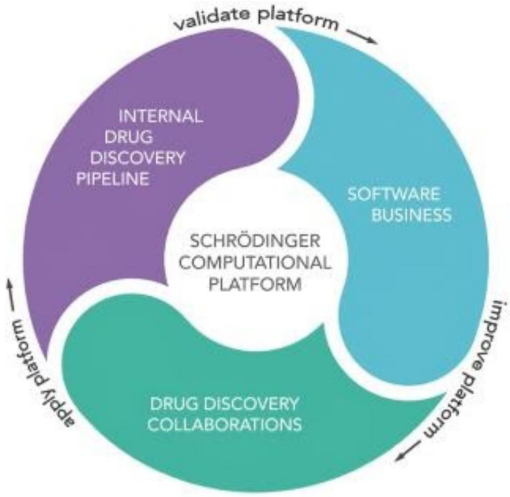
Strategy

Our mission is to improve human health and quality of life by transforming the way therapeutics and materials are discovered. Our physics-based approach and differentiated software solutions enable the discovery of novel molecules for drug development and materials applications more rapidly, at lower cost, and with, we believe, a higher likelihood of success compared to traditional methods. We license our software to biopharmaceutical and industrial companies, government laboratories, and academic institutions globally. We are also using our software and internal capabilities across a diverse portfolio of drug discovery programs.

- ***Advancing the science that underlies our computational platform:*** We have emerged as the leader in the field of physics-based computational drug discovery, and we believe our computational platform is far ahead of that of our nearest competitors. As of December 31, 2020, we had approximately 450 employees, roughly half of whom have Ph.D. degrees. We intend to maintain our industry-leading position by introducing new capabilities and refining our software to further strengthen our technology and advance the science underlying our platform.
- ***Growing and expanding our software business:*** We have experienced steady growth in our software revenues, achieving $92.5 million in revenue in 2020, an increase of 39% compared to 2019, primarily driven by broad adoption of our software solutions by the biopharmaceutical industry and the expansion of our materials science business.
  - *Life science software business:* In 2020, all of the top 20 pharmaceutical companies, measured by 2019 revenue, licensed our solutions, accounting for $31.9 million, or 34%, of our software revenue in 2020, and these companies have been our customers for an average of over 15 years. However, we estimate that many of our largest customers are currently purchasing only enough software to optimally enable one or two drug discovery projects, which typically represents a small fraction of their drug discovery projects. Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an ACV of over $100,000. We had 153, 131, and 122 such customers for the years ended December 31, 2020, 2019, and 2018, respectively. In addition, we had 16, 10, and 11 customers for the years ended December 31, 2020, 2019, and 2018, respectively, with an ACV of over $1.0 million. We intend to leverage our existing relationships with our customers to drive larger-scale adoption of our solutions. Further, we believe there remains a large opportunity for growth as there are thousands of biopharmaceutical companies that could benefit from our solutions.
  - *Materials science software business:* Beyond drug discovery, our solutions can be leveraged for broad application to address industrial challenges in molecule design, including in the fields of aerospace, energy, semiconductors and electronic displays. We intend to continue growing this business through increased brand awareness and a build-out of industry-specific functionality.
- ***Accelerating growth of our drug discovery business:*** We also apply our computational platform across a diversified portfolio of more than 25 drug discovery programs through collaborations with companies we have co-founded, with biopharmaceutical companies, and through our own efforts on internal programs. Our collaborations generate revenues through upfront payments, research funding, preclinical and clinical milestones as well as the potential for option fees, commercial milestones, and future royalties. We also benefit from equity positions in our co-founded companies. Our drug discovery group comprises over 80 scientists, including biologists, medicinal chemists, biochemists, crystallographers, drug metabolism and pharmacokinetics scientists, and pharmacologists.
  - We are actively working with our collaborators to discover novel therapies. We also intend to add new collaborations that offer scientific synergies and favorable economic terms.

- We plan to progress our existing internal programs and continue to add new programs that leverage our computational platform. As we progress these programs, we will strategically evaluate on a program-by-program basis entering into clinical development ourselves, entering into collaborations, or out-licensing programs to maximize commercial opportunities. As part of this strategy, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS pursuant to which we and BMS agreed to collaborate in the discovery, research and preclinical development of small molecule compounds for biological targets in the oncology, neurology, and immunology therapeutic areas.

- ***Leveraging the synergies between our businesses:*** We believe that there are significant synergies within our business. We leverage the feedback that we receive from our software customers, collaborators, and internal drug discovery experts to improve the functionality of our platform, which we believe supports increased customer adoption of our solutions and more rapid advancement of our collaborative and internal drug discovery programs. In addition, the success of our collaborators in advancing drug discovery programs provides significant validation of our platform and approach, which we believe increases the attractiveness of our platform to customers, helps us establish new collaborations, and validates the potential of our own internal drug discovery programs.



Central to our ability to pursue these distinct lines of business is a firewall policy consisting of a set of well-established protocols and technology measures designed to ensure that the intellectual property of our software customers and drug discovery collaborators remains confidential and segregated.

Industry Overview

Traditional drug discovery and development efforts have become increasingly complex, lengthy, capital-intensive, and are prone to high failure rates. Traditional drug discovery involves experimental screening of existing libraries of molecules to find molecules with detectable activity, or "hit molecules," followed by many rounds of chemical synthesis to attempt to optimize those hit molecules to a development candidate that can be advanced into clinical development. Efforts to optimize initial hit molecules for a drug discovery project involve costly and iterative synthesis and testing of molecules seeking to identify a molecule with the required property profile. The optimal profile has the acceptable balance of properties such as potency, selectivity, solubility, bioavailability, half-life, permeability, drug-drug interaction potential, synthesizability, and toxicity. These properties are often inversely correlated, meaning that optimizing one property often de-optimizes others. The challenge of optimizing hit molecules is amplified by the limited number of molecules that can be feasibly tested across these properties with traditional methods. As a result, this optimization process often fails to yield a molecule with a satisfactory property profile to be a development candidate, which is why many drug discovery programs fail to advance into clinical development.

The traditional approach to drug discovery takes too long, is too prone to failure, and is too costly. Successfully reaching an IND application filing requires on average five to six years, and the average success rates suggest two out of three projects will fail. Accounting for such failures, the average cost to complete a successful IND filing is $35 million.

A typical drug discovery project only has the budget and time to synthesize and assay fewer than 10,000 molecules, because the cost and timelines associated with interrogating a greater number of molecules is impractical. This small sampling of molecules represents a minuscule fraction of the total number of molecules that could potentially be synthesized. Exploring such a limited number of molecules reduces the likelihood of identifying molecules with the desired property profile, which we believe leads to development candidates with higher failure rates.

Being able to predict molecular properties before initiating costly and time-consuming experimental synthesis would accelerate drug discovery, reduce costs, and increase the probability of success. If it were possible to accurately predict critical properties of molecules, fewer molecules would have to be experimentally synthesized and tested. As a result, larger pools of molecules could be analyzed allowing for more selective synthesis of molecules, leading to higher-quality molecules. In addition, with predictive computational methods, better selections of molecules would be synthesized through exploration of larger portions of chemical space, leading to higher-quality molecules that would in turn have a higher probability of progressing through clinical development and obtaining regulatory approval for commercial sale.

There have been many attempts to improve the efficiency of the drug discovery process by using computational methods to predict properties of molecules. One of the primary computational methods that many companies have attempted to deploy is machine learning, often referred to as artificial intelligence, or AI. One of the main benefits of machine learning is its ability to rapidly process data at scale. However, machine learning on its own has significant limitations and has therefore had a limited impact on improving the efficiency of the drug discovery process. Machine learning requires input data, referred to as a training set, to build a predictive model. This model is expected to accurately predict properties of molecules similar to the training set, but cannot extrapolate to molecules that are not similar to the training set. Accordingly, since the number of possible molecules that could be synthesized is effectively infinite, machine learning can only cover a minuscule fraction of the total number of molecules that could potentially be synthesized.

The other primary computational method that has been attempted involves using fundamental, “first-principles” physics-based methods, which require a deep and thorough understanding of the specific property to be computed. However, physics-based methods are difficult to develop and can be slow compared to machine learning. Further, to apply such methods to design molecules that will bind with high affinity to a particular protein target, the three-dimensional structure of that protein must be generated with sufficient atomic detail to enable application of these physics-based approaches, which is referred to as being “structurally enabled,” and such structures have been historically difficult to obtain. Another factor preventing computational chemistry from realizing its promise has been limited compute speed. However, despite all of these challenges, physics-based methods have a significant advantage over machine learning in that they do not require a training set and can, in principle, compute properties for any molecule.

Our Platform

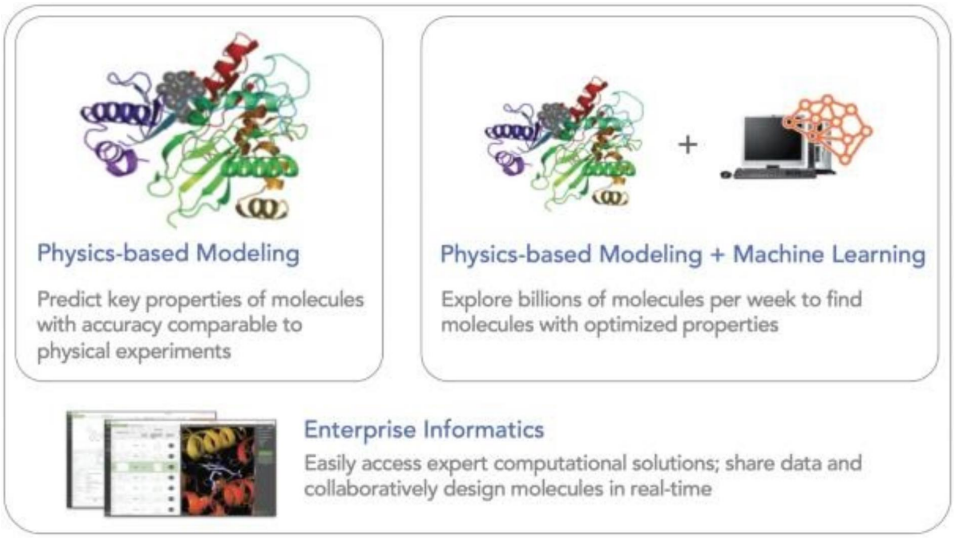
Over the past 30 years and with the concerted effort of hundreds of our scientists and software engineers, we have developed a computational platform that is capable of predicting critical properties of molecules with a high degree of accuracy. We have built our platform on a foundation of rigorous, physics-based methods, combined with the rapid data processing and scaling advantages of machine learning, that together provide a significant advantage over traditional methods. We believe that physics-based simulation is at a strategic inflection point as a result of the increased availability of massive computing power, combined with a more sophisticated understanding of models and algorithms and the growing availability of high-resolution protein structures.

We have demonstrated that our software platform can have a transformative impact on the drug discovery process by:

- reducing the average time and cost required to identify a development candidate; and
- increasing the probability of drug discovery programs entering clinical development.

Based on our collaborative drug discovery efforts to date, we believe that the development candidates discovered using our platform have a higher probability of successfully progressing through clinical development than the industry average.

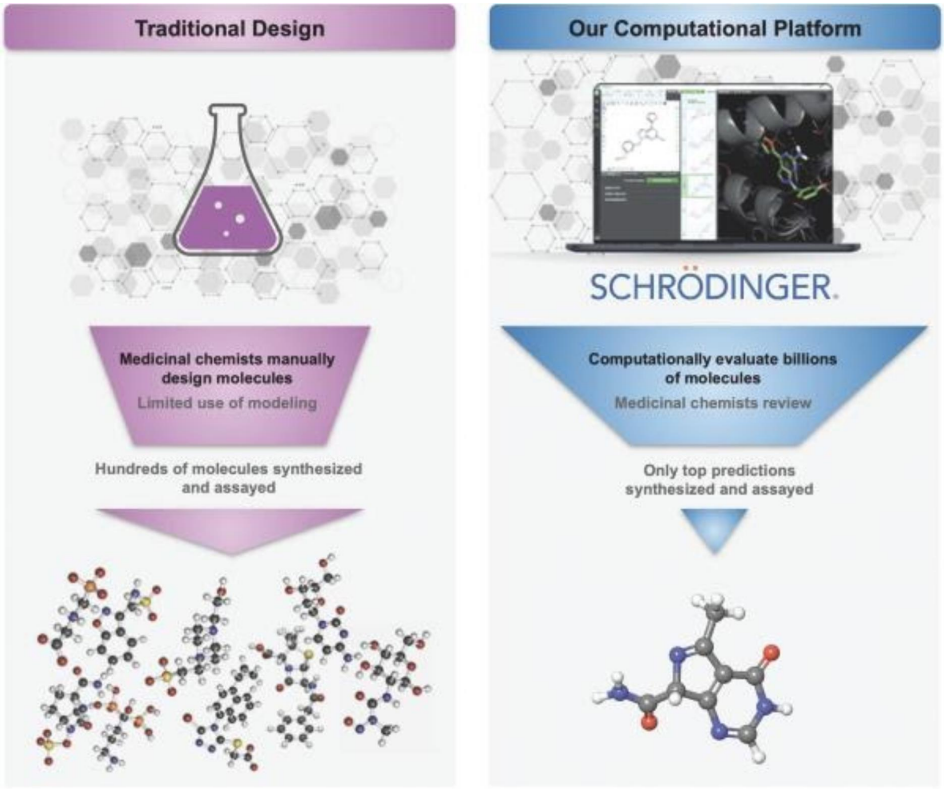
As shown below, we achieve these outcomes by tightly integrating our predictive physics-based methods, which have a high degree of accuracy, with machine learning, which is highly scalable. In addition, our platform enables real-time collaboration on drug discovery projects to inform decision-making and fully benefit from the predictive capabilities of our computational platform.



Our computational platform provides the following significant technological advantages over traditional approaches to drug discovery, all of which enable shortening timelines, decreasing costs, and increasing the probability of success of drug discovery efforts:

- **Speed.** Our platform is able to evaluate molecules in hours rather than the weeks that it typically takes to synthesize and assay molecules in the laboratory.
- **Scale.** Our platform can explicitly evaluate tens of billions of molecules per week, whereas traditionally operated discovery projects only synthesize approximately one thousand molecules per year, thereby increasing the probability that we find a novel molecule with the desired property profile.
- **Quality.** In a peer-reviewed study, our platform was tested against traditional methods for selecting tight-binding molecules and resulted in an eight-fold increase in the number of molecules with the desired affinity.

The figure below compares the optimization process of drug discovery using traditional methods and our approach.



Our computational platform includes a broad array of proprietary capabilities:

- **Faster Lead Discovery**: the ability to rapidly identify potent molecules suitable to initiate hit-to-lead and lead optimization efforts via solutions for virtual screening of extremely large libraries of molecules, as well as physics-based replacement of the central core of a molecule, known as scaffold hopping, to identify novel, highly potent molecules unavailable in library collections;
- **Accurate Property Prediction**: the ability to assess key properties of drug-like molecules using physics-based calculations with accuracy comparable to that of experimental laboratory assays, to facilitate optimization of drug properties, including drug potency, selectivity, and bioavailability;
- **Large-Scale Molecule Exploration**: the ability to computationally ideate and explore novel, high-quality drug-like molecules for consideration by discovery project teams utilizing computational enumeration and generative machine learning techniques that are trained and constructed to yield molecules that are synthetically feasible;
- **Large-Scale Molecule Evaluation**: the ability to scale our calculations of key drug properties to ultra-large idea sets of over a billion molecules to enable more rapid and successful identification of high-quality drug candidate molecules via integration of next-generation machine-learning methods with our physics-based techniques, as well as large-scale utilization of internal and cloud computing resources; and
- **Integrated Data Management and Visualization**: the ability to generate, access, and analyze the data derived from complex calculations integrated with assay data through a powerful and user-friendly graphical interface.

Recognition of our scientific advances has come through customer adoption, and in citations of publications in peer reviewed journals. For example, the initial paper describing our ligand-protein docking program, Glide, published in 2004 is currently the most cited paper in the history of the *Journal of Medicinal Chemistry*, a premier journal in its field. Glide continues to be broadly used as a hit-finding technology throughout the biopharmaceutical industry by our customers. We have made many similar scientific advances in fields including druggability assessment, affinity calculation, protein structure refinement, and molecule ideation and design. These advances were achieved by our team of hundreds of Ph.D.-level scientists and software engineers with extensive input from our Scientific Advisory Board, or SAB, which includes thought leaders in computational chemistry, physics-based simulations, statistical mechanics, and machine learning.

Also, critically important to the advances we have made are the performance gains offered by using graphical processing unit, or GPU, computing and the cloud. Our platform is capable of running on all major cloud providers and taking advantage of their combined compute power. Combining the dramatic effects of GPU and cloud computing with our integrated physics-based and machine learning technologies enables shortening timelines, decreasing costs, and increasing the probability of success of drug discovery efforts.

Our computational platform is also applicable to new problems of interest and new fields of study. Since the underlying physics that drives a biologic to bind to its target is no different than the physics that drives a small drug molecule to bind to a protein, we have been able to successfully apply these technologies to the discovery of biologics. Similarly, the physics underlying the properties of materials is no different than the physics underlying the properties of drug molecules. Therefore, we have successfully applied our computational platform to materials science applications, including in the fields of aerospace, energy, semiconductors, and electronic displays.

Software Business

Overview

We are transforming drug discovery and materials design by driving widespread adoption of our computational platform by biopharmaceutical and industrial companies, academic institutions, and government laboratories globally.

We are the leading provider of computational software solutions for drug discovery to the biopharmaceutical industry. In 2020, all of the top 20 pharmaceutical companies, measured by 2019 revenue, licensed our solutions, accounting for $31.9 million, or 34%, of our software revenue in 2020. Additionally, in 2020, our software was used by researchers around the world at more than 1,690 academic institutions. The widespread adoption of our software is supported by an approximately 130-person global team of sales, technical, and scientific personnel. Our direct sales operations span across the United States, Europe, Japan and India, and we have sales distributors in other important markets, including China and South Korea.

We have a diverse and large existing customer base, ranging from startup biotechnology companies to the largest global pharmaceutical companies as well as an increasing number of materials science customers. Our ten largest software customers represented approximately 29% of our software revenue in 2020, and no single software customer represented more than 5% of our software revenue. We continue to expand our customer base as we promote the education and recognition of the potential of our computational platform across industries. As of December 31, 2020, we had 1,463 active customers, which we define as the number of customers who had an ACV of at least $1,000 in a given fiscal year, and the figure below shows the growth in the number of our active customers since 2013.

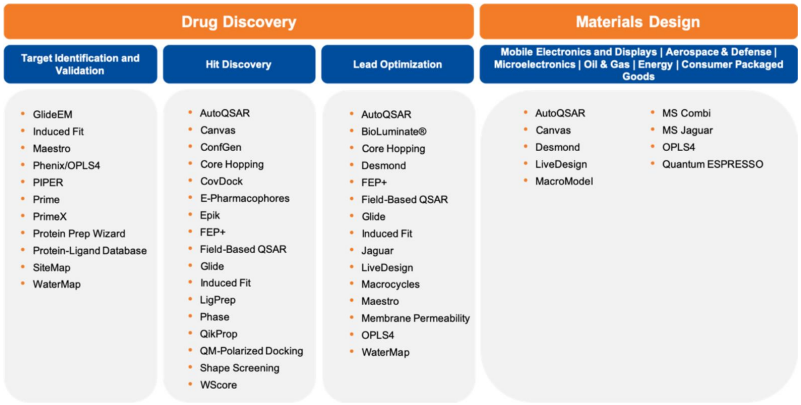
We believe there is a significant opportunity to expand the adoption of our platform within our growing customer base. Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate that this scaling-up will drive future revenue growth. Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an ACV over $100,000. We had 153, 131, and 122 such customers for the years ended December 31, 2020, 2019, and 2018, respectively. In addition, we had 16, 10, and 11 customers for the years ended December 31, 2020, 2019, and 2018, respectively, with an ACV of over $1.0 million. We believe biopharmaceutical companies are increasingly recognizing and applying the power and efficiency of our platform.

Furthermore, we believe our sales and marketing approach and the quality of our software solutions help us cultivate long-standing relationships and reoccurring sales. This is demonstrated by the length of our key relationships, with the average tenure of our 10 largest customers in 2020 being over 18 years. Furthermore, our ability to expand our customer relationships over time is exemplified by our ability to retain our customers with an ACV over $100,000. For the year ended December 31, 2020, our year-over-year customer retention rate for our customers with an ACV over $100,000 was 99% and was 96% or higher for each of the previous seven fiscal years. We believe the continued expansion of our customer base coupled with our ability to expand our customers' use of our software will continue to drive revenue growth. The figure below shows the different ways in which we are accelerating our growth.

See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Performance" for additional information regarding ACV and customer retention rate.

Our Software Solutions for Drug Discovery

We offer our customers a variety of software solutions that accelerate all stages of molecule discovery, design, and optimization pursuant to agreements with terms typically for one year. Our licenses give our customers the ability to execute a certain number of calculations across specified software solutions. Certain of our key software solutions are highlighted below, along with the particular stage of drug discovery in which they are employed:



- **Target Identification and Validation:** the identification and evaluation of a protein target that might be worthwhile to pursue as the subject of a drug discovery campaign.
    - **WaterMap** characterizes the locations and energetics of water molecules occupying the binding site of, or solvating, a target protein. From this analysis, one can infer the druggability of a protein, as well as uncover opportunities to significantly increase binding affinity by exploiting the water structure in the binding site.
    - **SiteMap** allows binding site identification and evaluation to help locate potential protein binding sites, including allosteric sites, and predict the approximate druggability of those sites.
    - **GlideEM, PrimeX and Phenix/OPLS4** enable optimization of intermediate quality experimental protein structures to a quality sufficient to drive structure-based drug discovery.
- **Hit Discovery**: the identification of hit molecules.
    - **FEP+** is our free energy calculation software. In hit discovery, this software can be used to replace the central core of earlier known tight binding molecules to identify novel, highly potent molecules unavailable in library collections. Often these molecules have much higher binding affinity and have a better property profile than typical hit molecules. FEP+ has also recently been extended to support the calculation of absolute binding affinities, which enables the software to evaluate and triage diverse molecules sharing no common peripheral features in a hit discovery context.
    - **Glide** is our virtual screening program that is used to screen libraries of molecules to find hit molecules likely to bind a particular protein target in a specific conformation.
    - **WScore** is our next-generation virtual screening program that utilizes a more accurate and robust description of protein-ligand interaction solvation effects. This and other novel features enable WScore to more reliably find hit molecules for challenging protein targets when screening libraries of molecules.
    - **Shape** uses the three-dimensional structure and shape of earlier known hit molecules to find new hits when screening libraries of molecules.
    - **AutoQSAR/DeepChem** uses modern machine-learning methods trained to earlier known hit molecules to find novel hits when screening libraries of molecules.
    - **Induced fit docking**, or **IFD**, can computationally predict the binding mode of molecules to a binding site of a protein, including predicting how the conformation of the protein binding site may reorganize upon binding the molecule.
- **Hit to Lead and Lead Optimization:** Hit to lead is the stage at which small molecule hits are evaluated and undergo limited optimization to identify promising lead molecules. Lead optimization improves on the property profile of lead molecules by designing new analogs with improved potency, reduced off-target activities, and favorable physicochemical/metabolic properties.
    - **FEP+** is our free energy calculation software. In the hit to lead and lead optimization phases of drug discovery, FEP+ is used to predict the binding affinity of ligands to proteins with accuracy approaching that of physical experiments. It allows precise rank-ordering of large libraries of virtual molecules so that only the most potent molecules are synthesized in a program, which can save time and reduce cost. FEP+ can also be used to calculate the binding selectivity, solubility, and mutational resistance profiles of molecules, which are key properties for the optimization of bioavailability, toxicology, and efficacy.
    - **AutoQSAR/DeepChem** uses modern machine-learning methods to produce predictive quantitative structure-activity relationship, or QSAR, models. This allows more accurate methods, such as FEP+, to be applied at a much greater scale but with less accuracy to much larger sets of molecules than would otherwise be possible and enables predictive QSAR models of other properties to be developed and deployed on drug discovery projects.
    - **PathFinder** is an enumeration tool that enables the rapid exploration of synthetically tractable ligands. When PathFinder is deployed in conjunction with multiparameter optimization, machine learning, and FEP+ simulations, it provides a streamlined approach to create and evaluate large sets of synthetically tractable, lead-like, potent ligands.
- **Software Solutions Used Throughout the Drug Discovery Process:**
    - **LiveDesign** is our user-friendly enterprise informatics solution that enables interactive and collaborative molecule design, aggregation and sharing of data, and end-to-end discovery project coordination between chemists, modelers, and biologists.
    - **Maestro** is our user-friendly modeling environment, which allows expert modelers to utilize our advanced modeling solutions.

Our Software Solutions for Materials Science

We also sell software licenses to customers engaged in molecule design for industrial purposes. The software solutions for our materials science customers leverage much of the same technology as our software for biopharmaceutical companies. In addition,

similar to traditional drug discovery efforts, traditional approaches to discovering new molecules in these fields also suffer from long timelines, and it can take as long as 10 to 20 years to bring new materials to the market. We are focused on leveraging our technology to transform the way new materials are discovered, and we believe that materials science industries are only beginning to recognize the potential of computational methods. We are continuing to build a team of subject matter experts to further drive adoption of our computational platform in each of the following areas in which we currently operate:

- **mobile electronics and displays**—organic electronics (OLED);
- **aerospace and defense**—polymers, composites;
- **microelectronics**—semiconductors, thin film processing;
- **oil and gas**—catalysis, reactivity;
- **energy**—alternative energy, batteries; and
- **consumer packaged goods**—soft matter, formulations.

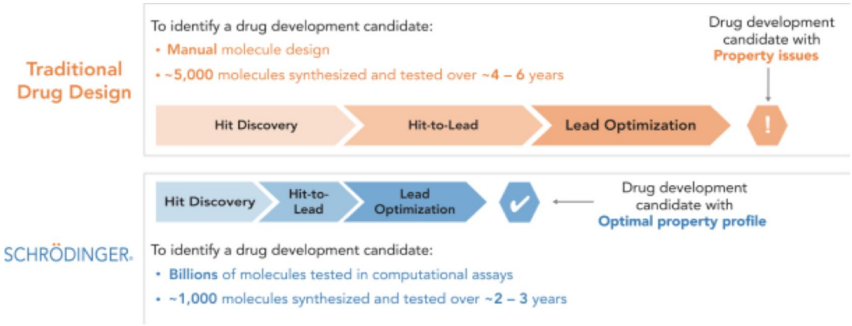
As part of our ongoing efforts to further advance our software solutions for materials science applications, in June 2020, we entered into a three-year agreement with Gates Ventures, LLC to develop and apply atomistic simulations methods to improve battery performance.

Drug Discovery Business

Overview

We are using our computational platform in both collaborative and internal drug discovery programs. Traditional drug discovery and development efforts have become increasingly complex, lengthy, capital-intensive, and are prone to high failure rates. Decreasing returns on investments in drug research and development have created a significant opportunity for us to leverage our computational platform to design and discover new medicines. In drug discovery stages, our platform can reduce the time and cost required to identify a development candidate with a more optimized property profile as compared to traditional methods. We believe that these candidates with more optimized property profiles will have a higher probability of success in clinical development.

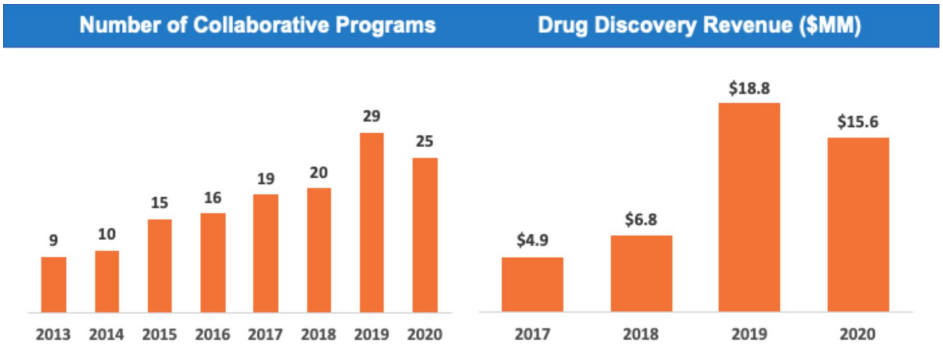
The figure below illustrates the advantages in time, cost, and molecule quality of our computational drug design approach over traditional drug discovery approaches.



The figures below show the number of collaborative programs we have worked on in each given year, as well as the amount of drug discovery revenue we have generated for the periods presented. While our revenue-generating collaborations are an important component of our business, our strategy is to pursue an increasing number of internal programs and strategically evaluate on a program-by-program basis entering into clinical development ourselves, entering into collaboration, or out-licensing programs to maximize commercial opportunities. As part of this strategy, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS pursuant to which we and BMS agreed to collaborate in the discovery, research and clinical development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. These programs are not included in the number of collaborative programs described below. See "—Our Pipeline" for a further discussion of these programs.

Furthermore, collaborative programs which we did not actively work on in a given year, but for which we are still eligible to receive potential milestone payments and royalties, are not included in the number of collaborative programs below. For the year ended December 31, 2020, we had nine such programs compared to two and one for the years ended December 31, 2019 and 2018, respectively. The number of these programs has increased as a result of a higher proportion of our collaborative programs advancing beyond the discovery phase, which is typically the stage where we are actively involved in the discovery of development candidates together with our collaborators.

Our drug discovery revenue consists of revenue generated from collaborations through the combination of upfront payments, research funding payments, discovery and development milestones, and other fees, as well as any revenue generated from our pipeline of internal drug discovery programs, including revenue generated from our collaboration with BMS. As part of the BMS collaboration in November 2020, we received an upfront payment of $55.0 million. Approximately $1.0 million of the upfront payment was included in our drug discovery revenue for the year ended December 31, 2020, with the remainder recorded as deferred revenue as of December 31, 2020.



Our Drug Discovery Expertise

Our drug discovery group is comprised of a team of over 80 experts in protein science, biochemistry, biophysics, medicinal and computational chemistry, and discovery scientists with expertise in preclinical and early clinical development. Many of our scientists have decades of biopharmaceutical industry experience across multiple disciplines and areas of expertise and deploy our computational platform across an array of disease targets and indications. Our differentiated, physics-based platform empowers our integrated team of experts to design better molecules, in shorter time frames, and at a lower cost than traditional drug design.

Our Drug Discovery Collaborations

Over the last decade, leveraging our platform and expertise, we have steadily grown our portfolio of collaborations with biopharmaceutical companies that have provided us with significant income and have the potential to produce additional milestone payments, option fees, and future royalties. These programs pursue design of clinical candidates across a wide range of therapeutic target protein classes and indications. Many of these programs are pursuing novel molecules for targets where a low-dose small molecule inhibitor or activator with optimal drug-like properties has been difficult to achieve or where selectivity for the target of interest has been difficult to achieve relative to other proteins. We have steadily grown our pipeline of collaborations by selectively entering into drug discovery collaborations with high potential from a large number of opportunities. Among the key factors that we use to select collaborators are whether the targets are well-validated, have high therapeutic potential, and are amenable to the strengths of our computational platform, and whether or not the collaborator brings complementary capabilities, all of which we believe contribute to an increased probability of success.

Through access to the maximum potential scale of our computational platform and our drug discovery and software development teams, our collaborators receive the following key benefits:

- **Immediate utilization of our platform:** Ability to immediately and efficiently leverage the full benefits of our computational platform, without the need for training or ramp-up time, thereby enabling accelerated drug discovery.

- **Access to massive compute power**: Ability to run our computational software on one of the largest GPU clusters dedicated to drug design in the industry, thereby avoiding the time and cost needed to build this infrastructure on their own.
- **Early access to cutting-edge functionality**: Real-time access to emerging solutions as they are being developed.
- **Target exclusivity**: Under our collaboration agreements, we agree to design drugs for a particular protein target or targets using our computational platform and knowhow exclusively for the collaborator.

Collaboration Agreements

We have entered into a number of collaborations with biopharmaceutical companies under which our collaborators are pursuing research in a number of therapeutics areas, including without limitation, various programs in oncology, antifungal diseases, fibrosis, inflammatory bowel disease, metabolic disease, autoimmune disease, immune-oncology, cardiopulmonary disease and tuberculosis. Our current collaborators include Ajax Therapeutics, Inc., Bright Angel Therapeutics Inc., Faxian Therapeutics, LLC, or Faxian, Morphic Holding, Inc., Nimbus Therapeutics, LLC, Ono Pharmaceuticals Co., LTD., Sanofi S.A., ShouTi Inc., Sun Pharma Advanced Research Company Ltd., TB Alliance and Takeda Pharmaceuticals Company Limited, or Takeda. With the exception of Takeda, where we retain all intellectual property rights until Takeda exercises its option to acquire a program, all of the programs being pursued under these collaborations are fully owned and controlled by each respective collaborator. Our opportunity to receive potential revenues from any of these programs is generally limited to research funding payments, development, regulatory, and commercial milestones, option fees to license projects and royalties on commercial sales, if any. We are not responsible for advancing their preclinical or clinical development or their commercialization, if approved.

Equity Stakes. We have received equity consideration in certain of our collaborators, and from time to time, we have also made additional equity investments in certain of these collaborators. As noted above, all of these programs are fully owned and controlled by each respective collaborator, with the exception of Faxian, which is a 50/50 joint venture. The following table presents our equity stakes on an issued and outstanding basis as of December 31, 2020:

Company	**Ownership %**
Ajax Therapeutics, Inc.	8.7%
Bright Angel Therapeutics Inc.	33.3%
Faxian Therapeutics, LLC (JV)	50.0%
Morphic Holding, Inc. (1)	2.6%
Nimbus Therapeutics, LLC (2)	6.9%
Ravenna Pharmaceuticals, Inc.	3.1%
Relay Therapeutics, Inc.(3)	0.5%
ShouTi, Inc.	6.1%

(1) Based on the number of shares of common stock outstanding as of February 24, 2021, as reported on Morphic's Annual Report on Form 10-K for the year ended December 31, 2020, as filed with the SEC on March 1, 2021.
(2) On a fully diluted unit basis.
(3) Based on the number of shares of common stock outstanding as of November 10, 2020, as reported on Relay's Quarterly Report on Form 10-Q for the quarter ended September 30, 2020, as filed with the SEC on November 12, 2020. In January 2021, we disposed of our equity stake in Relay Therapeutics, Inc. for aggregate consideration of $15.7 million.

Financial Rights. In addition to our equity stakes in certain of our collaborators, we also have rights to various payments on a collaborator-by-collaborator agreement basis including research funding payments, discovery, development, and commercial milestones, potential option fees to license projects, and potential royalties in the single-digit range. Under certain of our collaboration agreements, we are also eligible to receive a percentage of our collaborators' sublicense revenue.

Most of our collaborative programs are currently still in the discovery stages. Generally, the size of the payments we are eligible to receive from a collaborative program increases as the program advances. As a result of the broader validation of our platform, we intend to pursue an increasing number of wholly-owned programs, and we will continue evaluating new collaborative programs that fit our selection criteria and where the collaborator's particular expertise has the potential to create substantial value. Importantly, our current collaboration agreements typically also contemplate additional program targets being added, allowing our collaborators to potentially increase the number of programs under our current collaboration agreements.

However, because these collaborations are not under our control, we cannot predict whether or when we might achieve any event-based increases in research funding payments, milestone payments, royalty or other payments under these collaborations or estimate the full amount of such payments, and we may never receive any such payments. For a further discussion of the risks we face

with respect to receipt of any of these payments, please refer to “Risk Factors—Risks Related to Drug Discovery—We may never realize a return on our investment of resources and cash in our drug discovery collaborations”.

How We Work with Our Collaborators. Generally, our existing collaboration agreements provide that we agree to design drugs for a particular target or targets using our computational platform and knowhow exclusively for the collaborator. The collaborator retains the intellectual property related to any molecules developed under the collaboration. Generally, our collaborators are not contractually required to provide us with, nor do we expect generally to receive, access to nonpublic information regarding key developments related to the advancement of these collaboration programs, such as clinical trial results, including safety and efficacy data, regulatory communications, or commercialization plans and strategies. To the extent we do receive such information, our collaboration agreements generally require us to maintain the confidentiality of information we receive under the collaboration.

As our collaboration strategy has evolved, we are seeking to take more direct control and responsibility for all aspects of a drug discovery project and own a higher percentage of the value generated in the completed programs. For example, under our collaboration with Takeda, after mutual agreement on the target(s) of interest, our drug discovery group conducts all drug discovery research and pharmacology activities through the development candidate stage. Takeda has the option to acquire the program at either the lead optimization stage or development candidate stage and to develop and commercialize product candidate(s) from the program. Importantly, under the collaboration with Takeda, we control the drug discovery process and retain all intellectual property rights to any product candidates that are discovered under the program until Takeda exercises its option to acquire the program. The collaboration with Takeda anticipates drug discovery research on up to six targets. Three programs have been initiated to date in schizophrenia, oncology, and neurodegenerative disease with multiple milestone payments achieved. Two of these programs continue to advance while the program in schizophrenia is no longer an active collaboration and all rights to this program will continue to be retained by us.

Our Pipeline

In mid-2018, we launched a pipeline of internal, wholly-owned programs with the goal of rapidly advancing the discovery of best-in-class and first-in-class therapies. Our initial programs are focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Since then, we have expanded into other therapeutic areas, including in the areas of immunology and neurology. We continue to advance multiple internal programs towards investigational new drug, or IND, -enabling studies, and we expect to submit up to three IND applications in 2022, with our first submission expected in the first half of 2022, subject to favorable data from IND-enabling studies. Our strategy is to pursue an increasing number of wholly-owned programs and strategically evaluate on a program-by-program basis entering into clinical development ourselves, entering into collaborations, or out-licensing programs to maximize commercial opportunities.

As part of this strategy, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS pursuant to which we and BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. The collaboration includes HIF-2 alpha and SOS1/KRAS, which are two of our internal pipeline programs. Under the terms of the agreement, we received a $55.0 million upfront payment from BMS, and we are eligible to receive up to $2.7 billion in total milestones from BMS across all potential targets, as well as a tiered percentage royalty on net sales of each product commercialized by BMS ranging from mid-single digits to low-double digits, subject to certain specified reductions. See “—Collaboration Agreement with Bristol-Myers Squibb Company” for additional information relating to this agreement.

The following is a summary of our drug discovery programs:

Our Approach to Target Selection

Our selection of targets is based on an extensive analysis of human targets and drug discovery programs. We analyze targets using automated methods at scale. The key steps we take in prioritizing programs involve:

- **Structural and modeling enablement**. We use our computational platform to analyze protein structure quality as well as druggability of binding sites across thousands of target proteins in parallel. For a subset of high-quality structures of interest, we confirm amenability to our computational platform.
- **Evaluation of therapeutic potential**. Our selection of targets is strongly influenced by the level of validation of the target, including analysis of human genetics and prior clinical data.
- **Identification of unsolved design challenges**. We determine whether there are property profile challenges that could be solved by the application of our computational platform and provide a clinically meaningful differentiated, best-in-class or first-in-class product opportunity.
- **Assessment of potential value of pathways and mechanisms.** We evaluate industry and commercial interest as well as the clinical utility with the aim of prioritizing programs with high commercial and therapeutic potential.

Using this comprehensive analysis, we have identified a large number of protein targets that we believe are amenable to our technology. We continue to evaluate a number of additional targets using this analysis methodology.

CDC7 Kinase Inhibitor Program

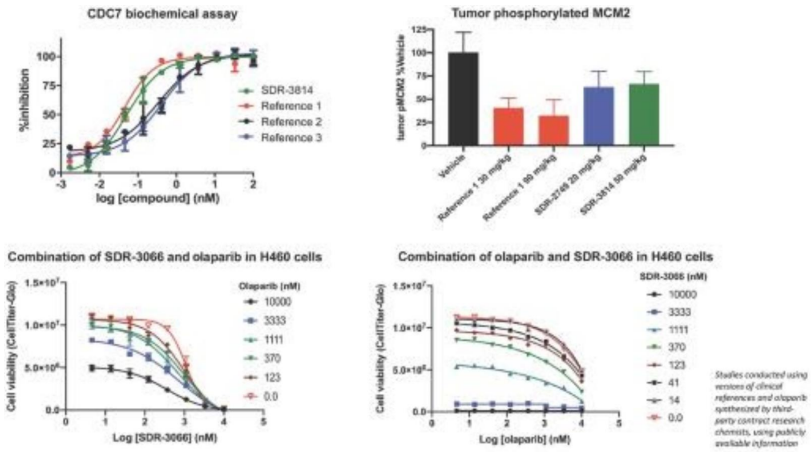
We are developing tight-binding, selective, novel small molecule inhibitors of CDC7 for the treatment of advanced solid and liquid tumors. CDC7 is a serine/threonine protein kinase that has been shown to be a required step in DNA replication initiation. CDC7 levels are high in certain tumors, and are thought to be linked to these cancer cells' proliferative capacity and ability to bypass normal DNA damage responses.

CDC7 phosphorylates and activates the enzymes responsible for DNA replication initiation. Disruption of CDC7 activity in cancer cells leads to delayed DNA replication, cell cycle abnormalities, and cell death.

The antiproliferative potential of CDC7 inhibition was validated by a third party in Phase 1 clinical trials of a CDC7 inhibitor in which responses were observed in patients, including those with bladder and pancreatic cancer. Prior to this positive result, existing CDC7 inhibitors were not sufficiently tight-binding, lacked selectivity, and demonstrated poor pharmacokinetic properties.

In order to maximize the number of cancer cells in cell cycle arrest, very tight-binding inhibitors are required to achieve durable clinical impact as monotherapy or in the context of clinical combinations. Using our computational platform, we have identified multiple tight-binding, selective, and novel CDC7 inhibitor series and are preparing for preclinical development activities.

As shown in the figure below, our early molecules demonstrated inhibition of a downstream biomarker of CDC7, intratumoral phosphorylated MCM2, or pMCM2, that was used as an endpoint in recent third-party clinical trials of a CDC7 inhibitor. Furthermore, one series of our molecules displayed high levels of brain penetration in preclinical assays, which may provide an opportunity for the treatment of brain metastases in solid tumor patients. Combination of our early molecules and the Wee1 inhibitor AZD1775 (adavosertib), which is undergoing clinical trial testing in cancer patients, showed additive anti-proliferative effect in Colo205 cells, or human colon adenocarcinoma cells. Combination of another of our molecules and olaparib, an FDA-approved PARP inhibitor marketed as LYNPARZA by AstraZeneca, also showed additive anti-proliferative effects in H460 cells, or human non-small-cell lung cancer cells. Additive effects were also shown in combination with ceralasertib, an ataxia telangiectasia and Rad3-related, or ATR, inhibitor in Colo205 cells.



Wee1 Kinase Inhibitor Program

Wee1 is a gatekeeper checkpoint kinase that prevents cellular progression through the cell cycle allowing time for DNA repair before cell division takes place. We are therefore developing tight-binding, selective Wee1 inhibitors with optimized physicochemical properties that we believe will be well suited for combinations with other DNA damage response therapies such as PARP and ATR inhibitors for the treatment of ovarian, pancreatic, breast, and lung cancers.

Wee1 acts as a negative regulator of entry into mitosis at the G2/M transition by protecting the nucleus from CDC2, an important activator that triggers cell division. Wee1 is one of the two mechanisms known by which the G2 checkpoint is initiated in response to DNA damage. Blockade at the G2 checkpoint is especially important, as some tumors rely on DNA repair at the G2 checkpoint. Thus, inhibition of Wee1 can trigger massive DNA breakage and apoptosis in tumor cells.

A Wee1 inhibitor currently being investigated in Phase 2 clinical trials by a third party has shown clinically meaningful tumor regression with partial responses and stable disease in ovarian cancer and small cell lung carcinoma, and is being studied in combinations with chemotherapy, PARP inhibitors, and immunotherapy.

A prior third party Wee1 inhibitor that has advanced to clinical trials may have off-target effects resulting from inhibition of polo-like kinase 1, or PLK1, and inactivation of a liver enzyme, CYP3A4, which is responsible for elimination of drug and drug metabolites from the body, making dosing and combinations more challenging. We believe our computational platform can be used to identify tight-binding molecules with optimized drug-like properties that exhibit neither of these liabilities.

We have identified Wee1 inhibitor lead molecules that are tight-binding and 100-fold more selective for Wee1 versus PLK1, and have exhibited a favorable property profile, including no observable inactivation of CYP3A4. We are pursuing *in vitro* and *in vivo* Wee1 and PARP inhibitor combination studies and studies in patient-derived tumor mouse models and other combinations, which we believe may have implications for future clinical combination trials.

MALT1 Inhibitor Program

We are developing novel MALT1 inhibitors for the treatment of patients with non-Hodgkin's lymphoma and chronic lymphocytic leukemia who are resistant to or have relapsed on Bruton's tyrosine kinase, or BTK, inhibitors, a currently-approved therapy for lymphoma patients. Constant activation of nuclear factor-kappa B, or NF-kB, a key signaling molecule in B cells, is a hallmark of several subtypes of lymphoma. MALT1 is a protein that is downstream of BTK in the NF-kB signaling pathway and when rearranged, drives lymphoma cell growth.

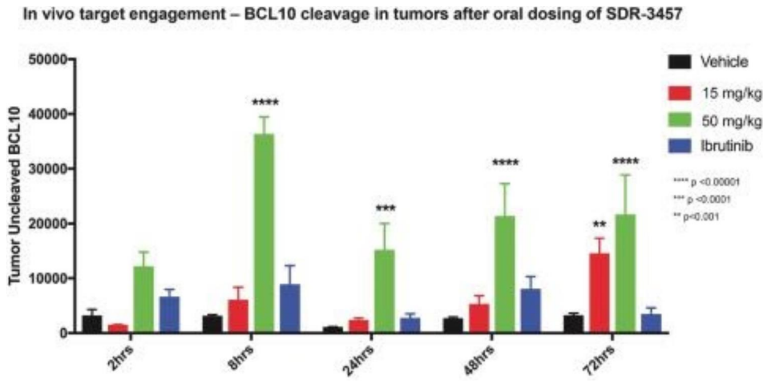
The anti-proliferative effect of covalent BTK inhibitors, such as ibrutinib and acalabrutinib, provides clinical and commercial proof-of-concept that inhibiting NF-kB signaling can be effective for the treatment of B-cell malignancies with elevated B-cell receptors signaling, including chronic lymphocytic leukemia, Waldenström's macroglobulinemia, mantle cell lymphoma and marginal zone lymphoma. However, a common active site mutation in patients following long-term BTK inhibitor treatment prevents covalent binding of ibrutinib and acalabrutinib to BTK leading to loss of efficacy.

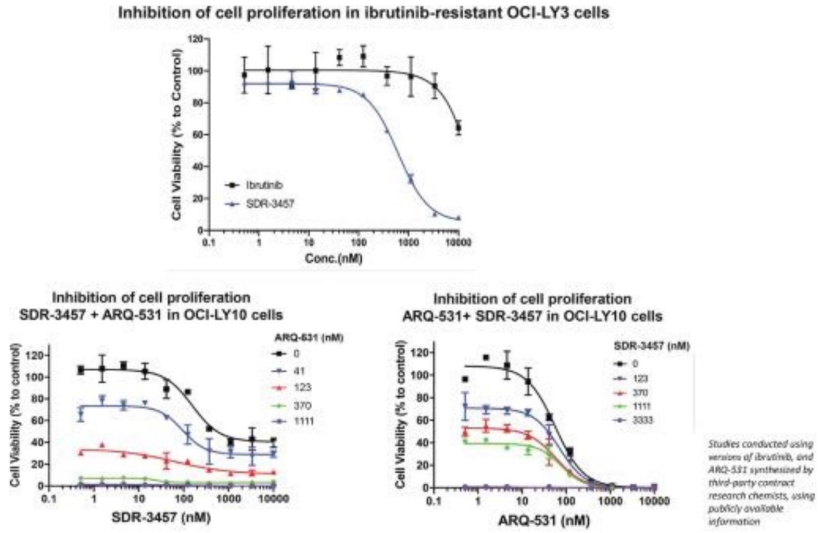
Activated B-cell, or ABC, a subtype of diffuse large B-cell lymphoma, or ABC DLBCL, is the most common type of aggressive non-Hodgkin B-cell lymphoma. ABC DLBCL is associated with a number of mutations that trigger a constitutively active NF-kB signaling pathway, which often is mediated by increased MALT1 protease activity. Among these mutations is a gain of function mutation or amplification of MALT1, which has also been identified in ABC DLBCL patients.

We have used our computational platform to rapidly identify novel, tight-binding MALT1 small-molecule allosteric inhibitors with drug-like properties. Furthermore, we have been able to demonstrate that our MALT1 inhibitors show additive effects when combined with BTK inhibitors in ABC DLBCL lymphoma cell lines.

In OCI-LY3 cells, which are resistant to BTK inhibitors, our current MALT1 inhibitors showed dose responsive anti-proliferative effects compared to ibrutinib, strongly suggesting the potential of our inhibitors to benefit patients with acquired resistance due to long term BTK inhibitor treatment.

Our MALT1 inhibitors demonstrated in vivo target engagement with decreased tumor B-cell lymphoma 10 (BCL 10) cleavage in a mouse model bearing OCI-LY10 cell derived tumors after oral daily dosing. Further, additive anti-proliferative effects were observed when combining our inhibitors with ibrutinib and acalabrutinib in preclinical studies of OCI-LY10 cells, which are responsive to BTK inhibitors. Additional combination studies were conducted with a next generation BTK inhibitor, ARQ-531, a third-party investigational reversible non-covalent inhibitor of BTK that inhibits wild type and ibrutinib-resistant BTK-C481S mutants. Our MALT1 inhibitors showed additive effects when combined with ARQ-531 in preclinical studies. This supports the potential for our MALT1 inhibitors to be combined with BTK inhibitors to treat patients with B-cell malignancies who no longer respond to existing BTK inhibitors.





HIF-2 alpha Inhibitor Program

In collaboration with BMS, we are developing a HIF-2 alpha inhibitor for the treatment of renal cell carcinoma as monotherapy or in combination with immunotherapy agents, PD-1 or PDL-1 antibodies, and potentially other indications, such as pulmonary hypertension. HIF-2 alpha, also known as EPAS1, is one of several master regulators of intratumoral hypoxia and control hypoxia-mediated pathological processes in tumors, including angiogenesis, pH homeostasis, cell migration/invasion, stem cell pluripotency, immune evasion, and therapy resistance. In third-party studies, clinical proof of concept was recently demonstrated for the role of HIF-2 alpha inhibition in patients with clear cell renal cell carcinoma, or CCRCC, caused by a germline mutation in the Von Hippel-Lindau tumor suppressor gene.

Pursuant to our collaboration and license agreement with BMS, once we have discovered or identified a HIF-2 alpha inhibitor that meets specified, mutually-agreed criteria (or upon BMS's selection), BMS will be solely responsible for the further preclinical and clinical development, manufacturing and commercialization of such candidate at its own expense. See "—Collaboration Agreement with Bristol-Myers Squibb Company" for additional information relating to this agreement.

SOS1/KRAS Inhibitor Program

In collaboration with BMS, we are developing a SOS1/KRAS protein-protein interaction inhibitor for the treatment of KRAS-driven cancers. SOS1, or Son of sevenless-1, is involved in the activation and regulation of KRAS. Oncogenic mutant KRAS stimulates the growth of some of the most intractable tumors, such as lung, pancreatic, and colon cancer. Strategies to disrupt the persistently active Ras pathway have focused on targeting Cys12 of the oncogenic mutant KRAS G12C with covalent inhibitors. Disruption of the SOS1/KRAS interaction has emerged as an alternative approach based on third party preclinical data. Our initial efforts suggest that we can leverage our computational platform to identify a novel development candidate for this target.

Pursuant to our collaboration and license agreement with BMS, once we have discovered or identified a SOS1/KRAS protein-protein interaction inhibitor that meets specified, mutually-agreed criteria (or upon BMS's selection), BMS will be solely responsible for the further preclinical and clinical development, manufacturing and commercialization of such candidate at its own expense. See "—Collaboration Agreement with Bristol-Myers Squibb Company" for additional information relating to this agreement.

Future Programs

We have identified a large number of protein targets that we believe are amenable to our computational platform, which creates a large and growing inventory of targets that we can potentially advance into discovery programs. Our drug discovery group also intends to pursue targets with strong biological validation and therapeutic potential that currently lack protein structures of sufficient

quality to permit the use of our computational platform for drug discovery. We are actively pursuing strategic alliances with collaborators that have the ability to generate high-quality protein structures for these targets, which will enable us to initiate discovery efforts. For example, as part of these efforts, in 2020 we entered into strategic partnerships with Viva Biotech to access new x-ray crystal structures as well as with Thermo Fisher Scientific to obtain structures of protein complexes leveraging cryo-EM technology.

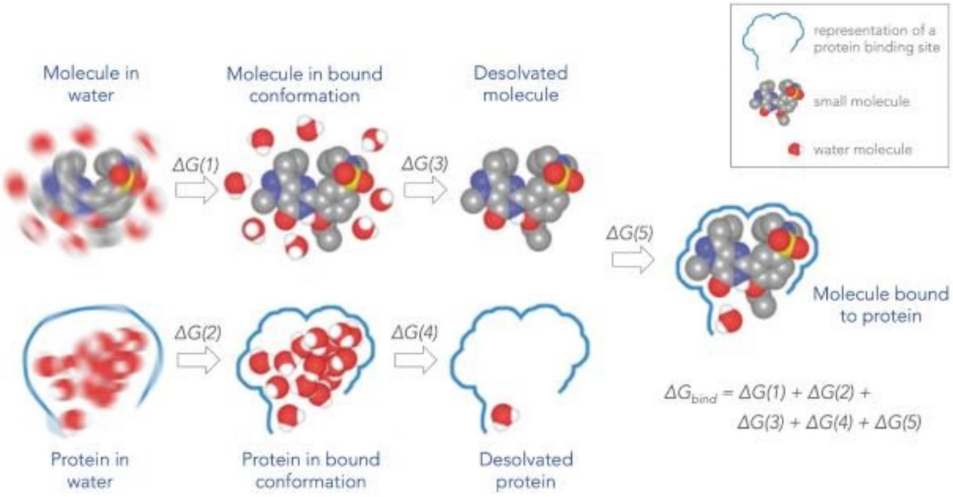
Our initial programs are focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Genomic instability of malignant cells leads to genetic mutations that can drive resistance to kinase inhibitors, creating the need for second and third generation drugs targeting the same disease. Our computational platform has been shown to be capable of predicting the impact that mutations in the kinase domain have on drug binding, potency, and drug sensitivity. Use of our platform to assess and evaluate the impact of clinical mutations on drug potency can be a powerful tool for drug discovery. We believe that deploying our platform at scale with access to genomic profiling data for patients puts us in a strong position to predict the impact of active-site resistance mutations with clinically relevant accuracy to optimize the design of molecules that are robust against common resistant mutations. Since we have launched our initial programs which are focused on oncology, we have expanded into other therapeutic areas, including in the areas of immunology and neurology.

Technical Details of Our Key Technologies

Calculation of key drug properties using physics-based methods

Over the past 30 years and with the concerted effort of hundreds of our scientists and software engineers, we have developed a physics-based computational platform that is capable of predicting the binding affinity of a drug molecule with a high degree of accuracy. The binding affinity of a drug molecule to a target protein is the key driving force of its *in vivo* efficacy. Specifically, when a drug binds to a target protein, the affinity with which it binds directly affects the extent to which it will modulate the function of the protein. Therefore, the ability to predict the binding affinity of a drug molecule to a target protein with a high degree of accuracy can significantly accelerate discovery of new efficacious medicines.

Accurately calculating the binding affinity of a drug molecule to a protein is enormously complex and requires a full characterization of all the physical contributions to the binding. These contributions include the deformation and/or rigidification of the small molecule into the bound conformation (ΔG(1) in the figure below) and the rigidification of the protein in the bound conformation (ΔG(2)), the removal of waters surrounding the molecule (ΔG(3)) and the removal of waters within the protein binding site (ΔG(4)), and finally the interactions achieved between the molecule and protein when binding to form the protein-molecule complex (ΔG(5)).



We have developed a solution to consistently assess all of these contributions to binding with a high degree of accuracy, building on a method called “free energy perturbation.” Free energy perturbation perturbs, or transforms, an initial molecule into

another molecule of interest and evaluates how that transformation changes binding affinity to a particular protein target. Our solution for conducting these calculations is called FEP+. FEP+ is enabled by the following differentiated constituent technologies:

- classical molecular mechanics force field with broad coverage of drug-like molecules with a high degree of accuracy;
- an automated workflow allowing for force field coverage to be extended on the fly utilizing our accurate quantum mechanics software;
- computationally efficient molecular dynamics engine that runs on GPUs;
- efficient, enhanced sampling methods that allow the calculation to be converged with reduced simulation times;
- automated atom-mapping and interaction-mapping assignment; and
- ability to scale these calculations to leverage large cloud computing environments.

All of these constituent technologies are necessary to achieve the accuracy, scalability and applicability of our free energy perturbation implementation.

In a recent peer-reviewed study including approximately 3,000 molecules across approximately 90 distinct projects, FEP+ exhibited an error profile that indicates its affinity predictions approach the accuracy of running a laboratory experiment. FEP+ is also able to perform these computations more rapidly than experimental assays. Computational assessment of a molecule utilizing FEP+ requires approximately 24 hours of computation on a GPU or only a few hours on a computer that contains eight GPUs. In comparison, it often takes weeks to synthesize a drug-like molecule and assay its binding affinity for the target of interest in a laboratory. As a result, our FEP+ solution can be used to explore very large numbers of molecules to identify drug candidates much more rapidly than would be possible solely using experimental approaches.

In a peer-reviewed article published in collaboration with a large biopharmaceutical company, the ability of FEP+ to prioritize molecules for synthesis expected to bind more tightly than an initial hit was compared with several other industry-standard approaches. We found that FEP+ succeeded in prioritizing the synthesis of molecules with improved binding affinity with eight times greater success than any other technique tested. This evidence supports the essential role that FEP+ can play in advancing drug discovery programs.

Enumeration of extremely large libraries of molecules

We have developed methods to enumerate extremely large libraries of molecules with our PathFinder software solution, thereby allowing our software customers, our drug discovery collaborators, and our internal drug discovery team to explore a much larger portion of chemical space than is possible through manual design. The chemical enumeration technology we have developed incorporates over a hundred known chemical reactions that can, in a fully automated fashion, computationally explore billions of alterations of a molecule of interest.

Scaling accurate physics-based calculations to extremely large libraries of molecules

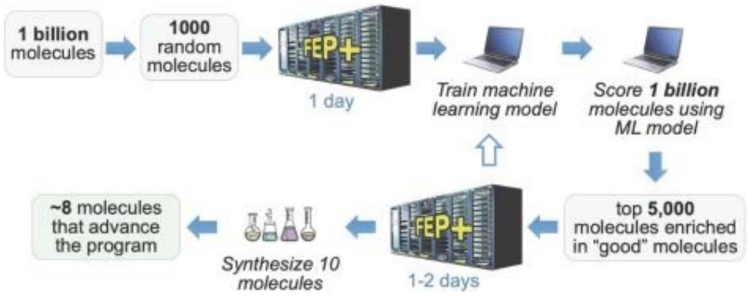
Although FEP+ calculations have been shown to be accurate, it is not possible to apply these calculations to billions of molecules given the current availability of computing resources. To address this problem, we developed an approach that leverages the accuracy of FEP+, but allows for exploration of billions of molecules in a reasonable amount of time by leveraging machine learning. We have succeeded in integrating our physics-based molecule scoring with highly computationally efficient modern machine-learning methods. This combined approach allows us to apply our physics-based calculations to much larger sets of molecules than would otherwise be computationally tractable. This allows us to both increase the speed and likelihood of identifying clinically viable molecules.

Advances in deep learning, a type of machine learning, in the past several years have required very large data sets as input to train the model. In a drug discovery program, the experimental data is typically sparse and expensive to procure, which is particularly problematic given that relevant drug-like chemical space is effectively infinitely large, estimated to be 10^60 molecules. For this reason, we believe that it would be extremely difficult to realize competitive advantage in a drug discovery program by using a platform exclusively based on machine learning or deep learning. Instead, we have developed an approach to integrate physics-based and machine-learning based scoring methodologies that allows the machine learning model to interactively prioritize additional molecules for physics-based analyses, known as active learning. Active learning retains the computational efficiency of machine learning while also taking advantage of the accuracy of the physics-based method. One can evaluate the utility of any particular prediction method with regard to both its accuracy and its computational efficiency. Modern machine learning methods, such as deep

learning, do provide a small improvement over conventional machine learning methods. However, for much of its history, conventional molecular simulations were much less computationally efficient than machine learning but not that much more accurate.

In developing FEP+, we were able to resolve deficiencies in early attempts to develop physics-based methods. FEP+ calculations are much more accurate than either conventional machine learning or modern machine learning when scoring molecules structurally distinct from the training set data. In addition, by integrating FEP+ with our machine learning implementation, which we refer to as AutoQSAR/DeepChem, we developed a solution that we refer to as Active Learning FEP+. Active Learning FEP+ combines the accuracy of free energy calculations with the speed of machine learning calculations and can be used to explore up to billions of molecules within a few days. By further combining this functionality with our ability to enumerate large sets of molecules provided by PathFinder and our ability to build and manage complex workflows utilizing cloud resources, we are able to deploy these capabilities at scale to advance projects.

Active Learning FEP+ is depicted in the figure below.



FEP+ is used to build a local model for a large library of molecules instead of relying on experimental data to provide the training set for the machine learning model. That machine learning model is then used to filter the large library of molecules down to a number that is small enough to be able to prioritize with FEP+. The result is that it takes only a few days to prioritize one billion molecules rather than one million days.

Rapid identification of novel active hit molecules suitable to initiate hit-to-lead and lead optimization efforts

Several hit-finding technologies we have developed are routinely used to identify active hit molecules to initiate small molecule drug discovery programs. In our hit-finding campaigns, we and our software customers typically utilize:

- modern machine learning models trained to the two-dimensional structures of known active molecules using our software solution, AutoQSAR/DeepChem;
- shape-based methods trained to the known or computationally deduced three-dimensional bioactive conformations of known active molecules using our software solution, Shape;
- structure-based docking methods that evaluate the number and kind of interactions possible utilizing a static atomistic representation of the experimentally determined three-dimensional structure of the target protein receptor using our software solutions, Glide and WScore; and
- free energy calculations using our software solution FEP+, which provides a fully dynamic atomistic representation of the target protein receptor.

These four approaches are complementary to each other, and their integrated use has led to successful hit-finding campaigns for dozens of protein targets in our collaborative and internal drug discovery programs. There are also numerous reports in the literature and in patents of our software customers utilizing some combination of these approaches to identify hit molecules.

AutoQSAR/DeepChem is trained to find known active molecules in a search through a molecule library and operates solely on the two-dimensional structure of the molecule. From this training process, AutoQSAR/DeepChem learns to identify substructures in the molecules that may lead to activity. Then when applied to large libraries of molecules, these methods can identify molecules with measurable activity against the target protein. These methods are highly efficient and can be used to screen one billion molecules in less than one day on a few hundred CPUs. However, one significant limitation is that machine learning methods cannot extrapolate

into chemical space that differs from the training set and therefore, this method tends to identify molecules similar to already known molecules.

Shape is used to identify molecules with a similar shape to known active molecules. It has been shown that molecules with similar three-dimensional shapes can have similar activities. While the hit rates and computational efficiencies of Shape and AutoQSAR/DeepChem are generally comparable, the hit molecules returned by these techniques tend to be distinct and complementary rather than redundant. This allows results from Shape to augment the AutoQSAR/DeepChem results while still being efficient for screening a large library.

Glide and WScore use knowledge of three-dimensional structure of the binding site of the protein of interest, rather than the structure of active molecules, to evaluate the likelihood of a small molecule to bind a protein target. Glide and WScore evaluate molecules based on the number and kind of contacts made between the molecule and protein. These methods are much more computationally expensive than AutoQSAR/DeepChem or Shape, often requiring seconds to minutes of CPU computing time per molecule. However, they can be more readily applied to targets for which there is little or no earlier reported active molecules.

The fourth computational method we routinely use to identify hit molecules to initiate drug discovery programs is the FEP+ solution described above. When used in this context, FEP+ can be used to completely replace the core moiety of an earlier known molecule to yield a novel molecule with similar binding potency. This approach is much more computationally intensive than previous methods, often ~24 GPU hours per molecule, but is also much more accurate. Utilizing this approach on multiple programs, we have been able to identify novel nanomolar or picomolar inhibitors in the first few months of project chemistry that have property profiles typical of molecules only observed in the later hit-to-lead phases of drug discovery. Our FEP+ solution has also recently been extended to support the calculation of absolute binding affinities, which enables the software to evaluate and triage diverse molecules sharing no common peripheral features in a hit discovery context.

Computational analysis of the energetic properties of water molecules occupying molecule binding sites in proteins

Subtle structural variations in molecules can have a profound impact on binding affinity to the protein target. The effects of these structural variations can be explained by a detailed examination of the thermodynamics of binding, including the free energy changes resulting from displacing water molecules in the binding site. Our computational software solution WaterMap maps the locations and energetic properties of water molecules that occupy protein binding sites, provides insight into the properties of the binding site, and quantitatively describes the water-mediated forces driving the binding of small molecules. Further, such an analysis can be used to assess the propensity of drug-like molecules to bind to the protein target with high affinity. WaterMap presents the computed results graphically for easy visualization of the water molecules occupying a binding site and their energetic properties. This makes interpretation of binding affinity data more intuitive and provides insights to possible design routes to improve potency and selectivity.

Competition

The overall market for molecular discovery and design software is global, rapidly evolving, competitive, and subject to changing technology and shifting customer focus. The solutions and applications offered by our competitors vary in size, breadth, and scope.

We believe the principal competitive factors in our market include, among other things, accuracy of computations, level of customer satisfaction and functionality, ease of use, breadth and depth of solution and application functionality, brand awareness and reputation, modern and adaptive technology platform, integration, security, scalability and reliability of applications, total cost, ability to innovate and respond to customer needs rapidly, and ability to integrate with legacy enterprise infrastructures and third-party applications.

We believe that we compete favorably on the basis of these factors and that the effort and investment required to develop a computational, physics-based platform similar to ours will hinder new entrants that are unable to invest the necessary capital and time, and lack the breadth and depth of technical expertise required to develop competing technology. Our ability to remain competitive will largely depend on our ability to continue to improve our computational platform and demonstrate success in our drug discovery efforts.

Our software solutions face competition from commercial competitors in the business of selling simulation and modeling software to biopharmaceutical companies. These competitors include BIOVIA, a brand of Dassault Systèmes SE, or BIOVIA, Chemical Computing Group (US) Inc., Cresset Biomolecular Discovery Limited, OpenEye Scientific Software, Inc., Optibrium Limited, and Simulations Plus, Inc. We also have competitors in materials science, such as BIOVIA and Materials Design, Inc., and in

enterprise software for the life sciences, such as BIOVIA, Certara USA, Inc., and Dotmatics, Inc. In some cases, these competitors are well-established providers of these solutions and have long-standing relationships with many of our current and potential customers, including large biopharmaceutical companies. In addition, there are academic consortia that develop physics-based simulation programs for life sciences and materials applications. In life sciences, the most prominent academic simulation packages include AMBER, CHARMm, GROMACS, GROMOS, OpenMM, and OpenFF. These packages are primarily maintained and developed by graduate students and post-doctoral researchers, often without the intent for commercialization. We also face competition from solutions that biopharmaceutical companies develop internally, smaller companies that offer products and services directed at more specific markets than we target, enabling these competitors to focus a greater proportion of their efforts and resources on these markets, as well as a large number of companies that have been founded with the goal of applying machine learning technologies to drug discovery.

The biopharmaceutical industry is characterized by rapidly advancing technologies, intense competition, and strong emphasis on proprietary products. While we believe that our computational platform, technology, knowledge, experience, and scientific resources provide us with competitive advantages, our drug discovery business faces potential competition from many sources, including major pharmaceutical, specialty biopharmaceutical companies, technology companies, academic institutions and government agencies, and public and private research institutions. Any product candidates that we or one of our collaborators successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Collaboration Agreement with Bristol-Myers Squibb Company

In November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS, pursuant to which we and BMS agreed to collaborate in the discovery, research and preclinical development of small molecule compounds (other than protein-degrader compounds) for biological targets in the oncology, neurology and immunology therapeutic areas.

Under the agreement, during a limited research term, we will be responsible, at our own cost and expense, for the discovery of small molecule compounds (other than protein-degrader compounds) directed to five specified biological targets pursuant to a mutually agreed research plan for each such target. The initial specified targets include HIF-2 alpha and SOS1/KRAS, which are two of our early-stage programs. Once we have discovered or identified a compound for a target that meets specified, mutually-agreed criteria or upon BMS selection of a compound as a development candidate, BMS will be solely responsible for the further preclinical and clinical development, manufacturing and commercialization of such candidate at its own cost and expense. The research term will end on the earlier of four years or until we have delivered a candidate for each specified target. We may elect to extend the research term for a limited period of time to deliver a candidate for a given target. In addition, the parties may mutually agree to extend the initial research term for an additional year. Under the agreement, BMS has agreed to use commercially reasonable efforts to develop, seek and obtain regulatory approval for, and commercialize at least one product that contains a licensed compound for each target in each of the United States, Japan and the European Union. The research component of the collaboration will be overseen by a joint steering committee comprised of an equal number of representatives from each of us and BMS. In addition to the initial specified targets, the parties have also agreed on a list of four reserved targets. BMS may replace one of the initial specified targets with a reserved target during a limited substitution period in the research term.

Pursuant to the agreement, for a given target, we have granted to BMS an exclusive license, with the right to grant sublicenses, under certain patent rights, know-how and materials controlled by us to clinically develop, manufacture, use, sell, offer for sale, export and import and otherwise exploit, and have others do the same, any compound, molecule or product for such target throughout the world.

Under the terms of the agreement, BMS paid us an initial upfront fee payment of $55 million. We are also entitled to receive up to $2.7 billion in total milestones across all potential targets. Such milestones consist of up to $585 million in total milestones per oncology target, including $360 million in the aggregate for certain specified research, development and regulatory milestones and $225 million in the aggregate for certain specified commercial milestones, as well as up to $482 million in total milestones per neurology and immunology target, including $257 million in the aggregate for certain specified research, development and regulatory milestones and $225 million in the aggregate for certain specified commercial milestones.

We are also entitled to a tiered percentage royalty on annual global net sales of licensed products ranging from mid-single digits to low-double digits, subject to certain specified reductions. Royalties are payable by BMS on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last valid claim of certain specified patent rights covering the licensed product in such country, expiration of all applicable regulatory exclusivities in such country for such licensed product and the tenth anniversary of the first commercial sale of such licensed product in such country.

The agreement excludes any activities relating to protein-degrader compounds. However, under the terms of the agreement, for a limited period of time after the execution of the agreement, we and BMS agreed to negotiate a separate definitive agreement pursuant to which we will agree to license to BMS the right to conduct research, development and commercialization activities with respect to degrader compounds for the targets under the agreement.

On a target-by-target basis, during the term of the agreement for a given target, we are prohibited from clinically developing or commercializing, ourselves or with a third party, any nucleic acid, antibody, biologic, compound, small molecule or other molecule, or any product that contains the foregoing, that specifically modulates as its primary mechanism of action such target, or is designed to specifically modulate such target. Such prohibition encompasses both the initial specified targets listed as of the effective date of the agreement and those targets on the reserved target list for the limited substitution period.

Unless earlier terminated, the agreement will expire on a licensed product-by-licensed product and country-by-country basis on the expiration of the applicable royalty term for such licensed product in such country and in its entirety upon expiration of the last royalty term for the last licensed product. Either party may terminate the agreement earlier upon an uncured material breach of the agreement by the other party on a target-by-target basis, or upon the occurrence of certain events of insolvency of the other party. Additionally, BMS may terminate the agreement for any or no reason, in its entirety or on a target-by-target basis, upon specified written notice to us. BMS may also terminate the agreement on a target-by-target basis for safety reasons. We may terminate the agreement on a target-by-target basis to the extent BMS commences or participates in challenging certain patents licensed by us to BMS under the agreement.

In the event that BMS terminates the Agreement at will, or if we terminate for a breach, insolvency or patent challenge by BMS, we are entitled to certain reversionary rights with respect to certain compounds and products for the applicable terminated target(s).

In the event that BMS has the right to terminate the agreement, in whole or with respect to a particular target, upon our uncured material breach or an event of insolvency with respect to us, then in lieu of so terminating, BMS has the right to elect to the have the agreement continue in full force and effect; provided that all royalties and milestones thereafter payable by BMS to us with respect to such applicable target(s) shall be reduced by 50%.

License Agreements with Columbia University

We have entered into several license agreements with Columbia University, or the Columbia License Agreements. The Columbia License Agreements establish our rights and obligations with respect to certain patents, software code, technology, and improvements thereto that we license from Columbia University and that are used in, and integrated into, our software solutions, and our physics-based computational platform. Our rights and obligations under, and the terms and conditions of, the Columbia License Agreements that we consider material to the operation of our business are described more fully below.

On November 1, 2008, we entered into an amendment, or the Royalty Amendment, to certain Columbia License Agreements, including each of the agreements described below. The Royalty Amendment simplified the royalties payable under each agreement on gross revenues generated from the use of any product which contains any code or software, or is covered by any patent, that we license from Columbia University, or a Licensed Product, in connection with a services agreement. We also pay royalties under the Columbia License Agreements on gross revenues generated from the sale, licensing or renting of our Licensed Products, which we calculate on a product-by-product basis. In the event that one or more Licensed Products are sold together with other products for a single aggregate license fee, we have agreed to pay to Columbia University the applicable royalty on the gross revenues attributable to each Licensed Product based on the relative list prices of each product covered by such license fee.

For a description of the royalties payable by us to Columbia University in connection with our services agreements, see “License Agreements with Columbia University —Services Royalty Amendment” below.

PS-GVB License Agreement

On May 5, 1994, we entered into a license agreement, or the 1994 Columbia Agreement, with Columbia University, which was amended on September 9, 2004 and November 1, 2008. The technology licensed under the 1994 Columbia Agreement is incorporated into our Jaguar quantum mechanical program, which we market and distribute as part of our physics-based computational platform. The 1994 Columbia Agreement grants us a worldwide, exclusive, license to the software code developed by Columbia University and incorporated into the electronic structure software program PS-GVB v1.0, or the PS-GVB Code, and all improvement to the PS-GVB v1.0 software program and PS-GVB Code developed by Columbia University, or the PS-GVB Improvements, including all PS-GVB Code and PS-GVB Improvements that are incorporated into any new products, new releases, and new versions related to the software, or the New PS-GVB Module Code, in each case, to reproduce, use, execute, copy, operate, sublicense, and distribute in connection

with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. We may only sublicense the PS-GVB Code, the PS-GVB Improvements, and the New PS-GVB Module Code, or the Licensed PS-GVB Software, to the extent they are incorporated into a product that is sold directly by us or that is distributed on our behalf. Under the 1994 Columbia Agreement, Columbia University retains the right to conduct, and to permit other academic and non-profit research institutions to conduct, research using the Licensed PS-GVB Software.

As consideration for entering into the 1994 Columbia Agreement, we have agreed to pay royalties to Columbia University in the low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable PS-GVB v1.0 software program on our, and our affiliates, gross revenues from the sale, licensing, or renting of the PS-GVB v1.0 software program, including any improvements and modifications thereto, regardless of whether such improvement or modification is marketed as a new version, new release, or new product, excluding any sales to Columbia University and any revenue generated under services agreements.

The 1994 Columbia Agreement and the licenses granted thereunder may be terminated by us or Columbia University only upon the other party's material breach of the agreement and such party's failure to cure such breach. Upon termination, any third party that has licensed the Licensed PS-GVB Software from us will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

Fast Multipole RESPA License Agreement

On July 15, 1998, we entered into a license agreement, or the 1998 Columbia Agreement, with Columbia University, which was amended on September 4, 2004, and November 1, 2008. The 1998 Columbia Agreement grants us a worldwide, non-exclusive, license to the Fast Multipole RESPA code developed at Columbia University, or the RESPA Code, which was incorporated into the IMPACT software program used in our Glide ligand-protein docking program, PrimeX protein modelling program, QSite QM/MM program, and Combglide automated library generation program, and all improvements to the IMPACT software program, including any new versions and new releases thereof, that are developed by Columbia University, or the IMPACT Improvements, in each case, to reproduce, use, execute, copy, compile, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. We may sublicense the RESPA Code and the IMPACT Improvements, or the Licensed IMPACT Software, to the extent it is incorporated into a product that is sold directly by us or that is distributed on our behalf. Under the 1998 Columbia Agreement, Columbia University retains the right to conduct, and to permit other academic and non-profit research institutions to conduct, research using the Licensed IMPACT Software.

As consideration for entering into the 1998 Columbia Agreement, we have agreed to pay royalties to Columbia University in the low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable IMPACT software program on our, and our affiliates, gross revenues from the sale, licensing, or renting of the IMPACT software program, including any improvements and modifications thereto and any new versions and new releases thereof, excluding any sales to Columbia University and revenue generated under services agreements.

The 1998 Columbia Agreement and the licenses granted thereunder may be terminated by us or Columbia University only upon the other party's material breach of the agreement and such party's failure to cure such breach. Upon termination, any third party that has licensed software from us subject to the 1998 Columbia Agreement will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

Protein Folding License Agreement

In September 2001, we entered into a license agreement, or the 2001 Columbia Agreement, with Columbia University, which was amended on September 9, 2004 and November 1, 2008. The technology licensed under the 2001 Columbia Agreement is incorporated into our Prime protein modelling program, which we market and distribute as part of our physics-based computational platform. The 2001 Columbia Agreement grants us a worldwide, exclusive license to the protein folding code developed by Columbia University, or the Folding Code; all improvements to the Folding Code and to any of our products, software, or code that incorporates any part of the Folding Code, including any improvements thereto and new versions or new releases thereof, that are developed by Columbia University, or the Folding Code Improvements; and the issued patent covering the Folding Code, or the Folding Code Patent, in each case, to reproduce, use, execute, copy, compile, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. We may sublicense the Folding Code, the Folding Code Improvements and the Folding Code Patent, or the Licensed Folding Code Software, to the extent it is incorporated into a product that is sold directly by us or that is distributed on our behalf. Under the 2001 Columbia Agreement, Columbia University retains the right to conduct, and to permit other academic and non-profit research institutions to conduct, research using the Licensed Folding Code Software.

As consideration for entering into the 2001 Columbia Agreement, we paid Columbia University a one-time, nominal license fee. In addition, we have paid royalties to Columbia University in low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable product, software program, or code on our, and our affiliates, gross revenues from the sale, licensing, or renting of any commercial product, software program, or code incorporating the Licensed Folding Code Software, excluding any sales to Columbia University and revenues generated under services agreements. Our obligation to pay any royalty under the 2001 Columbia Agreement, including any royalty paid pursuant to the Royalty Amendment, terminated with the expiration of the last to expire patent licensed under the 2001 Columbia Agreement in January 2014.

The 2001 Columbia Agreement and the licenses granted thereunder may be terminated by Columbia University only upon our material breach of the agreement and our failure to cure such breach. Upon termination, any third party that has licensed software from us subject to the 2001 Columbia Agreement will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

PLOP License Agreement

On June 19, 2003, we entered into a license agreement, or the 2003 Columbia Agreement, with Columbia University, which was amended on November 1, 2008. The technology licensed under the 2003 Columbia Agreement is incorporated into our Prime and PrimeX protein modelling programs and our Membrane Permeability model, which we market and distribute as part of our physics-based computational platform. The 2003 Columbia Agreement grants us a worldwide, exclusive license to the protein local optimization program software code, or the PLOP Code, developed at Columbia University and the University of California and all software code comprising improvements to the PLOP Code that are developed by Columbia University or the University of California, or the PLOP Improvements, in each case, to reproduce, use, execute, copy, compile, operate, sublicense, and distribute in connection with the marketing and sale of our products and services, to develop improvements thereto, and to conduct research and backup disaster recovery. Pursuant to an interinstitutional agreement between Columbia University and the University of California, the University of California granted Columbia University the sole right to license the PLOP Code and PLOP Improvements and has agreed not to license the PLOP Code or PLOP Improvements to any third party for as long as the interinstitutional agreement remains in effect. We may sublicense the PLOP Code and PLOP Improvements to the extent they are incorporated into a product that is sold directly by us or that is distributed on our behalf. We are restricted from distributing the PLOP Code and PLOP Improvements source code without the prior written consent of Columbia University.

Columbia University and the University of California retain the right to use, and to permit other academic and non-profit research institutions to use, the PLOP Code and PLOP Improvements for teaching and academic research purposes.

As consideration for entering into the 2003 Columbia Agreement, we paid Columbia University a one-time, nominal license fee. In addition, we have agreed to pay royalties to Columbia University in low-single digit to low-double digit percentages based upon the contribution of Columbia University generated code to the applicable product, software program, or code on our, and our affiliates, gross revenues from the sale, licensing, leasing, or renting any commercial product, software program, or code incorporating the PLOP Code or any PLOP Improvements, excluding any sales to Columbia University or the University of California and revenues generated under services agreements. Our obligation to pay any royalty under the 2003 Columbia Agreement, including any royalty paid pursuant to the Royalty Amendment, will terminate on June 19, 2023.

Columbia University is responsible for the copyright registration of the PLOP Code and PLOP Improvements. We are responsible for paying all reasonable copyright registration and attorney fees in connection with such copyright registrations.

The 2003 Columbia Agreement and the licenses granted thereunder may be terminated by us or Columbia University only upon the other party's material breach of the agreement and such party's failure to cure such breach. Upon termination, any third party that has licensed software from us subject to the 2003 Columbia Agreement will retain the right to use such software, and we will have the perpetual right to continue to provide support to any such third parties in connection with their use of such software.

Water Site Analysis License

On May 27, 2008, we entered into a software and patent license agreement, or the 2008 Columbia Agreement, with Columbia University, which was amended on November 1, 2008. The 2008 Columbia Agreement grants us a worldwide license, exclusive in the field of computational chemistry software and related services, to (a) certain software that implements the water site analysis method, or the Water Site Software; (b) all patent rights covering the Water Site Software, or the Water Site Patents; and (c) any products that incorporate or include the Water Site Software, or that is covered by the Water Site Patents, or the Water Site Products, in each case, to reproduce, modify, distribute, and perform and display in connection with the development, marketing, and sale of our products and services, to conduct research using the Water Site Software, and to conduct backup disaster recovery. Our Water Site Products include

our WaterMap Core program, which we market and distribute as part of our physics-based computational platform. We are restricted from distributing the Water Site Software source code without the prior written consent of Columbia University. Under the 2008 Columbia Agreement, Columbia University retains the right to use, and to permit other entities and individuals to use, the Water Site Software and Water Site Patents for academic and non-commercial educational purposes in the field of computational chemistry software and related services.

As consideration for entering into the 2008 Columbia Agreement, we paid Columbia University a one-time, nominal license fee. In addition, we have agreed to pay royalties to Columbia University in low-double digit percentages on our, and our affiliates, gross revenues from the sale, licensing, leasing, or renting of any Water Site Product, excluding any sales to Columbia University and revenues generated under services agreement. The royalties under the 2008 Columbia Agreement are paid on a product-by-product basis and vary based on whether or not the gross revenues are generated in countries of manufacture or sale in which the Water Site Product is covered by a Water Site Patent. In the event that there are multiple royalties payable on a single product, we are required to (i) pay the higher of the two royalties, if there are no more than two royalties payable on the particular Water Site Product or (ii) negotiate in good faith with Columbia University on a single royalty, if there are more than two royalties payable on the particular Water Site Product. In the event that we take action against Columbia University with respect to the validity or enforceability of any Water Site Patents, excluding any defensive actions or claims, the royalties paid under the 2008 Columbia Agreement will increase by a specified amount. Our obligation to pay any royalty under the 2008 Columbia Agreement, including any royalty paid pursuant to the Royalty Amendment, will terminate on May 27, 2028.

Columbia University is responsible for the prosecution and maintenance of the Water Site Patents in the jurisdictions that we specify. If we decide to discontinue the prosecution or maintenance of any Water Site Patent in any jurisdiction, but Columbia University objects to such discontinuation, our license to use such Water Site Patent will terminate in that jurisdiction; provided that, if we are using the Water Site Patent or Water Site Software in the jurisdiction at issue, Columbia University is obligated to discuss in good faith whether the licenses should instead be non-exclusive. Columbia University is also responsible for the enforcement of the Water Site Patent at its own expense and in its sole judgment; provided that, if we provide Columbia University with evidence of infringement of a Water Site Patent by a third party, and Columbia University fails to take appropriate enforcement action, we may initiate legal proceedings against the alleged infringer. We are responsible for reimbursing Columbia University for their reasonable expenses in connection with prosecuting and maintaining the Water Site Patents.

Unless terminated earlier, the 2008 Columbia Agreement will expire on a product by product and country by country basis upon the later of (i) the expiration of the last issued Water Site Patent, (ii) fifteen years from the date of the first commercial sale of a Water Site Product in a given country, and (iii) the expiration of the Water Site Software copyright. Columbia University may terminate the 2008 Columbia Agreement if we fail to cure a material breach, become subject to a voluntary or involuntary petition for bankruptcy or any other proceeding relating to insolvency, receivership or liquidation, or initiate any proceeding or assert any claim challenging the validity or enforceability of the Water Site Patents. Upon termination, any third party that has licensed a Water Site Product from us will retain the right to use such product, subject to the terms of their existing license agreement with us, and we will have the right to continue to provide support to any such third parties for the duration of their license agreement.

Services Royalty Amendment

On November 1, 2008, we entered into the Royalty Amendment with Columbia University, which amended and simplified our royalty obligations under each of the Columbia License Agreements described in each of the foregoing sections. Pursuant to the Royalty Amendment, we have agreed to pay royalties to Columbia University in mid-single digit percentages on the service fees generated from services (excluding certain gross revenue, including revenue generated under agreements with Columbia University) that we, or our affiliates, perform using one or more Licensed Products under an agreement with a third party. Upon termination of any of the Columbia License Agreements for any reason other than our material breach, we will have the right to continue to use the Licensed Products to provide services under existing third-party service agreements, until the expiration or termination of such agreements.

Intellectual Property

We strive to protect and enhance the proprietary technology, inventions, and improvements that are commercially important to the development of our business, including by seeking, maintaining, and defending patent rights, whether developed internally or jointly, or licensed from third parties. We also rely on trade secrets, know-how, continuing technological innovation, collaboration opportunities, and in-licensing opportunities to develop, strengthen, and maintain our proprietary position in our field.

It is important to our future commercial success to obtain and maintain patent and other proprietary protection for commercially important technology, inventions, and know-how related to our business; defend and enforce our intellectual property rights, in

particular our patent, trademark, and copyright rights; preserve the confidentiality of our trade secrets; and operate without infringing, misappropriating, or violating the valid and enforceable patents and proprietary rights of third parties. Our ability to stop third parties from making, using, selling, offering to sell, or importing any products we develop may depend on the extent to which we have rights under valid and enforceable patents or trade secrets that cover these activities.

The patent positions of companies like ours are generally uncertain and can involve complex legal, scientific, and factual issues. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient proprietary protection from competitors. We also cannot ensure that patents will issue with respect to any patent applications that we or our licensors may file in the future, nor can we ensure that any of our owned or licensed patents or future patents will be commercially useful in protecting our software, technology, computational platform, and any product candidates we develop. In addition, the coverage claimed in a patent application may be significantly reduced before a patent is issued, and its scope can be reinterpreted and even challenged after issuance. As a result, we cannot guarantee that any products we develop will be protected or remain protectable by enforceable patents. Moreover, any patents that we hold or may hold may be challenged, circumvented or invalidated by third parties. See “Risk Factors—Risks Related to Our Intellectual Property” for a more comprehensive description of risks related to our intellectual property.

Our strategy is to file patent applications directed to our key software and our key programs in an effort to secure our intellectual property positions vis-a-vis this software and these programs. The patent portfolio for our software business includes at least 12 published patent families. As of February 3, 2021, we owned or held exclusive license rights to approximately 60 patents and patent applications, including at least eight issued or allowed U.S. cases, five pending U.S. non-provisional patent applications, ten issued or allowed non-U.S. cases, including six granted European patents which have been validated among multiple individual European Patent Convention nations and four non-European patents, and nine pending foreign patent applications relating to our computational platform. While we believe that the specific and generic claims contained in our wholly-owned and licensed pending U.S. and non-U.S. applications provide protection for various aspects of our computational platform, third parties may nevertheless challenge such claims. Any patents that are issued or that may issue from these families are expected to expire between 2026 and 2038, absent any adjustments or extensions. As of February 3, 2021, there were no published patent families related to our internal drug discovery business, and although several of our drug discovery collaborators have filed patent applications related to our collaborations that include employees of ours as inventors, including over 100 compound patents and patent applications since 2010, we do not own any intellectual property rights related to these inventions. As of February 3, 2021, 13 pending wholly-owned provisional applications, two pending international patent applications, and two pending non-U.S. patent applications have been filed.

Prosecution is a lengthy process, during which the scope of the claims initially submitted for examination by the U.S. Patent and Trademark Office may be significantly narrowed before issuance, if issued at all. We expect this may be the case with respect to some of our pending patent applications.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the earliest date of filing a non-provisional patent application, absent any adjustments or extensions.

In addition, in the United States, the term of a patent covering an FDA-approved drug may, in certain cases, be eligible for a patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984 as compensation for the loss of patent term during the FDA regulatory review process. The period of extension may be up to five years, but cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval. Only one patent among those eligible for an extension and only those claims covering the approved drug, a method for using it, or a method for manufacturing it may be extended. Similar provisions are available in Europe and in certain other jurisdictions to extend the term of a patent that covers an approved drug. It is possible that issued U.S. patents we may obtain in the future may be entitled to patent term extensions. If our use of product candidates or the product candidate itself receive FDA approval, we intend to apply for patent term extensions, if available, to extend the term of patents that cover the approved use or product candidate. We also intend to seek patent term extensions in any jurisdictions where available, however, there is no guarantee that the applicable authorities, including the FDA, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

In addition to patent protection, as of February 3, 2021, we had approximately 42 copyright registrations covering our proprietary software code, and we rely upon unpatented trade secrets and confidential know-how and continuing technological innovation to develop and maintain our competitive position. However, trade secrets and confidential know-how are difficult to protect. We seek to protect our proprietary information, in part, using confidentiality agreements with any collaborators, scientific advisors, service providers, employees, and consultants and invention assignment agreements with our employees. We also have agreements requiring assignment of inventions with selected consultants, scientific advisors, and collaborators. These agreements may not provide meaningful protection. These agreements may also be breached, and we may not have an adequate remedy for any such

breach. In addition, our trade secrets and/or confidential know-how may become known or be independently developed by a third party, or misused by any collaborator to whom we disclose such information. Despite any measures taken to protect our intellectual property, unauthorized parties may attempt to copy aspects of our products or to obtain or use information that we regard as proprietary. Although we take steps to protect our proprietary information, third parties may independently develop the same or similar proprietary information or may otherwise gain access to our proprietary information. As a result, we may be unable to meaningfully protect our trade secrets and proprietary information. See "Risk Factors—Risks Related to Our Intellectual Property" for a more comprehensive description of risks related to our intellectual property.

We also own numerous trademarks registered in the United States and foreign jurisdictions, including "Schrödinger" and "LiveDesign". We pursue additional trademark registrations to the extent we believe doing so would be beneficial to our competitive position.

Sales and Marketing

Software Business

We commercialize our software solutions in various jurisdictions around the world through our software sales organization. We have sales operations in the United States, Europe, Japan, and India, and we also have established distribution channels in other important markets, including China and South Korea. These efforts are led by our approximately 130 person global team of sales, technical, and scientific personnel. Our marketing strategy leverages our strong base of scientific publications to support the continued growth of our computational platform into computational chemistry markets across industries and academia worldwide.

Drug Discovery Business

We have not established a commercial organization or developed distribution capabilities given the current stage of development of our internal, wholly-owned drug discovery programs. We plan to enter into agreements with biopharmaceutical companies that contribute to our ability to efficiently advance development candidates that we discover internally using our computational platform through to commercialization. We expect to utilize a variety of types of collaboration, distribution, and other arrangements with one or more of these third parties to develop and ultimately commercialize our development candidates. Over time, we may also create a commercial organization for drug product sales if and as we advance the development of any product candidates that we determine to commercialize ourselves.

Manufacturing

We do not own or operate manufacturing facilities for the production of any product candidates, nor do we have plans to develop our own manufacturing operations. We expect to rely on third-party contract manufacturers for all of our required raw materials, drug substance, and finished drug product for the preclinical and clinical development of any development candidates we develop ourselves.

Government Regulation and Product Approvals

Government authorities in the United States at the federal, state and local level, and in other countries and jurisdictions, including the European Union, extensively regulate, among other things, the research, development, testing, manufacture, pricing, reimbursement, quality control, approval, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, and import and export of biopharmaceutical products. The processes for obtaining marketing approvals in the United States and in foreign countries and jurisdictions, along with compliance with applicable statutes and regulations and other regulatory authorities, require the expenditure of substantial time and financial resources.

Approval and Regulation of Drugs in the United States

In the United States, drug products are approved and regulated under the Federal Food, Drug and Cosmetic Act, or FDCA, and applicable implementing regulations and guidance. The failure of an applicant to comply with the applicable regulatory requirements at any time during the product development process, including non-clinical testing, clinical testing, the approval process or post-approval process, may result in delays to the conduct of a study, regulatory review and approval, and/or administrative or judicial sanctions.

An applicant seeking approval to market and distribute a new drug in the United States generally must satisfactorily complete each of the following steps before the product candidate will be approved by the FDA:

- preclinical testing including laboratory tests, animal studies, and formulation studies, which must be performed in accordance with the FDA's good laboratory practice, or GLP, regulations and standards;
- submission to the FDA of an IND for human clinical testing, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, representing each clinical site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the product candidate for each proposed indication, in accordance with current good clinical practices, or GCP;
- preparation and submission to the FDA of a new drug application, or NDA, for a drug product which includes not only the results of the clinical trials, but also detailed information on the chemistry, manufacture and quality controls for the product candidate and proposed labeling for one or more proposed indication(s);
- review of the product candidate by an FDA advisory committee, where appropriate or if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities, including those of third parties, at which the product candidate or components thereof are manufactured to assess compliance with current good manufacturing practices, or cGMP, requirements and to assure that the facilities, methods, and controls are adequate to preserve the product's identity, strength, quality, and purity;
- satisfactory completion of any FDA audits of the non-clinical and clinical trial sites to assure compliance with GCP and the integrity of clinical data in support of the NDA;
- payment of user fees and securing FDA approval of the NDA to allow marketing of the new drug product; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct any post- approval studies required by the FDA.

Preclinical Studies

Before an applicant begins testing a product candidate with potential therapeutic value in humans, the product candidate enters the preclinical testing stage, including *in vitro* and animal studies to assess the safety and activity of the drug for initial testing in humans and to establish a rationale for therapeutic use. Preclinical tests include laboratory evaluations of product chemistry, formulation, and stability, as well as other studies to evaluate, among other things, the toxicity of the product candidate. The conduct of the preclinical tests and formulation of the compounds for testing must comply with federal regulations and requirements, including GLP regulations and standards. The results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, are submitted to the FDA as part of an IND. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity and long-term toxicity studies may continue after the IND is submitted.

The IND and IRB Processes

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their voluntary informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written study protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND.

An IND is an exemption from the FDCA that allows an unapproved product candidate to be shipped in interstate commerce for use in an investigational clinical trial and a request for FDA authorization to administer such investigational product to humans. Such authorization must be secured prior to interstate shipment and administration of any product candidate that is not the subject of an approved NDA. In support of a request for an IND, applicants must submit a protocol for each clinical trial, and any subsequent protocol amendments must be submitted to the FDA as part of the IND. The FDA requires a 30-day waiting period after the filing of each IND before clinical trials may begin. This waiting period is designed to allow the FDA to review the IND to determine whether human research subjects will be exposed to unreasonable health risks. At any time during this 30-day period, the FDA may raise concerns or questions about the conduct of the trials as outlined in the IND and impose a clinical hold or partial clinical hold. In these cases, the IND sponsor and the FDA must resolve any outstanding concerns before clinical trials, or parts of the trial, can begin.

Following commencement of a clinical trial under an IND, the FDA may also place a clinical hold or partial clinical hold on that trial. Clinical holds are imposed by the FDA whenever there is concern for patient safety and may be a result of new data, findings, or developments in clinical, nonclinical, and/or chemistry, manufacturing, and controls, or CMC. A clinical hold is an order issued by the FDA to the sponsor to delay a proposed clinical investigation or to suspend an ongoing investigation. A partial clinical hold is a delay or suspension of only part of the clinical work requested under the IND. For example, a specific protocol or part of a protocol may not be allowed to proceed, while other protocols may be allowed. No more than 30 days after imposition of a clinical hold or partial clinical hold, the FDA will provide the sponsor a written explanation of the basis for the hold.

Following issuance of a clinical hold or partial clinical hold, a clinical trial may only resume after the FDA has so notified the sponsor. The FDA will base that determination on information provided by the sponsor correcting the deficiencies previously cited or otherwise satisfying the FDA that the clinical trial can proceed.

A sponsor may choose, but is not required, to conduct a foreign clinical study under an IND. When a foreign clinical study is conducted under an IND, all FDA IND requirements must be met unless waived. When a foreign clinical study is not conducted under an IND, the sponsor must ensure that such studies are conducted in accordance with GCP, including review and approval by an independent ethics committee, or IEC, and informed consent from subjects, if the data from such a foreign study is to be used in support of a marketing application.

In addition to the foregoing IND requirements, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it commences at that institution, and the IRB must conduct continuing review and reapprove the study at least annually. The IRB must review and approve, among other things, the study protocol and informed consent information to be provided to study subjects. An IRB must operate in compliance with FDA regulations. An IRB can suspend or terminate approval of a clinical trial at its institution, or an institution it represents, if the clinical trial is not being conducted in accordance with the IRB's requirements or if the product candidate has been associated with unexpected serious harm to patients.

Additionally, some trials are overseen by an independent group of qualified experts organized by the trial sponsor, known as a data safety monitoring board or committee. This group provides authorization as to whether or not a trial may move forward at designated check points based on access that only the group maintains to available data from the study. Suspension or termination of development during any phase of clinical trials can occur if it is determined that the participants or patients are being exposed to an unacceptable health risk. Other reasons for suspension or termination may be made by us based on evolving business objectives and/or the competitive environment.

Information about clinical trials must be submitted within specific timeframes to the National Institutes of Health for public dissemination on its ClinicalTrials.gov website.

Human Clinical Trials in Support of an NDA

Clinical trials involve the administration of the investigational product candidate to human subjects under the supervision of a qualified investigator in accordance with GCP requirements, which include, among other things, the requirement that all research subjects provide their informed consent in writing before their participation in any clinical trial. Clinical trials are conducted under written clinical trial protocols detailing, among other things, the objectives of the study, inclusion and exclusion criteria, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated.

Human clinical trials are typically conducted in three sequential phases, but the phases may overlap or be combined. Additional studies may also be required after approval.

Phase 1 clinical trials are initially conducted in a limited population to test the product candidate for safety, including adverse effects, dose tolerance, absorption, metabolism, distribution, excretion, and pharmacodynamics in healthy humans or in patients. During Phase 1 clinical trials, information about the investigational drug product's pharmacokinetics and pharmacological effects may be obtained to permit the design of well-controlled and scientifically valid Phase 2 clinical trials.

Phase 2 clinical trials are generally conducted in a limited patient population to identify possible adverse effects and safety risks, evaluate the efficacy of the product candidate for specific targeted indications and determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more costly Phase 3 clinical trials. Phase 2 clinical trials are well controlled, closely monitored and conducted in a limited patient population. A Phase 2 trial may be further subdivided to Phase 2a and Phase 2b trials. A Phase 2a trial is typically an exploratory (non-pivotal) study that has clinical efficacy, pharmacodynamics, or biological activity as the primary endpoint. A Phase 2b trial is a definite dose range finding study with efficacy as the primary endpoint.

Phase 3 clinical trials proceed if the Phase 2 clinical trials demonstrate that a dose range of the product candidate is potentially effective and has an acceptable safety profile. Phase 3 clinical trials are undertaken within an expanded patient population to further evaluate dosage, provide substantial evidence of clinical efficacy, and further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial sites. A well-controlled, statistically robust Phase 3 clinical trial may be designed to deliver the data that regulatory authorities will use to decide whether or not to approve, and, if approved, how to appropriately label a drug. Such Phase 3 studies are referred to as "pivotal."

In some cases, the FDA may approve an NDA for a product candidate but require the sponsor to conduct additional clinical trials to further assess the product candidate's safety and effectiveness after approval. Such post-approval trials are typically referred to as Phase 4 clinical trials. These studies are used to gain additional experience from the treatment of a larger number of patients in the intended treatment group and to further document a clinical benefit in the case of drugs approved under Accelerated Approval regulations. Failure to exhibit due diligence with regard to conducting Phase 4 clinical trials could result in withdrawal of approval for products.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur. In addition, IND safety reports must be submitted to the FDA for any of the following: serious and unexpected suspected adverse reactions; findings from other studies or animal or *in vitro* testing that suggest a significant risk in humans exposed to the product; and any clinically important increase in the case of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, or at all. The FDA will typically inspect one or more clinical sites to assure compliance with GCP and the integrity of the clinical data submitted.

Concurrent with clinical trials, companies often complete additional animal studies. They must also develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the drug candidate and, among other things, must develop methods for testing the identity, strength, quality, purity, and potency of the final drug. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

Review and Approval of an NDA

In order to obtain approval to market a drug product in the United States, a NDA must be submitted to the FDA that provides sufficient data establishing the safety and efficacy of the proposed drug product for its intended indication. The application includes all relevant data available from pertinent preclinical and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls, and proposed labeling, among other things. Data can come from company-sponsored clinical trials intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by independent investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the drug product to the satisfaction of the FDA.

The NDA is a vehicle through which applicants formally propose that the FDA approve a new product for marketing and sale in the United States for one or more indications. Every new drug product candidate must be the subject of an approved NDA before it may be commercialized in the United States. Biologic License Applications, or BLAs, are submitted for licensure of biologic products under the Public Health Service Act. Under federal law, the submission of most NDAs is subject to an application user fee. The sponsor of an approved NDA is also subject to an annual program fee. Certain exceptions and waivers are available for some of these fees, such as an exception from the application fee for products with orphan designation, an exception from the program fee when the program does not engage in manufacturing the drug during a particular fiscal year and a waiver for certain small businesses.

The FDA conducts a preliminary review of the application, generally within 60 calendar days of its receipt, and strives to inform the sponsor within 74 days whether the application is sufficiently complete to permit substantive review. The FDA may request additional information rather than accept the application for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review. The FDA has agreed to specified performance goals in the review process of NDAs. Under that agreement, 90% of applications seeking approval of New Molecular Entities, or NMEs, are meant to be reviewed within ten months from the date on which the FDA accepts the application for filing, and 90% of applications for NMEs that have been designated for Priority Review are meant to be reviewed within six months of the filing date. For applications seeking approval of products that are not NMEs, the ten-month and six-month review periods run from the date that the FDA receives the application. The review process and the Prescription Drug User Fee Act, or PDUFA, goal date may be extended by

the FDA for three additional months to consider new information or clarification provided by the applicant to address an outstanding deficiency identified by the FDA following the original submission.

Before approving an application, the FDA typically will inspect the facility or facilities where the product is being or will be manufactured. These pre-approval inspections may cover all facilities associated with an NDA submission, including component manufacturing, finished product manufacturing, and control testing laboratories. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

In addition, as a condition of approval, the FDA may require an applicant to develop a REMS. A REMS uses risk-minimization strategies beyond the professional labeling to ensure that the benefits of the product outweigh the potential risks. To determine whether a REMS is needed, the FDA will consider the size of the population likely to use the product, the seriousness of the disease, the expected benefit of the product, the expected duration of treatment, the seriousness of known or potential adverse events, and whether the product is a new molecular entity.

The FDA may refer an application for a novel product to an advisory committee or explain why such referral was not made. Typically, an advisory committee is a panel of independent experts, including clinicians and other scientific experts, that review, evaluate and provide a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but the FDA considers such recommendations carefully when making decisions.

The FDA's Decision on an NDA

On the basis of the FDA's evaluation of the application and accompanying information, including the results of the inspection of the manufacturing facilities, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A complete response letter generally outlines the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the NDA, the FDA will issue an approval letter. The FDA has committed to reviewing such resubmissions in two or six months depending on the type of information included. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

If the FDA approves a new product, it may limit the approved indications for use of the product, require that contraindications, warnings, or precautions be included in the product labeling, or require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess the drug's safety after approval. The agency may also require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms, including a REMS, to help ensure that the benefits of the product outweigh the potential risks. REMS programs can include medication guides, communication plans for health care professionals, and elements to assure safe use, or ETASU. ETASU can include, but are not limited to, special training or certification for prescribing or dispensing, dispensing only under certain circumstances, special monitoring, and the use of patent registries. The FDA may prevent or limit further marketing of a product based on the results of post-market studies or surveillance programs. The FDA may require a REMS before or after approval if it becomes aware of a serious risk associated with use of the product. The requirement for a REMS can materially affect the potential market and profitability of a product. After approval, many types of changes to the approved product, such as adding new indications, changing manufacturing processes, and adding labeling claims, are subject to further testing requirements and FDA review and approval.

Patent Term Restoration and Extension

A patent claiming a new drug product may be eligible for a limited patent term extension under the Hatch- Waxman Act, which permits a patent restoration of up to five years for patent term lost during the FDA regulatory review. The restoration period granted on a patent covering a product is typically one-half the time between the effective date of a clinical investigation involving human beings is begun and the submission date of an application, plus the time between the submission date of an application and the ultimate approval date. Patent term restoration cannot be used to extend the remaining term of a patent past a total of 14 years from the product's approval date. Only one patent applicable to an approved product is eligible for the extension, and only those claims covering the approved product, a method for using it, or a method for manufacturing it, may be extended. Additionally, the application for the extension must be submitted prior to the expiration of the patent in question. A patent that covers multiple products for which approval is sought can only be extended in connection with one of the approvals. The United States Patent and Trademark Office reviews and approves the application for any patent term extension or restoration in consultation with the FDA.

Health Care Law and Regulation

Our collaborators who use our platform and we, if we develop a product, may be subject to broadly applicable healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell, and distribute our software and any products for which we obtain marketing approval. Restrictions under applicable federal and state health care laws and regulations, include the following:

- the federal health care Anti-Kickback Statute, which prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, paying, receiving, or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made, in whole or in part, under a federal health care program such as Medicare and Medicaid and similar state anti-kickback laws. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal civil and criminal false claims laws, including the civil False Claims Act (which can be enforced through civil whistleblower actions), and civil monetary penalties laws, which prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false, fictitious, or fraudulent or knowingly making, using or causing to made or used a false record or statement to avoid, decrease, or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items and services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the federal and state laws and regulations that protect the privacy and security of health-related or other personal identifiable information that we may generate or receive, and that require disclosure of breaches in which such information is compromised by being lost or obtained or accessible by unauthorized persons, including, among others, laws and regulations implemented through informed consents for clinical research studies and the privacy and security standards imposed under the Health Insurance Portability and Accountability Act, or HIPAA, for certain individually identifiable health information of patients and health plan beneficiaries;
- the federal false statements statute, which prohibits knowingly and willfully falsifying, concealing, or covering up a material fact or making any materially false statement in connection with the delivery of or payment for health care benefits, items or services;
- the federal transparency requirements known as the federal Physician Payments Sunshine Act, under the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or the ACA, which requires certain manufacturers of drugs, devices, biologics and medical supplies to report annually to the Centers for Medicare & Medicaid Services within the United States Department of Health and Human Services, information related to certain payments and other transfers of value made by that entity to physicians, as defined by such law, and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report such information regarding payments and transfers of value provided, as well as ownership and investment interest held, during the previous year to certain other healthcare professionals, including physician assistances and nurse practitioners; and
- analogous state and foreign laws, such as state anti-kickback and false claims laws, which may apply to health care items or services that are reimbursed by non-government third-party payors, including private insurers.

Further, some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition to requiring manufacturers to report information related to payments and other transfers of value to physicians and other health care providers or marketing expenditures. Additionally, some state and local laws require the registration of pharmaceutical sales representatives in the jurisdiction.

Violations of applicable healthcare laws and regulations may result in significant civil, criminal and administrative penalties, damages, disgorgement, fines, imprisonment, and possible exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, and integrity oversight and reporting obligations.

In addition to the health care laws set forth above, we may also be subject to additional federal laws, such as the U.S. Foreign Corrupt Practices Act of 1977, as amended, which prohibits, among other things, companies and their intermediaries from making, or offering or promising to make, improper payments to non-U.S. officials for the purpose of obtaining or retaining business or otherwise seeking favorable treatment.

Privacy and the General Data Protection Regulation

The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the European Union, including personal health data, is subject to the General Data Protection Regulation, or GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the European Union, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Compliance with the GDPR will be a rigorous and time-intensive process that may increase the cost of doing business or require companies to change their business practices to ensure full compliance.

Although there are legal mechanisms to allow for the transfer of personal data from the United Kingdom, European Economic Area, or EEA, and Switzerland to the United States, uncertainty about compliance with such data protection laws remains and such mechanisms may not be available or applicable with respect to the personal data processing activities necessary to research, develop and market our products and services. For example, legal challenges in Europe to the mechanisms allowing companies to transfer personal data from the EEA to the United States could result in further limitations on the ability to transfer personal data across borders, particularly if governments are unable or unwilling to reach new or maintain existing agreements that support cross-border data transfers, such as the EU-U.S. and Swiss-U.S. Privacy Shield Frameworks. Specifically, on July 16, 2020, the Court of Justice of the European Union invalidated Decision 2016/1250 on the adequacy of the protection provided by the EU-U.S. Privacy Shield Framework. To the extent that we were to rely on the EU-U.S. Privacy Shield Framework, we will not be able to do so in the future, which could increase our costs and limit our ability to process personal data from the European Union. The same decision also cast doubt on the ability to use one of the primary alternatives to the Privacy Shield, namely, the European Commission's Standard Contractual Clauses, to lawfully transfer personal data from Europe to the United States and most other countries. At present, there are few if any viable alternatives to the Privacy Shield and the Standard Contractual Clauses.

Similar privacy and data security requirements are either in place or underway in the United States. There are a broad variety of data protection laws that may be applicable to our activities, and a range of enforcement agencies at both the state and federal levels that can review companies for privacy and data security concerns based on general consumer protection laws. The Federal Trade Commission and state Attorneys General all are aggressive in reviewing privacy and data security protections for consumers. New laws also are being considered at both the state and federal levels. For example, the California Consumer Privacy Act of 2018, or the CCPA, which became effective on January 1, 2020, requires companies that process information on California residents to make new disclosures to consumers about their data collection, use and sharing practices, allow consumers to opt out of certain data sharing with third parties and provide a new cause of action for data breaches. Many other states are considering similar legislation, and a broad range of legislative measures also have been introduced at the federal level.

Pharmaceutical Insurance Coverage and Health Care Reform

In the United States and markets in other countries, patients who are prescribed treatments for their conditions and providers performing the prescribed services generally rely on third-party payers to reimburse all or part of the associated health care costs. Significant uncertainty exists as to the coverage and reimbursement status of products approved by the FDA and other government authorities. Thus, even if a product candidate of ours or one of our collaborators is approved, sales of the product will depend, in part, on the extent to which third-party payers, including government health programs in the United States such as Medicare and Medicaid, commercial health insurers and managed care organizations provide coverage and establish adequate reimbursement levels for the product. The process for determining whether a payer will provide coverage for a product may be separate from the process for setting the price or reimbursement rate that the payer will pay for the product once coverage is approved. Third-party payers are increasingly challenging the prices charged, examining the medical necessity and reviewing the cost-effectiveness of medical products and services and imposing controls to manage costs.

Third-party payers may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the approved products for a particular indication.

In order to secure coverage and reimbursement for any product that might be approved for sale, a company may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of the product, in addition to the costs required to obtain FDA or other comparable marketing approvals. Nonetheless, product candidates may not be considered

medically necessary or cost effective. A decision by a third-party payer not to cover a product could reduce market acceptance once the product is approved and have a material adverse effect on sales, results of operations and financial condition. Additionally, a payer's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payer's determination to provide coverage for a product does not assure that other payers will also provide coverage and reimbursement for the product, and the level of coverage and reimbursement can differ significantly from payer to payer.

In international markets, reimbursement and health care payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. In some countries, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. To obtain coverage and adequate reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product to other available therapies.

The containment of health care costs also has become a priority of federal, state, and foreign governments and the prices of products have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on coverage, reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit a company's revenue generated from the sale of any approved products including those that we are our collaborators may develop. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which a company or its collaborators receive marketing approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Review and Approval of Medicinal Products in the European Union

In order to market any product outside of the United States, a company must also comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety, and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales, and distribution of products. Whether or not it obtains FDA approval for a product, an applicant will need to obtain the necessary approvals by the comparable non-U.S. regulatory authorities before it can commence clinical trials or marketing of the product in those countries or jurisdictions. The approval process ultimately varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others. Specifically, however, the process governing approval of medicinal products in the European Union generally follows the same lines as in the United States. It entails satisfactory completion of preclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each proposed indication. It also requires the submission to the relevant competent authorities of a marketing authorization application, or MAA, and granting of a marketing authorization by these authorities before the product can be marketed and sold in the European Union.

Clinical Trial Approval

The Clinical Trials Directive 2001/20/EC, the Directive 2005/28/EC on GCP and the related national implementing provisions of the individual member states of the European Union, or EU Member States, govern the system for the approval of clinical trials in the European Union. Under this system, an applicant must obtain prior approval from the competent national authority of the EU Member States in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after the competent ethics committee has issued a favorable opinion. The clinical trial application must be accompanied by, among other documents, an investigational medicinal product dossier (the Common Technical Document) with supporting information prescribed by Directive 2001/20/EC, Directive 2005/28/EC, where relevant the implementing national provisions of the individual EU Member States and further detailed in applicable guidance documents.

In April 2014, the new Clinical Trials Regulation, (EU) No 536/2014, was adopted. The new Clinical Trials Regulation aims to simplify and streamline the approval of clinical trials in the European Union. The main characteristics of the regulation include: a streamlined application procedure via a single entry point, the "EU Portal and Database"; a single set of documents to be prepared and submitted for the application as well as simplified reporting procedures for clinical trial sponsors; and a harmonized procedure for the assessment of applications for clinical trials, which is divided in two parts. Part I is assessed by the appointed reporting Member State, whose assessment report is submitted for review by the sponsor and all other competent authorities of all EU Member States in which an application for authorization of a clinical trial has been submitted (Concerned Member States). Part II is assessed separately by each Concerned Member State. Strict deadlines have been established for the assessment of clinical trial applications. The role of the

relevant ethics committees in the assessment procedure will continue to be governed by the national law of the Concerned Member State. However, overall related timelines will be defined by the Clinical Trials Regulation.

The Clinical Trials Regulation will be directly applicable in all the EU Member States, repealing the current Clinical Trials Directive 2001/20/EC and replacing any national legislation that was put in place to implement the Clinical Trials Directive. Conduct of all clinical trials performed in the European Union will continue to be bound by currently applicable provisions until the new Clinical Trials Regulation becomes applicable. The extent to which on-going clinical trials will be governed by the Clinical Trials Regulation will depend on when the Clinical Trials Regulation becomes applicable and on the duration of the individual clinical trial. If a clinical trial continues for more than three years from the day on which the Clinical Trials Regulation becomes applicable the Clinical Trials Regulation will at that time begin to apply to the clinical trial.

In January 2020, the website of the European Commission reported that the implementation of the Clinical Trials Regulation was dependent on the development of a fully functional clinical trials portal and database, which would be confirmed by an independent audit which was conducted in December 2020, and that the new legislation would come into effect six months after the European Commission publishes a notice of this confirmation. The Clinical Trials Regulation becomes applicable six months after the European Commission publishes notice of this confirmation and has published an expected system “go live” in December 2021. When the Clinical Trials Regulation becomes applicable, the existing Clinical Trials Directive and national legislation put in place to implement the Directive will be repealed. Following implementation of the Clinical Trials Regulation, a transitional period will be in effect for one year where new clinical trial applications can be submitted either under the existing Clinical Trials Directive or under the new Clinical Trials Regulation.

PRIME Designation in the European Union

In March 2016, the European Medicines Agency, or EMA, launched an initiative to facilitate development of product candidates in indications, often rare, for which few or no therapies currently exist. The PRIority MEdicines, or PRIME, scheme is intended to encourage drug development in areas of unmet medical need and provides accelerated assessment of products representing substantial innovation reviewed under the centralized procedure. Products from small- and medium-sized enterprises may qualify for earlier entry into the PRIME scheme than larger companies. Many benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and accelerated marketing authorization application assessment once a dossier has been submitted. Importantly, a dedicated agency contact and rapporteur from the Committee for Human Medicinal Products, or CHMP, or Committee for Advanced Therapies are appointed early in PRIME scheme facilitating increased understanding of the product at EMA’s Committee level. A kick-off meeting initiates these relationships and includes a team of multidisciplinary experts at the EMA to provide guidance on the overall development and regulatory strategies.

Marketing Authorization

To obtain a marketing authorization for a product under European Union regulatory systems, an applicant must submit an MAA either under a centralized procedure administered by the EMA, or one of the procedures administered by competent authorities in the EU Member States (decentralized procedure, national procedure or mutual recognition procedure). A marketing authorization may be granted only to an applicant established in the European Union. Regulation (EC) No 1901/2006 provides that prior to obtaining a marketing authorization in the European Union, applicants have to demonstrate compliance with all measures included in an EMA-approved Paediatric Investigation Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver, or (3) a deferral for one or more of the measures included in the PIP.

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid across the European Economic Area (i.e. the European Union as well as Iceland, Liechtenstein and Norway). Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products, and products with a new active substance indicated for the treatment of certain diseases. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, the centralized procedure may be optional. The centralized procedure may at the request of the applicant also be used in certain other cases.

Under the centralized procedure, the CHMP is responsible for conducting the initial assessment of a product and for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure in the European Union, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response

to questions of the CHMP. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. If the CHMP accepts such request, the time limit of 210 days will be reduced to 150 days but it is possible that the CHMP can revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. At the end of this period, the CHMP provides a scientific opinion on whether or not a marketing authorization should be granted in relation to a medicinal product. Within 15 calendar days of receipt of a final opinion from the CHMP, the European Commission must prepare a draft decision concerning an application for marketing authorization. This draft decision must take the opinion and any relevant provisions of European Union law into account. Before arriving at a final decision on an application for centralized authorization of a medicinal product the European Commission must consult the Standing Committee on Medicinal Products for Human Use, or the Standing Committee. The Standing Committee is composed of representatives of the EU Member States and chaired by a non-voting European Commission representative. The European Parliament also has a related “droit de regard”. The European Parliament’s role is to ensure that the European Commission has not exceeded its powers in deciding to grant or refuse to grant a marketing authorization.

The European Commission may grant a so-called “marketing authorization under exceptional circumstances”. Such authorization is intended for products for which the applicant can demonstrate that it is unable to provide comprehensive data on the efficacy and safety under normal conditions of use, because the indications for which the product in question is intended are encountered so rarely that the applicant cannot reasonably be expected to provide comprehensive evidence, or in the present state of scientific knowledge, comprehensive information cannot be provided, or it would be contrary to generally accepted principles of medical ethics to collect such information. Consequently, marketing authorization under exceptional circumstances may be granted subject to certain specific obligations, which may include the following:

- the applicant must complete an identified program of studies within a time period specified by the competent authority, the results of which form the basis of a reassessment of the benefit/risk profile;
- the medicinal product in question may be supplied on medical prescription only and may in certain cases be administered only under strict medical supervision, possibly in a hospital and in the case of a radiopharmaceutical, by an authorized person; and
- the package leaflet and any medical information must draw the attention of the medical practitioner to the fact that the particulars available concerning the medicinal product in question are as yet inadequate in certain specified respects.

A marketing authorization under exceptional circumstances is subject to annual review to reassess the risk- benefit balance in an annual reassessment procedure. Continuation of the authorization is linked to the annual reassessment and a negative assessment could potentially result in the marketing authorization being suspended or revoked. The renewal of a marketing authorization of a medicinal product under exceptional circumstances, however, follows the same rules as a “normal” marketing authorization. Thus, a marketing authorization under exceptional circumstances is granted for an initial five years, after which the authorization will become valid indefinitely, unless the EMA decides that safety grounds merit one additional five-year renewal.

The European Commission may also grant a so-called “conditional marketing authorization” prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional marketing authorizations may be granted for product candidates (including medicines designated as orphan medicinal products), if (i) the risk-benefit balance of the product candidate is positive, (ii) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data, (iii) the product fulfills an unmet medical need, and (iv) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization.

The European Union medicines rules expressly permit the EU Member States to adopt national legislation prohibiting or restricting the sale, supply or use of any medicinal product containing, consisting of or derived from a specific type of human or animal cell, such as embryonic stem cells. While the products we have in development do not make use of embryonic stem cells, it is possible that the national laws in certain EU Member States may prohibit or restrict us from commercializing our products, even if they have been granted a European Union marketing authorization.

Unlike the centralized authorization procedure, the decentralized marketing authorization procedure requires a separate application to, and leads to separate approval by, the competent authorities of each EU Member State in which the product is to be

marketed. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The reference EU Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the concerned EU Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a concerned EU Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the European Commission, whose decision is binding on all EU Member States.

The mutual recognition procedure similarly is based on the acceptance by the competent authorities of the EU Member States of the marketing authorization of a medicinal product by the competent authorities of other EU Member States. The holder of a national marketing authorization may submit an application to the competent authority of an EU Member State requesting that this authority recognize the marketing authorization delivered by the competent authority of another EU Member State.

As in the United States, information about clinical trials in support of a marketing application must be submitted within specific timeframes to the European Union (EudraCT) website: https://eudract.ema.europa.eu/ and other countries.

Regulatory Data Protection in the European Union

In the European Union, innovative medicinal products approved on the basis of a complete independent data package qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity pursuant to Directive 2001/83/EC. Regulation (EC) No 726/2004 repeats this entitlement for medicinal products authorized in accordance the centralized authorization procedure. Data exclusivity prevents applicants for authorization of generics of these innovative products from referencing the innovator's data to assess a generic (abridged) application for a period of eight years. During an additional two-year period of market exclusivity, a generic marketing authorization application can be submitted and authorized, and the innovator's data may be referenced, but no generic medicinal product can be placed on the European Union market until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be a new chemical entity so that the innovator gains the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical tests, preclinical tests, and clinical trials.

Periods of Authorization and Renewals

A marketing authorization has an initial validity for five years in principle. The marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the EU Member State. To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety, and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. The European Commission or the competent authorities of the EU Member States may decide, on justified grounds relating to pharmacovigilance, to proceed with one further five- year period of marketing authorization. Once subsequently definitively renewed, the marketing authorization shall be valid for an unlimited period. Any authorization which is not followed by the actual placing of the medicinal product on the European Union market (in case of centralized procedure) or on the market of the authorizing EU Member State within three years after authorization ceases to be valid (the so-called sunset clause).

Brexit and the Regulatory Framework in the United Kingdom

On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, commonly referred to as Brexit. Following protracted negotiations, the United Kingdom withdrew from the European Union on January 31, 2020. On December 24, 2020, the United Kingdom and the European Union entered into a Trade and Cooperation Agreement, which sets out certain procedures for approval and recognition of medical products in each jurisdiction. Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from European Union directives and regulations, Brexit could materially impact the future regulatory regime that applies to products and the approval of product candidates in the United Kingdom, as the United Kingdom legislation now has the potential to diverge from European Union legislation. It remains to be seen how Brexit will impact regulatory requirements for product candidates and products in the United Kingdom in the long-term. The Medicines and Healthcare Products Regulatory Agency has recently published detailed guidance for industry and organizations to follow from January 1, 2021 now the transition period is over, which will be updated as the United Kingdom's regulatory position on medicinal products evolves over time.

Furthermore, while the Data Protection Act of 2018 in the United Kingdom that "implements" and complements the European Union's GDPR is now effective in the United Kingdom, it is still unclear whether transfer of data from the EEA to the United Kingdom will remain lawful under GDPR. The Trade and Cooperation Agreement provides for a transitional period during which the United Kingdom will be treated like an European Union member state in relation to processing and transfers of personal data for four months from January 1, 2021. This may be extended by two further months. After such period, the United Kingdom will be a "third country" under the GDPR unless the European Commission adopts an adequacy decision in respect of transfers of personal data to the United Kingdom. The United Kingdom has already determined that it considers all of the European Union and EEA member states to be adequate for the purposes of data protection, ensuring that data flows from the United Kingdom to the European and EEA remain unaffected.

Pricing Decisions for Approved Products

In the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. For example, EU Member States have the option to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. EU Member States may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other EU Member States allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the European Union have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage health care expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the European Union. The downward pressure on health care costs in general, particularly prescription products, has become intense. As a result, increasingly high barriers are being erected to the entry of new products. Political, economic, and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU Member States, and parallel trade, i.e., arbitrage between low-priced and high-priced EU Member States, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any products, if approved in those countries.

Employees

As of December 31, 2020, we had 445 full-time employees and 452 total employees, including a total of 231 employees with Ph.D. degrees. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Our Corporate Information

Our principal executive offices are located at 120 West 45th Street, 17th Floor, New York, New York 10036, and our telephone number is (212) 295-5800. Our website address is http://www.schrodinger.com. The information contained on, or that can be accessed through, our website is not incorporated by reference into this Annual Report or in any other report or document we file with the SEC, and any reference to our website address is intended to be an inactive textual reference only.

We own or have rights to trademarks, service marks, and trade names that we use in connection with the operation of our business, including our corporate name, logos and website names. Other trademarks, service marks, and trade names appearing in this Annual Report are the property of their respective owners. Solely for convenience, some of the trademarks, service marks, and trade names referred to in this Annual Report are listed without the ® and ™ symbols.

Available Information

We make available free of charge through our website our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. We make these reports available through our website as soon as reasonably practicable after we electronically file such reports with, or furnish such reports to, the SEC. We also make available, free of charge on our website, the reports filed with the SEC by our executive officers, directors and 10% stockholders pursuant to Section 16 under the Exchange Act as soon as reasonably practicable after copies of those filings are provided to us by those persons. The information contained on, or that can be access through, our website is not a part of or incorporated by reference in this Annual Report.

Item 1A. Risk Factors.

You should carefully consider the risks and uncertainties described below together with all of the other information contained in this Annual Report and our other public filings with the SEC. The risks described below are not the only risks facing our company. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could cause our business, prospects, operating results, and financial condition to suffer materially.

Risks Related to Our Financial Position and Need for Additional Capital

We have a history of significant operating losses, and we expect to incur losses over the next several years.

We have a history of significant operating losses. Our net loss was $26.6 million, $25.7 million, and 28.4 million for the years ended December 31, 2020, 2019 and 2018, respectively. As of December 31, 2020, we had an accumulated deficit of $129.6 million.

We anticipate that our operating expenses will increase substantially in the foreseeable future as we continue to invest in our internal drug discovery programs, sales and marketing infrastructure, and our computational platform. We are still in the early stages of development of our own drug discovery program, and we have not yet identified our first clinical candidate. We have no drug products licensed for commercial sale and have not generated any revenue from our own drug product sales to date. We expect to continue to incur significant expenses and operating losses over the next several years. Our operating expenses and net income or loss may fluctuate significantly from quarter to quarter and year to year. We anticipate that our expenses will increase substantially as we:

- continue to invest in and develop our computational platform and software solutions;
- continue our research and development efforts for our internal drug discovery programs;
- conduct preclinical studies and clinical trials for any of our future product candidates;
- maintain, expand, enforce, defend, and protect our intellectual property;
- hire additional software engineers, programmers, sales and marketing, and other personnel to support our software business;
- hire additional clinical, quality control, and other scientific personnel; and
- add operational, financial, and management information systems and personnel to support our operations as a public company.

If we are unable to increase sales of our software, or if we and our current and future collaborators are unable to successfully develop and commercialize drug products, our revenues may be insufficient for us to achieve or maintain profitability.

To achieve and maintain profitability, we must succeed in significantly increasing our software sales, or we and our current or future collaborators must succeed in developing, and eventually commercializing, a drug product or drug products that generate significant revenue. We currently generate revenues primarily from the sales of our software solutions and expect to continue to derive most of our revenue from sales of our software until such time as our or our collaborators' drug development and commercialization efforts are successful, if ever. As such, increasing sales of our software to existing customers and successfully marketing our software to new customers are critical to our success. Demand for our software solutions may be affected by a number of factors, including continued market acceptance by the biopharmaceutical industry, market adoption of our software solutions beyond the biopharmaceutical industry including for material science applications, the ability of our platform to identify more promising molecules and accelerate and lower the costs of discovery as compared to traditional methods, timing of development and release of new offerings by our competitors, technological change, and the rate of growth in our target markets. If we are unable to continue to meet the demands of our customers, our business operations, financial results, and growth prospects will be adversely affected.

Achieving success in drug development will require us or our current or future collaborators to be effective in a range of challenging activities, including completing preclinical testing and clinical trials of product candidates, obtaining regulatory approval for these product candidates and manufacturing, marketing, and selling any products for which we or they may obtain regulatory approval. We and most of our current drug discovery collaborators are only in the preliminary stages of most of these activities. We and they may never succeed in these activities and, even if we do, we may never generate revenues that are significant enough to achieve and to maintain profitability, or even if our collaborators do, we may not receive option fees, milestone payments, or royalties from them that are significant enough for us to achieve and to maintain profitability. Because of the intense competition in the market for our software solutions and the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict when, or if, we will be able to sustain profitability.

Even if we achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would depress the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, increase sales of our software, develop a pipeline of product candidates, enter into collaborations, or even continue our operations. A decline in the value of our company could also cause our stockholders to lose all or part of their investment.

In addition, although we have experienced revenue growth in recent periods, we may not be able to sustain revenue growth consistent with our recent history or at all. Our total revenues increased by 26% from $85.5 million in the fiscal year ended December 31, 2019 to $108.1 million in the fiscal year ended December 31, 2020. You should not consider our revenue growth in recent periods as indicative of our future performance. As we grow our business, our revenue growth rates may slow in future periods.

Our quarterly and annual results may fluctuate significantly, which could adversely impact the value of our common stock.

Our results of operations, including our revenues, gross margin, profitability, and cash flows, have historically varied from period to period, and we expect that they will continue to do so. As a result, period-to-period comparisons of our operating results may not be meaningful, and our quarterly and annual results should not be relied upon as an indication of future performance. Our quarterly and annual financial results may fluctuate as a result of a variety of factors, many of which are outside of our control. Factors that may cause fluctuations in our quarterly and annual financial results include, without limitation, those listed elsewhere in this “Risk Factors” section and those listed below:

- customer renewal rates and the timing and terms of customer renewals, including the seasonality of customer renewals of our on-premise software arrangements, for which revenue historically has been recognized at a single point in time in the first and fourth quarter of each fiscal year;
- our ability to attract new customers for our software;
- the addition or loss of large customers, including through acquisitions or consolidations of such customers;
- the amount and timing of operating expenses related to the maintenance and expansion of our business, operations, and infrastructure;
- network outages or security breaches;
- general economic, industry, and market conditions, including within the life sciences industry;
- our ability to collect receivables from our customers;
- the amount of software purchased by our customers, including the mix of on-premise and hosted software sold during a period;
- variations in the timing of the sales of our software, which may be difficult to predict;
- changes in the pricing of our solutions and in our pricing policies or those of our competitors;
- the timing and success of the introduction of new software solutions by us or our competitors or any other change in the competitive dynamics of our industry, including consolidation among competitors, customers, or strategic collaborators;
- changes in the fair value of or receipt of distributions or proceeds on account of the equity interests we hold in our drug discovery collaborators, such as Morphic;
- the success of our drug discovery collaborators in developing and commercializing drug products for which we are entitled to receive milestone payments or royalties and the timing of receipt of such payments, if any, such as under our collaboration agreement with Bristol-Myers Squibb Company, or BMS; and
- the timing of expenses related to our drug discovery programs, the development or acquisition of technologies or businesses and potential future charges for impairment of goodwill from acquired companies.

In addition, because we recognize revenues from our hosted software solutions ratably over the life of the contract, a significant upturn or downturn in sales of our hosted software solutions may not be reflected immediately in our operating results. As a result of these factors, we believe that period-to-period comparisons of our operating results are not a good indication of our future performance and that our interim financial results are not necessarily indicative of results for a full year or for any subsequent interim period.

We may require additional capital to fund our operations. If we are unable to raise additional capital on terms acceptable to us or at all or generate cash flows necessary to maintain or expand our operations, we may not be able to compete successfully, which would harm our business, operations, and financial condition.

We expect to devote substantial financial resources to our ongoing and planned activities, including the development of drug discovery programs and continued investment in our computational platform. We expect our expenses to increase substantially in connection with our ongoing and planned activities, particularly as we advance our internal drug discovery programs, initiate preclinical and investigational new drug, or IND, enabling studies and invest in the further development of our platform. In addition, if we determine to advance any of our drug discovery programs into clinical development and seek regulatory approval on our own, we expect to incur significant additional expenses. Furthermore, we incur additional costs associated with operating as a public company.

Our current drug discovery collaborators, from whom we are entitled to receive milestone payments upon achievement of various development, regulatory, and commercial milestones as well as royalties on commercial sales, if any, under the collaboration agreements that we have entered into with them, face numerous risks in the development of drugs, including the conduct of preclinical and clinical testing, obtaining regulatory approval, and achieving product sales. In addition, the amounts we are entitled to receive upon the achievement of such milestones tend to be smaller for near-term development milestones and increase if and as a collaborative product candidate advances through regulatory development to commercialization and will vary depending on the level of commercial success achieved, if any. We do not anticipate receiving significant milestone payments from many of our drug discovery collaborators for several years, if at all, and our drug discovery collaborators may never achieve milestones that result in significant cash payments to us. Accordingly, we may need to obtain substantial additional capital to fund our continuing operations.

As of December 31, 2020, we had cash, cash equivalents, restricted cash, and marketable securities of $643.2 million. We believe that our existing cash, cash equivalents, and marketable securities will be sufficient to fund our operations and capital expenditure requirements for at least the next 12 months. However, we have based this estimate on assumptions that may prove to be wrong, and our operating plans may change as a result of many factors currently unknown to us. As a result, we could deplete our capital resources sooner than we currently expect.

Our future capital requirements will depend on many factors, including:

- the growth of our software revenue;
- the timing and extent of spending to support research and development efforts;
- the continued expansion of software sales and marketing activities;
- the timing and receipt of payments from our collaborations as well as spending to support, advance, and broaden our internal drug discovery programs; and
- the timing and receipt of any distributions or proceeds we may receive from our equity stakes in our co-founded companies and other drug discovery collaborators and partners.

In the event that we require additional financing, we may not be able to raise such financing on terms acceptable to us or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. If we are unable to raise additional capital on terms acceptable to us or at all or generate cash flows necessary to maintain or expand our operations and invest in our computational platform, we may not be able to compete successfully, which would harm our business, operations, and financial condition.

Raising additional capital may cause dilution to our stockholders, restrict our operations, or require us to relinquish rights to our technologies or drug programs.

To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' ownership interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights as common stockholders. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, selling or licensing our assets, making product acquisitions, making capital expenditures, or declaring dividends.

If we raise additional funds through collaborations, strategic alliances or marketing, distribution, or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us or agree to exploit a drug development target exclusively for one of our collaborators when we may prefer to pursue the drug development target for ourselves.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with generally accepted accounting principles in the United States, or U.S. GAAP, requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances, as provided in "Management's Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Significant Judgments and Estimates" of this Annual Report. The results of these estimates form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include the estimated variable consideration included in the transaction price in our contracts with customers, stock-based compensation, and valuation of our equity investments in early-stage biotechnology companies. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, we regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, changes to existing standards and changes in their interpretation, we might be required to change our accounting policies, alter our operational policies, and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or we may be required to restate our published financial statements. Such changes to existing standards or changes in their interpretation may have an adverse effect on our reputation, business, financial position, and profit.

Risks Related to Our Software

If our existing customers do not renew their licenses, do not buy additional solutions from us, or renew at lower prices, our business and operating results will suffer.

We expect to continue to derive a significant portion of our software revenues from renewal of existing license agreements. As a result, maintaining the renewal rate of our existing customers and selling additional software solutions to them is critical to our future operating results. Factors that may affect the renewal rate for our customers and our ability to sell additional solutions to them include:

- the price, performance, and functionality of our software solutions;
- the availability, price, performance, and functionality of competing software solutions;
- the effectiveness of our professional services;
- our ability to develop complementary software solutions, applications, and services;
- the success of competitive products or technologies;
- the stability, performance, and security of our technological infrastructure; and
- the business environment of our customers.

We deliver our software through either (i) a product license that permits our customers to install the software solution directly on their own in-house hardware and use it for a specified term, or (ii) a subscription that allows our customers to access the cloud-based software solution on their own hardware without taking control of the licenses. Our customers have no obligation to renew their product licenses or subscriptions for our software solutions after the license term expires, which is typically after one year, and many of our contracts may be terminated or reduced in scope either immediately or upon notice. In addition, our customers may negotiate terms less advantageous to us upon renewal, which may reduce our revenues from these customers. Factors that are not within our control may contribute to a reduction in our software revenues. For instance, our customers may reduce the number of their employees who are engaged in research and who would have use of our software, which would result in a corresponding reduction in the number of user licenses needed for some of our solutions and thus a lower aggregate renewal fee. The loss, reduction in scope, or delay of a large contract, or the loss or delay of multiple contracts, could materially adversely affect our business.

Our future operating results also depend, in part, on our ability to sell new software solutions and licenses to our existing customers. For example, the willingness of existing customers to license our software will depend on our ability to scale and adapt our existing software solutions to meet the performance and other requirements of our customers, which we may not do successfully. If our customers fail to renew their agreements, renew their agreements upon less favorable terms or at lower fee levels, or fail to purchase new software solutions and licenses from us, our revenues may decline and our future revenues may be constrained.

Our software sales cycle can vary and be long and unpredictable.

The timing of sales of our software solutions is difficult to forecast because of the length and unpredictability of our sales cycle. We sell our solutions primarily to biopharmaceutical companies, and our sales cycles can be as long as nine to twelve months or longer. Further, the length of time that potential customers devote to their testing and evaluation, contract negotiation, and budgeting processes varies significantly, depending on the size of the organization and the nature of their needs. In addition, we might devote substantial time and effort to a particular unsuccessful sales effort, and as a result, we could lose other sales opportunities or incur expenses that are not offset by an increase in revenue, which could harm our business.

A significant portion of our revenues are generated by sales to life sciences industry customers, and factors that adversely affect this industry could also adversely affect our software sales.

A significant portion of our current software sales are to customers in the life sciences industry, in particular the biopharmaceutical industry. Demand for our software solutions could be affected by factors that adversely affect the life sciences industry. The life sciences industry is highly regulated and competitive and has experienced periods of considerable consolidation. Consolidation among our customers could cause us to lose customers, decrease the available market for our solutions, and adversely affect our business. In addition, changes in regulations that make investment in the life sciences industry less attractive or drug development more expensive could adversely impact the demand for our software solutions. For these reasons and others, selling software to life sciences companies can be competitive, expensive, and time consuming, often requiring significant upfront time and expense without any assurance that we will successfully complete a software sale. Accordingly, our operating results and our ability to efficiently provide our solutions to life sciences companies and to grow or maintain our customer base could be adversely affected as a result of factors that affect the life sciences industry generally.

We also intend to continue leveraging our solutions for broad application to industrial challenges in molecule design, including in the fields of aerospace, energy, semiconductors, and electronic displays. However, we believe the materials science industry is in the very early stages of recognizing the potential of computational methods for molecular discovery, and there can be no assurance that the industry will adopt computational methods such as our platform. Any factor adversely affecting our ability to market our software solutions to customers outside of the life sciences industry, including in these new fields, could increase our dependence on the life sciences industry and adversely affect the growth rate of our revenues, operating results, and business.

The markets in which we participate are competitive, and if we do not compete effectively, our business and operating results could be adversely affected.

The overall market for molecular discovery and design software is global, rapidly evolving, competitive, and subject to changing technology and shifting customer focus. Our software solutions face competition from commercial competitors in the business of selling simulation and modeling software to biopharmaceutical companies. These competitors include BIOVIA, a brand of Dassault Systèmes SE, or BIOVIA; Chemical Computing Group (US) Inc.; Cresset Biomolecular Discovery Limited; OpenEye Scientific Software, Inc.; Optibrium Limited; and Simulations Plus, Inc. We also have competitors in materials science, such as BIOVIA and Materials Design, Inc., and in enterprise software for the life sciences, such as BIOVIA; Certara USA, Inc.; and Dotmatics, Inc. In some cases, these competitors are well-established providers of these solutions and have long-standing relationships with many of our current and potential customers, including large biopharmaceutical companies. In addition, there are academic consortia that develop physics-based simulation programs for life sciences and materials applications. In life sciences, the most prominent academic simulation packages include AMBER, CHARMm, GROMACS, GROMOS, OpenMM, and OpenFF. These packages are primarily maintained and developed by graduate students and post-doctoral researchers, often without the intent for commercialization. We also face competition from solutions that biopharmaceutical companies develop internally and from smaller companies that offer products and services directed at more specific markets than we target, enabling these smaller competitors to focus a greater proportion of their efforts and resources on these markets, as well as a large number of companies that have been founded with the goal of applying machine learning technologies to drug discovery.

Many of our competitors are able to devote greater resources to the development, promotion, and sale of their software solutions and services. It is possible that our new focus on internal drug discovery will result in loss of management focus and resources relating to our software business, thereby resulting in decreasing revenues from our software business. Furthermore, third parties with greater available resources and the ability to initiate or withstand substantial price competition could acquire our current or potential competitors. Our competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their product offerings or resources. If our competitors' products, services, or technologies become more accepted than our solutions, if our competitors are successful in bringing their products or services to market earlier than ours, if our competitors are able to respond more quickly and effectively to new or changing opportunities, technologies, or customer requirements, or if their products or services are more technologically capable than ours, then our software revenues could be adversely affected.

We may be required to decrease our prices or modify our pricing practices in order to attract new customers or retain existing customers due to increased competition. Pricing pressures and increased competition could result in reduced sales, reduced margins, losses, or a failure to maintain or improve our competitive market position, any of which could adversely affect our business.

We have invested and expect to continue to invest in research and development efforts that further enhance our computational platform. Such investments may affect our operating results, and, if the return on these investments is lower or develops more slowly than we expect, our revenue and operating results may suffer.

We have invested and expect to continue to invest in research and development efforts that further enhance our computational platform, often in response to our customers' requirements. These investments may involve significant time, risks, and uncertainties, including the risk that the expenses associated with these investments may affect our margins and operating results and that such investments may not generate sufficient revenues to offset liabilities assumed and expenses associated with these new investments. The software industry changes rapidly as a result of technological and product developments, which may render our solutions less desirable. We believe that we must continue to invest a significant amount of time and resources in our platform and software solutions to maintain and improve our competitive position. If we do not achieve the benefits anticipated from these investments, if the achievement of these benefits is delayed, or if a slowdown in general computing power impacts the rate at which we expect our physics-based simulations to increase in power and domain applicability, our revenue and operating results may be adversely affected.

If we are unable to collect receivables from our customers, our operating results may be adversely affected.

While the majority of our current customers are well-established, large companies and universities, we also provide software solutions to smaller companies. Our financial success depends upon the creditworthiness and ultimate collection of amounts due from our customers, including our smaller customers with fewer financial resources. If we are not able to collect amounts due from our customers, we may be required to write-off significant accounts receivable and recognize bad debt expenses, which could materially and adversely affect our operating results.

Defects or disruptions in our solutions could result in diminishing demand for our solutions, a reduction in our revenues, and subject us to substantial liability.

Our software business and the level of customer acceptance of our software depend upon the continuous, effective, and reliable operation of our software and related tools and functions. Our software solutions are inherently complex and may contain defects or errors. Errors may result from our own technology or from the interface of our software solutions with legacy systems and data, which we did not develop. The risk of errors is particularly significant when a new software solution is first introduced or when new versions or enhancements of existing software solutions are released. We have from time to time found defects in our software, and new errors in our existing software may be detected in the future. Any errors, defects, disruptions, or other performance problems with our software could hurt our reputation and may damage our customers' businesses. If that occurs, our customers may delay or withhold payment to us, cancel their agreements with us, elect not to renew, make service credit claims, warranty claims, or other claims against us, and we could lose future sales. The occurrence of any of these events could result in diminishing demand for our software, a reduction of our revenues, an increase in collection cycles for accounts receivable, require us to increase our warranty provisions, or incur the expense of litigation or substantial liability.

We rely upon third-party providers of cloud-based infrastructure to host our software solutions. Any disruption in the operations of these third-party providers, limitations on capacity, or interference with our use could adversely affect our business, financial condition, and results of operations.

We outsource substantially all of the infrastructure relating to our hosted software solutions to third-party hosting services. Customers of our hosted software solutions need to be able to access our computational platform at any time, without interruption or degradation of performance, and we provide them with service-level commitments with respect to uptime. Our hosted software solutions depend on protecting the virtual cloud infrastructure hosted by third-party hosting services by maintaining its configuration, architecture, features, and interconnection specifications, as well as the information stored in these virtual data centers, which is transmitted by third-party internet service providers. Any limitation on the capacity of our third-party hosting services could impede our ability to onboard new customers or expand the usage of our existing customers, which could adversely affect our business, financial condition, and results of operations. In addition, any incident affecting our third-party hosting services' infrastructure that may be caused by cyber-attacks, natural disasters, fire, flood, severe storm, earthquake, power loss, telecommunications failures, terrorist or other attacks, and other similar events beyond our control could negatively affect our cloud-based solutions. A prolonged service disruption affecting our cloud-based solutions for any of the foregoing reasons would negatively impact our ability to serve our customers and could damage our reputation with current and potential customers, expose us to liability, cause us to lose

customers, or otherwise harm our business. We may also incur significant costs for using alternative equipment or taking other actions in preparation for, or in reaction to, events that damage the third-party hosting services we use.

In the event that our service agreements with our third-party hosting services are terminated, or there is a lapse of service, elimination of services or features that we utilize, interruption of internet service provider connectivity, or damage to such facilities, we could experience interruptions in access to our platform as well as significant delays and additional expense in arranging or creating new facilities and services and/or re-architecting our hosted software solutions for deployment on a different cloud infrastructure service provider, which could adversely affect our business, financial condition, and results of operations.

If our security measures are breached or unauthorized access to customer data is otherwise obtained, our solutions may be perceived as not being secure, customers may reduce the use of or stop using our solutions, and we may incur significant liabilities.

Our solutions involve the collection, analysis, and storage of our customers' proprietary information and sensitive proprietary data related to the discovery efforts of our customers. As a result, unauthorized access or security breaches, as a result of third-party action, employee error, malfeasance, or otherwise could result in the loss of information, litigation, indemnity obligations, damage to our reputation, and other liability. Because the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, if our employees fail to adhere to practices we have established to maintain a firewall between our internal drug discovery team and our teams that work with software customers, or if the technical solutions we have adopted to maintain the firewall malfunction, our customers and collaborators may lose confidence in our ability to maintain the confidentiality of their intellectual property, we may have trouble attracting new customers and collaborators, we may be subject to breach of contract claims by our customers and collaborators, and we may suffer reputational and other harm as a result. Any or all of these issues could adversely affect our ability to attract new customers, cause existing customers to elect to not renew their licenses, result in reputational damage or subject us to third-party lawsuits or other action or liability, which could adversely affect our operating results. Our insurance may not be adequate to cover losses associated with such events, and in any case, such insurance may not cover all of the types of costs, expenses, and losses we could incur to respond to and remediate a security breach.

Any failure to offer high-quality technical support services could adversely affect our relationships with our customers and our operating results.

Our customers depend on our support organization to resolve technical issues relating to our solutions, as our software requires expert usage to fully exploit its capabilities. Certain of our customers also rely on us to troubleshoot problems with the performance of the software, introduce new features requested for specific customer projects, inform them about the best way to set up and analyze various types of simulations and illustrate our techniques for drug discovery using examples from publicly available data sets. We may be unable to respond quickly enough to accommodate short-term increases in customer demand for these support services. Increased customer demand for our services, without corresponding revenues, could increase costs and adversely affect our operating results. In addition, our sales process is highly dependent on the reputation of our solutions and business and on positive recommendations from our existing customers. Any failure to offer high-quality technical support, or a market perception that we do not offer high-quality support, could adversely affect our reputation, our ability to sell our solutions to existing and prospective customers and our business and operating results.

Our solutions utilize third party open source software, and any failure to comply with the terms of one or more of these open source software licenses could adversely affect our business or our ability to sell our software solutions, subject us to litigation, or create potential liability.

Our solutions include software licensed by third parties under any one or more open source licenses, including the GNU General Public License, the GNU Lesser General Public License, the Affero General Public License, the BSD License, the MIT License, the Apache License, and others, and we expect to continue to incorporate open source software in our solutions in the future. Moreover, we cannot ensure that we have effectively monitored our use of open source software or that we are in compliance with the terms of the applicable open source licenses or our current policies and procedures. There have been claims against companies that use open source software in their products and services asserting that the use of such open source software infringes the claimants' intellectual property rights. As a result, we and our customers could be subject to suits by third parties claiming that what we believe to be licensed open source software infringes such third parties' intellectual property rights, and we may be required to indemnify our customers against such claims. Additionally, if an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we or our customers could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from the sale of our solutions that contain the open source software and required to comply with onerous conditions or restrictions on these solutions,

which could disrupt the distribution and sale of these solutions. Litigation could be costly for us to defend, have a negative effect on our business, financial condition, and results of operations, or require us to devote additional research and development resources to change our solutions.

Use of open source software may entail greater risks than use of third party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code, including with respect to security vulnerabilities. In addition, certain open source licenses require that source code for software programs that interact with such open source software be made available to the public at no cost and that any modifications or derivative works to such open source software continue to be licensed under the same terms as the open source software license. The terms of various open source licenses have not been interpreted by courts in the relevant jurisdictions, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market our solutions. By the terms of certain open source licenses, we could be required to release the source code of our proprietary software, and to make our proprietary software available under open source licenses, if we combine our proprietary software with open source software in a certain manner. In the event that portions of our proprietary software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our solutions, or otherwise be limited in the licensing of our solutions, each of which could reduce or eliminate the value of our solutions. Disclosing our proprietary source code could allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales. Any of these events could create liability for us and damage our reputation, which could have a material adverse effect on our revenue, business, results of operations, and financial condition and the market price of our shares.

Risks Related to Drug Discovery

We may never realize return on our investment of resources and cash in our drug discovery collaborations.

We use our computational platform to provide drug discovery services to collaborators who are engaged in drug discovery and development. These collaborators include start-up companies we co-found, pre-commercial biotechnology companies, and large-scale pharmaceutical companies. When we engage in drug discovery with these collaborators, we typically provide access to our platform and platform experts who assist the drug discovery collaborator in identifying molecules that have activity against one or more specified protein targets. We historically have not received significant initial cash consideration for these services, except for the upfront payment of $55.0 million we received from BMS upon entry into our collaboration agreement with BMS. However, we have received equity consideration in certain of our collaborators and/or the right to receive option fees, cash milestone payments upon the achievement of specified development, regulatory, and commercial sales milestones for the drug discovery targets, and potential royalties. From time to time, we have also made additional equity investments in our drug discovery collaborators.

We may never realize return on our investment of resources and cash in our drug discovery collaborations. Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. Our drug discovery collaborators may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of any product candidates. In addition, our ability to realize return from our drug discovery collaborations is subject to the following risks:

- drug discovery collaborators have significant discretion in determining the amount and timing of efforts and resources that they will apply to our collaborations and may not perform their obligations as expected;
- drug discovery collaborators may not pursue development or commercialization of any product candidates for which we are entitled to option fees, milestone payments, or royalties or may elect not to continue or renew development or commercialization programs based on results of clinical trials or other studies, changes in the collaborator's strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- drug discovery collaborators may delay clinical trials for which we are entitled to milestone payments;
- we may not have access to, or may be restricted from disclosing, certain information regarding our collaborators' product candidates being developed or commercialized and, consequently, may have limited ability to inform our stockholders about the status of, and likelihood of achieving, milestone payments or royalties under such collaborations;
- drug discovery collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with any product candidates and products for which we are entitled to milestone payments or royalties if the collaborator believes that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive;

- product candidates discovered in drug discovery collaborations with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause our collaborators to cease to devote resources to the commercialization of any such product candidates;
- existing drug discovery collaborators and potential future drug discovery collaborators may begin to perceive us to be a competitor more generally, particularly as we advance our internal drug discovery programs, and therefore may be unwilling to continue existing collaborations with us or to enter into new collaborations with us;
- a drug discovery collaborator may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution, or marketing of a product candidate or product, which may impact our ability to receive milestone payments;
- disagreements with drug discovery collaborators, including disagreements over intellectual property or proprietary rights, contract interpretation, or the preferred course of development, might cause delays or terminations of the research, development, or commercialization of product candidates for which we are eligible to receive milestone payments, or might result in litigation or arbitration;
- drug discovery collaborators may not properly obtain, maintain, enforce, defend or protect our intellectual property or proprietary rights or may use our proprietary information in such a way as to potentially lead to disputes or legal proceedings that could jeopardize or invalidate our or their intellectual property or proprietary information or expose us and them to potential litigation;
- drug discovery collaborators may infringe, misappropriate, or otherwise violate the intellectual property or proprietary rights of third parties, which may expose us to litigation and potential liability;
- drug discovery collaborators could suffer from operational delays as a result of global health impacts, such as the COVID-19 pandemic; and
- drug discovery collaborations may be terminated prior to our receipt of any significant value from the collaboration.

Our drug discovery collaborations may not lead to development or commercialization of product candidates that results in our receipt of option fees, milestone payments, or royalties in a timely manner, or at all. If any drug discovery collaborations that we enter into do not result in the successful development and commercialization of drug products that result in option fees, milestone payments, or royalties to us, we may not receive return on the resources we have invested in the drug discovery collaboration. Moreover, even if a drug discovery collaboration initially leads to the achievement of milestones that result in payments to us, it may not continue to do so.

We also rely on collaborators for the development and potential commercialization of product candidates we discover internally when we believe it will help maximize the commercial value of the product candidate. For example, under our collaboration agreement with BMS, after mutual agreement on the targets(s) of interest, our drug discovery group will be responsible for the discovery of development candidates. Once a development candidate meeting specified criteria for a target has been identified, BMS will be solely responsible for the development, manufacturing and commercialization of such development candidate. Even if we successfully identify one or more development candidates for BMS to develop and commercialize under our collaboration agreement, BMS may not achieve the research, development, regulatory and sales milestones for those development candidates that result in additional payments to us.

We may never realize a return on our equity investments in our drug discovery collaborators.

We may never realize a return on our equity investments in our drug discovery collaborators. None of the drug discovery collaborators in which we hold equity generate revenue from commercial sales of drug products. They are therefore dependent on the availability of capital on favorable terms to continue their operations. In addition, if the drug discovery collaborators in which we hold equity raise additional capital, our ownership interest in and degree of control over these drug discovery collaborators will be diluted, unless we have sufficient resources and choose to invest in them further or successfully negotiate contractual anti-dilution protections for our equity investment. The financial success of our equity investment in any collaborator will likely be dependent on a liquidity event, such as a public offering, acquisition, or other favorable market event reflecting appreciation in the value of the equity we hold. The capital markets for public offerings and acquisitions are dynamic, and the likelihood of liquidity events for the companies in which we hold equity interests could significantly worsen. Further, valuations of privately held companies are inherently complex due to the lack of readily available market data. If we determine that any of our investments in such companies have experienced a decline in value, we may be required to record an impairment, which could negatively impact our financial results. The fair value of our equity interests in public companies, such as Morphic, may fluctuate significantly in future periods since we determine the fair value

of such equity interests based on the market value of such companies' common stock as of a given reporting date. All of the equity we hold in our drug discovery collaborators is subject to a risk of partial or total loss of our investment.

Our drug discovery collaborators have significant discretion in determining when to make announcements, if any, about the status of our collaborations, including about clinical developments and timelines for advancing collaborative programs, and the price of our common stock may decline as a result of announcements of unexpected results or developments.

Our drug discovery collaborators have significant discretion in determining when to make announcements about the status of our collaborations, including about preclinical and clinical developments and timelines for advancing the collaborative programs. While as a general matter we intend to periodically report on the status of our collaborations, our drug discovery collaborators, and in particular, our privately-held collaborators, may wish to report such information more or less frequently than we intend to or may not wish to report such information at all. The price of our common stock may decline as a result of the public announcement of unexpected results or developments in our collaborations, or as a result of our collaborators withholding such information.

Although we believe that our computational platform has the potential to identify more promising molecules than traditional methods and to accelerate drug discovery, our focus on using our platform technology to discover and design molecules with therapeutic potential may not result in the discovery and development of commercially viable products for us or our collaborators.

Our scientific approach focuses on using our platform technology to conduct "computational assays" that leverage our deep understanding of physics-based modeling and theoretical chemistry to design molecules and predict their key properties without conducting time-consuming and expensive physical experiments. Our computational platform underpins our software solutions, our drug discovery collaborations and our own internal drug discovery programs.

While the results of certain of our drug discovery collaborators suggest that our platform is capable of accelerating drug discovery and identifying high quality product candidates, these results do not assure future success for our drug discovery collaborators or for us with our internal drug discovery programs.

Even if we or our drug discovery collaborators are able to develop product candidates that demonstrate potential in preclinical studies, we or they may not succeed in demonstrating safety and efficacy of product candidates in human clinical trials. For example, in collaboration with us, Nimbus Therapeutics, LLC, or Nimbus, was able to identify a unique series of acetyl-CoA carboxylase, or ACC, allosteric protein-protein interaction inhibitors with favorable pharmaceutical properties that inhibit the activity of the ACC enzyme. Nimbus achieved proof of concept in a Phase 1b clinical trial of its ACC inhibitor, firsocostat, and later sold the program to Gilead Sciences, Inc., or Gilead Sciences, in a transaction valued at approximately $1.2 billion, comprised of an upfront payment and earn outs. Of this amount, $601.3 million has been paid to Nimbus to date, and we received a total of $46.0 million in cash distributions in 2016 and 2017. In December 2019, Gilead Sciences announced topline results from its Phase 2 clinical trial which included firsocostat, both as a monotherapy and in combination with other investigational therapies for advanced fibrosis due to nonalcoholic steatohepatitis, in which the primary endpoint was not met. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their product candidates.

We may not be successful in our efforts to identify or discover product candidates and may fail to capitalize on programs, collaborations, or product candidates that may present a greater commercial opportunity or for which there is a greater likelihood of success.

Research programs to identify new product candidates require substantial technical, financial, and human resources. As an organization, we have not yet developed any product candidates, and we may fail to identify potential product candidates for clinical development. Similarly, a key element of our business plan is to expand the use of our computational platform through an increase in software sales and drug discovery collaborations. A failure to demonstrate the utility of our platform by successfully using it ourselves to discover internal product candidates could harm our business prospects.

Because we have limited resources, we focus our research programs on protein targets where we believe our computational assays are a good substitute for experimental assays, where we believe it is theoretically possible to discover a molecule with properties that are required for the molecule to become a drug and where we believe there is a meaningful commercial opportunity, among other factors. The focus of our initial internal drug discovery programs was in the area of oncology, and we have only recently begun expanding into other therapeutic areas, including neurology and immunology. We may forego or delay pursuit of opportunities with certain programs, collaborations, or product candidates or for indications that later prove to have greater commercial potential. However, the development of any product candidate we pursue may ultimately prove to be unsuccessful or less successful than another potential product candidate that we might have chosen to pursue on a more aggressive basis with our capital resources. If we

do not accurately evaluate the commercial potential for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic collaboration, partnership, licensing, or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. Alternatively, we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a collaboration.

We rely on contract research organizations to synthesize any molecules with therapeutic potential that we discover. If such organizations do not meet our supply requirements, development of any product candidate we may develop may be delayed.

We expect to rely on third parties to synthesize any molecules with therapeutic potential that we discover. Reliance on third parties may expose us to different risks than if we were to synthesize molecules ourselves. If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or synthesize molecules in accordance with regulatory requirements, if there are disagreements between us and such parties or if such parties are unable to expand capacities, we may not be able to fulfill, or may be delayed in producing sufficient product candidates to meet, our supply requirements. These facilities may also be affected by natural disasters, such as floods or fire, or geopolitical developments or public health pandemics, such as COVID-19, or such facilities could face production issues, such as contamination or regulatory concerns following a regulatory inspection of such facility. In such instances, we may need to locate an appropriate replacement third-party facility and establish a contractual relationship, which may not be readily available or on acceptable terms, which would cause additional delay and increased expense, and may have a material adverse effect on our business.

We or any third party may also encounter shortages in the raw materials or active pharmaceutical ingredient, or API, necessary to synthesize any molecule we may discover in the quantities needed for preclinical studies or clinical trials, as a result of capacity constraints or delays or disruptions in the market for the raw materials or API. Even if raw materials or API are available, we may be unable to obtain sufficient quantities at an acceptable cost or quality. The failure by us or the third parties to obtain the raw materials or API necessary to synthesize sufficient quantities of any molecule we may discover could delay, prevent, or impair our development efforts and may have a material adverse effect on our business.

If we are not able to establish or maintain collaborations to develop and commercialize any of the product candidates we discover internally, we may have to alter our development and commercialization plans for those product candidates and our business could be adversely affected.

We have not yet identified any product candidates or advanced any of our drug discovery programs past the discovery stage and into preclinical studies or human clinical trials. We expect to rely on future collaborators for the development and potential commercialization of product candidates we discover internally when we believe it will help maximize the commercial value of the product candidate. We face significant competition in seeking appropriate collaborators for these activities, and a number of more established companies may also be pursuing such collaborations. These established companies may have a competitive advantage over us due to their size, financial resources, and greater clinical development and commercialization expertise. Whether we reach a definitive agreement for such collaborations will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration, and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of preclinical studies and clinical trials, the likelihood of approval by the U.S. Food and Drug Administration, or FDA, or similar regulatory authorities outside the United States, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. Collaborations are complex and time-consuming to negotiate and document. In addition, there have been a significant number of recent business combinations among large biopharmaceutical companies that have resulted in a reduced number of potential future collaborators.

If we are unable to reach agreements with suitable collaborators on a timely basis, on acceptable terms or at all, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other development programs, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to fund and undertake development or commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we fail to enter into collaborations and do not have sufficient funds or expertise to undertake the necessary development and commercialization activities, we may not be able to further develop any product candidates or bring them to market.

As a company, we do not have any experience in clinical development and have not advanced any product candidates into clinical development.

We only began conducting our own internal drug discovery efforts in mid-2018. As a company, we do not have any experience in clinical development and have not advanced any product candidates into clinical development. Our lack of experience in conducting clinical development activities may adversely impact the likelihood that we will be successful in advancing our programs. Further, any predictions you make about the future success or viability of our internal drug discovery programs may not be as accurate as they could be if we had a history of conducting clinical trials and developing our own product candidates.

In addition, as our internal drug discovery business grows, we may encounter unforeseen expenses, difficulties, complications, delays, and other known and unknown factors. Our internal drug discovery business may need to transition to a business capable of supporting clinical development activities. We may not be successful in such a transition.

If we and any current or future collaborators are unable to successfully complete clinical development, obtain regulatory approval for, or commercialize any product candidates, or experience delays in doing so, our business may be materially harmed.

The success of our and any current or future collaborators' development and commercialization programs will depend on several factors, including the following:

- successful completion of necessary preclinical studies to enable the initiation of clinical trials;
- successful enrollment of patients in, and the completion of, the clinical trials;
- acceptance by the FDA or other regulatory agencies of regulatory filings for any product candidates we and our current or future collaborators may develop;
- expanding and maintaining a workforce of experienced scientists and others to continue to develop any product candidates;
- obtaining and maintaining intellectual property protection and regulatory exclusivity for any product candidates we and our current or future collaborators may develop;
- making arrangements with third-party manufacturers for, or establishing, clinical and commercial manufacturing capabilities;
- establishing sales, marketing, and distribution capabilities for drug products and successfully launching commercial sales, if and when approved;
- acceptance of any product candidates we and our current or future collaborators may develop, if and when approved, by patients, the medical community, and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining coverage, adequate pricing, and adequate reimbursement from third-party payors, including government payors;
- patients' willingness to pay out-of-pocket in the absence of coverage and/or adequate reimbursement from third-party payors;
- ongoing or future restrictions resulting from the COVID-19 pandemic and its collateral consequences may result in internal and external operational delays and limitations; and
- maintaining a continued acceptable safety profile following receipt of any regulatory approvals.

Many of these factors are beyond our control, including clinical outcomes, the regulatory review process, potential threats to our intellectual property rights, and the manufacturing, marketing, and sales efforts of any current or future collaborator. Clinical drug development involves a lengthy and expensive process, with an uncertain outcome. If we or our current or future collaborators are unable to develop, receive marketing approval for, and successfully commercialize any product candidates, or if we or they experience delays as a result of any of these factors or otherwise, we may need to spend significant additional time and resources, which would adversely affect our business, prospects, financial condition, and results of operations.

Risks Related to Our Operations

Doing business internationally creates operational and financial risks for our business.

For the fiscal year ended December 31, 2020, sales to customers outside of the United States accounted for approximately 44% of our total revenues. Operating in international markets requires significant resources and management attention and subjects us to regulatory, economic, and political risks that are different from those in the United States. We have limited operating experience in some international markets, and we cannot assure you that our expansion efforts into other international markets will be successful. Our experience in the United States and other international markets in which we already have a presence may not be relevant to our ability to expand in other markets. Our international expansion efforts may not be successful in creating further demand for our solutions outside of the United States or in effectively selling our solutions in the international markets we enter. In addition, we face risks in doing business internationally that could adversely affect our business, including:

- the need to localize and adapt our solutions for specific countries, including translation into foreign languages;
- data privacy laws which require that customer data be stored and processed in a designated territory or handled in a manner that differs significantly from how we typically handle customer data;
- difficulties in staffing and managing foreign operations, including employee laws and regulations;
- different pricing environments, longer sales cycles, and longer accounts receivable payment cycles and collections issues;
- new and different sources of competition;
- weaker protection for intellectual property and other legal rights than in the United States and practical difficulties in enforcing intellectual property and other rights outside of the United States;
- laws and business practices favoring local competitors;
- compliance challenges related to the complexity of multiple, conflicting, and changing governmental laws and regulations, including employment, tax, reimbursement and pricing, privacy and data protection, and anti-bribery laws and regulations;
- increased financial accounting and reporting burdens and complexities;
- restrictions on the transfer of funds;
- changes in diplomatic and trade relationships, including new tariffs, trade protection measures, import or export licensing requirements, trade embargoes, and other trade barriers;
- changes in social, political, and economic conditions or in laws, regulations, and policies governing foreign trade, manufacturing, development, and investment both domestically as well as in the other countries and jurisdictions;
- adverse tax consequences, including the potential for required withholding taxes;
- global health pandemics, such as COVID-19; and
- unstable regional and economic political conditions.

Our international agreements may provide for payment denominated in local currencies and our local operating costs are denominated in local currencies. Therefore, fluctuations in the value of the U.S. dollar and foreign currencies may impact our operating results when translated into U.S. dollars. We do not currently engage in currency hedging activities to limit the risk of exchange rate fluctuations.

Additionally, we could face heightened risks as a result of the recent withdrawal of the United Kingdom from the European Union on January 31, 2020, commonly referred to as Brexit. On December 24, 2020, the United Kingdom and the European Union entered into a Trade and Cooperation Agreement, which sets out certain procedures for approval and recognition of medical products in each jurisdiction. Since the regulatory framework for pharmaceutical products in the United Kingdom covering quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from European Union directives and regulations, Brexit could materially impact the future regulatory regime that applies to products and the approval of product candidates in the United Kingdom.

A widespread outbreak of an illness or other health issue, such as the COVID-19 pandemic, could negatively affect various aspects of our business and make it more difficult to meet our obligations to our customers, and could result in reduced demand from our customers as well as delays in our drug discovery and development programs.

Our business and operations could be adversely affected by health epidemics, including the recent COVID-19 pandemic, impacting the markets and industries in which we and our customers and collaborators operate. In December 2019, a disease referred to as COVID-19 was reported and has spread to many countries worldwide, including the United States. The ongoing global COVID-19 pandemic may adversely impact many aspects of our business.

The COVID-19 pandemic has been declared a national emergency. In response to the COVID-19 pandemic, state, local, federal, and foreign governments have put in place, and others in the future may put in place, quarantines, executive orders, shelter-in-place orders, and similar government orders and restrictions in order to control the spread of the disease. Such orders or restrictions, or the perception that such orders or restrictions could occur, have resulted in business closures, work stoppages, slowdowns and delays, work-from-home policies, travel restrictions, and cancellation or postponement of events, among other effects that could negatively impact productivity and disrupt our operations and those of our customers and collaborators. In early March 2020, we implemented a work-from-home policy for all of our employees. Beginning in June 2020, we began limited re-openings of certain of our offices in the United States and abroad. Our re-openings have begun on a limited basis and are voluntary for all of our employees. We intend to continue to phase-in the re-opening of our offices as our management and federal, state, or local authorities advise, and we may take further actions that alter our operations as may be required by federal, state, or local authorities, or which we determine are in our best interests. While most of our operations can be performed remotely, there is no guarantee that we will be as effective while working remotely because our team is dispersed, many employees may have additional personal needs to attend to (such as looking after children as a result of school closures or family who become sick), and employees may become sick themselves and be unable to work. Decreased effectiveness of our team could adversely affect our results due to our inability to meet in person with potential or current customers and collaborators, or other decreases in productivity that could seriously harm our business.

The full extent of the future impact will depend on many factors outside of our control, including, without limitation, the timing, extent, trajectory and duration of the pandemic, the development and availability of effective treatments and vaccines, the imposition of protective public safety measures, and the impact of the pandemic on the global economy. For instance, if certain of our customers experience downturns or uncertainty in their own business operations and revenue because of the economic effects resulting from the spread of COVID-19, they may decrease their spending, which may result in decreased software revenue. Furthermore, as a result of the restrictions related to COVID-19, our sales force has limited in-person interactions, and their ability to attend events that promote and expand knowledge of our company and platform, including industry conferences and events has been hampered.

In addition, as a result of the COVID-19 pandemic, we may experience delays in the progress of certain of our drug discovery and development programs, particularly those that are in clinical studies or preparing to enter clinical studies. Delays in any such programs could result in delays achieving milestones and related revenue.

The global impact of COVID-19 continues to rapidly evolve, and we will continue to monitor the situation closely. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, operations, or the global economy as a whole. While the spread of COVID-19 may eventually be contained or mitigated, there is no guarantee that a future outbreak of this or any other widespread epidemics will not occur, or that the global economy will recover, either of which could seriously harm our business.

If we fail to manage our technical operations infrastructure, our existing customers, and our internal drug discovery team, may experience service outages, and our new customers may experience delays in the deployment of our solutions.

We have experienced significant growth in the number of users and data that our operations infrastructure supports. We seek to maintain sufficient excess capacity in our operations infrastructure to meet the needs of all of our customers and to support our internal drug discovery programs. We also seek to maintain excess capacity to facilitate the rapid provision of new customer deployments and the expansion of existing customer deployments. In addition, we need to properly manage our technological operations infrastructure in order to support version control, changes in hardware and software parameters and the evolution of our solutions. However, the provision of new hosting infrastructure requires adequate lead-time. We have experienced, and may in the future experience, website disruptions, outages, and other performance problems. These types of problems may be caused by a variety of factors, including infrastructure changes, human or software errors, viruses, security attacks, fraud, spikes in usage, and denial of service issues. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time. If we do not accurately predict our infrastructure requirements, our existing customers may experience service outages that may subject us to financial penalties, financial liabilities, and customer losses. If our operations infrastructure fails to keep pace with increased sales and usage, customers and our internal drug discovery team may experience delays in the deployment

of our solutions as we seek to obtain additional capacity, which could adversely affect our reputation and adversely affect our revenues.

Changes in tax laws or in their implementation or interpretation could adversely affect our business and financial condition.

Changes in tax law may adversely affect our business or financial condition. On December 22, 2017, President Trump signed into law the Tax Cuts and Jobs Act, or the 2017 Tax Act, which significantly revised the Internal Revenue Code of 1986, as amended, or the Code. The 2017 Tax Act, among other things, contained significant changes to corporate taxation, including a reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, the limitation of the tax deduction for net interest expense to 30% of adjusted earnings (except for certain small businesses), the limitation of the deduction for net operating losses arising in taxable years ending after December 31, 2017 to 80% of current year taxable income and elimination of net operating loss carrybacks for losses arising in taxable years ending after December 31, 2017 (though any such net operating losses may be carried forward indefinitely), the imposition of a one-time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, the elimination of U.S. tax on foreign earnings (subject to certain important exceptions), the allowance of immediate deductions for certain new investments instead of deductions for depreciation expense over time, and the modification or repeal of many business deductions and credits.

As part of Congress's response to the COVID-19 pandemic, the Families First Coronavirus Response Act, or FFCR Act, was enacted on March 18, 2020, the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, was enacted on March 27, 2020, and COVID relief provisions were included in the Consolidated Appropriations Act, 2021, or CAA, which was enacted on December 27, 2020. All contain numerous tax provisions. In particular, the CARES Act retroactively and temporarily (for taxable years beginning before January 1, 2021) suspends application of the 80%-of-income limitation on the use of net operating losses, which was enacted as part of the 2017 Tax Act. It also provides that net operating losses arising in any taxable year beginning after December 31, 2017, and before January 1, 2021 are generally eligible to be carried back up to five years. The CARES Act also temporarily (for taxable years beginning in 2019 or 2020) relaxes the limitation of the tax deductibility for net interest expense by increasing the limitation from 30 to 50% of adjusted taxable income.

Regulatory guidance under the 2017 Tax Act, the FFCR Act, the CARES Act, and the CAA is and continues to be forthcoming, and such guidance could ultimately increase or lessen the impact of these laws on our business and financial condition. It is also possible that Congress will enact additional legislation in connection with the COVID-19 pandemic, some of which could have an impact on our company. In addition, it is uncertain if and to what extent various states will conform to the 2017 Tax Act, the FFCR Act, the CARES Act, and the CAA.

Our ability to use our NOLs and research and development tax credit carryforwards to offset future taxable income may be subject to certain limitations.

As of December 31, 2020, we had federal net operating losses of approximately $206.3 million and state NOLs of approximately $126.7 million, which, if not utilized, generally begin to expire in 2022. As of December 31, 2020, we also had federal research and development tax credit carryforwards of approximately $9.4 million and state research and development tax credit carryforwards of approximately $0.5 million, which, if not utilized, generally begin to expire in 2021. These NOLs and research and development tax credit carryforwards could expire unused and be unavailable to offset future income tax liabilities.

In addition, under Section 382 of the Code, and corresponding provisions of state law, a corporation that undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership by certain stockholders over a three year period, is subject to limitations on its ability to utilize its pre-change NOLs and research and development tax credit carryforwards to offset future taxable income. We have performed an analysis through December 31, 2019 and determined that such an ownership change has not occurred. However, we may experience such ownership changes in the future as a result of offerings of our common stock or changes in our stock ownership (which may be outside our control). As a result, if, and to the extent that, we earn net taxable income, our ability to use our pre-change NOLs and research and development tax credit carryforwards to offset such taxable income may be subject to limitations.

There is also a risk that due to regulatory changes, such as suspension of the use of NOLs, or other unforeseen reasons, our existing NOLs could expire or otherwise become unavailable to offset future income tax liabilities. As described above in "Changes in tax laws or in their implementation or interpretation could adversely affect our business and financial condition," the 2017 Tax Act as amended by the CARES Act, includes changes to U.S. federal tax rates and rules governing NOL carryforwards that may significantly impact our ability to utilize NOLs to offset taxable income in the future. In addition, state NOLs generated in one state cannot be used to offset income generated in another state. For these reasons, we may be unable to use a material portion of our NOLs and other tax attributes.

Our international operations subject us to potentially adverse tax consequences.

We report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. These jurisdictions include Germany, Japan, and India. The international nature and organization of our business activities are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position were not sustained, we could be required to pay additional taxes, interest, and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows, and lower overall profitability of our operations.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added, or similar taxes, and we could be subject to tax liabilities with respect to past or future sales, which could adversely affect our results of operations.

We do not collect sales and use, value added, and similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable or that we are not required to collect such taxes with respect to the jurisdiction. Sales and use, value added, and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties, and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties, and interest or future requirements may adversely affect our results of operations.

Unanticipated changes in our effective tax rate could harm our future results.

We are subject to income taxes in the United States and various foreign jurisdictions, and our domestic and international tax liabilities are subject to the allocation of expenses in differing jurisdictions. Forecasting our estimated annual effective tax rate is complex and subject to uncertainty, and there may be material differences between our forecasted and actual tax rates. Our effective tax rate could be adversely affected by changes in the mix of earnings and losses in countries with differing statutory tax rates, certain non-deductible expenses as a result of acquisitions, the valuation of deferred tax assets and liabilities, and changes in federal, state, or international tax laws and accounting principles. Increases in our effective tax rate would reduce our profitability or in some cases increase our losses.

In addition, we may be subject to income tax audits by many tax jurisdictions throughout the world. Although we believe our income tax liabilities are reasonably estimated and accounted for in accordance with applicable laws and principles, an adverse resolution of one or more uncertain tax positions in any period could have a material impact on the results of operations for that period.

We may acquire other companies or technologies, which could divert our management's attention, result in additional dilution to our stockholders, and otherwise disrupt our operations and adversely affect our operating results.

We may in the future seek to acquire or invest in businesses, solutions, or technologies that we believe could complement or expand our solutions, enhance our technical capabilities, or otherwise offer growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating, and pursuing suitable acquisitions, whether or not they are consummated.

In addition, we have limited experience in acquiring other businesses. If we acquire additional businesses, we may not be able to integrate the acquired personnel, operations, and technologies successfully, effectively manage the combined business following the acquisition or preserve the operational synergies between our business units that we believe currently exist. We cannot assure you that following any acquisition we would achieve the expected synergies to justify the transaction, due to a number of factors, including:

- inability to integrate or benefit from acquired technologies or services in a profitable manner;
- unanticipated costs or liabilities associated with the acquisition;
- incurrence of acquisition-related costs;
- difficulty integrating the accounting systems, operations, and personnel of the acquired business;
- difficulties and additional expenses associated with supporting legacy products and hosting infrastructure of the acquired business;
- difficulty converting the customers of the acquired business onto our solutions and contract terms, including disparities in the revenues, licensing, support, or professional services model of the acquired company;

- diversion of management's attention from other business concerns;
- adverse effects to our existing business relationships with business partners and customers as a result of the acquisition;
- the potential loss of key employees;
- use of resources that are needed in other parts of our business; and
- use of substantial portions of our available cash to consummate the acquisition.

In addition, a significant portion of the purchase price of companies we acquire may be allocated to acquired goodwill and other intangible assets, which must be assessed for impairment at least annually. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our operating results based on this impairment assessment process, which could adversely affect our results of operations.

Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our operating results. In addition, if an acquired business fails to meet our expectations, our operating results, business, and financial position may suffer.

Our operations may be interrupted by the occurrence of a natural disaster or other catastrophic event at our primary facilities.

Our operations are primarily conducted at our facilities in New York, New York and Portland, Oregon and our internal hosting facility located in Clifton, New Jersey. The occurrence of natural disasters or other catastrophic events could disrupt our operations. Any natural disaster or catastrophic event in our facilities or the areas in which they are located could have a significant negative impact on our operations.

Risks Related to Our Intellectual Property

If we fail to comply with our obligations under our existing license agreements with Columbia University, under any of our other intellectual property licenses, or under any future intellectual property licenses, or otherwise experience disruptions to our business relationships with our current or any future licensors, we could lose intellectual property rights that are important to our business.

We are party to a number of license agreements pursuant to which we have been granted exclusive and non-exclusive worldwide licenses to certain patents, software code, and software programs to, among other things, reproduce, use, execute, copy, operate, sublicense, and distribute the licensed technology in connection with the marketing and sale of our software solutions and to develop improvements thereto. In particular, the technology that we license from Columbia University pursuant to our license agreements with them are used in and incorporated into a number of our software solutions which we market and license to our customers. For further information regarding our license agreements with Columbia University, see "Business—License Agreements with Columbia University". Our license agreements with Columbia University and other licensors impose, and we expect that future licenses will impose, specified royalty and other obligations on us.

In spite of our best efforts, our current or any future licensors might conclude that we have materially breached our license agreements with them and might therefore terminate the license agreements, thereby delaying our ability to market and sell our existing software solutions and develop and commercialize new software solutions that utilize technology covered by these license agreements. If these in-licenses are terminated, or if the underlying intellectual property fails to provide the intended exclusivity, competitors could market, products and technologies similar to ours. This could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation related issues;
- the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under any collaborative development relationships;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our current or future licensors and us and our collaborators; and
- the priority of invention of patented technology.

In addition, license agreements are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement. For example, our counterparties have in the past and may in the future dispute the amounts owed to them pursuant to payment obligations. If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may experience delays in the development and commercialization of new software solutions and in our ability to market and sell existing software solutions, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

Our obligations under our existing or future drug discovery collaboration agreements may limit our intellectual property rights that are important to our business. Further, if we fail to comply with our obligations under our existing or future collaboration agreements, or otherwise experience disruptions to our business relationships with our prior, current, or future collaborators, we could lose intellectual property rights that are important to our business.

We are party to collaboration agreements with biopharmaceutical companies, pursuant to which we provide drug discovery services but have no ownership rights, or only co-ownership rights, to certain intellectual property generated through the collaborations. We are also party to a collaboration agreement with BMS for the development and potential commercialization of product candidates we discover internally, which also provides for co-ownership rights to certain intellectual property generated through the collaboration in certain scenarios. We may enter into additional collaboration agreements in the future, pursuant to which we may have no ownership rights, or only co-ownership rights, to certain intellectual property generated through the future collaborations. If we are unable to obtain ownership or license of such intellectual property generated through our prior, current, or future collaborations and overlapping with, or related to, our own proprietary technology or product candidates, then our business, financial condition, results of operations, and prospects could be materially harmed.

Our existing collaboration agreements contain certain exclusivity obligations that require us to design compounds exclusively for our collaborators with respect to certain specific targets over a specified time period. Our future collaboration agreements may grant similar exclusivity rights to future collaborators with respect to target(s) that are the subject of such collaborations. Existing or future collaboration agreements may also impose diligence obligations on us. For example, existing or future collaboration agreements may impose restrictions on us from pursuing the drug development targets for ourselves or for our other current or future collaborators, thereby removing our ability to develop and commercialize, or to jointly develop and commercialize with other current or future collaborators, product candidates, and technology related to the drug development targets. Under our collaboration with BMS, for example, we are prohibited from developing and commercializing product candidates anywhere in the world that are directed at the targets specified under the agreement, until the earlier of such target ceasing to be included under the agreement or the expiration of the last to expire royalty term for the program related to the target. In spite of our best efforts, our prior, current, or future collaborators might conclude that we have materially breached our collaboration agreements. If these collaboration agreements are terminated, or if the underlying intellectual property, to the extent we have ownership or license of, fails to provide the intended exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, products and technology identical to ours. This could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

Disputes may arise regarding intellectual property subject to a collaboration agreement, including:

- the scope of ownership or license granted under the collaboration agreement and other interpretation related issues;
- the extent to which our technology and product candidates infringe on intellectual property that generated through the collaboration to of which we do not have ownership or license under the collaboration agreement;
- the assignment or sublicense of intellectual property rights and other rights under the collaboration agreement;
- our diligence obligations under the collaboration agreement and what activities satisfy those diligence obligations; and
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by us and our current or future collaborators.

In addition, collaboration agreements are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property, or increase what we believe to be our obligations under the relevant agreements, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we have owned, co-owned, or in-licensed under the collaboration agreements prevent or impair our ability to maintain our current collaboration arrangements on commercially acceptable terms, we may be unable

to successfully develop and commercialize the affected technology or product candidates, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we are unable to obtain, maintain, enforce, and protect patent protection for our technology and product candidates or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize technology and products similar or identical to ours, and our ability to successfully develop and commercialize our technology and product candidates may be adversely affected.

Our success depends in large part on our ability to obtain and maintain protection of the intellectual property we may own solely and jointly with others or may license from others, particularly patents, in the United States and other countries with respect to any proprietary technology and product candidates we develop. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to our technology and any product candidates we may develop that are important to our business and by in-licensing intellectual property related to our technology and product candidates. If we are unable to obtain or maintain patent protection with respect to any proprietary technology or product candidate, our business, financial condition, results of operations, and prospects could be materially harmed.

The patent prosecution process is expensive, time-consuming, and complex, and we may not be able to file, prosecute, maintain, defend, or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing, and prosecution of patent applications, or to maintain, enforce, and defend the patents, covering technology that we co-own with third parties or license from third parties. Therefore, these co-owned and in-licensed patents and applications may not be prepared, filed, prosecuted, maintained, defended, and enforced in a manner consistent with the best interests of our business.

The patent position of software and biopharmaceutical companies generally is highly uncertain, involves complex legal and factual questions, and has in recent years been the subject of much litigation. In addition, the scope of patent protection outside of the United States is uncertain and laws of non-U.S. countries may not protect our rights to the same extent as the laws of the United States or vice versa. With respect to both owned and in-licensed patent rights, we cannot predict whether the patent applications we and our licensor are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient protection from competitors. Further, we may not be aware of all third-party intellectual property rights or prior art potentially relating to our computational platform, technology, and any product candidates we may develop. In addition, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing of the priority application, or in some cases not published at all. Therefore, neither we nor our collaborators, or our licensor can know with certainty whether either we, our collaborators, or our licensor were the first to make the inventions claimed in the patents and patent applications we own or in-license now or in the future, or that either we, our collaborators, or our licensor were the first to file for patent protection of such inventions. As a result, the issuance, scope, validity, enforceability, and commercial value of our owned, co-owned, and in-licensed patent rights are highly uncertain. Moreover, our owned, co-owned, and in-licensed pending and future patent applications may not result in patents being issued that protect our technology and product candidates, in whole or in part, or that effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our owned, co-owned, or in-licensed current or future patents and our ability to obtain, protect, maintain, defend, and enforce our patent rights, narrow the scope of our patent protection and, more generally, could affect the value of, or narrow the scope of, our patent rights. For example, recent Supreme Court decisions have served to curtail the scope of subject matter eligible for patent protection in the United States, and many software patents have since been invalidated on the basis that they are directed to abstract ideas.

In order to pursue protection based on our provisional patent applications, we will need to file Patent Cooperation Treaty applications, non-U.S. applications, and/or U.S. non-provisional patent applications prior to applicable deadlines. Even then, as highlighted above, patents may never issue from our patent applications, or the scope of any patent may not be sufficient to provide a competitive advantage.

Moreover, we, our collaborators, or our licensor may be subject to a third-party preissuance submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or become involved in opposition, derivation, revocation, reexamination, *inter partes* review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights or allow third parties to commercialize our technology or product candidates and compete directly with us, without payment to us. If the breadth or strength of protection provided by our owned, co-owned, or in-licensed current or future patents and patent applications is threatened,

regardless of the outcome, it could dissuade companies from collaborating with us to license, develop, or commercialize current or future technology or product candidates.

Additionally, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if our owned, co-owned, and in-licensed current and future patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us, or otherwise provide us with any competitive advantage. The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability, and our owned and in-licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated, or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and product candidates. Such proceedings also may result in substantial cost and require significant time from our management and employees, even if the eventual outcome is favorable to us. In particular, given the amount of time required for the development, testing, and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. Furthermore, our competitors may be able to circumvent our owned, co-owned, or in-licensed current or future patents by developing similar or alternative technologies or products in a non-infringing manner. As a result, our owned, co-owned, and in-licensed current or future patent portfolio may not provide us with sufficient rights to exclude others from commercializing technology and products similar or identical to any of our technology and product candidates.

Changes to patent laws in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of patent laws in the United States, including patent reform legislation such as the Leahy-Smith America Invents Act, or the Leahy-Smith Act, could increase the uncertainties and costs surrounding the prosecution of our owned and in-licensed patent applications and the maintenance, enforcement or defense of our owned and in-licensed issued patents. The Leahy-Smith Act includes a number of significant changes to United States patent law. These changes include provisions that affect the way patent applications are prosecuted, redefine prior art, provide more efficient and cost-effective avenues for competitors to challenge the validity of patents, and enable third-party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent at USPTO-administered post-grant proceedings, including post-grant review, *inter partes* review, and derivation proceedings. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith Act, the United States transitioned to a first-to-file system in which, assuming that the other statutory requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. As such, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the patent positions of companies in the development and commercialization of software, biologics and pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our patent rights and our ability to protect, defend and enforce our patent rights in the future.

A number of recent cases decided by the U.S. Supreme Court have involved questions of when claims reciting abstract ideas, laws of nature, natural phenomena and/or natural products are eligible for a patent, regardless of whether the claimed subject matter is otherwise novel and inventive. These cases include Association for Molecular Pathology v. Myriad Genetics, Inc., 569 U.S. 12-398 (2013) or Myriad; Alice Corp. v. CLS Bank International, 573 U.S. 13-298 (2014); and Mayo Collaborative Services v. Prometheus Laboratories, Inc., or Prometheus, 566 U.S. 10-1150 (2012). In response to these cases, federal courts have held numerous patents invalid as claiming subject matter ineligible for patent protection. Moreover, the USPTO has issued guidance to the examining corps on how to apply these cases during examination. The full impact of these decisions is not yet known.

In addition to increasing uncertainty with regard to our ability to obtain future patents, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on these and other decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change or be interpreted in unpredictable ways that would weaken our ability to obtain new patents or to enforce any patents that may issue to us in the future. In addition, these events may adversely affect our ability to defend any patents that may issue in procedures in the USPTO or in courts.

We, our prior, existing, or future collaborators, and our existing or future licensors, may become involved in lawsuits to protect or enforce our patent or other intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Competitors and other third parties may infringe, misappropriate, or otherwise violate our, our prior, current and future collaborators', or our current and future licensors' issued patents or other intellectual property. As a result, we, our prior, current, or future collaborators, or our current or future licensor may need to file infringement, misappropriation, or other intellectual property related claims, which can be expensive and time-consuming. Any claims we assert against perceived infringers could provoke such parties to assert counterclaims against us alleging that we infringe, misappropriate, or otherwise violate their intellectual property. In addition, in a patent infringement proceeding, such parties could assert that the patents we or our licensors have asserted are invalid or unenforceable. In patent litigation in the United States, defenses alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, or non-enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may institute such claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post-grant review, *inter partes* review, interference proceedings, derivation proceedings, and equivalent proceedings in non-U.S. jurisdictions (e.g., opposition proceedings). The outcome following legal assertions of invalidity and unenforceability is unpredictable.

An adverse result in any such proceeding could put one or more of our owned, co-owned, or in-licensed current or future patents at risk of being invalidated or interpreted narrowly and could put any of our owned, co-owned, or in-licensed current or future patent applications at risk of not yielding an issued patent. A court may also refuse to stop the third party from using the technology at issue in a proceeding on the grounds that our owned, co-owned, or in-licensed current or future patents do not cover such technology. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information or trade secrets could be compromised by disclosure during this type of litigation. Any of the foregoing could allow such third parties to develop and commercialize competing technologies and products in a non-infringing manner and have a material adverse impact on our business, financial condition, results of operations, and prospects.

Interference or derivation proceedings provoked by third parties, or brought by us or by our licensor, or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to conduct clinical trials, continue our research programs, license necessary technology from third parties, or enter into development collaborations that would help us bring any product candidates to market.

Third parties may initiate legal proceedings alleging that we are infringing, misappropriating or otherwise violating their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Our commercial success depends upon our ability and the ability of our collaborators to develop, manufacture, market and sell any product candidates we may develop and for our collaborators, customers and partners to use our proprietary technologies without infringing, misappropriating or otherwise violating the intellectual property and proprietary rights of third parties. There is considerable patent and other intellectual property litigation in the software, pharmaceutical, and biotechnology industries. We may become party to, or threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our technology and product candidates, including interference proceedings, post grant review, *inter partes* review, and derivation proceedings before the USPTO and similar proceedings in non-U.S. jurisdictions such as oppositions before the European Patent Office. Numerous U.S. and non-U.S. issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our technologies or product candidates that we may identify may be subject to claims of infringement of the patent rights of third parties.

The legal threshold for initiating litigation or contested proceedings is low, so that even lawsuits or proceedings with a low probability of success might be initiated and require significant resources to defend. Litigation and contested proceedings can also be expensive and time-consuming, and our adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we can. The risks of being involved in such litigation and proceedings may increase if and as any product candidates near commercialization and as we gain the greater visibility associated with being a public company.

Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of merit. We may not be aware of all such intellectual property rights potentially relating to our technology and product candidates and their uses, or we may incorrectly conclude that third-party intellectual property is invalid or that our activities and product candidates do not infringe such intellectual property. Thus, we do not know with certainty that our technology and product candidates, or our development and commercialization thereof, do not and will not infringe, misappropriate or otherwise violate any third party's intellectual property.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations or methods, such as methods of manufacture or methods for treatment, related to the discovery, use or manufacture of the product candidates that we may identify or related to our technologies. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that the product candidates that we may identify may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Moreover, as noted above, there may be existing patents that we are not aware of or that we have incorrectly concluded are invalid or not infringed by our activities. If any third-party patents were held by a court of competent jurisdiction to cover, for example, the manufacturing process of the product candidates that we may identify, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize the product candidates that we may identify. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products, be forced to indemnify our customers or collaborators or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

We may choose to take a license or, if we are found to infringe, misappropriate or otherwise violate a third party's intellectual property rights, we could also be required to obtain a license from such third party to continue developing, manufacturing and marketing our technology and product candidates. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us and could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing and commercializing the infringing technology or product. A finding of infringement could prevent us from commercializing any product candidates or force us to cease some of our business operations, which could materially harm our business. In addition, we may be forced to redesign any product candidates, seek new regulatory approvals and indemnify third parties pursuant to contractual agreements. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on our business, financial condition, results of operations and prospects.

We may be subject to claims by third parties asserting that our employees, consultants, or contractors have wrongfully used or disclosed confidential information of third parties, or we have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Certain of our employees, consultants, and contractors were previously employed at universities or other software or biopharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims.

In addition, while it is our policy to require that our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact develops intellectual property that we regard as our own. Our intellectual property assignment agreements with them may not be self-executing or may be breached, and we may be forced to bring claims against third parties, or defend claims they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations, and prospects.

If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could have a material adverse effect on our competitive business position and prospects. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products, which license may not be available on commercially reasonable terms, or at all, or such license may be non-exclusive. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our management and employees.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position may be harmed.

In addition to seeking patents for any product candidates and technology, we also rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology, and other proprietary information, to maintain our competitive position. We seek to protect our trade secrets and other proprietary technology, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract research organizations, contract manufacturers, consultants, advisors, collaborators, and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants, but we cannot guarantee that we have entered into such agreements with each party that may have or has had access to our trade secrets or proprietary technology. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Detecting the disclosure or misappropriation of a trade secret and enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside of the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position may be materially and adversely harmed.

Risks Related to Regulatory and Other Legal Compliance Matters

Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which may have a material adverse effect on our business, financial condition, or results of operations.

The regulatory framework for the collection, use, safeguarding, sharing, transfer, and other processing of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Globally, virtually every jurisdiction in which we operate has established its own data security and privacy frameworks with which we must comply. For example, the collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the European Union, including personal health data and employee data, is subject to the European Union General Data Protection Regulation, or the GDPR, which took effect across all member states of the European Economic Area, or EEA, in May 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR would increase our obligations with respect to any clinical trials conducted in the EEA by expanding the definition of personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial subjects and investigators. In addition, the GDPR also imposes strict rules on the transfer of personal data to countries outside the European Union, including the United States and, as a result, increases the scrutiny that such rules should apply to transfers of personal data from any clinical trial sites located in the EEA to the United States. The GDPR also permits data protection authorities to require destruction of improperly gathered or used personal information and/or impose substantial fines for violations of the GDPR, which can be up to four percent of global revenues or 20 million Euros, whichever is greater, and confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR provides that European Union member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric, or health data.

Given the breadth and depth of changes in data protection obligations, preparing for and complying with the GDPR's requirements is rigorous and time intensive and requires significant resources and a review of our technologies, systems and practices, as well as those of any third-party collaborators, service providers, contractors, or consultants that process or transfer personal data collected in the European Union. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personal information, could require us to change our business practices and put in place additional compliance mechanisms, may interrupt or delay our development, regulatory and commercialization activities and increase our cost of doing business, and could lead to government enforcement actions, private litigation, and significant fines and penalties against us, and could have a material adverse effect on our business, financial condition, or results of operations.

Similar privacy and data security requirements are either in place or underway in the United States. There are a broad variety of data protection laws that may be applicable to our activities, and a range of enforcement agencies at both the state and federal levels that can review companies for privacy and data security concerns. The Federal Trade Commission and state Attorneys General all are aggressive in reviewing privacy and data security protections for consumers. New laws also are being considered at both the state and federal levels. For example, the California Consumer Privacy Act, or CCPA, which went into effect on January 1, 2020, is creating similar risks and obligations as those created by GDPR. Because of this, we may need to engage in additional activities (e.g., data mapping) to identify the personal information we are collecting and the purposes for which such information is collected. In addition, we will need to ensure that our policies recognize the rights granted to consumers (as that phrase is broadly defined in the CCPA and can include business contact information), including granting consumers the right to opt-out of the sale of their personal information. Many other states are considering similar legislation. A broad range of legislative measures also have been introduced at the federal level. Accordingly, failure to comply with current and any future federal and state laws regarding privacy and security of personal information could expose us to fines and penalties. We also face a threat of consumer class actions related to these laws and the overall protection of personal data. Even if we are not determined to have violated these laws, investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our reputation and our business.

We, and the collaborators who use our computational platform, may be subject to applicable anti-kickback, fraud and abuse, false claims, transparency, health information privacy and security, and other healthcare laws and regulations. Failure to comply with such laws and regulations, may result in substantial penalties.

We, and the collaborators who use our computational platform, may be subject to broadly applicable healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell, and distribute our software solutions and any products for which we obtain marketing approval. Such healthcare laws and regulations include, but are not limited to, the federal health care Anti-Kickback Statute; federal civil and criminal false claims laws, such as the federal False Claims Act; the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA; the Federal Food, Drug, and Cosmetic Act; the federal Physician Payments Sunshine Act; and analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws and transparency laws.

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations, or case law involving applicable fraud and abuse or other healthcare laws and regulations. Violations of applicable healthcare laws and regulations may result in significant civil, criminal, and administrative penalties, damages, disgorgement, fines, imprisonment, exclusion of products from government funded healthcare programs, such as Medicare and Medicaid, additional reporting requirements, and/or oversight if a corporate integrity agreement or similar agreement is executed to resolve allegations of non-compliance with these laws and the curtailment or restructuring of operations. In addition, violations may also result in reputational harm, diminished profits, and future earnings.

We are subject to anti-corruption laws, as well as export control laws, customs laws, sanctions laws, and other laws governing our operations. If we fail to comply with these laws, we could be subject to civil or criminal penalties, other remedial measures, and legal expenses, be precluded from developing, manufacturing, and selling certain products outside the United States or be required to develop and implement costly compliance programs, which could adversely affect our business, results of operations and financial condition.

Our operations are subject to anti-corruption laws, including the U.K. Bribery Act 2010, or Bribery Act, the U.S. Foreign Corrupt Practices Act, or FCPA, and other anti-corruption laws that apply in countries where we do business and may do business in the future. The Bribery Act, FCPA, and these other laws generally prohibit us, our officers, and our employees and intermediaries from bribing, being bribed, or making other prohibited payments to government officials or other persons to obtain or retain business or gain some other business advantage. Compliance with the FCPA, in particular, is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the biopharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

We may in the future operate in jurisdictions that pose a high risk of potential Bribery Act or FCPA violations, and we may participate in collaborations and relationships with third parties whose actions could potentially subject us to liability under the Bribery Act, FCPA, or local anti-corruption laws. In addition, we cannot predict the nature, scope or effect of future regulatory requirements to which our international operations might be subject or the manner in which existing laws might be administered or interpreted. If we further expand our operations outside of the United States, we will need to dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate.

We are also subject to other laws and regulations governing our international operations, including regulations administered by the governments of the United Kingdom and the United States, and authorities in the European Union, including applicable export control regulations, economic sanctions on countries and persons, customs requirements, and currency exchange regulations, collectively referred to as the Trade Control laws. In addition, various laws, regulations, and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

There is no assurance that we will be completely effective in ensuring our compliance with all applicable anti-corruption laws, including the Bribery Act, the FCPA, or other legal requirements, including Trade Control laws. If we are not in compliance with the Bribery Act, the FCPA, and other anti-corruption laws or Trade Control laws, we may be subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses, which could have an adverse impact on our business, financial condition, results of operations, and liquidity. The U.S. Securities and Exchange Commission, or SEC, also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions. Any investigation of any potential violations of the Bribery Act, the FCPA, other anti-corruption laws or Trade Control laws by the United Kingdom, U.S., or other authorities could also have an adverse impact on our reputation, our business, results of operations, and financial condition.

Our employees, independent contractors, consultants, and vendors may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading laws, which could cause significant liability for us and harm our reputation.

We are exposed to the risk of fraud or other misconduct by our employees, independent contractors, consultants, and vendors. Misconduct by these partners could include intentional failures to comply with FDA regulations or similar regulations of comparable foreign regulatory authorities, provide accurate information to the FDA or comparable foreign regulatory authorities, comply with manufacturing standards, comply with federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable foreign regulatory authorities, report financial information or data accurately, or disclose unauthorized activities to us. Employee misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. This could include violations of HIPAA, other U.S. federal and state law, and requirements of non-U.S. jurisdictions, including the European Union Data Protection Directive. We are also exposed to risks in connection with any insider trading violations by employees or others affiliated with us. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards, regulations, guidance, or codes of conduct. Furthermore, our employees may, from time to time, bring lawsuits against us for employment issues, including injury, discrimination, wage and hour disputes, sexual harassment, hostile work environment, or other employment issues. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant fines or other sanctions.

Our internal information technology systems, or those of our third-party vendors, contractors, or consultants, may fail or suffer security breaches, loss or leakage of data, and other disruptions, which could result in a material disruption of our services, compromise sensitive information related to our business, or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business.

We are increasingly dependent upon information technology systems, infrastructure, and data to operate our business. In the ordinary course of business, we collect, store, and transmit confidential information (including but not limited to intellectual property, proprietary business information, and personal information). It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We also have outsourced elements of our operations to third parties, and as a result we manage a number of third-party vendors and other contractors and consultants who have access to our confidential information.

Despite the implementation of security measures, given the size and complexity of our internal information technology systems and those of our third-party vendors and other contractors and consultants, and the increasing amounts of confidential information that they maintain, our information technology systems are potentially vulnerable to breakdown or other damage or interruption from service interruptions, system malfunction, natural disasters, terrorism, war, and telecommunication and electrical failures, as well as security breaches from inadvertent or intentional actions by our employees, third-party vendors, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware,

ransomware, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information), which may compromise our system infrastructure, or that of our third-party vendors and other contractors and consultants or lead to data leakage. The risk of a security breach or disruption, particularly through cyber-attacks or cyber intrusion, including by computer hackers, foreign governments, and cyber terrorists, has generally increased as the number, intensity, and sophistication of attempted attacks and intrusions from around the world have increased. We may not be able to anticipate all types of security threats, and we may not be able to implement preventive measures effective against all such security threats. For example, third parties have in the past and may in the future illegally pirate our software and make that software publicly available on peer-to-peer file sharing networks or otherwise. The techniques used by cyber criminals change frequently, may not be recognized until launched, and can originate from a wide variety of sources, including outside groups such as external service providers, organized crime affiliates, terrorist organizations, or hostile foreign governments or agencies. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or those of our third-party vendors and other contractors and consultants, or inappropriate disclosure of confidential or proprietary information, we could incur liability and reputational damage and the further development and commercialization of our software could be delayed. The costs related to significant security breaches or disruptions could be material and exceed the limits of the cybersecurity insurance we maintain against such risks. If the information technology systems of our third-party vendors and other contractors and consultants become subject to disruptions or security breaches, we may have insufficient recourse against such third parties and we may have to expend significant resources to mitigate the impact of such an event, and to develop and implement protections to prevent future events of this nature from occurring.

While we have not experienced any such system failure, accident, or security breach to date, and believe that our data protection efforts and our investment in information technology reduce the likelihood of such incidents in the future, we cannot assure you that our data protection efforts and our investment in information technology will prevent significant breakdowns, data leakages, breaches in our systems, or those of our third-party vendors and other contractors and consultants, or other cyber incidents that could have a material adverse effect upon our reputation, business, operations, or financial condition. For example, if such an event were to occur and cause interruptions in our operations, or those of our third-party vendors and other contractors and consultants, it could result in a material disruption of our programs and the development of our services and technologies could be delayed. Furthermore, significant disruptions of our internal information technology systems or those of our third-party vendors and other contractors and consultants, or security breaches could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the prevention of access to, confidential information (including trade secrets or other intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. For example, any such event that leads to unauthorized access, use, or disclosure of personal information, including personal information regarding our customers or employees, could harm our reputation directly, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business. Further, sophisticated cyber attackers (including foreign adversaries engaged in industrial espionage) are skilled at adapting to existing security technology and developing new methods of gaining access to organizations' sensitive business data, which could result in the loss of sensitive information, including trade secrets. Additionally, actual, potential, or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees, and engage third-party experts and consultants.

Risks Related to Employee Matters and Managing Growth

Our future success depends on our ability to retain key executives and to attract, retain, and motivate qualified personnel.

We are highly dependent on the research and development, clinical, financial, operational, scientific, software engineering, and other business expertise of our executive officers, as well as the other principal members of our management, scientific, clinical, and software engineering teams. Although we have entered into employment agreements with our executive officers, each of them may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or other employees.

The loss of the services of our executive officers or other key employees could impede the achievement of our development and sales goals in our software business and the achievement of our research, development, and commercialization objectives in our drug discovery business. In either case, the loss of the services of our executive officers or other key employees could seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals with the breadth of skills and experience required to successfully develop, gain regulatory approval of, and commercialize products in the life sciences industry.

Recruiting and retaining qualified scientific, clinical, manufacturing, accounting, legal, and sales and marketing personnel, as well as software engineers and computational chemists, will also be critical to our success. In the technology industry, there is substantial and continuous competition for engineers with high levels of expertise in designing, developing, and managing software and related services, as well as competition for sales executives, data scientists, and operations personnel. Competition to hire these individuals is intense, and we may be unable to hire, train, retain, or motivate these key personnel on acceptable terms given the competition among numerous biopharmaceutical and technology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors to assist us in formulating our research and development and commercialization strategy and advancing our computational platform. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited and our business would be adversely affected.

We are pursuing multiple business strategies and expect to expand our development and regulatory capabilities, and as a result, we may encounter difficulties in managing our multiple business units and our growth, which could disrupt our operations.

Currently, we are pursuing multiple business strategies simultaneously, including activities in research and development, software sales, and collaborative and internal drug discovery. We believe pursuing these multiple business strategies offers financial and operational synergies, but these diversified operations place increased demands on our limited resources. Furthermore, we expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of drug development, clinical and regulatory affairs. To manage our multiple business units and anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities, and continue to recruit and train additional qualified personnel. Due to our limited financial resources and our management team's limited attention and limited experience in managing a company with such anticipated growth, we may not be able to effectively manage our multiple business units and the expansion of our operations or recruit and train additional qualified personnel. The expansion of our operations may lead to significant costs and may divert our management and business development resources. In addition, in order to meet our obligations as a public company and to support our anticipated long-term growth, we will need to increase our general and administrative capabilities. Our management, personnel, and systems may not be adequate to support this future growth. Any inability to manage our multiple business units and growth could delay the execution of our business plans or disrupt our operations and the synergies we believe currently exist between our business units. In addition, adverse developments in one of these business units may disrupt these synergies.

Risks Related to Ownership of Our Common Stock

An active trading market for our common stock may not be sustained.

Our shares of common stock began trading on the Nasdaq Global Select Market on February 6, 2020. Prior to February 6, 2020, there was no public market for our common stock, and we cannot assure you that an active trading market for our shares will be sustained. As a result, it may be difficult for our stockholders to sell their shares without depressing the market price of our common stock, or at all.

Our executive officers, directors, and principal stockholders, if they choose to act together, have the ability to significantly influence all matters submitted to stockholders for approval.

As of February 26, 2021, our executive officers and directors and our stockholders who beneficially owned more than 5% of our outstanding common stock, in the aggregate, beneficially owned shares representing approximately 35.5% of our common stock and all of our limited common stock, or, if the holder of our limited common stock exercised its right to convert each share of its limited common stock for one share of our common stock, approximately 43.9% of our common stock. As a result, if these stockholders were to choose to act together, they would be able to significantly influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would significantly influence the election of directors and approval of any merger, consolidation, or sale of all or substantially all of our assets.

This concentration of ownership control may:

- delay, defer, or prevent a change in control;
- entrench our management and board of directors; or
- delay or prevent a merger, consolidation, takeover, or other business combination involving us that other stockholders may desire.

This concentration of ownership may also adversely affect the market price of our common stock.

The price of our common stock is volatile and fluctuates substantially, which could result in substantial losses for our stockholders.

Our stock price has been, and is likely to continue to be volatile. Since our initial public offering in February 2020 and through February 26, 2021, the intraday price of our common stock has fluctuated from a low of $25.50 to a high of $117.00. As a result of volatility, our stockholders may not be able to sell their common stock at or above the price paid for the shares. The market price for our common stock may be influenced by many factors, including:

- our investment in, and the success of, our software solutions;
- the success of our research and development efforts for our internal drug discovery programs;
- initiation and progress of preclinical studies and clinical trials for any product candidates that we may develop;
- results of or developments in preclinical studies and clinical trials of any product candidates we may develop or those of our competitors or potential collaborators;
- the success of our drug discovery collaborators and any milestone or other payments we receive from such collaborators;
- the success of competitive products or technologies;
- regulatory or legal developments in the United States and other countries;
- the recruitment or departure of key personnel;
- variations in our financial results or the financial results of companies that are perceived to be similar to us;
- sales of common stock by us, our executive officers, directors or principal stockholders, or others, or the anticipation of such sales;
- market conditions in the biopharmaceutical sector;
- general economic, industry, and market conditions;
- the societal and economic impact of public health epidemics, such as the ongoing COVID-19 pandemic; and
- the other factors described in this “Risk Factors” section.

In the past, following periods of volatility in the market price of a company’s securities, securities class-action litigation has often been instituted against that company. Any lawsuit to which we are a party, with or without merit, may result in an unfavorable judgment. We also may decide to settle lawsuits on unfavorable terms. Any such negative outcome could result in payments of substantial damages or fines, damage to our reputation, or adverse changes to our offerings or business practices. Such litigation may also cause us to incur other substantial costs to defend such claims and divert management’s attention and resources.

Our actual operating results may differ significantly from our guidance.

From time to time, we may release guidance in our quarterly earnings conference calls, quarterly earnings releases, or otherwise, regarding our future performance that represents our management’s estimates as of the date of release. This guidance, which would include forward-looking statements, would be based on projections prepared by our management. Neither our registered public accountants nor any other independent expert or outside party would compile or examine the projections. Accordingly, no such person would express any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we would release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such third parties.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying any guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance would be only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material.

We and our collaborators may not achieve projected discovery and development milestones and other anticipated key events in the time frames that we or they announce, which could have an adverse impact on our business and could cause our stock price to decline.

From time to time, we expect that we will make public statements regarding the expected timing of certain milestones and key events, such as the commencement and completion of preclinical and IND-enabling studies in our internal drug discovery programs as well developments and milestones under our collaborations. Morphic has also made public statements regarding its expectations for the development of programs under collaboration with us and they and other collaborators may in the future make additional statements about their goals and expectations for collaborations with us. The actual timing of these events can vary dramatically due to a number of factors such as delays or failures in our or our current and future collaborators' drug discovery and development programs, including as a result of COVID-19, the amount of time, effort, and resources committed by us and our current and future collaborators, and the numerous uncertainties inherent in the development of drugs. As a result, there can be no assurance that our or our current and future collaborators' programs will advance or be completed in the time frames we or they announce or expect. If we or any collaborators fail to achieve one or more of these milestones or other key events as planned, our business could be materially adversely affected and the price of our common stock could decline.

If securities analysts do not publish or cease publishing research or reports or publish misleading, inaccurate or unfavorable research about our business or if they publish negative evaluations of our stock, the price and trading volume of our stock could decline.

The market price and trading volume for our common stock relies, in part, on the research and reports that industry or financial analysts publish about us or our business. We do not have control over these analysts. There can be no assurance that existing analysts will continue to cover us or that new analysts will begin to cover us. There is also no assurance that any covering analyst will provide favorable coverage. Although we have obtained analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock or publish inaccurate or unfavorable research about our business, or provides more favorable relative recommendations about our competitors, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price and trading volume to decline.

We have broad discretion in the use of our cash, cash equivalents, and marketable securities and may not use them effectively.

Our management will have broad discretion in the application of our cash, cash equivalents, and marketable securities and could use such funds in ways that do not improve our results of operations or enhance the value of our common stock or in ways that our stockholders may not agree with. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations, and prospects and could cause the price of our common stock to decline.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be the sole source of gain for our stockholders.

We have never declared or paid cash dividends on our common stock. We currently intend to retain all of our future earnings to fund the development and expansion of our business. Any determination to pay dividends in the future will be at the discretion of our board of directors. As a result, capital appreciation of our common stock, if any, will be the sole source of gain for our stockholders for the foreseeable future.

Sales of a substantial number of shares of our common stock in the public market could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock, impair our ability to raise capital through the sale of additional equity securities, and make it more difficult for our stockholders to sell their common stock at a time and price that they deem appropriate. As of February 26, 2021, we had outstanding 60,848,093 shares of common stock and 9,164,193 shares of limited common stock. All of our outstanding shares of common stock, including shares of common stock issuable upon the conversion of shares of our limited common stock, are available for sale in the public market, subject only to the restrictions of Rule 144 under the Securities Act in the case of our affiliates.

In addition, certain of our executive officers, directors and affiliated stockholders have entered or may enter into Rule 10b5-1 plans providing for sales of shares of our common stock from time to time. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the executive officer, director or affiliated stockholder when entering into the plan, without further direction from the executive officer, director or affiliated stockholder. A Rule 10b5-1 plan may be amended or terminated in some circumstances. Our executive officers, directors and affiliated stockholders also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material, nonpublic information.

Moreover, certain holders of our common stock and our limited common stock have rights, subject to specified conditions, to include their shares in registration statements that we may file for ourselves or other stockholders and, beginning at any time after we become eligible to file a registration statement on Form S-3, to require us to file Form S-3 registration statements covering their shares. We also have filed a registration statement on Form S-8 to register shares of common stock that we may issue under our equity compensation plans. Shares registered under the registration statement on Form S-8 are available for sale in the public market upon issuance, subject to volume limitations applicable to affiliates, vesting arrangements and exercise of options.

We are an "emerging growth company" and a "smaller reporting company," and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an "emerging growth company," or EGC, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. We may remain an EGC until December 31, 2025, although if we become a "large accelerated filer" or if we have annual gross revenues of $1.07 billion or more in any fiscal year, we would cease to be an EGC as of December 31 of the applicable year. We also would cease to be an EGC if we issue more than $1.0 billion of non-convertible debt over a three-year period. For so long as we remain an EGC, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not EGCs. These exemptions include:

- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We are also a "smaller reporting company," as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, although we expect to cease to be a smaller reporting company in connection with the filing of our Quarterly Report on Form 10-Q for the first quarter of 2021. Similar to EGCs, smaller reporting companies have reduced disclosure obligations, such as an exemption from providing selected financial data and an ability to provide simplified executive compensation information and only two years of audited financial statement in an annual report on Form 10-K, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure.

We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act permits an EGC to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies until those standards would otherwise apply to private companies. We have elected to take advantage of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we may adopt the new or revised standard at the time private companies adopt the new or revised standard and may do so until such time that we either irrevocably elect to "opt out" of such extended transition period or no longer qualify as an EGC.

We have incurred and will continue to incur increased costs as a result of operating as a public company, and our management has devoted and will continue to be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, we have incurred and will continue to incur significant legal, accounting, and other expenses that we did not incur as a private company, which we expect to further increase after we are no longer an EGC. The Exchange Act, Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel devote and will need to continue to devote a substantial amount of time and resources to these compliance initiatives, potentially at the expense of other business concerns, which could harm our business, financial condition, results of operations, and prospects. Moreover, these rules and regulations will increase our legal and financial compliance costs, and will make some activities more time-consuming and costly compared to when we were a private company.

We are evaluating these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

As a result of becoming a public company, we are obligated to develop and maintain proper and effective internal controls over financial reporting. Any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to furnish a report by our management on our internal control over financial reporting on an annual basis. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. However, our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting until our first annual report required to be filed with the SEC following the date we are no longer an EGC. At such time as we are required to obtain auditor attestation, if we then have an unremediated material weakness, we would receive an adverse opinion regarding our internal control over financial reporting from our independent registered accounting firm.

To achieve compliance with Section 404 within the prescribed period, we are engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, including through hiring additional financial and accounting personnel, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. During our evaluation of our internal control, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of shares of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

As a public company, we are subject to certain reporting requirements of the Exchange Act. Our disclosure controls and procedures are designed to reasonably assure that information required to be disclosed by us in reports we file or submit under the Exchange Act is accumulated and communicated to management, recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements or insufficient disclosures due to error or fraud may occur and not be detected.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of our company, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current directors and members of management.

Provisions in our certificate of incorporation and our bylaws may discourage, delay, or prevent a merger, acquisition, or other change in control of our company that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because our board of directors is responsible for appointing the members of our management team, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Among other things, these provisions:

- establish a classified board of directors such that only one of three classes of directors is elected each year;
- allow the authorized number of our directors to be changed only by resolution of our board of directors;
- limit the manner in which stockholders can remove directors from our board of directors;
- establish advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our board of directors;
- require that stockholder actions must be effected at a duly called stockholder meeting and prohibit actions by our stockholders by written consent;
- limit who may call stockholder meetings to the board of directors or to the secretary at the request of the holders of at least 25% of the outstanding shares of our common stock and limited common stock; and
- authorize our board of directors to issue preferred stock without stockholder approval, which could be used to institute a “poison pill” that would work to dilute the stock ownership of a potential hostile acquirer, effectively preventing acquisitions that have not been approved by our board of directors.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, or the DGCL, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our certificate of incorporation designates the state courts in the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could discourage lawsuits against the company and our directors, officers, and employees.

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the federal district court for the District of Delaware) will be the sole and exclusive forum for: (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or stockholders to our company or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (4) any action asserting a claim arising pursuant to any provision of our certificate of incorporation or bylaws (in each case, as they may be amended from time to time) or governed by the internal affairs doctrine. These choice of forum provisions will not apply to suits brought to enforce a duty or liability created by the Securities Act of 1933, as amended, the Exchange Act or any other claim for which federal courts have exclusive jurisdiction.

This exclusive forum provision may limit the ability of our stockholders to bring a claim in a judicial forum that such stockholders find favorable for disputes with us or our directors, officers, or employees, which may discourage such lawsuits against us and our directors, officers, and employees. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition, and operating results.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our principal facilities consist of office space. We occupy approximately 63,000 square feet of office space in New York, New York under a lease that currently expires in August 2021. We also occupy approximately 26,000 square feet of office space in Portland, Oregon under a lease that currently expires in August 2026, and we lease additional office space at our other office locations around the world. We believe our facilities are adequate and suitable for our current needs and that should it be needed, suitable additional or alternative space will be available to accommodate our operations.

Item 3. Legal Proceedings.

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not currently subject to any material legal proceedings.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock has been publicly traded on the Nasdaq Global Select Market under the symbol "SDGR" since February 6, 2020. Prior to that date, there was no public market for our common stock. Our limited common stock is not listed or traded on any stock exchange.

Holders of Record

As of February 26, 2021, there were approximately 146 holders of record of our common stock and one holder of record of our limited common stock. The actual number of stockholders is greater than this number of holders of record and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividends

We have never declared or paid cash dividends on our common stock or our limited common stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare and pay dividends will be made at the discretion of our board of directors and will depend on then-existing conditions, including our results of operations, financial condition, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant.

Certain Provisions of our Certificate of Incorporation and Bylaws

During November 2020, the Bill & Melinda Gates Foundation Trust, Schrodinger Equity Holdings, LLC, D. E. Shaw & Co., L.P., D. E. Shaw Technology Development, LLC and D. E. Shaw Valence Portfolios, L.L.C. and their respective successors and affiliates ceased to collectively beneficially own (directly or indirectly) more than 40% of our outstanding shares of common stock and limited common stock. Accordingly, pursuant to the provisions in our certificate of incorporation and our bylaws, our directors may be removed only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of all outstanding shares of common stock, and our stockholders may not take action by written consent in lieu of an annual or special meeting of stockholders.

Use of Proceeds

On February 5, 2020, our registration statement on Form S-1, as amended (File No. 333-235890) was declared effective by the SEC in connection with our initial public offering of common stock, pursuant to which we issued and sold on February 10, 2020, 13,664,704 shares of our common stock at a public offering price of $17.00 per share, including 1,782,352 additional shares of common stock issued upon the full exercise by the underwriters of their option to purchase additional shares, for total gross proceeds of $232.3 million. On February 10, 2020, we received net proceeds of $209.6 million, after deducting $16.3 million in underwriting discounts and commissions and $6.4 million in estimated offering expenses borne by us.

There has been no material change in the planned use of proceeds from our initial public offering from that described in the final prospectus related to the offering, dated February 5, 2020, as filed with the SEC on February 6, 2020.

Recent Sales of Unregistered Securities

Set forth below is information regarding issuances of shares of our common stock during the year ended December 31, 2020 that were not registered under the Securities Act of 1933, as amended, or the Securities Act, and that have not been otherwise described in a Quarterly Report on Form 10-Q or a Current Report on Form 8-K.

Issuances of Common Stock Upon Exchange of Limited Common Stock

On November 24, 2020, the Bill & Melinda Gates Foundation Trust voluntarily converted 4,000,000 shares of limited common stock into 4,000,000 shares of common stock.

The shares of common stock issued upon the conversion of the limited common stock described in this section were issued in reliance on the exemption provided by Section 3(a)(9) under the Securities Act.

Issuer Purchases of Equity Securities

Not applicable.

Item 6. Selected Financial Data.

You should read the following selected consolidated financial data together with our consolidated financial statements and the related notes, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial information included in this Annual Report. We have derived the consolidated statement of operations data for the years ended December 31, 2020 and 2019 and the consolidated balance sheet data as of December 31, 2020 and 2019 from our audited consolidated financial statements, which are included elsewhere in this Annual Report. The consolidated statement of operations data for the years ended December 31, 2018 and 2017 and the selected consolidated balance sheet data as of December 31, 2018 and December 31, 2017 are derived from our audited consolidated financial statements not included in this Annual Report. Our historical results are not necessarily indicative of results that should be expected in any future period.

	Year Ended December 31,			
	2020	2019	2018	2017
	(in thousands, except share and per share data)			
Consolidated Statements of Operations Data:				
Revenues:				
Software products and services	$ 92,530	$ 66,735	$ 59,885	$ 50,841
Drug discovery	15,565	18,808	6,754	4,852
Total revenues	108,095	85,543	66,639	55,693
Cost of revenues:				
Software products and services	18,003	13,646	10,687	7,843
Drug discovery	26,620	22,804	13,015	8,050
Total cost of revenues	44,623	36,450	23,702	15,893
Gross profit	63,472	49,093	42,937	39,800
Operating expenses:				
Research and development	64,695	39,404	34,523	27,669
Sales and marketing	17,795	21,364	17,831	16,716
General and administrative	41,898	27,040	18,552	14,436
Total operating expenses	124,388	87,808	70,906	58,821
Loss from operations	(60,916)	(38,715)	(27,969)	(19,021)
Other income (expense):				
Gain on equity investments	4,108	943	—	3,243
Change in fair value	28,263	9,922	(812)	(1,641)
Interest income	2,253	1,878	433	359
Total other income (expense)	34,624	12,743	(379)	1,961
Loss before income taxes	(26,292)	(25,972)	(28,348)	(17,060)
Income tax expense (benefit)	345	(291)	77	332
Net loss	(26,637)	(25,681)	(28,425)	(17,392)
Net loss attributable to noncontrolling interest	(2,174)	(1,110)	—	—
Net loss attributable to Schrödinger common and limited common stockholders	$ (24,463)	$ (24,571)	$ (28,425)	$ (17,392)
Net loss per share attributable to Schrödinger common and limited common stockholders, basic and diluted:	$ (0.41)	$ (4.09)	$ (4.93)	$ (3.77)
Weighted average common shares used to compute net loss per share attributable to common and limited common stockholders, basic and diluted(1):	60,024,658	6,004,500	5,771,305	4,608,307

(1) Reflects the one-for-7.47534 reverse stock split of our common stock that became effective on January 24, 2020.

	December 31, 2020	December 31, 2019	December 31, 2018	December 31, 2017
	(in thousands)			
Consolidated Balance Sheet Data				
Cash, cash equivalents, marketable securities, and restricted cash	$ 643,191	$ 86,330	$ 84,067	$ 36,343
Working capital(2)	609,773	73,516	77,685	30,236
Total assets	746,263	155,270	120,730	58,022
Deferred revenue, current and long-term	86,567	27,259	20,730	13,750
Convertible preferred stock	—	191,580	161,687	82,310
Total stockholders' equity (deficit)	624,019	(93,323)	(71,560)	(45,362)

(2) Working capital is current assets less current liabilities.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes appearing elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business and related financing, includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in "Risk Factors" of this Annual Report, our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

Overview

We are transforming the way therapeutics and materials are discovered. Our differentiated, physics-based software platform enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly, at lower cost, and with, we believe, a higher likelihood of success compared to traditional methods. Our software platform is used by biopharmaceutical and industrial companies, academic institutions, and government laboratories around the world. Our multidisciplinary drug discovery team also leverages our software platform to advance collaborative drug discovery and development programs and our own pipeline of novel therapeutics to address unmet medical needs.

Since our founding, we have been primarily focused on developing our computational platform, which is capable of predicting critical properties of molecules with a high degree of accuracy, as well as advancing drug discovery programs both with our collaborators and internally. We have devoted substantially all of our resources to introducing new capabilities and refining our software, conducting research and development activities, recruiting skilled personnel, and providing general and administrative support for these operations.

We are using our computational platform for both collaborative and internal drug discovery programs. Over the last decade, we have entered into a number of collaborations with biopharmaceutical companies that have provided us with significant income and have the potential to produce additional milestone payments, option fees, and future royalties. Furthermore, in mid-2018, we launched a pipeline of internal, wholly-owned programs.

We generate revenues from sales of our software solutions and from upfront payments, research funding and milestone payments from our drug discovery collaborations, and have received distributions on account of, or proceeds from the sale of, our equity stakes in our collaborators, all of which we have used to support our research and development and other operating expenses. Furthermore, we have also financed our operations from sales of our equity securities. On February 10, 2020, we closed our initial public offering of our common stock, in which we sold 13,664,704 shares of common stock at a public offering price of $17.00 per share, resulting in net proceeds to us of $209.6 million, after deducting underwriting discounts and commissions and offering expenses borne by us. In addition, on August 17, 2020, we closed a follow-on public offering, in which we sold 5,250,000 shares of common stock at a public offering price of $66.00 per share, resulting in net proceeds to us of $325.6 million, after deducting underwriting discounts and commissions and offering expenses borne by us.

We currently conduct our operations through two reportable segments: software and drug discovery. The software segment is focused on selling our software to transform drug discovery across the life sciences industry, as well as to customers in materials science industries. The drug discovery segment is focused on generating revenue from a diverse portfolio of preclinical and clinical programs, internally and through collaborations, that have advanced to various stages of discovery and development.

Our software segment generates revenue from software product licenses, hosted software subscriptions, software maintenance, professional services, and contributions. The revenue we generate through our software solutions from each of our customers varies largely depending on the number of software licenses our customers purchase from us. The licenses that our customers purchase from us provide them the ability to perform a certain number of calculations used in the design of molecules for drug discovery or materials science. We deliver our software through either (i) a product license that permits our customers to install the software solution directly on their own in-house hardware and use it for a specified term, or (ii) a subscription that allows our customers to access our cloud-based software solution on their own hardware without taking control of licenses.

We currently generate drug discovery revenue from our collaborations, including upfront payments, research funding payments and discovery and development milestones. In the future, we may also derive drug discovery revenue from our collaborations from option fees, the achievement of commercial milestones, and royalties on commercial drug sales. In addition to revenue from our collaborations, we may also derive drug discovery revenue from collaborating on or out-licensing our internal drug discovery programs when we believe it will help maximize the commercial potential of the program. In November 2020, we entered into an exclusive, worldwide collaboration and license agreement with Bristol-Myers Squibb Company, or BMS, pursuant to which we and

BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. The collaboration includes HIF-2 alpha and SOS1/KRAS, which are two of our internal pipeline programs. Under the terms of the agreement, we received an upfront payment of $55.0 million, and we are eligible to receive up to $2.7 billion in total milestone payments across all potential targets, as well as a tiered percentage royalty on net sales of each product commercialized by BMS ranging from mid-single digits to low-double digits, subject to certain specified reductions. See "Business—Collaboration Agreement with Bristol-Myers Squibb Company" for additional information relating to this agreement.

We generated revenue of $108.1 million, $85.5 million, and $66.6 million in 2020, 2019, and 2018, respectively, representing year-over-year growth of 26% and 28%, respectively. Our net loss was $26.6 million, $25.7 million, and $28.4 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Business Impact of COVID-19 Pandemic

In December 2019, a novel coronavirus, or COVID-19, emerged and has since spread to many countries worldwide, including the United States. On March 11, 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic, and on March 13, 2020, the United States declared a national emergency with respect to COVID-19. In response to the COVID-19 pandemic, state, local, federal, and foreign governments have put in place, and others in the future may put in place, quarantines, executive orders, shelter-in-place orders, and similar government orders and restrictions in order to control the spread of the disease. In order to safeguard the health of our employees, in early March 2020 we implemented a company-wide work-from-home policy. Beginning in June 2020, we began limited re-openings of certain of our offices in the United States and abroad. Our re-openings are being conducted on a limited basis and are voluntary for all of our employees. We intend to continue to phase-in the re-opening of our offices as our management and federal, state, or local authorities advise, and we may take further actions that alter our operations as may be required by federal, state, or local authorities, or which we determine are in our best interests.

During 2020, we did not see material impacts to our business from the COVID-19 pandemic. While we do not expect material impacts in 2021 from the COVID-19 pandemic, the full extent of the future impact will depend on many factors outside of our control, including, without limitation, the timing, extent, trajectory and duration of the COVID-19 pandemic, the development and availability of effective treatments and vaccines, the imposition of protective public safety measures, and the impact of the COVID-19 pandemic on the global economy. For instance, with respect to our software business, some of our customers may experience increasing budgetary pressures as a result of downturns or uncertainty in their respective businesses, which may cause them to delay or reduce purchases. In addition, due to the restrictions related to COVID-19, our sales force has limited in-person interactions, and their ability to attend events that promote and expand knowledge of our company and platform, including industry conferences and events, has been hampered. Relative to our drug discovery programs, the COVID-19 pandemic could delay the progress of certain programs, particularly ones that are in clinical studies or preparing to enter clinical studies. Delays in these programs could result in delays in achieving milestones and related revenue. While there remains uncertainty about the extent of the effect of the COVID-19 pandemic, we do not envision a long-term impact from the COVID-19 pandemic on our ability to execute on our strategy.

Management is actively monitoring the COVID-19 pandemic and its possible effects on our financial condition, liquidity, operations, customers, contractors, and workforce. For additional information on risks posed by the COVID-19 pandemic, please see "Risk Factors – Risks Related to Our Operations – A widespread outbreak of an illness or other health issue, such as the COVID-19 pandemic, could negatively affect various aspects of our business and make it more difficult to meet our obligations to our customers, and could result in reduced demand from our customers as well as delays in our drug discovery and development programs," included elsewhere in this Annual Report.

In response to the COVID-19 pandemic, we have joined a multi-company philanthropic effort to discover and develop novel small-molecule antiviral therapeutics to address COVID-19. The intent of the alliance, which to date also includes Takeda Pharmaceutical Company Limited, Novartis AG, Alphabet, Inc., Gilead Sciences, and WuXi AppTec, Inc., is to make any discoveries from this alliance available to the public. There is no expectation that this effort will generate revenue for any of the companies involved in the alliance, including us.

Key Factors Affecting Our Performance

Ability to drive additional revenue from our software solutions from existing customers

Our large existing base of customers represents a significant opportunity for us to expand our revenue through increased utilization of our software. The revenue that we generate through our software solutions from each of our customers varies depending on the number of licenses for each software solution that each customer purchases from us. Accordingly, we work with our customers

to improve their experience and increase the utility of our platform in order to expand the scale at which they deploy our platform in their business. Biopharmaceutical companies are increasingly adopting our software at a larger scale, and we anticipate that this scaling-up will drive future revenue growth. Our ability to expand within our customer base is demonstrated by the increasing number of our customers with an annual contract value, or ACV, of over $100,000. We had 153, 131, and 122 of these customers for the years ended December 31, 2020, 2019, and 2018, respectively. This subset of customers represented approximately 79%, 78%, and 77% of our total ACV for the years ended December 31, 2020, 2019, and 2018, respectively. In addition, we had 16, 10, and 11 customers with an ACV of over $1.0 million for the years ended December 31, 2020, 2019, and 2018, respectively.

With respect to contracts that have a duration of one year or less, or contracts of more than one year in duration that are billed annually, we define ACV as the contract value billed during the applicable period. For contracts with a duration of more than one year that are billed upfront, ACV in each period represents the total billed contract value divided by the term. ACV should be viewed independently of revenue and does not represent revenue calculated in accordance with generally accepted accounting principles in the United States, or U.S. GAAP, on an annualized basis, as it is an operating metric that can be impacted by contract execution start and end dates and renewal rates. ACV is not intended to be a replacement for, or forecast of, revenue. Our ACV was $92.1 million, $75.6 million, and $64.0 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Another important driver of our ability to expand our customer relationships is the retention of our customers with an ACV over $100,000. For the year ended December 31, 2020, our year-over-year customer retention rate for such customers was 99% and was 96% or higher for each of the previous seven fiscal years. We calculate year-over-year customer retention for our customers with an ACV over $100,000 by starting with the number of such customers we had in the previous fiscal year. We then calculate how many of these customers were active customers in the current fiscal year. We then divide this number by the number of customers with an ACV over $100,000 we had in the previous fiscal year to arrive at the year-over-year customer retention rate for such customers. We intend to leverage our existing relationships with our customers to drive larger-scale adoption of our software solutions. If we are unable to continue to increase revenue from existing customers, our financial performance will be adversely impacted.

Ability to increase our customer base for our software solutions

We believe that we have significant opportunity to continue to increase the number of customers who use our solutions. We had 1,463, 1,266, and 1,150 active customers for the years ended December 31, 2020, 2019, and 2018, respectively. We define the number of active customers as the number of customers who had an ACV of at least $1,000 in the fiscal year. We use $1,000 as a threshold for defining our active customers as this amount will generally exclude customers who only license our PyMOL software, which is our open-source molecular visualization system broadly available at low cost.

While we have significantly penetrated the pharmaceutical industry, with all of the top 20 pharmaceutical companies, measured by 2019 revenue, licensing our software in 2020, our strategy is to grow our customer base. We believe there remains a large opportunity for growth as there are thousands of biopharmaceutical companies that could benefit from our solutions. Additionally, since the physics underlying the properties of drug molecules and materials is the same, we have been able to extend our computational platform to materials science applications in fields such as aerospace, energy, semiconductors, and electronic displays. We sell our software solutions to a growing number of materials science customers, and we believe materials science industries are only beginning to recognize the potential of computational methods. We continue to promote the education and recognition of our computational platform across industries. As part of our strategy, we have driven the adoption of our software by researchers, and we had more than 1,690 academic institutions across the world using our software in 2020. We believe that by introducing the benefits of our computational software at the academic stage, we will drive brand awareness and expand the use of our platform to industries that have historically relied on traditional methods for discovery of molecules. Our ability to continue to grow our customer base is dependent upon our ability to educate the market and support the business through investment in our sales and marketing efforts and the ongoing enhancement of our software solutions.

Advancement of our collaborations

We have entered into a number of collaborations with various biopharmaceutical companies, some of which we have co-founded, to advance drug discovery. We will seek to enter into additional collaboration agreements, driven by the synergies we expect to achieve between our platform and the capabilities and expertise of our potential collaborators. We believe that our collaborations will be a significant driver of value for us in the form of equity stakes, research fees, preclinical, clinical, and commercial milestone payments, and option fees, as well as royalties on any potential future sales of products, if approved. We continue to work with our current collaborators to advance existing programs through discovery research stages and initiate additional programs. However, we do not generally exercise control over the development programs of our collaborators and often rely on decisions of the management of such companies with respect to clinical development and commercialization. Our ability to continue to derive value from our

collaborations will be driven by both our capability to make progress in these programs as well as whether our collaborators successfully advance such programs beyond the discovery stage.

Ability to develop and expand our internal proprietary drug discovery pipeline

We are advancing our pipeline of internal drug discovery programs through extensive application of our software platform. Our initial programs are focused on discovering and developing inhibitors for targets in DNA damage response pathways and genetically defined cancers. Since then, we have expanded into other therapeutic areas, including in the areas of immunology and neurology. As we progress these programs, we will strategically evaluate on a program-by-program basis entering into clinical development ourselves, entering into collaborations, or out-licensing programs to maximize commercial opportunities. As part of this strategy, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS pursuant to which we and BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the oncology, neurology and immunology therapeutic areas. We will need to continue to devote substantial resources to develop and expand our internal pipeline. Our ability to advance and build value in our internal drug discovery programs will impact our financial performance, especially as we increasingly shift our focus to these programs.

Components of Results of Operations

Software Products and Services Revenue

Our software business generates revenue from five sources: (i) on-premise software license fees, (ii) hosted software subscription fees, (iii) software maintenance fees, (iv) professional services fees, and (v) contributions.

On-premise software. Our on-premise software license arrangements grant customers the right to use our software on their own in-house servers or their own cloud instances for a specified term, typically for one year. We recognize revenue for on-premise software license fees upfront, either upon delivery of the license or the effective date of the agreement, whichever is later.

Hosted software. Hosted software revenue consists primarily of fees to provide our customers with hosted licenses, which allows these customers to access our cloud-based software solution on their own hardware without taking control of the licenses, and is recognized ratably over the term of the arrangement, which is typically one year. When a customer enters into a hosted arrangement for which revenue is recognized over time, the amount paid upfront that is not recognized in the current period is included in deferred revenue in our statement of financial position until the period in which it is recognized.

Software maintenance. Software maintenance includes technical support, updates, and upgrades related to our on-premise software licenses. Software maintenance revenue is recognized ratably over the term of the arrangement. Software maintenance activities are performed in connection with the use of our on-premise software, and may fluctuate from period to period.

Professional services. Professional services, such as training, technical setup or installation or modeling services, where we use our software to perform tasks such as virtual screening and homology modeling on behalf of our customers, generally are not related to the functionality of our software and are recognized as revenue when resources are consumed. Since each professional services agreement represents a unique, ad hoc engagement, professional services revenue may fluctuate from period to period.

Contribution. Contribution revenue consists of funds received under a non-reciprocal agreement with Gates Ventures, LLC. The agreement is an unconditional non-exchange contribution without restrictions and the initial contribution was invoiced upon execution of the agreement. Revenue was recognized upon execution of the agreement when invoiced in accordance with Accounting Standard Codification, or ASC Topic 958, Not-for-Profit Entities as the agreement is not an exchange transaction.

Drug Discovery Revenue

We currently generate drug discovery revenue from discovery collaboration arrangements, including research funding payments and discovery and development milestones. We expect our drug discovery revenue to trend higher over time as collaboration arrangements advance and we receive additional revenue from research funding payments, the achievement of discovery, development, and commercial milestones, option fees, and royalties on commercial drug sales. The majority of our current collaborations are in the discovery stage. Milestone payments typically increase in magnitude as a program advances. In addition to revenue from our collaborations, we may also derive drug discovery revenue from entering into collaborations or out-licensing our internal drug discovery programs when we believe it will help maximize the commercial potential of the program. For example, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS, pursuant to which we received an upfront payment of $55.0 million from BMS, of which approximately $1.0 million is included in our drug discovery

revenue for the year ended December 31, 2020. However, we expect that our revenue will fluctuate from period to period due to the inherently uncertain nature of the timing of milestone achievement and our dependence on the program decisions of our collaborators.

Cost of Revenues

Software products and services. Cost of revenues for software includes personnel-related expenses (comprised of salaries, benefits, and stock-based compensation) for employees directly involved in the delivery of software solutions, maintenance and professional services, royalties paid for products sold and services performed using third-party licensed software functionality, and allocated overhead (facilities and information technology support) costs. Pursuant to various third party arrangements, we license technology that is used in our software. These arrangements require us to pay royalties based on sales volume, and such royalty payments represented 6.3% and 6.7% of software revenues in the years ended December 31, 2020 and 2019, respectively.

Drug discovery. Costs of revenue for drug discovery includes personnel-related expenses and costs of third-party contract research organizations, or CROs, that support discovery activities in our collaborations, royalties paid for services performed using third-party licensed software functionality, and allocated compute capacity and overhead costs. While we have incurred costs associated with discovery efforts for this collaboration since late 2017, we have recognized and expect to continue to recognize revenues in the future if and when milestones are achieved. Generally, drug discovery costs of revenue for collaborations are incurred in advance of the revenue milestone achievement.

Royalty payments to third-parties represented 11.2% and 6.7% of drug discovery revenues in the years ended December 31, 2020 and 2019, respectively. We expect our drug discovery costs of revenue to trend higher over time as our discovery collaborations advance.

Gross Profit and Gross Margin

Gross profit represents revenue less cost of revenues. Gross margin is gross profit expressed as a percentage of revenue. Our software products and services gross margin may fluctuate from period to period as our revenue fluctuates, and as a result of changes in sales mix between on-premise and hosted software solutions. For example, the cost of royalties due for sales of our hosted software arrangements are recognized upfront, whereas the associated revenue is recognized over the term of the underlying agreement. Currently, gross margin is not meaningful for measuring the operating results of our drug discovery business.

Research and Development Expense

Research and development expense accounts for a significant portion of our operating expenses. We recognize research and development expense as incurred. Research and development expense consists of internal drug discovery program costs and costs incurred for continuous development of the technology and science that supports our computational platform, primarily:

- personnel-related expenses, including salaries, benefits, bonuses, and stock-based compensation for employees engaged in research and development functions;
- expenses incurred under agreements with third-party CROs and consultants involved in our internal discovery programs; and
- allocated compute capacity on our internal discovery programs and overhead (facilities and information technology support) costs.

We expect our research and development expense to increase substantially in absolute dollars for the foreseeable future as we continue to invest in activities related to discovery and development of our internal drug discovery programs, in advancing our platform, and as we incur expenses associated with hiring additional personnel directly involved in such efforts. At this time, we do not know, nor can we reasonably estimate, the nature, timing, or costs of the efforts that will be necessary to complete the development of any of our internal drug discovery programs. Since our internal drug discovery efforts are at a very early stage, currently we do not track research and development expense on a program-by-program basis.

Sales and Marketing Expense

Sales and marketing expense consists primarily of personnel-related costs for our sales and marketing staff and application scientists supporting our sales efforts, including salaries, benefits, bonuses, and stock-based compensation. Other sales and marketing costs include promotional events that promote and expand knowledge of our company and platform, including industry conferences and events and our annual user group meetings in the United States and Europe, advertising, and allocated overhead costs. Most

operating costs of our sales offices in Europe and Japan are included in sales and marketing expense. Due to the inherent scientific complexity of our software solutions, a high level of scientific expertise is needed to support our sales and marketing efforts. We plan to make focused investments in sales and marketing over the foreseeable future to foster the growth of our business as we aim to expand software sales to existing customers and increase our customer base.

General and Administrative Expense

General and administrative expense consists of personnel-related expenses associated with our executive, legal, finance, human resources, information technology, and other administrative functions, including salaries, benefits, bonuses, and stock-based compensation. General and administrative expense also includes professional fees for external legal, accounting and other consulting services, allocated overhead costs, and other general operating expenses.

We expect to increase the size of our general and administrative staff to support the anticipated growth of our business. We expect to continue to incur additional expenses as a result of operating as a public company, including costs to comply with the rules and regulations applicable to companies listed on a U.S. securities exchange and costs related to compliance and reporting obligations pursuant to the rules and regulations of the Securities and Exchange Commission, or SEC. In addition, as a public company, we expect to continue to incur increased expenses such as insurance and professional services. As a result, we expect the dollar amount of our general and administrative expense to increase for the foreseeable future.

Gain on Equity Investments

Gain on equity investments consists of realized gains in the form of cash distributions received from our equity investments.

Change in Fair Value

Fair value gains and losses consist of adjustments to the fair value of our equity investments, including Nimbus, Morphic Holding, Inc., or Morphic, and Relay Therapeutics, Inc., or Relay. Morphic and Relay became publicly traded companies in June 2019 and July 2020, respectively. As such, fair value is determined as the current market value of the respective common stock as of the reporting date. We remeasure our investments at each period end.

Prior to Morphic's initial public offering, fair value changes for our Morphic investment were determined under the hypothetical liquidation book value, or HLBV, method. For further information regarding the HLBV method, see "—Critical Accounting Policies and Significant Judgments and Estimates—Valuation of Equity Investments" in this Annual Report.

Prior to Relay's initial public offering, fair value changes for our Relay investment were determined under the cost method. In January 2021, we disposed of our equity stake in Relay for aggregate consideration of $15.7 million.

We expect that fair value gains and losses may fluctuate significantly in future periods.

Interest Income

Interest income consists of interest earned on our cash equivalents and marketable securities.

Income Tax Expense (Benefit)

Income tax expense (benefit) consists of U.S. federal and state income taxes and income taxes in certain foreign jurisdictions in which we conduct business. We maintain a full valuation allowance on our federal and state deferred tax assets as we have concluded that it is not more likely than not that the deferred tax assets will be realized.

Results of Operations

Comparison of the years ended December 31, 2020 and 2019

The following table summarizes our results of operations data for the years ended December 31, 2020 and 2019:

	Year Ended December 31,		Change	
	2020	2019	$	%
	(in thousands)			
Revenues:				
Software products and services	$ 92,530	$ 66,735	$ 25,795	39%
Drug discovery	15,565	18,808	(3,243)	-17%
Total revenues	108,095	85,543	22,552	26%
Cost of revenues:				
Software products and services	18,003	13,646	4,357	32%
Drug discovery	26,620	22,804	3,816	17%
Total cost of revenues	44,623	36,450	8,173	22%
Gross profit	63,472	49,093	14,379	29%
Operating expenses:				
Research and development	64,695	39,404	25,291	64%
Sales and marketing	17,795	21,364	(3,569)	-17%
General and administrative	41,898	27,040	14,858	55%
Total operating expenses	124,388	87,808	36,580	42%
Loss from operations	(60,916)	(38,715)	(22,201)	57%
Other income:				
Gain on equity investments	4,108	943	3,165	
Change in fair value	28,263	9,922	18,341	
Interest income	2,253	1,878	375	
Total other income	34,624	12,743	21,881	
Loss before income taxes	(26,292)	(25,972)	(320)	
Income tax expense (benefit)	345	(291)	636	
Net loss	(26,637)	(25,681)	(956)	
Net loss attributable to noncontrolling interest	(2,174)	(1,110)	(1,064)	
Net loss attributable to Schrödinger stockholders	$ (24,463)	$ (24,571)	$ 108	

Revenues

	Year Ended December 31,		Change	
	2020	2019	$	%
	(in thousands)			
Revenues:				
On-premise software	$ 58,311	$ 42,647	$ 15,664	37%
Hosted software	9,192	7,418	1,774	24%
Software maintenance	14,465	11,643	2,822	24%
Professional services	9,562	5,027	4,535	90%
Contribution	1,000	—	1,000	—
Total software products and services	92,530	66,735	25,795	39%
Drug discovery	15,565	18,808	(3,243)	-17%
Total revenues	$ 108,095	$ 85,543	$ 22,552	26%

On-premise software. The increase in revenues for on-premise software was primarily attributable to existing and new customer growth, and an increase in multi-year arrangements during 2020 as compared to 2019.

Hosted software. The increase in revenues for hosted software was primarily due to increased spend from existing hosted customers, as well as new customers purchasing hosted software subscriptions, for which revenue is recognized ratably over time.

Software maintenance. The increase in revenues for software maintenance was primarily due to the increase in on-premise software sales in previous years, offset by an overall reduction in the cost to provide such services. Software maintenance revenue is recognized over time.

Professional services. The increase in revenues from professional services was primarily due to revenue from significant technology service projects that began in late 2019, as well as an increased number of modeling service contracts.

Contributions. Contribution revenue during 2020 was due to an agreement with Gates Ventures, LLC, which began in June 2020.

Drug discovery. The decrease in revenues for drug discovery was primarily due to the timing and amount of collaboration milestones achieved during 2020 as compared to 2019.

Cost of Revenues

	Year Ended December 31,		Change	
	2020	2019	$	%
	(in thousands)			
Cost of revenues:				
Software products and services	$ 18,003	$ 13,646	$ 4,357	32%
Gross margin	81%	80%		
Drug discovery	26,620	22,804	3,816	17%

Software products and services. The increase in cost of revenues for software products and services was attributable to increases of approximately $2.6 million in personnel-related expense, approximately $1.5 million in royalty expense due to higher sales levels, and approximately $0.4 million in other costs, offset by a decrease of approximately $0.2 million in travel and entertainment expense due to COVID-19. The increase in gross margin was primarily attributable to sales mix.

Drug discovery. The increase in cost of revenues for drug discovery was attributable to increases of approximately $3.3 million in personnel-related expense, approximately $0.7 million in compute capacity costs, and approximately $0.4 million in royalty expense, offset by a decrease of approximately $0.6 million in third-party CRO costs to support collaborations.

Research and Development Expense

	Year Ended December 31,		Change	
	2020	2019	$	%
	(in thousands)			
Research and development	$ 64,695	$ 39,404	$ 25,291	64%

The increase in research and development expense was attributable to increases of approximately $11.7 million in personnel-related expense, approximately $10.1 million in CRO costs associated with the expansion and progression of internal drug discovery programs, approximately $2.3 million in compute capacity costs, and approximately $1.1 million in other expenses.

Sales and Marketing Expense

	Year Ended December 31,		Change	
	2020	2019	$	%
	(in thousands)			
Sales and marketing	$ 17,795	$ 21,364	$ (3,569)	-17%

The decrease in sales and marketing expense was attributable to a decrease of approximately $2.7 million in personnel-related expense, a decrease of approximately $1.2 million in travel and entertainment expenses due to COVD-19, partially offset by an increase of $0.3 million in other expenses.

General and Administrative Expense

	Year Ended December 31,		Change	
	2020	2019	$	%
	(in thousands)			
General and administrative	$ 41,898	$ 27,040	$ 14,858	55%

The increase in general and administrative expense was attributable to an increase of approximately $10.5 million of personnel-related expense, and an increase of approximately $7.5 million in other expenses, primarily reflecting costs necessary to build a public company infrastructure, partially offset by a $3.3 million reduction for non-comparable items recognized during 2019.

Gain on Equity Investment

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Gain on equity investments	$ 4,108	$ 943	$ 3,165

The gain on equity investments during 2020 represents realized gains in the form of a cash distribution received from the Petra Pharma Corporation, or Petra, merger in May 2020 on account of our equity stake in Petra. The gain on equity investments during 2019 represents realized gains in the form of a cash distribution received from our Nimbus investment.

Change in Fair Value

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Change in fair value	$ 28,263	$ 9,922	$ 18,341

The change in fair value during 2020 was due to a gain on our investment in Relay of $17.6 million and a gain on our investment in Morphic of $13.7 million, offset by a loss on our investment in Nimbus of $3.0 million. The change in fair value during 2019 was due to a $14.1 million gain on our investment in Morphic, offset by a $4.2 million loss on our investment in Nimbus.

Interest Income

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Interest income	$ 2,253	$ 1,878	$ 375

The increase in interest income was attributable to increased earnings on our investment portfolio balance, which increased significantly year-over-year due to the investment of proceeds from our initial public offering in February 2020 and our follow-on public offering in August 2020, partially offset by a significant reduction in interest rates year-over-year.

Income Tax Expense (Benefit)

	Year Ended December 31,		
	2020	2019	Change
	(in thousands)		
Income tax expense (benefit)	$ 345	$ (291)	$ 636

Due to the full valuation allowance on our U.S. federal and state deferred tax assets, income tax expense (benefit) represents our income tax obligations in certain foreign jurisdictions in which we conduct business. The income tax benefit during the year ended December 31, 2019 is due to alternative minimum tax credits previously utilized that are refundable under the Tax Cuts and Jobs Act of 2017.

Quarterly Results of Operations

The following tables summarize our selected unaudited quarterly results of operations data for each of the eight quarters in the period ended December 31, 2020. The information for each of these quarters has been prepared on the same basis as our audited annual consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal, recurring nature that are necessary for the fair statement of the results of operations for these periods. This data should be read in conjunction with our audited consolidated financial statements included elsewhere in this Annual Report. Historical results are not necessarily indicative of the results that may be expected for the full fiscal year or any other period.

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Revenues:								
Software products and services	$ 24,957	$ 22,861	$ 20,900	$ 23,812	$ 17,530	$ 16,118	$ 14,482	$ 18,605
Drug discovery	8,075	2,936	2,192	2,362	8,302	3,842	4,528	2,136
Total revenues	33,032	25,797	23,092	26,174	25,832	19,960	19,010	20,741
Cost of revenues:								
Software products and services(1)	5,806	4,334	3,862	4,001	3,745	3,097	3,671	3,133
Drug discovery(1)	8,234	6,191	5,647	6,548	6,560	6,152	5,488	4,604
Total cost of revenues	14,040	10,525	9,509	10,549	10,305	9,249	9,159	7,737
Gross profit	18,992	15,272	13,583	15,625	15,527	10,711	9,851	13,004
Operating expenses:								
Research and development(1)	17,319	17,019	16,657	13,700	11,082	10,353	9,531	8,438
Sales and marketing(1)	4,675	3,969	4,362	4,789	5,743	5,185	5,343	5,093
General and administrative(1)	13,582	9,729	9,651	8,936	6,549	6,465	8,940	5,086
Total operating expenses	35,576	30,717	30,670	27,425	23,374	22,003	23,814	18,617
Loss from operations	(16,584)	(15,445)	(17,087)	(11,800)	(7,847)	(11,292)	(13,963)	(5,613)
Other (expense) income:								
Gain on equity investment	(48)	—	4,156	—	943	—	—	—
Change in fair value	4,750	18,233	8,359	(3,079)	(685)	(1,427)	12,661	(627)
Interest income	521	463	570	699	415	501	524	438
Total other (expense) income	5,223	18,696	13,085	(2,380)	673	(926)	13,185	(189)
(Loss) income before income taxes	(11,361)	3,251	(4,002)	(14,180)	(7,174)	(12,218)	(778)	(5,802)
Income tax expense (benefit)	225	(35)	64	91	(29)	(257)	(51)	46
Net (loss) income	(11,586)	3,286	(4,066)	(14,271)	(7,145)	(11,961)	(727)	(5,848)
Net loss attributable to noncontrolling interest	(447)	(566)	(716)	(445)	(375)	(454)	(227)	(54)
Net (loss) income attributable to Schrodinger stockholders	$ (11,139)	$ 3,852	$ (3,350)	$ (13,826)	$ (6,770)	$ (11,507)	$ (500)	$ (5,794)

(1) Includes stock-based compensation as indicated in the table located further below.

Revenues:

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Revenues:								
On-premise software	$ 16,542	$ 15,064	$ 11,105	$ 15,600	$ 10,723	$ 10,300	$ 8,601	$ 13,023
Hosted software	2,373	2,374	2,312	2,133	1,934	1,862	1,911	1,711
Software maintenance	3,841	3,536	3,551	3,537	3,181	3,025	2,848	2,589
Professional services	2,201	1,887	2,932	2,542	1,692	931	1,122	1,282
Revenue from contracts with customers	24,957	22,861	19,900	23,812	17,530	16,118	14,482	18,605
Contribution	-	-	1,000	-	-	-	-	-
Total software products and services revenue	24,957	22,861	20,900	23,812	17,530	16,118	14,482	18,605
Drug discovery	8,075	2,936	2,192	2,362	8,302	3,842	4,528	2,136
Total revenues	$ 33,032	$ 25,797	$ 23,092	$ 26,174	$ 25,832	$ 19,960	$ 19,010	$ 20,741

Deferred Revenue:

	As of							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Deferred revenue	$ 86,567	$ 21,659	$ 25,117	$ 23,835	$ 27,259	$ 19,129	$ 22,417	$ 17,970

Gross Margin:

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
Software products and services gross margin	77%	81%	82%	83%	79%	81%	75%	83%

Stock-Based Compensation:

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Stock-based compensation:								
Cost of revenues:								
Software products and services	$ 152	$ 169	$ 124	$ 85	$ 42	$ 41	$ 33	$ 36
Drug discovery	276	230	181	168	62	60	48	53
Research and development	863	857	822	508	122	114	113	111
Sales and marketing	141	165	116	93	86	79	75	71
General and administrative	1,571	1,617	1,486	921	269	267	262	249
Total stock-based compensation expense	$ 3,003	$ 3,038	$ 2,729	$ 1,775	$ 581	$ 561	$ 531	$ 520

Depreciation:

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Depreciation:								
Cost of revenues:								
Software products and services	$ 67	$ 62	$ 48	$ 43	$ —	$ —	$ —	$ —
Drug discovery	226	213	205	193	229	234	227	219
Research and development	222	212	200	176	157	159	155	147
Sales and marketing	39	30	39	34	43	44	37	30
General and administrative	457	372	388	432	479	502	497	481
Total depreciation expense	$ 1,011	$ 889	$ 880	$ 878	$ 908	$ 939	$ 916	$ 877

Quarterly Revenue Trends

On-premise software revenue is subject to seasonality that favors the first quarter of each year, although for 2020 the trend is shifting toward the fourth quarter, primarily due to the calendar year timing of customer renewals for on-premise software arrangements, for which revenue is recognized at a single point in time. Hosted software revenue grew more steadily in the periods presented, as existing customers and new customers increased their spend on hosted solutions, for which revenue is recognized over time. As a result, a substantial portion of the software products and services revenue we reported in each period was attributable to sales we made in prior periods. Software maintenance revenue is related to on-premise software sales and also is recognized ratably over the term of the underlying agreement. Therefore, increases or decreases in customer sales, customer expansion, or renewals in a period may not be immediately reflected in revenue for the period. Our professional services arrangements are typically project-based and, therefore, fluctuated based on individual customer needs and ongoing project support. Drug discovery revenue fluctuated from period to period based on the achievement of specific collaboration milestones. The majority of our current collaborations are in the discovery stage. Milestone payments typically increase in magnitude as a program advances.

Quarterly Deferred Revenue Trends

Deferred revenue consists of the unearned portion of customer billings, which is recognized as revenue in accordance with our revenue recognition policy, as well as the unearned portion of unbilled collaboration milestones that are deemed probable in advance

of actual achievement. Deferred revenue balances have generally increased over the periods presented, but have fluctuated based on the timing of sales, shifts in product mix, fluctuations to the number and size of milestones that were deemed probable in advance of actual achievement, and the measurement of progress toward completion for service projects.

Quarterly Gross Margin Trends

Our software products and services gross margin experienced fluctuations over the periods presented due to increased headcount and the product mix for software and services, as the cost of royalties due on sales of our hosted software is recognized upfront, while the associated revenue is recognized over the term of the related agreement. Currently, gross margin is not meaningful for measuring the operating results of our drug discovery business.

Quarterly Operating Expense Trends

Operating expenses generally increased during the periods presented due to increased headcount and personnel-related expenses involved in research and development, sales and marketing, general and administrative activities, and CRO costs related to our internal drug discovery programs. These increases in headcount across our operations have supported the overall growth and management of our business. CRO cost increases were driven by the launch and expansion of our internal drug discovery programs.

Quarterly Other (Expense) Income Trends

Other (expense) income during the periods presented consisted primarily of fair value gains and losses related to our equity investments in Nimbus, Morphic and Relay, our realized gain from the Petra Corporation merger, and, to a lesser degree, interest income.

Segment Information

The following tables summarize segment information for the years ended December 31, 2020 and 2019. See Note 15 in our audited consolidated financial statements for additional information regarding our segments.

Segment gross profit is derived by deducting operational expenditures, with the exception of research and development, sales and marketing, and general and administrative activities, from U.S. GAAP revenue. Operational expenditures are expenditures made that are directly attributable to the reportable segment. In many cases, these expenditures are allocated to the segments based on headcount. The reportable segment expenditures include compensation, supplies, and services from contract research organizations.

Certain cost items are not allocated to our reportable segments. These cost items primarily consist of compensation and general operational expenses associated with our research and development, sales and marketing, and general and administrative activities. These costs are incurred by both segments and, due to the integrated nature of our software and drug discovery segments, any allocation methodology would be arbitrary and provide no meaningful analysis. Additionally, we report assets on a consolidated basis and do not allocate assets to our reportable segments for purposes of assessing segment performance or allocating resources.

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Segment revenues:		
Software	$ 92,530	$ 66,735
Drug discovery	15,565	18,808
Total segment revenues	$ 108,095	$ 85,543
Segment gross profit:		
Software	$ 74,527	$ 53,089
Drug discovery	(11,055)	(3,996)
Total segment gross profit	63,472	49,093
Unallocated (expense) income:		
Research and development	(64,695)	(39,404)
Sales and marketing	(17,795)	(21,364)
General and administrative	(41,898)	(27,040)
Gain on equity investment	4,108	943
Change in fair value	28,263	9,922
Interest	2,253	1,878
Income taxes	(345)	291
Consolidated net loss	$ (26,637)	$ (25,681)

Liquidity and Capital Resources

Historically we have incurred substantial operating losses and expect to continue to incur significant operating losses for the foreseeable future, we have not maintained profitability and may never become profitable in the future. As of December 31, 2020, we had an accumulated deficit of $129.6 million. Our operating cash flows are impacted by the magnitude and timing of our software sales and by the magnitude and timing of our drug discovery milestone achievements and research funding fees. Our primary use of cash is to fund operating expenses, which consist of research and development, sales and marketing, and general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when we pay operating expenses to vendors and collect amounts due from customers and collaborators, which is reflected in changes in our operating assets and liabilities, including accounts payable, accrued expenses, prepaid expenses, deferred revenue, and accounts receivable.

We generate revenues from sales of our software solutions and from upfront payments, research funding and milestone payments from our drug discovery collaborations, and have received distributions on account of, or proceeds from the sale of, our equity stakes in our collaborators, all of which we have used to support our research and development and other operating expenses. Furthermore, we have financed our operations from sales of our equity securities.

On February 10, 2020, we closed our initial public offering of our common stock, in which we sold 13,664,704 shares of common stock at a public offering price of $17.00 per share, resulting in net proceeds to us of $209.6 million, after deducting underwriting discounts and commissions and offering expenses borne by us. In addition, on August 17, 2020, we closed a follow-on public offering, in which we sold 5,250,000 shares of common stock at a public offering price of $66.00 per share, resulting in net proceeds to us of $325.6 million, after deducting underwriting discounts and commissions and offering expenses borne by us.

As of December 31, 2020, we had cash, cash equivalents, restricted cash, and marketable securities of $643.2 million. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view towards capital preservation and liquidity.

Cash Flows

The following table presents a summary of our cash flows for the periods shown:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Net cash provided by (used in) operating activities	$ 16,757	$ (26,059)
Net cash used in investing activities	(381,721)	(53,855)
Net cash provided by financing activities	541,274	28,684
Net increase (decrease) in cash and cash equivalents and restricted cash	$ 176,310	$ (51,230)

Operating activities

During the year ended December 31, 2020, operating activities provided approximately $16.8 million of cash. Cash provided by operating activities increased primarily from changes in our operating assets and liabilities, which provided cash of approximately $59.2 million primarily due to an increase of $59.7 million in deferred revenue, of which approximately $54.0 million is related to our agreement with BMS, and $12.5 million of non-cash operating expenses included in net loss, including depreciation and stock-based compensation costs. These increases are partially offset by our net loss of $26.6 million and $28.3 million non-cash gain from changes in fair value.

During the year ended December 31, 2019, operating activities used approximately $26.1 million of cash, primarily resulting from net loss of $25.7 million, which included a $9.9 million non-cash gain from changes in fair value and a $0.9 million gain on equity investment that is classified as an investing activity, partially offset by $6.2 million of non-cash operating expenses included in net loss, including depreciation and stock-based compensation costs. Changes in our operating assets and liabilities provided cash of approximately $4.2 million.

Investing activities

During the year ended December 31, 2020, investing activities used approximately $381.7 million of cash, primarily for purchases of marketable securities.

During the year ended December 31, 2019, investing activities used approximately $53.9 million of cash, primarily for purchases of marketable securities.

Financing activities

During the year ended December 31, 2020, financing activities provided approximately $541.3 million of cash, primarily attributable to proceeds from issuances of our common stock in our initial public and follow-on offerings.

During the year ended December 31, 2019, financing activities provided approximately $28.7 million of cash, primarily attributable to proceeds from issuances of our Series E preferred stock.

Funding Requirements

We believe that our existing cash, cash equivalents, and marketable securities will be sufficient to fund our operations and capital expenditure requirements for at least the next 12 months. Our future capital requirements will depend on many factors, including the growth of our software revenue, the timing and extent of spending to support research and development efforts, the continued expansion of software sales and marketing activities, the timing and receipt of milestone payments from our collaborations, as well as spending to support, advance, and broaden our internal programs. Furthermore, our capital requirements will also change depending on the timing and receipt of any distributions we may receive from our equity stakes in our co-founded companies and other drug discovery collaborators and partners. The potential for these distributions, and the amounts which we may be entitled to receive, are difficult to predict due to the inherent uncertainty of the events which may trigger such distributions.

In addition, with respect to our internal programs, as part of our strategy we may choose to enter into collaborations or pursue out-licensing arrangements when we believe it will help maximize the commercial value of any such program. For example, in November 2020, we entered into an exclusive, worldwide collaboration and license agreement with BMS, pursuant to which we and BMS agreed to collaborate in the discovery, research and development of small molecule compounds for biological targets in the

oncology, neurology and immunology therapeutic areas. Under the terms of the agreement, we received an 55.0 million upfront payment from BMS, and we are eligible to receive up to $2.7 billion in total milestone payments from BMS across all potential targets, as well as a tiered percentage royalty on net sales of each product commercialized by BMS ranging from mid-single digits to low-double digits, subject to certain specified reductions. However, under this agreement and any other future arrangements, the potential amounts we may be entitled to and the likelihood and timing of such payments, including at what stage of discovery or development we may choose to pursue such arrangements, is uncertain.

We may be required to seek additional equity or debt financing. In the event that we require additional financing, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital or generate cash flows necessary to maintain or expand our operations and invest in our platform, we may not be able to compete successfully, which would harm our business, operations and financial condition. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of December 31, 2020:

	Total	Less than 1 Year	1 to 3 Years	3 to 5 Years	More than 5 Years
			(in thousands)		
Operating lease obligations(1)	$ 12,341	$ 4,622	$ 3,652	$ 3,105	$ 962

(1) Operating lease obligations consist of our continuing rent obligations through January 2029, primarily for our principal offices located in New York, New York and Portland, Oregon, which expire in August 2021 and August 2026, respectively.

In November 2019, we entered into a three-year agreement with a third-party cloud provider for compute power. The agreement originally contained a minimum payment obligation, which totaled $18 million over the three years after the date we entered into the agreement. In December 2020, we entered into a new five-year agreement with such party for compute power, which replaced the prior three-year agreement. The agreement contains a minimum payment obligation, which totals $60 million over the five years after the date we entered into the subsequent agreement. These amounts are not included in the table above because there is not an annual commitment.

We enter into agreements in the normal course of business with CRO vendors for research and preclinical studies, professional consultants for expert advice, and other vendors for various products and services. We have not included these payments in the table of contractual obligations above since the contracts do not contain any minimum purchase commitments and are cancelable at any time by us, generally upon 30 days prior written notice, and therefore we believe that our non-cancelable obligations under these agreements are not material. We have also agreed to pay volume-based royalties to third parties for use of software functionality under various licensing and related agreements.

Income Taxes

At December 31, 2020, we had federal and state net operating loss carryforwards of approximately $206.3 million and $126.7 million, respectively. These carryforwards, with the exception of federal net operating losses generated post 2017, will expire between 2022 and 2040, if not used by us to reduce income taxes payable in future periods. Utilization of post 2017 federal net operating loss carryforwards is limited to 80% of taxable income generated in a given tax year and carry forward indefinitely. At December 31, 2020, we had federal and state research and development tax credit carryforwards of approximately $9.4 million and $0.5 million, respectively. These carryforwards will expire between 2021 and 2040 if not used by us to reduce income taxes payable in future periods.

As required by ASC Topic 740, Income Taxes, our management has evaluated the positive and negative evidence bearing upon the realizability of our deferred tax assets, which are composed principally of net operating loss carryforwards and research and development credit carryforwards. Management has determined that it is more likely than not that we will not realize the benefits of our federal and state deferred tax assets and, as a result, a valuation allowance of $58.2 million and $35.3 million has been established at December 31, 2020 and 2019, respectively. The change in the valuation allowance for the years ended December 31, 2020 and 2019 was $22.9 million and $7.7 million, respectively. We recorded income tax expense of $0.3 million for the year ended December 31, 2020 and income tax benefit of $0.3 million for the year ended December 31, 2019.

Seasonality

Historically, the first quarter of each year has typically been our largest quarter for software products and services revenue, although for 2020 the fourth quarter was our largest quarter, primarily due to the timing of customer renewals of on-premise software arrangements, for which revenue is recognized at a single point in time. Seasonality has been a less significant factor for our hosted software arrangements, for which revenue is recognized ratably over time. Seasonality has not been a factor for our drug discovery revenues. Historical seasonality may not be indicative of future periods.

Off-Balance Sheet Arrangements

During the periods presented, we did not have, and currently we do not have, any off-balance sheet arrangements, as defined under the rules and regulations of the SEC.

Critical Accounting Policies and Significant Judgments and Estimates

Critical accounting policies are those that are both most important to the portrayal of a company's financial condition and results, and that require management's most difficult, subjective, and complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Our management's discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make judgments and estimates that affect the reported amounts of assets, liabilities, revenues, and expenses and the disclosure of contingent assets and liabilities in our consolidated financial statements and the accompanying notes. We base our estimates on historical experience, known trends and events, and our beliefs of what could occur in the future considering available information. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts, and experience. The effects of material revisions in estimates, if any, are reflected in the consolidated financial statements prospectively from the date of change in estimates**.**

While our significant accounting policies are described in more detail Note 2 – Significant Accounting Policies to our consolidated financial statements appearing in Item 8 of this Annual Report, we believe the following accounting policies used in the preparation of our consolidated financial statements require the most difficult, subjective and complex judgments and estimates.

Revenue

We recognize revenue in accordance with ASC 606, Revenue from Contracts with Customers. In accordance with ASC 606, we recognize revenue when our customer obtains control of promised goods or services, in an amount that reflects the consideration which we expect to receive in exchange for those goods or services. To determine revenue recognition for arrangements that we determine are within the scope of ASC 606, we perform the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when or as we satisfy a performance obligation.

Our software revenue may include upfront payments for the performance of services in the future, which have both fixed and variable consideration. At contract inception, we assess the goods or services promised within each contract that falls under the scope of ASC 606 to identify distinct performance obligations. We allocate the transaction price to each distinct performance obligation based on a relative stand-alone selling price, which requires our judgement. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when or as the performance obligation is satisfied.

We include the unconstrained amount of estimated variable consideration in the transaction price. The amount included in the transaction price is constrained to the amount for which it is probable that a significant reversal of cumulative revenue recognized will not occur. At the end of each subsequent reporting period, we re-evaluate the estimated variable consideration included in the transaction price and any related constraint and, if necessary, adjust our estimate of the overall transaction price.

Milestone payments: Research and development, regulatory or commercial milestones in our collaboration agreements may include some, but not necessarily all, of the following types of events:

- completion of preclinical research and development work leading to selection of product candidates;
- initiation of Phase 1, Phase 2, and Phase 3 clinical trials;
- filing of regulatory applications for marketing approval in the United States, Europe or Japan;

- marketing approval in major markets, such as the United States, Europe, or Japan;
- commercial milestones and/or commercial royalties; and
- achievement of certain other technical, scientific, or development criteria.

At the inception of each arrangement that includes research, development, or regulatory milestone payments, we evaluate whether the milestones are considered probable of being reached and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control or that of the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achievement of such development milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which may affect license, collaboration, and other revenues and earnings in the period of adjustment. The process of successfully achieving the criteria for the milestone payments is highly uncertain. Consequently, there is a risk that we may not earn all of the milestone payments from each of our collaborators.

Collaboration and license agreements: At the inception of each arrangement we allocate the transaction price to each performance obligation based on the relative stand-alone selling price of each performance obligation at inception, which will be determined based on each performance obligation's estimated stand-alone selling price. We determine the estimated stand-alone selling price at contract inception of the research activities based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant inputs used to determine the total costs to perform the research activities may include the length of time required, the internal hours expected to be incurred on the services and the number and costs of various studies that will be performed to complete the research plan. Revenue is recognized on a proportional performance basis over the period of service, using input based measurements to estimate the performance. Progress towards completion is remeasured at the end of each reporting period.

Stock-Based Compensation

We estimate the fair value of stock option awards granted using the Black-Scholes option-pricing model, which uses as inputs the fair value of our common stock and subjective assumptions we make as follows:

Fair Value of Common Stock. As of February 2020, we determine the fair value of our common stock based on the closing price of our common stock as reported on the Nasdaq Global Select Market.

Expected Term. The expected term of employee stock options represents the weighted average period that the stock options are expected to remain outstanding. The expected terms were calculated using an average of historical exercises.

Expected Volatility. We base expected future volatility on the historical and implied volatility of comparable publicly traded companies over a similar expected term.

Expected Dividend Yield. We have never declared or paid any cash dividends and do not presently intend to pay cash dividends in the foreseeable future. As a result, we used an expected dividend yield of zero.

Risk-Free Interest Rates. We based the risk-free interest rate on the rate for a U.S. Treasury zero-coupon issue with a term that closely approximates the expected life of the option grant at the date nearest the option grant date.

If any assumptions used in the Black-Scholes option-pricing model change significantly, stock-based compensation for future awards may differ materially compared with the awards granted previously.

JOBS Act Election

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or JOBS Act. An emerging growth company may take advantage of reduced reporting requirements that are not otherwise applicable to public companies. These provisions include, but are not limited to:

- not being required to comply with the auditor attestation requirements on the effectiveness of our internal control over financial reporting;

- not being required to comply with any requirement that may be adopted by the PCAOB regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements (auditor discussion and analysis);
- reduced disclosure obligations regarding executive compensation arrangements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may use these provisions until December 31, 2025. However, if certain events occur prior to such date, including if we become a "large accelerated filer," our annual gross revenues exceed $1.07 billion, or we issue more than $1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We are also a "smaller reporting company," as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, although we expect to cease to be a smaller reporting company in connection with the filing of our Quarterly Report on Form 10-Q for the first quarter of 2021. Similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations, such as an ability to provide simplified executive compensation information and only two years of audited financial statements in an annual report on Form 10-K, with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, until those standards apply to private companies. We have elected to take advantage of the benefits of this extended transition period and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. Our financial statements may therefore not be comparable to those of companies that comply with such new or revised accounting standards. Until the date that we are no longer an emerging growth company or affirmatively and irrevocably opt out of the exemption provided by Section 7(a)(2)(B) of the Securities Act of 1933, as amended, upon issuance of a new or revised accounting standard that applies to our financial statements and that has a different effective date for public and private companies, we will disclose the date on which we will adopt the recently issued accounting standard.

Recent Accounting Pronouncements

See Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report for a discussion of recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because our investments, including cash equivalents and marketable securities, are in the form of U.S. Treasury and corporate bonds and a money market fund that is invested in U.S. Treasury and corporate bonds. Due to the nature of these investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of this investment portfolio.

We are also exposed to market risk related to changes in foreign currency exchange rates. We maintain a bank account denominated in Japanese Yen to accommodate deposits of amounts due from certain customers. We also contract with certain vendors that are located outside of the United States whose invoices are denominated in foreign currencies. We are subject to fluctuations in foreign currency rates in connection with these arrangements. We do not currently hedge our foreign currency exchange rate risk. Our cash balances and outstanding vendor invoices denominated in foreign currencies were not material as of December 31, 2020 and 2019, and our market risk associated with foreign currency exchange rates was deemed insignificant. An immediate 10% change in foreign exchange rates would not have a material effect on our consolidated financial statements.

Inflation generally affects us by increasing our cost of labor and target development costs. We do not believe that inflation had a material effect on our business, financial condition, or results of operations for the years ended December 31, 2020 and 2019.

Item 8. Financial Statements and Supplementary Data.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Schrödinger, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Schrödinger, Inc. and subsidiaries (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, convertible preferred stock and stockholders' equity (deficit), and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2010.

Portland, Oregon
March 4, 2021

SCHRÖDINGER, INC. AND SUBSIDIARIES

Consolidated Balance Sheets

(in thousands, except for share and per share amounts)

Assets	December 31, 2020	December 31, 2019
Current assets:		
Cash and cash equivalents	$ 202,296	$ 25,986
Restricted cash	500	500
Marketable securities	440,395	59,844
Accounts receivable, net of allowance for doubtful accounts of $60 and $50	31,423	18,676
Unbilled and other receivables	3,955	7,062
Prepaid expenses	4,409	6,468
Total current assets	682,978	118,536
Property and equipment, net	5,140	6,268
Equity investments	45,664	15,366
Right of use assets	10,129	12,762
Other assets	2,352	2,338
Total assets	$ 746,263	$ 155,270
Liabilities, Convertible Preferred Stock, and Stockholders' Equity (Deficit)		
Current liabilities:		
Accounts payable	$ 8,398	$ 3,524
Accrued payroll, taxes, and benefits	12,000	7,034
Deferred revenue	45,403	25,054
Lease liabilities	4,543	5,584
Other accrued liabilities	2,861	3,824
Total current liabilities	73,205	45,020
Deferred revenue, long-term	41,164	2,205
Lease liabilities, long-term	7,221	8,888
Other liabilities, long-term	654	900
Total liabilities	122,244	57,013
Commitments and contingencies (Note 6)		
Convertible preferred stock:		
Series E convertible preferred stock, $0.01 par value. Authorized zero and 77,150,132 shares; zero and 73,795,777 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	—	109,270
Series D convertible preferred stock, $0.01 par value. Authorized zero and 39,540,611 shares; zero and 39,540,611 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	—	22,000
Series C convertible preferred stock, $0.01 par value. Authorized zero and 47,242,235 shares; zero and 47,242,235 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	—	19,844
Series B convertible preferred stock, $0.01 par value. Authorized zero and 29,468,101 shares; zero and 29,468,101 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	—	9,840
Series A convertible preferred stock, $0.01 par value. Authorized zero and 134,704,785 shares; zero and 134,704,785 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	—	30,626
Total convertible preferred stock	—	191,580
Stockholders' equity (deficit):		
Common stock, $0.01 par value. Authorized 500,000,000 and 425,000,000 shares; 60,713,534 and 6,121,821 shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	607	61
Limited common stock, $0.01 par value. Authorized 100,000,000 and 146,199,885 shares; 9,164,193 and zero shares issued and outstanding at December 31, 2020 and December 31, 2019, respectively	92	—
Additional paid-in capital	752,558	11,655
Accumulated deficit	(129,559)	(105,096)
Accumulated other comprehensive income	317	16
Total stockholders' equity (deficit) of Schrödinger stockholders	624,015	(93,364)
Noncontrolling interest	4	41
Total stockholders' equity (deficit)	624,019	(93,323)
Total liabilities, convertible preferred stock, and stockholders' equity (deficit)	$ 746,263	$ 155,270

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
(in thousands, except for share and per share amounts)

	Year Ended December 31,	
	2020	**2019**
Revenues:		
Software products and services	$ 92,530	$ 66,735
Drug discovery	15,565	18,808
Total revenues	108,095	85,543
Cost of revenues:		
Software products and services	18,003	13,646
Drug discovery	26,620	22,804
Total cost of revenues	44,623	36,450
Gross profit	63,472	49,093
Operating expenses:		
Research and development	64,695	39,404
Sales and marketing	17,795	21,364
General and administrative	41,898	27,040
Total operating expenses	124,388	87,808
Loss from operations	(60,916)	(38,715)
Other income:		
Gain on equity investments	4,108	943
Change in fair value	28,263	9,922
Interest income	2,253	1,878
Total other income	34,624	12,743
Loss before income taxes	(26,292)	(25,972)
Income tax expense (benefit)	345	(291)
Net loss	(26,637)	(25,681)
Net loss attributable to noncontrolling interest	(2,174)	(1,110)
Net loss attributable to Schrödinger common and limited common stockholders	$ (24,463)	$ (24,571)
Net loss per share attributable to Schrödinger common and limited common stockholders, basic and diluted:	$ (0.41)	$ (4.09)
Weighted average shares used to compute net loss per share attributable to Schrödinger common and limited common stockholders, basic and diluted:	60,024,658	6,004,500

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES

Consolidated Statements of Comprehensive Loss

(in thousands)

	Year Ended December 31,	
	2020	2019
Net loss attributable to Schrödinger common and limited common stockholders	$ (24,463)	$ (24,571)
Changes in market value of investments, net of tax:		
Unrealized gain on marketable securities	301	25
Comprehensive loss	$ (24,162)	$ (24,546)

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES

Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)

(in thousands, except for share amounts)

	Series E preferred stock		Series D preferred stock		Series C preferred stock		Series B preferred stock		Series A preferred stock		Common stock		Limited common stock		Additional paid-in	Accumulated	Accumulated other comprehensive	Non controlling	Total stockholders'
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount	capital	deficit	loss (income)	interest	equity (deficit)
Balance at December 31, 2018	53,669,659	$ 79,377	39,540,611	$ 22,000	47,242,235	$ 19,844	29,468,101	$ 9,840	134,704,785	$ 30,626	5,906,976	$ 59	—	$ —	$ 8,915	$ (80,525)	$ (9)	$ —	$ (71,560)
Change in unrealized loss on marketable securities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25	—	25
Issuances of Series E preferred stock, net of issuance costs of $127	20,126,118	29,893	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Issuances of common stock upon stock option exercise	—	—	—	—	—	—	—	—	—	—	214,845	2			547	—	—	—	549
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2,193	—	—	—	2,193
Contributions by noncontrolling interest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,151	1,151
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(24,571)	—	(1,110)	(25,681)
Balance at December 31, 2019	73,795,777	109,270	39,540,611	22,000	47,242,235	19,844	29,468,101	9,840	134,704,785	30,626	6,121,821	61	—	—	11,655	(105,096)	16	41	(93,323)
Change in unrealized loss on marketable securities	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	301	—	301
Issuances of common stock upon stock option exercise	—	—	—	—	—	—	—	—	—	—	1,398,177	14	—	—	4,169	—	—	—	4,183
Stock-based compensation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10,545	—	—	—	10,545
Issuances of common stock upon initial public offering, net of issuance costs of $22,667	—	—	—	—	—	—	—	—	—	—	13,664,704	136	—	—	209,497	—	—	—	209,633
Issuances of common stock upon follow-on offering, net of issuance costs of $20,901	—	—	—	—	—	—	—	—	—	—	5,250,000	53	—	—	325,547	—	—	—	325,600
Conversion of convertible preferred stock into common stock	(73,795,777)	(109,270)	(17,844,124)	(9,928)	—	—	—	—	(134,704,785)	(30,626)	30,278,832	303	—	—	149,521	—	—	—	149,824
Exchange of convertible preferred stock into limited common stock	—	—	(21,696,487)	(12,072)	(47,242,235)	(19,844)	(29,468,101)	(9,840)	—	—	—	—	13,164,193	132	41,624	—	—	—	41,756
Conversion of limited common stock into common stock	—	—	—	—	—	—	—	—	—	—	4,000,000	40	(4,000,000)	(40)	—	—	—	—	—
Contributions by non-controlling interest	—	—	—	—	—	—	—	—	—	—	—	—	—	—		—	—	2,137	2,137
Net loss	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	(24,463)	—	(2,174)	(26,637)
Balance at December 31, 2020	—	$ —	—	$ —	—	$ —	—	$ —	—	$ —	60,713,534	$ 607	9,164,193	$ 92	$ 752,558	$ (129,559)	$ 317	$ 4	$ 624,019

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES

Consolidated Statements of Cash Flows

(in thousands)

	Year Ended December 31,	
	2020	2019
Cash flows from operating activities:		
Net loss	$ (26,637)	$ (25,681)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Gain on equity investments	(4,108)	(943)
Noncash revenue from equity investments	(397)	(186)
Fair value adjustments	(28,263)	(9,922)
Depreciation	3,658	3,640
Stock-based compensation	10,545	2,193
Noncash research and development expenses	2,137	1,051
Noncash investment accretion	646	(506)
Decrease (increase) in assets:		
Accounts receivable, net	(12,747)	(5,038)
Unbilled and other receivables	3,468	(1,556)
Reduction in the carrying amount of right of use assets	5,342	4,177
Prepaid expenses and other assets	187	410
Increase (decrease) in liabilities:		
Accounts payable	4,882	(294)
Accrued payroll, taxes, and benefits	4,966	2,948
Deferred revenue	59,705	6,715
Lease liabilities	(5,417)	(4,025)
Other accrued liabilities	(1,210)	958
Net cash provided by (used in) operating activities	16,757	(26,059)
Cash flows from investing activities:		
Purchases of property and equipment	(2,538)	(1,836)
Purchases of equity investments	(2,869)	—
Distribution from equity investment	4,582	943
Purchases of marketable securities	(519,668)	(110,187)
Proceeds from sale and maturity of marketable securities	138,772	57,225
Net cash used in investing activities	(381,721)	(53,855)
Cash flows from financing activities:		
Issuances of common stock upon initial public offering, net	211,491	—
Issuances of common stock upon follow-on public offering, net	325,600	—
Issuances of Series E preferred stock, net	—	29,893
Issuances of common stock upon stock option exercise	4,183	549
Contribution by noncontrolling interest	—	100
Deferred offering costs	—	(1,858)
Net cash provided by financing activities	541,274	28,684
Net increase (decrease) in cash and cash equivalents and restricted cash	176,310	(51,230)
Cash and cash equivalents and restricted cash, beginning of year	26,486	77,716
Cash and cash equivalents and restricted cash, end of year	$ 202,796	$ 26,486
Supplemental disclosure of cash flow and noncash information		
Cash paid for income taxes	$ 381	$ 139
Supplemental disclosure of non-cash investing and financing activities		
Accrued deferred offering costs	—	2,142
Purchases of property and equipment	8	90
Acquisitions of right of use assets in exchange for lease obligations	2,709	464
Right of use assets recognized on adoption	—	16,475
Reclassification of deferred financing costs to additional paid-in capital	1,858	—

See accompanying notes to consolidated financial statements.

SCHRÖDINGER, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

For the years ended December 31, 2020 and 2019

(in thousands, except for share and per share amounts)

(1) Description of Business

Schrödinger, Inc. (the "Company") has developed a differentiated, physics-based software platform that enables discovery of high-quality, novel molecules for drug development and materials applications more rapidly, at lower cost, and with, the Company believes, a higher likelihood of success compared to traditional methods. The Company sells its software to biopharmaceutical and industrial companies, academic institutions, and government laboratories. The Company also applies its computational platform to a broad pipeline of drug discovery and development programs in collaboration with biopharmaceutical companies, some of which the Company co-founded. In addition, the Company uses its platform to advance a pipeline of internal drug discovery programs.

On February 10, 2020, the Company completed an initial public offering ("IPO"), in which the Company issued and sold 11,882,352 shares of its common stock at a public offering price of $17.00 per share. The underwriters fully exercised their option to purchase an additional 1,782,352 shares of the Company's common stock at the public offering price less underwriting discounts. The Company raised $209.6 million in net proceeds after deducting underwriting discounts and commissions and offering expenses payable by the Company.

Immediately prior to the closing of the IPO, preferred stockholders voluntarily exchanged 98,406,823 shares of preferred stock for an aggregate of 13,164,193 shares of limited common stock. In addition, upon the closing of the IPO, the remaining 226,344,686 shares of preferred stock automatically converted into an aggregate of 30,278,832 shares of common stock.

On August 17, 2020, the Company completed a follow-on public offering, in which the Company issued and sold 4,500,000 shares of its common stock at a public offering price of $66.00 per share. The underwriters fully exercised their option to purchase an additional 750,000 shares of the Company's common stock at the public offering price less underwriting discounts. The Company raised $325.6 million in net proceeds after deducting underwriting discounts and commissions and offering expenses payable by the Company. In addition, a stockholder of the Company sold 500,000 shares of common stock. The Company did not receive any proceeds from the sale of shares of common stock by the selling stockholder.

(2) Significant Accounting Policies

(a) Recently Issued Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2018-13, *Changes to Disclosure Requirements for Fair Value Measurements* (Topic 820), which improved the effectiveness of disclosure requirements for recurring and nonrecurring fair value measurements. The standard removes, modifies, and adds certain disclosure requirements. The Company adopted this new standard effective January 1, 2020 with no material impact on its consolidated financial statements.

In November 2018, the FASB issued ASU No. 2018-18, *Collaborative Arrangements* (Topic 808) – *Clarifying the Interaction between Topic 808 and Topic 606*. The amendments in this ASU clarified that certain transactions between collaborative arrangement participants should be accounted for as revenue under Topic 606, *Revenue from Contracts with Customers*, when the collaborative arrangement participant is a customer in the context of a unit of account and precluded recognizing as revenue consideration received from a collaborative arrangement participant if the participant is not a customer. The new guidance is effective for fiscal years beginning after December 15, 2019. The Company adopted the amendment on January 1, 2020, with no material impact on its consolidated financial statements.

(b) Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses* (Topic 326) – *Measurement of Credit Losses on Financial Instruments*, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to certain available-for-sale debt securities to be recorded through an allowance for credit

losses rather than as a reduction in the amortized cost basis of the securities. These changes result in earlier recognition of credit losses. The Company will adopt ASU 2016-13 as of January 1, 2021 and does not expect this adoption to have a significant impact on its consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other-Internal-Use Software (Topic 350): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract. This standard aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The standard is effective for annual periods beginning after December 15, 2020, and interim periods within annual periods beginning after December 15, 2021, with early adoption permitted. The Company has not yet adopted ASU 2018-15 and does not expect the adoption to have a significant impact on its consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, Income Taxes (Topic 740) – Simplifying the Accounting for Income Taxes, which simplifies the accounting for income taxes. This guidance will be effective for the Company in the first quarter of 2021 on a prospective basis, and early adoption is permitted. The Company has not yet adopted ASU 2019-12, and does not expect this adoption to have a significant impact on its consolidated financial statements.

(c) Basis of Presentation and Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Significant estimates include the assumptions used in the allocation of revenue, estimates towards the progress of completion of collaboration agreements, and the valuation of stock-based compensation. Actual results could differ from those estimates, and such differences may be material to the consolidated financial statements.

(d) Principles of Consolidation

The Company's consolidated financial statements include the accounts of Schrödinger, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. The functional currency for foreign entities is the United States dollar. The Company accounts for investments over which it has significant influence, but not a controlling financial interest, using the equity method.

(e) Cash and Cash Equivalents and Marketable Securities and Restricted Cash

Included in cash and cash equivalents were cash equivalents of $185,614 and $20,208 as of December 31, 2020 and 2019, respectively, which consisted of money market funds and certificates of deposit, and are stated at cost, which approximates market value. The Company classifies all highly liquid investments with an original maturity of three months or less to be cash equivalents. The Company classifies all marketable securities, which consist of fixed income securities, as available for sale securities.

At times, cash balances held at financial institutions were in excess of the Federal Deposit Insurance Corporation's insured limits; however, the Company primarily places its temporary cash with high-credit quality financial institutions.

Restricted cash consists of a letter of credit held with the Company's financial institution related to facility leases, and is classified as current in the Company's balance sheets based on the maturity of the underlying letter of credit.

(f) Accounts Receivable

Accounts receivable are stated at original invoice amount less an allowance for doubtful accounts. Management estimates the allowance for doubtful accounts by evaluating individual customer receivables and considering a customer's financial condition, credit history, and current economic conditions. Account balances are considered delinquent if payment is not received by the due date. Accounts receivable are written off when deemed uncollectible. Recovery of accounts receivable previously written off is recorded when received. Changes in the balance of accounts deemed uncollectible were deemed immaterial as of December 31, 2020 and 2019. Interest is not charged on accounts receivable.

(g) Fair Value of Financial Instruments

The carrying values of cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities approximate fair value due to their short maturities.

(h) Property and Equipment

Property and equipment are stated at cost. Maintenance and repairs are expensed as incurred.

Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which range from 3 to 7 years. Amortization of leasehold improvements is calculated using the straight-line method over the remaining life of the lease or the useful life of the asset, whichever is shorter.

Property and equipment are reviewed for impairment as discussed below under Accounting for the Impairment of Long-Lived Assets. The Company did not capitalize any interest during 2020 and 2019.

(i) Accounting for the Impairment of Long-Lived Assets

Long-lived assets, such as property and equipment subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group be tested for potential impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying value. If the carrying value of the long-lived asset or asset group is not recoverable on an undiscounted cash flow basis, an impairment is recognized to the extent that carrying value exceeds fair value. Fair value is determined using various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, depending on the nature of the asset. No impairment was identified for the years ended December 31, 2020 and 2019.

(j) Warranties

The Company typically warrants that its products will perform in a manner consistent with the product specifications provided to the customer for a period of 30 days. Historically, the Company has not been required to make payments under these obligations. Therefore, no liabilities for such obligations are presented in the consolidated financial statements.

(k) Concentrations

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of trade receivables.

The Company does not require customers to provide collateral to support accounts receivable. If deemed necessary, credit reviews of significant new customers may be performed prior to extending credit. The determination of a customer’s ability to pay requires judgment, and failure to collect from a customer can adversely affect revenue, cash, and net income. The Company maintains an allowance for doubtful accounts.

As of December 31, 2020, two customers accounted for 17% and 14% of total accounts receivable, respectively. As of December 31, 2019, one customer accounted for 10% of total accounts receivable. For the year ended December 31, 2020, no customer accounted for more than 10% of total revenues. For the year ended December 31, 2019, one customer accounted for 12% of total revenues.

(l) Royalties

Royalties represent a component of cost of revenues and consist of royalties paid to owners of intellectual property used in or bundled with the Company’s software. Generally, royalties are incurred and recorded at the time a customer enters into a binding purchase agreement, although some royalty agreements are based instead on cash collections. Royalty expense was $7,663 and $7,352 for the years ended December 31, 2020 and 2019, respectively.

(m) Software Development Costs

Costs to develop new software products and substantial enhancements to existing software products are expensed as incurred. Historically, the Company has not capitalized any software development costs because the software development process was essentially completed concurrent with the establishment of technological feasibility.

(n) Research and Development and Advertising

Research and development and advertising costs are expensed as incurred. The Company did not incur any significant advertising costs in 2020 or 2019.

(o) Stock-Based Compensation

The Company calculates stock-based compensation expense utilizing fair value–based methodologies and recognizes expense over the vesting period of such awards.

(p) Commissions

Commissions represent a component of sales and marketing expense and consist of the variable compensation paid to the Company's sales representatives. Generally, sales commissions are earned and recorded as expense at the time that a customer has entered into a binding purchase agreement. Commissions paid to sales representatives are recoverable only in the case that the Company cannot collect against any invoiced fee associated with a sales order. Commission expense was $1,362 and $754 in 2020 and 2019, respectively.

(q) Income Taxes

The Company records deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the financial statement carrying amounts and the tax basis of the assets and liabilities. Deferred tax assets are reduced by a valuation allowance when it is estimated to become more likely than not that a portion of the deferred tax assets will not be realized. Accordingly, the Company currently maintains a full valuation allowance against existing net deferred tax assets.

The Company recognizes the effect of income tax positions only if such positions are deemed "more likely than not" capable of being sustained. Interest and penalties accrued on unrecognized tax benefits are included within income tax expense in the consolidated financial statements.

(r) Comprehensive Loss

Comprehensive loss includes net loss and changes in equity related to changes in unrealized gains or losses on marketable securities.

(s) Equity Investments

The Company has entered into collaboration agreements with Nimbus Therapeutics, LLC ("Nimbus"), Morphic Therapeutic, Inc., a wholly owned subsidiary of Morphic Holding, Inc. ("Morphic"), Petra Pharma Corporation ("Petra"), and Relay Therapeutics, Inc. ("Relay") to perform drug design services in exchange for minority ownership, which are included within equity investments in the Company's consolidated balance sheets.

The Company has concluded that the carrying value of its equity investment in Nimbus should reflect its contractual rights to substantive profits. The Company further determined that the hypothetical liquidation at book value method ("HLBV method") for valuing contractual rights to substantive profits provides the best representation of its financial position in Nimbus. During 2020, the Company continued to value Nimbus using the HLBV method.

The HLBV method is a balance sheet-oriented approach to equity method accounting. Under the HLBV method, the Company determines its share of earnings or losses by comparing its claim on the book value at the beginning and end of each reporting period. This claim is calculated as the amount that the Company would receive (or be obligated to pay) if the investee were to liquidate all of its assets at recorded amounts, determined as of the balance sheet date in accordance with U.S. GAAP, and distribute the resulting cash to creditors and investors in accordance with their respective priorities.

Upon the completion of Morphic's initial public offering in June 2019, the Company changed the valuation methodology used to value the Morphic investment. As there is a readily available public market for Morphic's common stock, the Company values its investment based on the closing price of Morphic's common stock as of the reporting date.

Upon the completion of Relay's initial public offering in July 2020, the Company changed the valuation methodology used to value the Relay investment. As there is a readily available public market for Relay's common stock, the Company values its investment based on the closing price of Relay's common stock as of the reporting date.

Prior to May 2020, the Company had concluded that its equity investment in Petra should be valued using the historical cost method, as the Company does not exercise significant influence over Petra. During May 2020, Petra merged with a third party. For further information regarding the Company's equity investments, see Note 5, Fair Value Measurements and Note 12, Equity Investments.

(t) Net Loss per Share Attributable to Common and Limited Common Stockholders

Following the completion of the Company's IPO in February 2020, the outstanding equity of the Company consists of common stock and limited common stock. Under the Company's certificate of incorporation, the rights of the holders of common stock and limited common stock are identical, except with respect to voting and conversion. Holders of limited common stock are precluded from voting such shares in any election of directors or on the removal of directors. Limited common stock may be converted into common stock at any time at the option of the stockholder.

Undistributed earnings allocated to the participating securities are subtracted from net income in determining net loss attributable to common and limited common stockholders. Basic net loss per share is computed by dividing net loss attributable to common and limited common stockholders by the weighted-average number of shares of common and limited common stock outstanding during the period.

For the calculation of diluted net loss, net income attributable to common and limited common stockholders for basic net loss is adjusted by the effect of dilutive securities, including awards under the Company's equity compensation plans. Diluted net loss per share attributable to common and limited common stockholders is computed by dividing the resulting net income attributable to common and limited common stockholders by the weighted-average number of fully diluted shares of common and limited common stock outstanding. For purposes of this calculation, stock options are considered common stock equivalents but have been excluded from the calculation of net loss per share attributable to common and limited stockholders as their effect is anti-dilutive. For years ended December 31, 2020 and 2019, the computation of basic and diluted net loss per share is presented on a combined basis for common and limited common stock because the results are identical.

(3) Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for promised goods or services. The Company's performance obligations are satisfied either over time or at a point in time.

The following table illustrates the timing of the Company's revenue recognition:

	Year Ended December 31,	
	2020	2019
Software products and services – point in time	55.0%	49.9%
Software products and services – over time	30.6	28.1
Drug Discovery – point in time	6.7	8.6
Drug Discovery – over time	7.7	13.4

(a) Software Products and Services

The Company enters into contracts that can include various combinations of licenses, products and services, some of which are distinct and are accounted for as separate performance obligations. For contracts with multiple performance obligations, the Company allocates the transaction price of the contract to each performance obligation on a relative standalone selling price basis. Revenue is recognized net of any sale and value-added taxes collected from customers and subsequently remitted to governmental authorities.

The Company's software business derives revenue from five sources: (i) on-premise software license fees, (ii) hosted software subscription fees, (iii) software maintenance fees, (iv) professional services fees, and (v) contributions.

On-premise software. The Company's on-premise software license arrangements grant customers the right to use its software on their own in-house servers or their own cloud instances for a specified term, typically for one year. The Company recognizes revenue for on-premise software license fees upfront, either upon delivery of the license or the effective date of the agreement, whichever is later. In instances where the timing of delivery differs from the timing of invoicing, the Company considers whether a significant financing component exists. The Company has elected the practical expedient to not assess for significant financing where the term is less than one year. The Company's updates and upgrades are not integral to maintaining the utility of the software licenses. Payments typically are received upfront or annually.

Hosted software. Hosted software revenue consists primarily of fees to provide the Company's customers with hosted licenses, which allows these customers to access the Company's cloud-based software solution on their own hardware without taking control of licenses. Hosted software is recognized ratably over the term of the arrangement.

Software maintenance. Software maintenance includes technical support, updates, and upgrades. Software maintenance revenue is considered to be a separate performance obligation and is recognized ratably over the term of the arrangement.

Professional services. Professional services, such as training, technical support and installation or assisting customers with modeling, generally are not related to the functionality of the Company's software and may be recognized as resources are consumed or over the term of the arrangement, depending on the terms of the underlying agreement. The Company has historically estimated project status with relative accuracy, although a number of internal and external factors can affect such estimates, including labor rates, utilization and efficiency variances. Payments for services are due in advance or upon consumption of resources.

Contribution. Contribution revenue consists of funds received under a non-reciprocal agreement with Gates Ventures, LLC. The agreement is an unconditional non-exchange contribution without restrictions and the initial contribution was invoiced upon execution of the agreement. Revenue was recognized upon execution of the agreement when invoiced in accordance with Accounting Standards Codification ("ASC") Topic 958, Not-for-Profit Entities, as the agreement is not an exchange transaction.

The following table presents the revenue recognized from the five sources of the software products and services revenue:

	Year Ended December 31,	
	2020	2019
On-premise software	$ 58,311	$ 42,647
Hosted software	9,192	7,418
Software maintenance	14,465	11,643
Professional services	9,562	5,027
Revenue from contracts with customers	91,530	66,735
Contribution	1,000	—
Total software revenue	$ 92,530	$ 66,735

(b) Contribution Revenue

During the year ended December 31, 2020, the Company recognized contribution revenue related to an agreement with Gates Ventures, LLC, which covers the period from June 23, 2020 through June 22, 2023 for total consideration of up to $3,000. The Company received $1,000 in connection with its entry into the agreement, and the Company is entitled to receive additional $1,000 payments on or around the first and second anniversary of its entry into the agreement, subject to the Company providing certain progress reports to the Trustees of Columbia University in the City of New York. As of December 31, 2020, the Company had no deferred revenue balance related to this agreement. During the year ended December 31, 2020, the Company recognized $1,000 of contribution revenue.

(c) Drug Discovery

Revenue from drug discovery and collaboration services contracts is recognized either over time, typically by using costs incurred or hours expended to measure progress, or at a point in time based on the achievement of milestones. Payments for services are generally due upon achieving milestones stated in a contract, upfront at the start of a contract, or upon consumption of resources. Services may at times include variable consideration and milestone payments. The Company has estimated the amount of consideration that is variable using the most likely amount method. The Company evaluates milestones on a case-by-case basis, including whether there are factors outside the Company's control that could result in a significant reversal of revenue, and the likelihood and magnitude of a potential reversal. If achievement of a milestone is not considered probable, the Company constrains (reduces) variable consideration to exclude the milestone payment until it is probable to be achieved. As of December 31, 2020 and 2019, milestones not yet achieved that were determined to be probable of achievement totaled $250 and $1,500, respectively, and $85 and $1,500 of those milestones were recognized as revenue for the years ended December 31, 2020 and 2019.

(d) Collaboration and License Agreement

On November 22, 2020, the Company entered into an exclusive, worldwide collaboration and license agreement with Bristol-Myers Squibb Company ("BMS"), pursuant to which the Company and BMS have agreed to collaborate in the discovery, research and preclinical development of new small molecule compounds for disease indications in oncology, neurology, and immunology therapeutics areas. The Company will be responsible, at its own cost and expense, for the discovery of small molecule compounds directed to five specified biological targets pursuant to a mutually agreed research plan for each such target. The targets include HIF-2 alpha and SOS1/KRAS, which are two of the Company's internal programs. Once a development candidate meeting specified criteria for a target under the agreement has been identified by the Company, BMS will be solely responsible for the further development, manufacturing and commercialization of such development candidate at its own cost and expense.

Under the terms of the agreement, BMS paid the Company an initial upfront fee payment of $55,000. The Company also is entitled to receive up to $2.7 billion in total milestone payments across all potential targets, consisting of: a) up to $585,000 in milestone payments per oncology target, including $360,000 in the aggregate for the achievement of certain specified research, development, and regulatory milestones and $225,000 in the aggregate for the achievement of certain specified commercial milestones; and b) up to $482,000 million in milestone payments per neurology and immunology target, including $257,000 in the aggregate for the achievement of certain specified research, development, and regulatory milestones and $225,000 in the aggregate for the achievement of certain specified commercial milestones.

The Company is also entitled to a tiered percentage royalty on annual net sales ranging from mid-single digits to low-double digits, subject to certain specified reductions. Royalties are payable by BMS on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last valid claim covering the licensed product in such country, expiration of all applicable regulatory exclusivities in such country for such licensed product and the tenth anniversary of the first commercial sale of such licensed product in such country.

The Company assessed the collaboration and license agreement in accordance with ASC 606, *Revenue from Contracts with Customers* (Topic 606), and concluded that BMS is a customer based on the agreement structure. At inception, the Company identified one performance obligation for each of the five programs under the agreement, which includes research activities for each program and a license grant for the underlying intellectual property. The Company determined that the license grant for intellectual property is not separable from the research activities, as the research activities are expected to significantly modify or enhance the license grant over the period of service, and therefore are not distinct in the context of the contract.

The Company determined that the transaction price at the onset of the agreement is $55,000. Additional consideration to be paid to the Company upon the achievement of future milestone payments were excluded from the transaction price as they represent milestone payments that are not considered probable as of the inception date such that there is not a significant risk of revenue reversal.

The Company has allocated the transaction price of $55,000 to each performance obligation based on the relative stand-alone selling price of each performance obligation at inception, which was determined based on each performance obligation's estimated stand-alone selling price. The Company determined the estimated stand-alone selling price at contract inception of the research activities based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant inputs used to determine the total costs to perform the research activities included the length of time required, the internal hours expected to be incurred on the services and the number and costs of various studies that will be performed to complete the research plan.

Revenue associated with the research activities is recognized on a proportional performance basis over the period of service for research activities, using input based measurements of total costs of research incurred to estimate the proportion performed. Progress towards completion is remeasured at the end of each reporting period.

During the year ended December 31, 2020, the Company recognized $988 associated with the agreement based on the research activities performed subsequent to the contract start date. As of December 31, 2020, there was $54,012 of deferred revenue related to the agreement, which was classified as either current or non-current in the consolidated balance sheet based on the period the services are expected to be performed. There was no outstanding receivable for this collaboration as of December 31, 2020.

(e) Significant Judgments

Significant judgments and estimates are required under ASC Topic 606. Due to the complexity of certain contracts, the actual revenue recognition treatment required under Topic 606 for the Company's arrangements may be dependent on contract-specific terms and may vary in some instances.

The Company's contracts with customers often include promises to transfer multiple software products and services, including training, professional services, technical support services, and rights to unspecified updates. Determining whether licenses and services are distinct performance obligations that should be accounted for separately, or are not distinct and therefore should be accounted for together, requires significant judgment. In some arrangements, such as most of the Company's term-based software license arrangements, the Company has concluded that the licenses and associated services are distinct from each other. In other arrangements, including collaboration services arrangements, the licenses and certain services may not be distinct from each other. The Company's time-based software arrangements may include multiple software licenses and a right to updates or upgrades to the licensed software products, and technical support. The Company has concluded that such promised goods and services are separate distinct performance obligations.

The Company is required to estimate the total consideration expected to be received from contracts with customers, including any variable consideration. Once the estimated transaction price is established, amounts are allocated to the performance obligations that have been identified. The transaction price is allocated to each separate performance obligation on a relative stand-alone selling price ("SSP") basis.

Judgment is required to determine the SSP for each distinct performance obligation. The Company rarely licenses or sells products on a standalone basis, so the Company is required to estimate the range of SSPs for each performance obligation. In instances where the SSP is not directly observable because the Company does not sell the license, product, or service separately, the Company determines the SSP using information that includes historical discounting practices, market conditions, cost-plus analysis, and other observable inputs. The Company typically has more than one SSP for individual performance obligations due to the stratification of those items by classes of customers and circumstances. In these instances, the Company may use information such as the size and geographic region of the customer in determining the SSP. Professional service revenue is recognized as costs and hours are incurred, and judgment is required in estimating both the project status and the costs incurred or hours expended.

If a group of agreements are so closely related to each other that they are, in effect, part of a single arrangement, such agreements are deemed to be one arrangement for revenue recognition purposes. The Company exercises significant judgment to evaluate the relevant facts and circumstances in determining whether the separate agreements should be accounted for separately or as, in substance, a single arrangement. The Company's judgments about whether a group of contracts comprises a single arrangement can affect the allocation of consideration to the distinct performance obligations, which could have an effect on results of operations for the periods involved.

Judgment is required to determine the total costs to perform research activities, which include the length of time required, the internal hours expected to be incurred on the services, and the number and costs of various studies that may be performed to complete the research plan.

Generally, the Company has not experienced significant returns or refunds to customers.

The Company's estimates related to revenue recognition require significant judgment and the change in these estimates could have an effect on the Company's results of operations during the periods involved.

(f) Contract Balances

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in receivables, contract assets, or contract liabilities (deferred revenue) on the consolidated balance sheets. The Company records a contract asset when revenue is recognized prior to invoicing. A deferred revenue liability is recorded when revenue is expected to be recognized subsequent to invoicing. For the Company's time-based software agreements, customers are generally invoiced at the beginning of the arrangement for the entire term, though when the term spans multiple years the customers may be invoiced on an annual basis. For certain drug discovery agreements where the milestones are deemed probable, the Company records a contract asset for the full value of the milestone.

Contract assets are included in unbilled and other receivables within the consolidated balance sheets, and are transferred to receivables when the Company invoices the customer.

Contract balances were as follows:

	As of December 31, 2020	As of December 31, 2019
Contract assets	$ 3,589	$ 6,904
Deferred revenue, short-term:		
Software	28,218	23,287
Drug discovery	17,185	1,767
Deferred revenue, long-term:		
Software	1,976	1,500
Drug discovery	39,188	705

For the years ended December 2020 and 2019, respectively, the Company recognized $24,921 and $17,720 of revenue that was included in deferred revenue at the end of the preceding period. All other deferred revenue activity is due to the timing of invoices in relation to the timing of revenue, as described above. The Company expects to recognize as revenue approximately 52% of its December 31, 2020 deferred revenue balance in the next 12 months and the remainder thereafter. Additionally, contracted but unsatisfied performance obligations that had not yet been billed to the customer or included in deferred revenue were $29,147 as of December 31, 2020.

Payment terms and conditions vary by contract type, although terms typically require payment within 30 to 60 days. In instances where the timing of revenue recognition differs from that of invoicing, the Company has determined that its contracts generally do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing the Company's products and services, not to facilitate financing arrangements.

(g) Deferred Sales Commissions

The Company has applied the practical expedient for sales commission expense, as any compensation paid to sales representatives to obtain a contract relates to a period of one year or less. Therefore, the Company has not capitalized any costs related to sales commissions.

(4) Property and Equipment

Property and equipment consisted of the following:

	As of December 31,	
	2020	2019
Computers and equipment	$ 12,718	$ 11,150
Leasehold improvements	4,385	4,374
Furniture and fixtures	1,839	1,306
	18,942	16,830
Less accumulated depreciation	(13,802)	(10,562)
	$ 5,140	$ 6,268

Depreciation expense for 2020 and 2019 was $3,658 and $3,625, respectively, and is included within cost of revenues and research and development, sales and marketing, and general and administrative expenses within the consolidated statements of operations.

(5) Fair Value Measurements

Various inputs are used in determining the fair value of the Company's financial assets and liabilities. These inputs are summarized into the following three broad categories:

Level 1 – quoted prices in active markets for identical securities

Level 2 – other significant observable inputs, including quoted prices for similar securities, interest rates, credit risk, etc.

Level 3 – significant unobservable inputs, including the Company's own assumptions in determining fair value

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. Marketable securities, which consist primarily of corporate and U.S. government agency bonds, are classified as available for sale and fair value does not differ significantly from carrying value as of December 31, 2020 and 2019. The following table presents information about the Company's assets and liabilities measured at fair value as of December 31, 2020:

	Level 1	Level 2	Level 3	Total
Assets:				
Marketable securities	$ —	$ 440,395	$ —	$ 440,395
Equity investments	45,570	—	—	45,570
Total	$ 45,570	$ 440,395	$ —	$ 485,965

The following table presents information about the Company's assets and liabilities measured at fair value as of December 31, 2019:

	Level 1	Level 2	Level 3	Total
Assets:				
Marketable securities	$ —	$ 59,844	$ —	$ 59,844
Equity investments	14,328	—	108	14,436
Total	$ 14,328	$ 59,844	$ 108	$ 74,280

Fair value of the Company's investments in Morphic and Relay, classified as Level 1 in the fair value hierarchy, were determined using the respective market prices of Morphic's and Relay's common stock as of the close of trading on December 31, 2020.

Fair value of the Company's investment in Nimbus, classified as Level 3 in the fair value hierarchy, was determined under the HLBV method, as further described in Note 2, Significant Accounting Policies. Significant unobservable inputs used under the HLBV method include Nimbus' annual financial statements and the Company's respective liquidation priority. The following table sets forth changes in fair value of the Company's Level 3 investments:

	Amount
As of December 31, 2018	$ 4,288
Unrealized loss	(4,180)
As of December 31, 2019	108
Cash contributions	2,869
Unrealized loss	(2,977)
As of December 31, 2020	$ —

Unrealized gains and losses arising from changes in fair value of the Company's equity investments are classified within change in fair value in the consolidated statements of operations. During the years ended December 31, 2020 and 2019, there were no transfers between Level 1, Level 2 and Level 3 investments. See Note 12, Equity Investments, for further information.

(6) Commitments and Contingencies

(a) Leases

The Company leases office space under operating leases that expire at various dates through 2029. The Company adopted Topic 842, *Leases* as of January 1, 2019 and elected the package of practical expedients permitted under the transition guidance, which allowed the Company to carryforward its historical lease classification, its assessment on whether a contract was or contains a lease, and its initial direct costs for any leases that existed prior to January 1, 2019. In addition, the Company elected the short-term lease exception as a practical expedient and to combine lease and non-lease components. The Company recognizes rent expense on a straight-line basis over the life of the related lease, including any periods of free rent.

Upon inception of a lease, the Company determines if an arrangement is a lease, if it includes options to extend or terminate the lease, and if it is reasonably certain that the Company will exercise the options. Lease cost, representing lease payments over the term of the lease and any capitalizable direct costs less any incentives received, is recognized on a straight-line basis over the lease term as lease expense.

In determining the present value of lease payments, the Company uses its incremental borrowing rate based on the information available at the lease commencement date if the rate implicit in the lease is not readily determinable. The Company determined lease liability amounts using a discount rate of 5.01%, which represents the Company's incremental borrowing rate. The Company determines its incremental borrowing rate for lease liability using its current borrowing rate, adjusted for various factors including level of collateralization and lease term. As of December 31, 2020, the remaining weighted average lease term was 4 years.

During the year ended December 31, 2020, the Company entered into two new leases, which increased right-of-use ("ROU") assets and lease liabilities by $2,709. ROU assets and lease liabilities were equal as no lease costs or incentives were associated with acquiring the leases.

Variable and short-term lease costs were immaterial for the year ended December 31, 2020. Additional details of the Company's operating leases are presented in the following table:

	Year Ended December 31,	
	2020	2019
Operating lease costs	$ 5,895	$ 5,181
Cash paid for operating leases	6,050	5,108

Maturities of operating lease liabilities as of December 31, 2020 under noncancelable operating leases were as follows:

Year ending December 31:	
2021	$ 4,622
2022	1,892
2023	1,760
2024	1,777
2025	1,328
Thereafter	962
Total future minimum lease payments	12,341
Less: imputed interest	(577)
Present value of future minimum lease payments	11,764
Less: current portion of operating leases payments	(4,543)
Lease liabilities, long-term	$ 7,221

(b) Legal Matters

From time to time, the Company may become involved in routine litigation arising in the ordinary course of business. While the results of such litigation cannot be predicted with certainty, management believes that the final outcome of such matters is not likely to have a material adverse effect on the Company's financial position or results of operations or cash flows.

(7) Income Taxes

Income tax expense is comprised of the following:

	Year ended December 31,	
	2020	2019
Current:		
Federal	$ —	$ 583
State	178	(95)
Foreign	167	(779)
Current income tax expense (benefit)	345	(291)
Deferred:		
Federal	—	—
State	—	—
Deferred income tax expense (benefit)	—	—
	$ 345	$ (291)

Components of income (loss) before income taxes by tax jurisdiction were as follows:

	Year ended December 31,	
	2020	2019
United States	$ (24,567)	$ (25,385)
Foreign	449	523
Loss before income taxes	$ (24,118)	$ (24,862)

Reconciliation of income tax expense at the applicable statutory income tax rates to the effective rate is as follows:

	Year ended December 31,	
	2020	2019
Statutory federal income tax rate	21.0%	21.0%
State taxes, net of federal benefits	14.2	4.2
Withholding tax	—	(2.3)
Section 162(m) limitation	(12.8)	—
Stock compensation	68.5	0.2
Return-to-provision adjustments	(1.3)	3.2
Research and development credit	6.2	5.2
Tax contingencies, net of reversals	(0.6)	(0.5)
Change in valuation allowance	(95.0)	(31.3)
Other	(1.6)	(0.6)
Effective income tax rate	(1.4)%	(0.9)%

The income tax expense for the year ended December 31, 2020 primarily related to state taxes and taxes in foreign jurisdictions. Income tax benefit for the year ended December 31, 2019 primarily related to alternative minimum tax credits previously utilized that are refundable under the Tax Cuts and Jobs Act of 2017 (the “2017 Tax Act”).

The total change in valuation allowance for the year ended December 31, 2020 was $22,904, which primarily was due to the generation of net operating losses.

Tax effects of temporary differences that give rise to significant portions of deferred income tax assets and deferred income tax liabilities were as follows:

	As of December 31,	
	2020	2019
Deferred income tax assets:		
Net operating loss carryforwards	$ 51,498	$ 26,119
Accrued expenses	10,477	7,097
Credits	8,752	7,468
Gross deferred tax assets	70,727	40,684
Less valuation allowance	(58,155)	(35,251)
Net deferred tax assets	12,572	5,433
Deferred income tax liabilities:		
Unrealized gain on equity investments	(10,185)	(1,984)
Prepaid expenses	(889)	(441)
Depreciation and amortization	(1,498)	(3,008)
Net deferred income tax assets	$ —	$ —

As of December 31, 2020, the Company had federal and state net operating loss ("NOL") carryforwards of $206,311 and $126,729, respectively. These carryforwards, with the exception of federal NOLs generated post 2017, will expire between 2022 and 2040 if not used by the Company to reduce income taxes payable in future periods. Utilization of post 2017 federal NOL carryforwards are limited to 80% of taxable income generated in a given year and carry forward indefinitely. As of December 31, 2020, the Company had federal and state research and development tax credit carryforwards of $9,385 and $498, respectively. These carryforwards will expire between 2021 and 2040 if not used by the Company to reduce income taxes payable in future periods.

The Company has not recognized a deferred tax liability for the undistributed earnings of its foreign operations as the Company considers these earnings to be indefinitely reinvested.

In response to the COVID-19 pandemic, the Coronavirus Aid, Relief and Economic Security Act (the "CARES Act") was signed into law in March 2020. The CARES Act lifts certain deduction limitations originally imposed by the 2017 Tax Act. Corporate taxpayers may carryback NOLs originating during 2018 through 2020 for up to five years, which was not previously allowed under the 2017 Tax Act. The CARES Act also eliminates the 80% of taxable income limitations by allowing corporate entities to fully utilize NOL carryforwards to offset taxable income in 2018, 2019 or 2020. Taxpayers may generally deduct interest up to the sum of 50% of adjusted taxable income plus business interest income (30% limit under the 2017 Tax Act) for tax years beginning January 1, 2019 and 2020. The CARES Act allows taxpayers with alternative minimum tax credits to claim a refund in 2020 for the entire amount of the credits instead of recovering the credits through refunds over a period of years, as originally enacted by the 2017 Tax Act. The CARES Act raises the corporate charitable deduction limit to 25% of taxable income and makes qualified improvement property generally eligible for 15-year cost-recovery and 100% bonus depreciation. In addition, the CARES Act allows companies to defer making certain payroll tax payments until future years. With the enactment of the CARES Act, the Company has not recognized a quantitative or qualitative impact for the year ended December 31, 2020.

The Company classifies interest and penalties related to unrecognized tax benefits within income tax expense in the consolidated statement of operations. Following is a reconciliation of total gross unrecognized tax benefits:

	Year ended December 31,	
	2020	2019
Balance, January 1	$ 902	$ 781
Additions for tax positions taken in prior years	25	24
Reductions for tax positions taken in prior years	(16)	(12)
Additions for tax positions related to the current year	135	109
Balance, December 31	$ 1,046	$ 902

The Company does not anticipate any significant increases or decreases in its uncertain tax positions within the next 12 months.

As of December 31, 2020, statutes of limitations were open for all of the Company's federal and state tax returns filed after the year ended December 31, 2015 and 2014, respectively. Net operating loss and credit carryforwards for all years are subject to

examination and adjustments for the three years following the year in which the carryforwards are utilized. The Company is not currently undergoing any federal or state income tax examinations.

(8) Stockholders' Equity (Deficit)

(a) Common Stock

Upon the closing of the IPO, 226,344,686 shares of preferred stock automatically converted into an aggregate of 30,278,832 shares of common stock. As of December 31, 2020, the Company had authorized 500,000,000 shares of common stock with a par value of $0.01 per share. Holders of common stock are entitled to one vote per share, to receive dividends, if and when declared by the board of directors, and upon liquidation or dissolution, to receive a portion of the assets available for distributions to stockholders, subject to preferential amounts owed to holders of the Company's preferred stock.

Common stockholders have no preemptive or other subscription rights and there are no redemption or sinking fund provisions with respect to such shares. Common stock is subordinate to preferred stock with respect to dividend rights and rights upon liquidation, winding up, and dissolution of the Company.

(b) Limited Common Stock

Immediately prior to the closing of the IPO, preferred stockholders voluntarily exchanged 98,406,823 shares of preferred stock for an aggregate of 13,164,193 shares of limited common stock. During the year ended December 31, 2020, limited common stockholders voluntarily converted 4,000,000 shares of limited common stock into 4,000,000 shares of common stock.

As of December 31, 2020, the Company had authorized 100,000,000 shares of limited common stock with a par value of $0.01 per share. Holders of limited common stock are entitled to one vote per share, however, the holders of limited common stock are not entitled to vote such shares in any election of directors or on the removal of directors. Holders of limited common stock are entitled to receive dividends, if and when declared by the board of directors, and upon liquidation or dissolution, to receive a portion of the assets available for distributions to stockholders, subject to preferential amounts owed to holders of the Company's preferred stock. Holders of the Company's limited common stock have the right to exchange each share of limited common stock for one share of the Company's common stock.

Limited common stockholders have no preemptive or other subscription rights and there are no redemption or sinking fund provisions with respect to such shares. The rights, preferences and privileges of holders of the limited common stock are subject to and may be adversely affected by the right of the holders of shares of any series of preferred stock that the Company may designate and issue in the future.

(c) Preferred Stock

As of December 31, 2020, the Company had authorized 10,000,000 shares of preferred stock with a par value of $0.01 per share. The Company's board of directors has the discretion to determine the rights, preferences, privileges, and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges, and liquidation preferences, of each series of preferred stock.

(9) Stock-Based Compensation

Stock Incentive Plans

As of December 31, 2020, the Company's stock incentive plans included the 2010 Stock Plan (the "2010 Plan") and the 2020 Equity Incentive Plan (the "2020 Plan") (together, the "Plans"). The 2020 Plan provides for the award of incentive stock options, non-qualified stock options, stock appreciation rights, restricted stock awards, restricted stock units, and other stock-based awards.

The 2010 Plan provided for the granting of incentive stock options and non-qualified stock options. As of the effective date of the 2020 Plan, no further awards will be made under the 2010 Plan. Any options or awards outstanding under the 2010 Plan remain outstanding and effective. Shares of common stock subject to outstanding awards granted under the 2010 Plan that expire, terminate, or are otherwise surrendered, cancelled, forfeited, or repurchased by the Company are available for issuance under the 2020 Plan.

Stock options must be granted at an exercise price not less than 100% of the fair market value per share at the grant date. The maximum contractual term of options granted under the Plans is typically 10 years, options generally vest over four years with 25% of the shares underlying the option vesting at the end of the first year and the remaining vesting monthly over the following three years.

During 2020 and 2019, 1,398,177 and 214,845 options under the Plans were exercised at a total exercise price of $4,183 and $549, respectively.

The fair value of each option award is determined on the date of grant using the Black Scholes Merton option-pricing model. The calculation of fair value includes several assumptions that require management's judgment. The expected terms of options granted to employees during 2020 and 2019 were calculated using an average of historical exercises. Estimated volatility for 2020 and 2019 incorporates a calculated volatility derived from the historical closing prices of shares of common stock of similar entities whose share prices were publicly available for the expected term of the option. The risk-free interest rate is based on the U.S. Treasury constant maturities in effect at the time of grant for the expected term of the option. The Company accounts for forfeitures as they occur, as such, the Company does not estimate forfeitures at the time of grant.

The board of directors or compensation committee determines the exercise price of the Company's stock options based on the closing price of the common stock as reported on the Nasdaq Global Select Market on the day of grant.

As of December 31, 2020, there were 2,168,706 shares available for grant under the 2020 Plan. As of December 31, 2019, there were 236,005 shares available for grant under the 2010 Plan. Following are the weighted average valuation assumptions used for options:

	Year Ended December 31,	
	2020	2019
Valuation assumptions		
Expected dividend yield	—%	—%
Expected volatility	60%	57%
Expected term (years)	4.49	6.05
Risk-free interest rate	1.46%	2.33%

The following table presents classification of stock-based compensation expense within the consolidated statements of operations:

	Year Ended December 31,	
	2020	2019
Cost of sales	$ 1,384	$ 376
Research and development	3,050	460
Sales and marketing	516	311
General and administrative	5,595	1,046
Total stock-based compensation	$ 10,545	$ 2,193

Stock option activity was as follows:

	Number of shares	Weighted average exercise price	Weighted average remaining contractual term (years)	Aggregate intrinsic value
Beginning, January 1, 2020	4,943,778	$ 3.57		
Granted	3,912,383	19.49		
Exercised	(1,398,177)	2.99		
Forfeited	(129,315)	12.20		
Expired	(71,209)	1.98		
Balance, December 31, 2020	7,257,460	12.14	8.06	$ 486,572
Exercisable, December 31, 2020	1,978,647	3.57	6.19	$ 149,604

The weighted average grant date fair value per share of options granted during 2020 and 2019 was $9.55 and $2.93, respectively. The intrinsic value of options exercised during 2020 and 2019 was $87,946 and $546, respectively.

As of December 31, 2020, there was $31,424 of unrecognized compensation cost related to unvested stock options granted under the Plans, which is expected to be recognized over a weighted average period of 3.01 years. The fair value of shares vested during 2020 and 2019 was $3,153 and $1,734, respectively.

(10) Noncontrolling Interest

The Company reviews each legal entity formed by parties related to the Company to determine whether or not the Company has a variable interest in the entity and whether or not the entity would meet the definition of a variable interest entity ("VIE") in accordance with ASC Topic 810, *Consolidation* ("ASC 810"). If the entity is a VIE, the Company assesses whether or not the Company is the primary beneficiary of that VIE based on a number of factors, including (i) which party has the power to direct the activities that most significantly affect the VIE's economic performance, (ii) the parties' contractual rights and responsibilities pursuant to any contractual agreements and (iii) which party has the obligation to absorb losses or the right to receive benefits from the VIE. If the Company determines it is the primary beneficiary of a VIE, the Company consolidates the financial statements of the VIE into the Company's consolidated financial statements at the time that determination is made. The Company evaluates whether it continues to be the primary beneficiary of any consolidated VIEs on a quarterly basis. If the Company were to determine that it is no longer the primary beneficiary of a consolidated VIE, or no longer has a variable interest in the VIE, it would deconsolidate the VIE in the period that the determination is made.

If the Company determines it is the primary beneficiary of a VIE that meets the definition of a business, the Company measures the assets, liabilities and noncontrolling interests of the newly consolidated entity at fair value in accordance with ASC Topic 805, *Business Combinations* ("ASC 805") at the date the reporting entity first becomes the primary beneficiary.

In October 2018, Faxian was formed in the United States. In April 2019, upon consummation of the joint venture, the Company and WuXi AppTech ("WuXi"), each received a 50% equity interest in the entity in exchange for their contributions to the entity. The Company determined that Faxian was a VIE and concluded that it is the primary beneficiary of the VIE. As such, the Company has historically consolidated Faxian's results into the consolidated financial statements, and eliminated WuXi's ownership as a non-controlling interest.

(11) Net Loss per Share Attributable to Common and Limited Common Stockholders

The following table presents the calculation of basic and diluted net loss per share attributable to common and limited common stockholders for the years presented (in thousands, except per share data):

	Year Ended December 31,	
	2020	**2019**
Numerator:		
Net loss attributable to Schrödinger common and limited common stockholders	$ (24,463)	$ (24,571)
Denominator:		
Weighted average shares used to compute net loss per share attributable to Schrödinger common and limited common stockholders, basic and diluted:	60,024,658	6,004,500
Net loss per share attributable to Schrödinger common and limited common stockholders, basic and diluted:	$ (0.41)	$ (4.09)

Since the Company was in a loss position for all years presented, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential common shares outstanding would have been anti-dilutive. Potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive were as follows:

	Year Ended December 31,	
	2020	2019
Convertible preferred stock	—	42,734,884
Shares subject to outstanding common stock options	7,257,460	4,805,562
	7,257,460	47,540,446

(12) Equity Investments

The Company classifies the Nimbus investment as an equity investment within the consolidated balance sheets. The initial Nimbus investment was received as compensation for collaboration services provided under a separate service agreement. During the year ended December 31, 2020, the Company made a $2,869 cash investment in Nimbus. The Company held 6.9% and 6.7% of Nimbus units on a fully diluted basis as of December 31, 2020 and December 31, 2019, respectively.

As Nimbus is a limited liability company and the Company is not a passive investor due to its collaboration with Nimbus on a number of drug discovery targets, the Company's management determined that it has significant influence over the entity and therefore accounts for the entity as an equity method investment.

The Company provides collaboration services for Nimbus under the terms of a master services agreement executed on May 18, 2010, as amended. Collaboration agreements are separate from the transaction that resulted in equity ownership and related fees are paid in cash to the Company.

Under the HLBV method, the Company reported losses of $2,977 and $4,180 on the Nimbus investment during 2020 and 2019, respectively. The carrying value of the Nimbus investment was zero and $108 as of December 31, 2020 and December 31, 2019, respectively. The Company has no obligation to fund Nimbus losses in excess of its initial investment.

In June 2019, Morphic successfully completed an initial public offering. The Company accounts for its investment in Morphic at fair value based on the share price of Morphic’s common stock at the measurement date.

During 2020 and 2019, the Company reported a gain of $13,685 and $14,102, respectively, on the Morphic investment. As of December 31, 2020 and December 31, 2019, the carrying value of the Company’s investment in Morphic was $28,013 and $14,328, respectively. The Company has no obligation to fund Morphic losses in excess of its initial investment.

During May 2020, Petra entered into a merger agreement with a third party. In connection with the merger, the Company received $4,582 of merger consideration in exchange for the Company’s shares of Petra common stock and is eligible to receive potential earn-outs tied to the achievement of specified development, regulatory, and commercial milestones. The Company is also eligible to receive $361 in escrow payments. As the escrow payments are expected to be received within 12 months from the closing of the merger, they have been recorded as other receivables within the consolidated balance sheets. The Company recorded a gain on the Petra investment of $4,156 for the year ended December 31, 2020. The Company reported no gain or loss on the Petra investment for the year ended December 31, 2019.

In connection with the merger, the Company also received 2,676,191 shares of common stock of Ravenna Pharmaceuticals, Inc. (“Ravenna”). The Company does not exercise significant influence over Ravenna and, as such, the Company has recorded its investment in Ravenna as a non-marketable equity security. As of December 31, 2020 and December 31, 2019, the carrying value of non-marketable equity securities was $94 and $930, respectively.

In July 2020, Relay successfully completed an initial public offering. The Company accounts for its investment in Relay at fair value based on the share price of Relay’s common stock at the measurement date.

The Company reported a gain of $17,556 on the Relay investment for the year ended December 31, 2020, which is included within change in fair value in the consolidated statements of operations. The Company reported no gain or loss on the Relay investment for the year ended December 31, 2019. As of December 31, 2020 and December 31, 2019, the carrying value of the Company’s investment in Relay was $17,556 and zero, respectively. The Company has no obligation to fund Relay losses in excess of its initial investment.

(13) Employee Benefit Plan

The Company offers a 401(k) employee savings plan to its U.S.-based employees. The Company made discretionary matching contributions equal to 100% of the first 4.0% of compensation contributed by employees for the years ended December 31, 2020 and 2019. Matching contributions during 2020 and 2019 were $1,748 and $1,492, respectively.

(14) Related Party Transactions

(a) D. E. Shaw

For the years ended December 31, 2020 and 2019, the Company licensed technology and purchased services for $7,281 and $5,190, respectively, from companies controlled by David E. Shaw and/or affiliates of companies controlled by David E. Shaw (the "D. E. Shaw entities"), stockholders of the Company. In addition, D. E. Shaw entities purchased certain products and services from, and provided cost reimbursements to, the Company totaling $226 and $195 for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020 and December 31, 2019, the Company had net payables of $3,464 and $1,760, respectively, to D.E. Shaw entities.

(b) Board Member

For the years ended December 31, 2020 and 2019, the Company paid consulting fees of $364 and $361, respectively, to a member of its board of directors.

(c) Bill and Melinda Gates Foundation

For the years ended December 31, 2020 and 2019, the Bill & Melinda Gates Foundation, an entity under common control with Bill and Melinda Gates Foundation Trust ("BMGFT"), a stockholder of the Company, issued a grant under which it agreed to pay the Company directly for certain licenses and services provided to a specified group of third-party organizations. Revenue recognized for services provided by the Company under this grant were $2,094 and $1,065 for the years ended December 31, 2020 and 2019, respectively. As of December 31, 2020 and December 31, 2019, the Company had net receivables of $543 and $294, respectively, due from the Bill & Melinda Gates Foundation.

During the year ended December 31, 2020, the Company also recognized contribution revenue of $1,000 related to an agreement with Gates Ventures, LLC, an entity under control of William H. Gates III, who may be deemed to be the beneficial owner of more than 5% of the Company's voting securities. There was no revenue recognized under this agreement for year ended December 31, 2019. As of December 31, 2020 and December 31, 2019, the Company did not record a receivables balance due from Gates Ventures, LLC.

(15) Segment Reporting

The Company has determined that its chief executive officer ("CEO") is its chief operating decision maker ("CODM"). The Company's CEO evaluates the financial performance of the Company based on two reportable segments: Software and Drug Discovery. The Software segment is focused on licensing the Company's software to transform molecular discovery. The Drug Discovery segment is focused on building a portfolio of preclinical and clinical drug programs, internally and through collaborations.

The CODM reviews segment performance and allocates resources based upon segment revenue and segment gross profit of the Software and Drug Discovery reportable segments. Segment gross profit is derived by deducting operational expenditures, with the exception of research and development, sales and marketing, and general and administrative activities from U.S. GAAP revenue. Operational expenditures are expenditures made that are directly attributable to the reportable segment. These expenditures are allocated to the segments based on headcount. The reportable segment expenditures include compensation, supplies, and services from contract research organizations.

Certain cost items are not allocated to the Company's reportable segments. These cost items primarily consist of compensation and general operational expenses associated with the Company's research and development, sales and marketing, and general and administrative. These costs are incurred by both segments and due to the integrated nature of the Company's Software and Drug Discovery segments, any allocation methodology would be arbitrary and provide no meaningful analysis.

All segment revenue is earned in the United States and there are no intersegment revenues. Additionally, the Company reports assets on a consolidated basis and does not allocate assets to its reportable segments for purposes of assessing segment performance or allocating resources. Presented below is financial information with respect to the Company's reportable segments for the periods presented:

	Year Ended December 31,	
	2020	2019
Segment revenues:		
Software	$ 92,530	$ 66,735
Drug discovery	15,565	18,808
Total segment revenues	$ 108,095	$ 85,543
Segment gross profit:		
Software	$ 74,527	$ 53,089
Drug discovery	(11,055)	(3,996)
Total segment gross profit	63,472	49,093
Unallocated:		
Research and development	(64,695)	(39,404)
Sales and marketing	(17,795)	(21,364)
General and administrative	(41,898)	(27,040)
Gain on equity investments	4,108	943
Change in fair value	28,263	9,922
Interest income	2,253	1,878
Income tax (expense) benefit	(345)	291
Consolidated net loss	$ (26,637)	$ (25,681)

The following table sets forth revenues by geographic area for the years ended December 31, 2020 and 2019:

	Year Ended December 31,	
	2020	2019
United States	$ 60,737	$ 47,622
Europe	24,370	17,504
Japan	14,558	14,367
Rest of World	8,430	6,050
	$ 108,095	$ 85,543

(16) Subsequent Events

On January 14, 2021, the Company sold 422,425 shares of Relay common stock for $15,735.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, as of December 31, 2020. The term "disclosure controls and procedures," means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on such evaluation of our disclosure controls and procedures as of December 31, 2020, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Annual Report on Internal Control Over Financial Reporting and Attestation Report of Registered Public Accounting Firm

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Our internal control over financial reporting is a process designed under the supervision of our principal executive and principal financial officer to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Management assessed our internal control over financial reporting as of December 31, 2020. Management based its assessment on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework). Based on that evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2020.

This Annual Report does not include an attestation report of our independent registered public accounting firm due to an exemption established by the JOBS Act for "emerging growth companies".

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f)) under the Exchange Act) that occurred during the fourth quarter of 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our principal executive officer and principal financial officer, do not expect that our disclosure controls or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by

management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item 10 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2021 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2020 pursuant to General Instruction G(3) of Form 10-K.

We have adopted a written code of business conduct and ethics that applies to our directors, officers, and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. We have posted a current copy of the code on our website, www.schrodinger.com. In addition, we intend to post on our website all disclosures that are required by law or Nasdaq listing standards concerning any amendments to, or waivers from, any provision of the code. Our website is not incorporated by reference into this Annual Report and you should not consider any information contained in or accessible from our website to be a part of this Annual Report.

Item 11. Executive Compensation.

The information required by this Item 11 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2021 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2020 pursuant to General Instruction G(3) of Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item 12 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2021 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2020 pursuant to General Instruction G(3) of Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item 13 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2021 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2020 pursuant to General Instruction G(3) of Form 10-K.

Item 14. Principal Accountant Fees and Services.

The information required by this Item 14 is incorporated herein by reference from the information that will be contained in our proxy statement related to the 2021 Annual Meeting of Stockholders, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year ended December 31, 2020 pursuant to General Instruction G(3) of Form 10-K.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(1) **Financial Statements**

The following documents are included on pages F-2 through F-8 attached hereto and are filed as part of this Annual Report.

	Page
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2020 and 2019	F-3
Consolidated Statements of Operations for the Years ended December 31, 2020 and 2019	F-4
Consolidated Statements of Convertible Preferred Stock and Stockholders' Deficit for the Years ended December 31, 2020 and 2019	F-6
Consolidated Statements of Cash Flows for the Years ended December 31, 2020 and 2019	F-7
Notes to Consolidated Financial Statements	F-8

(2) **Financial Statement Schedules**

All financial statement schedules have been omitted because they are not applicable, not required, or the information required is shown in the consolidated financial statements or the notes thereto.

(3) **Exhibits**

The exhibits filed as part of this Annual Report are listed below.

Exhibit Number	Description of Exhibit	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Restated Certificate of Incorporation	8-K	001-39206	3.1	2/10/2020	
3.2	Amended and Restated Bylaws	8-K	001-39206	3.2	2/10/2020	
4.1	Specimen Stock Certificate evidencing the shares of common stock	S-1/A	333-235890	4.1	1/27/2020	
4.2	Amended and Restated Share Exchange Agreement, dated January 24, 2020, by and between the Registrant and Bill & Melinda Gates Foundation Trust	S-1/A	333-235890	4.2	1/27/2020	
4.3	Description of Securities Registered Under Section 12 of the Exchange Act					X
10.1	Amended and Restated Investors' Rights Agreement, dated as of November 9, 2018, by and among the Registrant and the other parties thereto, as amended	S-1/A	333-235890	10.1	1/27/2020	

10.2	2010 Stock Plan, as amended	S-1	333-235890	10.2	1/10/2020	
10.3	Form of Notice of Stock Option Grant and Stock Option Agreement under 2010 Stock Plan	S-1	333-235890	10.3	1/10/2020	
10.4+	2020 Equity Incentive Plan	S-1/A	333-235890	10.4	1/27/2020	
10.5+	Form of Stock Option Agreement and Form of Restricted Stock Unit Agreement under the 2020 Equity Incentive Plan	S-1/A	333-235890	10.5	1/27/2020	
10.6+	2020 Employee Stock Purchase Plan	S-1/A	333-235890	10.6	1/27/2020	
10.7+	Second Amended and Restated Director Compensation Policy					X
10.8+	Senior Executive Incentive Compensation Plan	S-1	333-235890	10.8	1/10/2020	
10.9+	Executive Severance and Change in Control Benefits Plan	S-1	333-235890	10.9	1/10/2020	
10.10+	Employment Agreement, dated May 11, 2010, by and between the Registrant and Ramy Farid	S-1	333-235890	10.10	1/10/2020	
10.11+	Employment Agreement, dated November 14, 2018, by and between the Registrant and Joel Lebowitz	S-1	333-235890	10.11	1/10/2020	
10.12+	Employment Agreement, dated April 15, 2013, by and between the Registrant and Cony D'Cruz	S-1	333-235890	10.12	1/10/2020	
10.13+	Managing Director Agreement, dated October 1, 2002, by and between Schrödinger GmbH and Jörg Weiser	S-1	333-235890	10.13	1/10/2020	
10.14+	Employment Agreement, dated May 14, 2018, by and between the Registrant and Karen Akinsanya	S-1	333-235890	10.14	1/10/2020	
10.15+	Employment Agreement, dated February 22, 2017, by and between the Registrant and Jennifer Daniel	S-1	333-235890	10.15	1/10/2020	
10.16+	Employment Agreement, dated April 27, 2010, by and between the Registrant and Yvonne Tran	S-1	333-235890	10.16	1/10/2020	
10.17+	Employment Agreement, dated September 11, 2006, by and between the Registrant and Patrick Lorton	S-1	333-235890	10.17	1/10/2020	
10.18+	Employment Agreement, dated June 1, 2010, by and between the Registrant and Shane Brauner	S-1	333-235890	10.18	1/10/2020	
10.19+	Employment Agreement, dated March 9, 2009, by and between the Registrant and Robert Abel	S-1	333-235890	10.19	1/10/2020	

10.20+	Consultant Agreement, dated July 1, 1999, between the Registrant and Richard A. Friesner, as amended	10-Q	001-39206	10.1	8/10/2020
10.21+	Form of Indemnification Agreement between the Registrant and each of its Executive Officers and Directors	S-1	333-235890	10.21	1/10/2020
10.22	Lease, dated July 8, 2009, between SLG Tower 45 LLC and Registrant, as amended	S-1	333-235890	10.22	1/10/2020
10.23	Lease, dated August 6, 2008, between One Main Place Portland – Oregon, Inc., Landlord, and Registrant, Tenant, as amended	S-1	333-235890	10.23	1/10/2020
10.24†	Agreement, dated as of May 5, 1994, between The Trustees of Columbia University in the City of New York and Registrant, as amended	S-1	333-235890	10.24	1/10/2020
10.25†	Agreement, dated as of July 15, 1998, between The Trustees of Columbia University in the City of New York and Registrant, as amended	S-1	333-235890	10.25	1/10/2020
10.26†	Agreement, dated as of September 2001, between The Trustees of Columbia University in the City of New York and Schrödinger, LLC, as amended	S-1	333-235890	10.26	1/10/2020
10.27†	Agreement, dated as of June 19, 2003, between The Trustees of Columbia University in the City of New York and Schrödinger, LLC	S-1	333-235890	10.27	1/10/2020
10.28†	Software and Patent License Agreement, dated May 27, 2008, between The Trustees of Columbia University in the City of New York and Schrödinger, LLC	S-1	333-235890	10.28	1/10/2020
10.29†	Services Royalty Amendment, dated November 1, 2008, by and between The Trustees of Columbia University in the City of New York and Schrödinger, LLC	S-1	333-235890	10.29	1/10/2020
10.30†	Services Agreement, dated June 25, 2013, between D.E. Shaw India Software Private Limited and Schrödinger, LLC, as amended	S-1	333-235890	10.30	1/10/2020
10.31†	License and Software Development Agreement, dated March 14, 2013, by and between D. E. Shaw Research LLC and Schrödinger, LLC	S-1	333-235890	10.31	1/10/2020
10.32†	Amended and Restated License and Software Development Agreement, dated May 20, 2014, by and between D. E. Shaw Research, LLC and Schrödinger, LLC	S-1	333-235890	10.32	1/10/2020
10.33+	Global Bonus Plan	S-1/A	333-235890	10.33	1/27/2020

10.34†	Independent Contractor Agreement, dated June 23, 2020, by and between the Registrant and Gates Ventures, LLC	10-Q	001-39206	10.2	8/10/2020	
10.35	Restricted Stock Unit Agreement for Non-U.S. Participants under the 2020 Equity Incentive Plan	10-Q	001-39206	10.1	11/12/2020	
10.36	Stock Option Agreement for Non-U.S. Participants under the 2020 Equity Incentive Plan	10-Q	001-39206	10.2	11/12/2020	
10.37†	Collaboration and License Agreement, dated November 22, 2020, by and between the Registrant and Bristol-Myers Squibb Company					X
10.38+	2021 Inducement Equity Incentive Plan					X
10.39+	Nonstatutory Stock Option Agreement under 2021 Inducement Equity Incentive Plan					X
10.40+	Restricted Stock Unit Agreement for U.S. Participants under 2021 Inducement Equity Incentive Plan					X
10.41+	Restricted Stock Unit Agreement for Non-U.S. Participants under 2021 Inducement Equity Incentive Plan					X
21.1	Subsidiaries of the Registrant	S-1	333-235890	21.1	1/10/2020	
23.1	Consent of KPMG LLP, independent registered public accounting firm					X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1#	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
32.2#	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					
101.SCH	XBRL Taxonomy Extension Schema Document					
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					

101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

† Portions of this exhibit have been omitted pursuant to Item 601(b)(10)(iv) of Regulation S-K.

The certifications attached as Exhibits 32.1 and 32.2 that accompany this Annual Report, are deemed furnished and not filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Schrödinger, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report, irrespective of any general incorporation language contained in such filing.

+ Management contract or compensatory plan or arrangement filed in response to Item 15(a)(3) of the Instructions to the Annual Report on Form 10-K.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized**.**

SCHRÖDINGER, INC.

Date: March 4, 2021

By: /s/ Ramy Farid

Ramy Farid, Ph.D.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ Ramy Farid Ramy Farid, Ph.D.	President and Chief Executive Officer, Director (Principal Executive Officer)	March 4, 2021
/s/ Joel Lebowitz Joel Lebowitz	Chief Financial Officer (Principal Financial Officer)	March 4, 2021
/s/ Jenny Herman Jenny Herman	Senior Vice President, Controller (Principal Accounting Officer)	March 4, 2021
/s/ Michael Lynton Michael Lynton	Chairman of the Board	March 4, 2021
/s/ Jeffrey Chodakewitz Jeffrey Chodakewitz, M.D.	Director	March 4, 2021
/s/ Richard Friesner Richard Friesner, Ph.D.	Director	March 4, 2021
/s/ Gary Ginsberg Gary Ginsberg	Director	March 4, 2021
/s/ Rosana Kapeller-Libermann Rosana Kapeller-Libermann, M.D., Ph.D.	Director	March 4, 2021
/s/ Gary Sender Gary Sender	Director	March 4, 2021
/s/ Nancy Thornberry Nancy Thornberry	Director	March 4, 2021
/s/ Timothy Wright Timothy Wright, M.D.	Director	March 4, 2021

Exhibit 4.3

DESCRIPTION OF SECURITIES REGISTERED UNDER SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED

The following description of the securities of Schrödinger, Inc. ("us," "our," "we" or the "Company") registered under Section 12 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is intended as a summary only and therefore is not a complete description of our common stock. This description is based upon, and is qualified by reference to, our certificate of incorporation, our bylaws, our amended and restated share exchange agreement and applicable provisions of the Delaware General Corporation Law (the "DGCL"). You should read our certificate of incorporation, our bylaws and our amended and restated share exchange agreement, which are incorporated by reference as Exhibit 3.1, Exhibit 3.2 and Exhibit 4.2, respectively, to the Annual Report on Form 10-K of which this Exhibit 4.3 is a part, for the provisions that are important to you.

Authorized Capital Stock

Our authorized capital stock consists of 500,000,000 shares of our common stock, par value $0.01 per share, 100,000,000 shares of our limited common stock, par value $0.01 per share and 10,000,000 shares of our preferred stock, par value $0.01 per share, all of which preferred stock is undesignated. Our common stock is registered under Section 12(b) of the Exchange Act.

Common Stock and Limited Common Stock

Voting Rights. Holders of our common stock are entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Holders of our limited common stock are entitled to one vote for each share of limited common stock held on all matters submitted to a vote of stockholders, except such holders of limited common stock are not entitled to vote any shares of limited common stock in any election of directors or on the removal of directors. At all meetings of stockholders at which directors are to be elected, other than in a contested election, when a quorum is present the election of directors by our stockholders will be determined by majority voting, meaning each nominee will be elected to the board of directors if the votes cast "for" such nominee's election by the stockholders entitled to vote exceed the votes cast "against" the nominee's election, with abstentions and "broker non-votes" not counting as votes "for" or "against." In a contested election, when a quorum is present the election of directors by our stockholders will be determined by a plurality of the votes cast by the stockholders entitled to vote on the election.

Dividends. Holders of common stock and limited common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any of our outstanding preferred stock.

Liquidation, Dissolution and Winding Up. In the event of our liquidation, dissolution or winding up, the holders of our common stock and limited common stock are entitled to receive proportionately all assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any of our outstanding preferred stock.

Other Rights. Holders of our common stock have no preemptive, subscription, redemption or conversion rights. The Bill & Melinda and Gates Foundation Trust, or the Trust, is party to an amended and restated share exchange agreement with us pursuant to which the Trust is entitled to exchange each share of common stock held by the Trust into one share of limited common stock at the Trust's election. Holders of our limited common stock have no preemptive, subscription or redemption rights. Holders of our limited common stock have the right to convert each share of our limited common stock into one share of common stock at such holder's election. The rights, preferences and privileges of holders of our common stock and limited common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Preferred Stock

Under the terms of our certificate of incorporation, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges, and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges, and liquidation preferences, of each series of preferred stock. The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings, and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock.

Provisions of Our Certificate of Incorporation and Bylaws and the DGCL That May Have Anti-Takeover Effects

Delaware Business Combination Statute. We are subject to Section 203 of the DGCL ("Section 203"), which prohibits a Delaware corporation from engaging in business combinations with an interested stockholder. An interested stockholder is generally defined as an entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation or any entity or person affiliated with or controlling or controlled by such entity or person ("interested stockholder"). Section 203 provides that an interested stockholder may not engage in business combinations with the corporation for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (i) by persons who are directors and also officers and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combinations to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, lease, transfer, pledge or other disposition of 10% or more of the assets of the corporation to or with the interested stockholder;

- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

Board of Directors; Removal of Directors. Our certificate of incorporation and our bylaws divide our board of directors into three classes with staggered three-year terms. In addition, our certificate of incorporation and our bylaws provide that our directors may be removed only for cause and only by the affirmative vote of the holders of at least a majority of the voting power of all outstanding shares of common stock. Under our certificate of incorporation and our bylaws, any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled only by vote of a majority of our directors then in office. Furthermore, our certificate of incorporation provides that the authorized number of directors may be changed only by the resolution of our board of directors. The classification of our board of directors and the limitations on the ability of our stockholders to remove directors, change the authorized number of directors and fill vacancies could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of our company.

Stockholder Action; Special Meeting of Stockholders; Advance Notice Requirements for Stockholder Proposals and Director Nominations. Our certificate of incorporation and our bylaws provide that any action required or permitted to be taken by our stockholders at an annual meeting or special meeting of stockholders may only be taken if it is properly brought before such meeting; stockholders may not take action by written consent in lieu of a meeting. Except as otherwise required by law, special meetings of the stockholders can only be called by our board of directors or by our secretary at the request of the holders of at least 25% of the outstanding shares of our common stock and limited common stock. In addition, our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual or special meeting of stockholders, including proposed nominations of candidates for election to our board of directors. Stockholders at an annual or special meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors, or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder's intention to bring such business before the meeting. The advance notice provisions in our bylaws could have the effect of delaying stockholder actions that are favored by the holders of a majority of our outstanding voting securities. Moreover, the prohibition on stockholder action by written consent except as noted above could discourage a third party from making a tender offer for our common stock because even if the third party acquired a majority of our outstanding voting stock, it would be able to take action as a stockholder, such as electing new directors or approving a merger, only at a duly called stockholders meeting and not by written consent.

Exclusive Forum Selection. Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware (or, if the Court of Chancery of the State of Delaware does not have jurisdiction, the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, other employees or stockholders to our company or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the DGCL or as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware or (4) any action asserting a claim arising pursuant to any provision of our certificate of incorporation or bylaws (in each case, as they may be amended from time to time) or governed by the internal affairs doctrine. These choice of forum provisions do not apply to suits brought to enforce any duty or liability created by the Securities Act of 1933, as amended, or the rules and regulations thereunder, the Exchange Act, or the rules and regulations thereunder or any other claim for which the federal courts have exclusive jurisdiction. Although our certificate of incorporation contains the choice of forum provisions described above, it is possible that a court could rule that such provisions are inapplicable for a particular claim or action or that such provisions are unenforceable.

EXHIBIT 10.7

Schrödinger, Inc.

Second Amended and Restated Director Compensation Policy

Adopted on February 18, 2021

Effective as of January 1, 2021, the non-employee directors of Schrödinger, Inc. (the "Company") shall receive the following compensation for their service as members of the Board of Directors (the "Board") of the Company.

Director Compensation

Our goal is to provide compensation for our non-employee directors in a manner that enables us to attract and retain outstanding director candidates and reflects the substantial time commitment necessary to oversee the Company's affairs. We also seek to align the interests of our directors and our stockholders and we have chosen to do so by compensating our non-employee directors with a mix of cash and equity-based compensation.

Cash Compensation

The fees that will be paid to our non-employee directors for service on the Board, and for service on each committee of the Board on which the director is then a member, and the fees that will be paid to the chairperson of the Board, if one is then appointed, and the chairperson of each committee of the Board will be as follows:

	1 **Base**	**2** **Incremental–Board Chair or Committee Chair**	**3** **Incremental – Non-Chair Committee Members**
Board of Directors	$40,000	$35,000 (Non-Executive Chair)	—
Audit Committee	—	$20,000	$10,000
Compensation Committee	—	$15,000	$7,500
Nominating and Corporate Governance Committee	—	$10,000	$5,000
Drug Discovery Committee	—	$10,000	$5,000

The foregoing fees will be payable in arrears in four equal quarterly installments on the last day of each quarter, provided that the amount of such payment will be prorated for any portion of such quarter that the director is not serving on our Board, on such committee or in such position.

Equity Compensation

Initial Grants. Upon initial election to our Board, each non-employee director will be granted, automatically and without the need for any further action by the Board, an initial equity award of an option to purchase 17,471 shares of our common stock. The initial award shall have a term of ten years from the date of grant of the award, and shall vest and become exercisable as to 33.3333% of the shares underlying such award on each of the first, second and third anniversaries of the date of grant of the award, subject the director's continued service as a director, employee or consultant through each applicable vesting date. The vesting shall accelerate as to 100% of the shares upon a Change in Control of the Company (as defined in the Company's Executive Severance and Change in Control Benefits Plan). The exercise price shall be the closing price of our common stock on the date of grant.

Annual Grants. Beginning in calendar year 2021, each non-employee director who is serving as a member of our Board will be granted, automatically and without the need for any further action by the Board, an equity award on the date of our annual meeting of stockholders for such year of an option to purchase 8,736 shares; provided, however, that for a non-employee director who was initially elected to the Board within the 12 months preceding the annual meeting of stockholders, the number of shares subject to such option shall be pro-rated on a monthly basis for time in service. The annual award shall have a term of ten years from the date of the award, and shall vest on the twelve-month anniversary of the date of the date of grant of the award (or, if earlier, the date of the next annual meeting of stockholders following the date of grant of the award), subject to the director's continued service as a director, employee or consultant through each applicable vesting date. The vesting shall accelerate as to 100% of the shares upon a Change in Control of the Company. The exercise price shall be the closing price of our common stock on the date of grant.

The foregoing share amounts shall be automatically adjusted in the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event effecting our common stock, or any distribution to holders of our common stock other than an ordinary cash dividend.

The initial awards and the annual awards shall be subject to the terms and conditions of our 2020 Equity Incentive Plan, or any successor plan, and the terms of the option agreements entered into with each director in connection with such awards.

Expenses

Upon presentation of documentation of such expenses reasonably satisfactory to the Company, each non-employee director shall be reimbursed for his or her reasonable out-of-pocket business expenses incurred in connection with attending meetings of the Board and committees thereof or in connection with other business related to the Board, and each non-employee director shall also be reimbursed for his or her reasonable out-of-pocket business expenses authorized by the Board or a committee of the Board that are incurred in connection with attendance at various conferences or meetings with management of the Company, in accordance with the Company's travel policy, as it may be in effect from time to time.

Certain identified information has been excluded from the exhibit because it is both (i) not material and (ii) would likely cause competitive harm to the Company, if publicly disclosed.

Triple asterisks denote omissions.

EXHIBIT 10.37

COLLABORATION AND LICENSE AGREEMENT

This Collaboration and License Agreement (this "**Agreement**") is made and entered into as of November 22, 2020 (the "**Effective Date**") by and between **Schrödinger, Inc.**, a corporation organized under the laws of the State of Delaware, having its principal place of business at 120 West 45th Street, 17th Floor, New York, New York, 10036 ("**Schrödinger**"), and **Bristol-Myers Squibb Company**, a Delaware corporation headquartered at 430 East 29th Street, 14th Floor, New York, New York, USA 10016 ("**BMS**"). Schrödinger and BMS are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties**".

RECITALS

Whereas, BMS is a biopharmaceutical company engaged in the research, development, manufacture and commercialization of human therapeutic products.

Whereas, Schrödinger is a software and drug discovery company that has technology and expertise relating to the discovery and development of compounds directed to certain targets using its proprietary computational platform technology and drug discovery capabilities.

Whereas, Schrödinger and BMS desire to collaborate in the performance of a Research Program for the purpose of discovery and preclinical development of Licensed Collaboration Compounds for the Designated Targets suitable for development for human therapeutic uses, with the objective of identifying one or more Licensed Collaboration Compounds or Licensed Collaboration Products for the Designated Targets for BMS to advance into human clinical trials, in accordance with the terms and conditions set forth in this Agreement.

Whereas, separate from the Research Program, the Parties intend to negotiate for BMS to have the right to conduct research, development and commercialization activities with respect to Degrader Compounds containing Licensed Binders for the Designated Targets, and have committed to negotiate in good faith a further agreement with respect to Degrader Compounds containing Licensed Binders for the Designated Targets, in accordance with the terms and conditions set forth in this Agreement.

Whereas, BMS will have certain exclusive licenses and rights with respect to Licensed Compounds and Licensed Products for the Designated Targets and will be solely responsible for the clinical development and commercialization of Licensed Collaboration Compounds and Licensed Collaboration Products for the Designated Targets worldwide, in accordance with the terms and conditions set forth in this Agreement.

Now Therefore, in consideration of the foregoing premises and the mutual promises, covenants and conditions contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows.

1. DEFINITIONS

As used in this Agreement, the terms with initial letters capitalized, whether used in the singular or plural form, shall have the meanings set forth in this Article 1 or, if not listed below, the meaning designated in places throughout this Agreement.

1.1 "**AAA**" means the American Arbitration Association.

1.2 "**Acquirer**" has the meaning set forth in Section 12.6(d).

1.3 "**Acquired Party**" has the meaning set forth in Section 12.6(d).

1.4 "**Acquirer Technology**" has the meaning set forth in Section 12.6(a).

1.5 "**Acquisition Transaction**" has the meaning set forth in Section 11.4.

1.6 "**Adaptive Trial**" means a Clinical Trial that does not meet the criteria for a Registrational Trial at the time such Clinical Trial is initiated and includes a prospectively planned opportunity for such Clinical Trial to be modified based on interim analyses to change to a Registrational Trial following an analysis of interim data from subjects in such Clinical Trial.

1.7 "**Affiliate**" means, with respect to a particular Party, a Person that controls, is controlled by or is under common control with such Party. For the purposes of this definition, the word "control" (including, with correlative meaning, the terms "controlled by" or "under the common control with") means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such Person, whether by the ownership of more than fifty percent (50%) of the voting stock of such entity, or by contract or otherwise.

1.8 "**Alliance Manager**" has the meaning set forth in Section 2.5.

1.9 "**Applicable Law**" means any applicable federal, state, local or foreign law, statute, ordinance, principle of common law, or any rule, regulation, standard, judgment, order, writ, injunction, decree, arbitration award, agency requirement, license or permit of any Governmental Authority.

1.10 "**Animal Care Guidelines**" has the meaning set forth in Section 3.13.

1.11 "**Arbitrable Matter**" means any dispute concerning the validity, interpretation or construction of, compliance with, or breach of (other than a breach of Sections [***]), this Agreement, including any dispute with respect to whether either Party is entitled to terminate this Agreement pursuant to Article 13, in whole or as to any Collaboration Target. For clarity,

Arbitrable Matters do not include Royalty Rate Matters, R&D Expert Matters or any JSC disputes for which either Party has final decision-making authority in accordance with Section 2.1(e).

1.12 "**Bankrupt Party**" has the meaning set forth in Section 17.3(a).

1.13 "**Base Royalty Rate**" has the meaning set forth in Section 8.4(b).

1.14 "**Biosimilar Product**" means, in a particular country with respect to a particular Licensed Collaboration Product, any pharmaceutical product that is claimed to be biosimilar to, or interchangeable or substitutable with, such Licensed Collaboration Product (including a product that is the subject of an application submitted under Section 351(k) of the PHSA in the United States or under Article 10(4) of Directive 2001/83/EC in the European Union or any member state thereof, in each case citing such Licensed Collaboration Product as the reference product or where such application was based in significant part upon clinical data generated by BMS (or its Affiliates or Sublicensee) with respect to such Licensed Collaboration Product).

1.15 "**BMS Claims**" has the meaning set forth in Section 15.1.

1.16 "**BMS Indemnitees**" has the meaning set forth in Section 15.1.

1.17 "**BMS Patent**" means any Patent that claims a Sole Invention owned by BMS.

1.18 "**Business Combination Transaction**" has the meaning set forth in the definition of "Change of Control Transaction".

1.19 "**Business Day**" means a day that is not a Saturday, Sunday or a day on which banking institutions in New York, New York are required by Applicable Law to remain closed.

1.20 "**Calendar Quarter**" means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30 and December 31.

1.21 "**Calendar Year**" means the one (1) year period beginning on January 1 and ending on December 31.

1.22 "**Change of Control Transaction**" means, with respect to a Party:

(a) the acquisition by any individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended) (a "**Specified Person**") of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Securities Exchange Act of 1934, as amended) of fifty percent (50%) or more of either (i) the then outstanding capital stock of such Party (the "**Outstanding Capital Stock**") or (ii) the combined voting power of the then outstanding voting securities of such Party (the "**Outstanding Voting Securities**");

(b) the consummation of any acquisition, merger or consolidation involving any Third Party (a "**Business Combination Transaction**"), unless immediately following such Business Combination Transaction, (i) the individuals and entities who were the beneficial owners, respectively, of the Outstanding Capital Stock and Outstanding Voting Securities immediately

prior to such Business Combination Transaction beneficially own, directly or indirectly, fifty percent (50%) or more of, respectively, the then-outstanding capital stock and the combined voting power of the then-outstanding voting securities, as the case may be, of the corporation or other entity resulting from such Business Combination Transaction (including a corporation which as a result of such transaction owns the then-outstanding securities of such Party or all or substantially all of such Party's assets either directly or through one or more subsidiaries) in substantially the same proportions as their ownership, immediately prior to such Business Combination Transaction, of the Outstanding Capital Stock and Outstanding Voting Securities, as the case may be and (ii) fifty percent (50%) or more of the members of the board of directors of the corporation resulting from such Business Combination Transaction were members of the Board of Directors of such Party at the time of the execution of the initial agreement, or of the action of the Board of Directors of such Party, providing for such Business Combination Transaction; or

(c) a Party or any of its Affiliates sells or transfers to any Specified Person(s) (other than the other Party or its Affiliates) in one or more related transactions properties or assets representing all or substantially all of such Party's business or assets at the time of such sale or transfer.

1.23 "**Claim**" has the meaning set forth in Section 15.3.

1.24 "**Clinical Trial**" means any human clinical trial of a Licensed Collaboration Compound or Licensed Collaboration Product.

1.25 "**CMC**" means chemistry, manufacturing and controls with respect to Licensed Collaboration Compounds or Licensed Collaboration Products, including the chemistry, manufacturing and controls section of Regulatory Materials for the Licensed Collaboration Products and all data contained or referenced therein.

1.26 "**Collaboration In-License**" has the meaning set forth in Section 8.4(e)(ii)B.

1.27 "**Collaboration Target**" means the (a) Initial Collaboration Targets set forth on **Exhibit A,** (b) any Substitute Target that is selected as a Designated Target in accordance with Section 3.4(c) of this Agreement, (c) any Reserved Target, and (d) [***], in each case ((a), (b), (c) and (d)) for so long as any such Target remains an Initial Collaboration Target, Designated Target, Substitute Target or Reserved Target.

1.28 "**Combination Product**" means a product that includes at least one additional active ingredient (whether coformulated or copackaged) that is not a Licensed Collaboration Compound. Pharmaceutical dosage form vehicles, adjuvants, and excipients shall not be deemed to be "active ingredients", except in the case where such vehicle, adjuvant, or excipient is recognized by the FDA as an active ingredient in accordance with 21 CFR 210.3(b)(7).

1.29 "**Commercial Arbitration Rules**" has the meaning set forth in Section 16.2(b).

1.30 "**Commercialize**" or "**Commercialization**" means the marketing, promotion, sale (and offer for sale or contract to sell), distribution, importation or other commercial exploitation (including pricing and reimbursement activities) for a Licensed Product in the Territory.

Commercialization shall include commercial activities conducted in preparation for Licensed Product launch.

1.31 "**Commercially Reasonable Efforts**" means, with respect BMS' obligations under this Agreement, [***]. "**Commercially Reasonable Efforts**" means, with respect to Schrödinger's obligations under this Agreement, [***].

1.32 "**Companion Diagnostic**" means a diagnostic product that provides information for the safe and effective use of a Licensed Collaboration Compound or Licensed Collaboration Product, including to identify patients who are most likely to benefit from treatment, to identify patients who are likely to be at increased risk for serious side effects as a result of treatment, or to monitor response to treatment. For example, a Companion Diagnostic may detect or quantify the presence or amount of an analyte in body or tissue that affects the pathogenesis of the target disease.

1.33 "**Compound**" means any nucleic acid, antibody, biologic, compound, small molecule or other molecule.

1.34 "**Confidential Information**" means, with respect to a Party, and subject to Section 12.1, all non-public Information of such Party that is disclosed to the other Party under this Agreement or the Prior CDA or generated under or in connection with the Research Plans, which may include specifications, know-how, trade secrets, technical information, models, business information, inventions, discoveries, methods, procedures, formulae, protocols, techniques, data, and unpublished patent applications, whether disclosed in oral, written, graphic, or electronic form; provided, that, notwithstanding the foregoing, (a) the existence and terms of this Agreement shall be deemed to be the Confidential Information of both Parties and both Parties shall be deemed to be the Receiving Party with respect thereto, (b) Joint Inventions (subject to the subclause (c) below) shall be deemed to be the Confidential Information of both Parties, and both Parties shall be deemed to be the Disclosing Party with respect thereto, (c) for a given Designated Target, any Information specifically relating to Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target or the Development, Commercialization or other Exploitation thereof (including, for clarity, (i) Designated Target structure-based compound design information for such Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target, or (ii) any proprietary data generated under this Agreement that specifically relates to the Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target that is used to fit specific parameters of a model (e.g., to parameterize a QSAR model) to specific classes and types of compounds) ("**Licensed Collaboration Product Information**") shall be deemed the Confidential Information of [***], and [***] shall be deemed to be the Disclosing Party, and [***] shall be deemed to be the Receiving Party, with respect thereto; provided that [***], (d) except for any Schrödinger Platform Inventions assigned to Schrödinger by or on behalf of BMS pursuant to Section 9.1(b) in connection with BMS' exercise of its license grant under Section 7.1(b), the Schrödinger Platform and Schrödinger Platform Inventions shall be the Confidential Information of Schrödinger, and Schrödinger will have no obligation to disclose the Schrödinger Platform or Schrödinger Platform Inventions to BMS, (e) for a Terminated Target, any Confidential Information disclosed by Schrödinger that solely and specifically relates to Reversion Compounds or Reversion Products for such Terminated Target, or the development, Manufacture, commercialization or other Exploitation thereof (including, for

clarity, Confidential Information owned or controlled by Schrödinger that solely and specifically relates to (i) Terminated Target structure-based compound design information for such Reversion Compounds or Reversion Products, or (ii) any proprietary data that is generated under this Agreement and solely and specifically related to the Reversion Compounds or Reversion Products for such Terminated Target that is used to fit specific parameters of a model (e.g., to parameterize a QSAR model) to specific classes and types of compounds) shall be Confidential Information of Schrödinger, and BMS will have no rights with respect thereto under this Agreement. For clarity, any use or disclosure thereof that is authorized under Article 12 shall not be restricted by, or be deemed a violation of, such Prior CDA.

1.35 "**Control**" or "**Controlled**" means, with respect to any Material, Information, Patent or intellectual property right, that a Party or its Affiliate (a) owns such Material, Information, Patent or intellectual property right, or (b) has a license or right to use to such Material, Information, Patent or intellectual property right, in each case (a) or (b) with the ability to grant to the other Party access, a right to use, or a license, or a sublicense (as applicable) to such Material, Information, Patent or intellectual property right on the terms and conditions set forth herein, without violating the terms of any agreement or other arrangement with any Third Party in existence as of the time such Party or its Affiliates would first be required hereunder to grant the other Party such access, right to use or (sub)license. Schrödinger and its Affiliates shall not be deemed to Control any Material, Information, Patent or other intellectual property right licensed to Schrödinger pursuant to a Schrödinger New In-License entered into after the Effective Date unless such Schrödinger New In-License becomes a Collaboration In-License or unless such Schrödinger New In-License is otherwise deemed Controlled by Schrödinger pursuant to Section 8.4(e)(ii)B. Notwithstanding the foregoing, with respect to Acquirer Technology, the definition of "Control" is subject to the terms and conditions set forth in Section 12.6.

1.36 "**Conversion Date**" has the meaning set forth in the definition of "Converted Trial".

1.37 "**Converted Trial**" means an Adaptive Trial that is modified to meet and otherwise satisfies the criteria for a Registrational Trial based on pre-specified analyses following an analysis of interim data from subjects in such Adaptive Trial. For clarity, an Adaptive Trial shall only constitute a Converted Trial if, from and after the date following such modification or analysis, such Adaptive Trial is continued as a Registrational Trial (such date with respect to such Converted Trial, the "**Conversion Date**").

1.38 "**Cover**", "**Covered**" or "**Covering**" means, with respect to a Licensed Compound or a Licensed Product and a Patent, that, in absence of a (sub)license under, or ownership of, such Patent, the making, using, offering for sale, selling or importing of such Licensed Compound or Licensed Product would infringe such Patent as issued or, with respect to a pending claim included in such Patent, as if such pending claim were to issue without modification.

1.39 "**Cure Period**" has the meaning set forth in Section 13.3(a).

1.40 "**DC Candidate**" means, for a given Designated Target, each Licensed Collaboration Compound that the JSC or the R&D Expert determines has achieved the DC Criteria

for such Designated Target, or that BMS selects for such Designated Target, in each case pursuant to Section 3.6(c).

1.41 "**DC Criteria**" means, for a given Designated Target, (a) the requirements for a Licensed Collaboration Compound for such Designated Target to achieve development candidate status as set forth in the applicable Research Plan and (b) [***].

1.42 "**DC Payment**" has the meaning set forth in Section 8.2(a).

1.43 "**Definitive Degrader Agreement**" has the meaning set forth in Section 7.6.

1.44 "**Degrader Compound**" means [***] comprising all of the following: [***] and [***] a Target Binding Moiety.

1.45 "**Degrader Program**" has the meaning set forth in Section 7.6.

1.46 "**Designated Target**" means (a) each Initial Collaboration Target, (b) each Substitute Target that is selected as a Designated Target in accordance with Section 3.4(c), and (c) [***], in each case ((a), (b), and (c)) for so long as any such Target remains an Initial Collaboration Target or Substitute Target (including any Substitute Target that is selected as a Designated Target). For clarity, any Designated Target that is substituted pursuant to Section 3.4(c) shall no longer be a Designated Target or a Collaboration Target and shall be a Terminated Target from and after the date on which the new Research Plan (including the DC Criteria) for such new Designated Target is approved by the JSC hereunder.

1.47 "**Develop**" or "**Development**" means all activities that relate to obtaining, maintaining or expanding Regulatory Approval of a Licensed Compound or a Licensed Product and to supporting appropriate usage for such Licensed Compound or Licensed Product, for one or more Indications in the Field. This includes: (a) preclinical/nonclinical research and testing, toxicology, and Clinical Trials; and (b) preparation, submission, review, and development of data or other Information and Regulatory Materials for the purpose of submission to a Governmental Authority to obtain, maintain or expand Regulatory Approval of a Licensed Product (including contacts with Regulatory Authorities).

1.48 "**Disclosing Party**" has the meaning set forth in Section 12.1, subject to the proviso in the definition of Confidential Information.

1.49 "**Distracting Product**" has the meaning set forth in Section 11.4.

1.50 "**Dollar**" or "**$**" means the lawful currency of the United States.

1.51 "**Effective Date**" means the date specified in the initial paragraph of this Agreement.

1.52 "**EMA**" means the European Medicines Agency and any successor agency thereto.

1.53 "**EMA Approval**" means, with respect to a Licensed Collaboration Product, receipt of both (a) Regulatory Approval from the EMA of an MAA for such Licensed Collaboration

Product in the EU under the centralized EMA filing procedure and (b) pricing and reimbursement approvals in any [***] of the Major European Countries; provided, however, that if the centralized EMA filing procedure is not used, EMA Approval will be achieved upon receipt of Regulatory Approval from the applicable Regulatory Authority of an MAA for such Licensed Collaboration Product and receipt of pricing and reimbursement approvals in any [***] of the Major European Countries.

1.54 "**Europe**" means the countries comprising the European Union as it may be constituted from time to time, together with those additional countries comprising the European Economic Area (as of the Effective Date, Iceland, Liechtenstein and Norway) as it may be constituted from time to time, and Switzerland and the United Kingdom.

1.55 "**EU**" or "**European Union**" means the European Union, as its membership may be constituted from time to time, and any successor thereto, and which, as of the Effective Date, consists of Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden and that certain portion of Cyprus included in such organization.

1.56 "**Executive Officer**" means, in the case of BMS, [***], and in the case of Schrödinger, Schrödinger's [***].

1.57 "**Existing Patents**" has the meaning set forth in Section 14.2(a).

1.58 "**Expert**" means a mutually acceptable, disinterested, conflict-of-interest-free individual not affiliated with either Party or its Affiliates who, with respect to a dispute concerning a financial, commercial, scientific or regulatory matter possesses appropriate expertise to resolve such dispute. The Expert (or any of the Expert's current or former employers) (a) shall not be or have been at any time an Affiliate, employee, consultant (during the previous [***]), officer or director of either Party or any of its Affiliates, or (b) shall not own equity or debt in either Party or any of its Affiliates (other than equity or debt owned through a broad based mutual fund or exchange trade fund).

1.59 "**Exploit**" or "**Exploitation**" means, with respect to a Compound, product or process, to make, have made, import, use, sell or offer for sale, including to research, develop, commercialize, register, modify, enhance, improve, Manufacture, hold or keep (whether for disposal or otherwise), formulate, optimize, have used, export, transport, distribute, promote, market or have sold or otherwise dispose of such Compound, product or process.

1.60 "**FDA**" means the United States Food and Drug Administration and any successor agency thereto.

1.61 "**FD&C Act**" or "**Act**" means the United States Federal Food, Drug, and Cosmetic Act, as amended.

1.62 "**Field**" means, with respect to a Licensed Compound or Licensed Product, all indications and uses, including the diagnosis, prevention, palliation, control or treatment of any indication, disease, disorder or condition, including the Exploitation of Companion Diagnostics.

1.63 "**Final Offer**" has the meaning set forth in Section 16.2(d)(i).

1.64 "**First Commercial Sale**" means, with respect to a Licensed Collaboration Product or Termination Product and a country, the first sale to a Third Party that is not a Related Party of such Licensed Collaboration Product or Termination Product, as applicable, in such country after Regulatory Approval of such Licensed Collaboration Product or Termination Product has been obtained in such country.

1.65 "**Future In-Licensed IP**" has the meaning set forth in Section 8.4(e)(ii).

1.66 "**GAAP**" means generally accepted accounting principles in the U.S. consistently applied.

1.67 "**Generic Product**" means, with respect to a Licensed Collaboration Product in a country, any pharmaceutical product that (a) is distributed by a Third Party under a Marketing Authorization Application approved by a Regulatory Authority in reliance, in whole or in part, on the prior approval (or on safety or efficacy data submitted in support of the prior approval) of such Licensed Collaboration Product, including any product authorized for sale (i) in the U.S. pursuant to Section 505(b)(2) or Section 505(j) of the Act (21 U.S.C. 355(b)(2) and 21 U.S.C. 355(j), respectively), (ii) in the EU pursuant to a provision of Articles 10, 10a or 10b of Parliament and Council Directive 2001/83/EC as amended (including an application under Article 6.1 of Parliament and Council Regulation (EC) No 726/2004 that relies for its content on any such provision) or (iii) in any other country or jurisdiction pursuant to all equivalents of such provisions or (b) is otherwise substitutable under Applicable Law for such Licensed Collaboration Product when dispensed without the intervention of a physician or other health care provider with prescribing authority.

1.68 "[***]" means, [***].

1.69 "**Governmental Authority**" means any multi-national, federal, state, local, municipal or other government authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, court, tribunal or other entity).

1.70 "**Handoff**" has the meaning set forth in Section 4.1(a).

1.71 "**Immunology Targets**" means (a) the Initial Collaboration Targets designated as "Immunology Targets" on **Exhibit A** hereto, and (b) any Substitute Targets designated by the JSC as "Immunology Targets".

1.72 "**IND**" means (a) an Investigational New Drug Application as defined in the FD&C Act and applicable regulations promulgated thereunder by the FDA, or (b) the equivalent application to the applicable Regulatory Authority in any other regulatory jurisdiction, the filing of which is necessary to initiate or conduct clinical testing of a pharmaceutical product in humans in such jurisdiction.

1.73 "**Indemnified Party**" has the meaning set forth in Section 15.3.

1.74 "**Indemnifying Party**" has the meaning set forth in Section 15.3.

1.75 "**Indication**" has the meaning set forth in Section 8.2(d).

1.76 "**Information**" means any data, results, and information of any type whatsoever, in any tangible or intangible form, including know-how, trade secrets, practices, techniques, methods, processes, inventions, developments, specifications, formulations, formulae, software, source code, object code, algorithms, marketing reports, expertise, stability, technology, test data (including pharmacological, biological, chemical, biochemical, toxicological, and clinical test data), manufacturing (including CMC) data, analytical and quality control data, stability data, studies and procedures.

1.77 "**Infringement**" has the meaning set forth in Section 9.5(a).

1.78 "**Initial Collaboration Targets**" has the meaning set forth in Section 3.4(a).

1.79 "[***]" has the meaning set forth in Section [***].

1.80 "**Initiation**" of a Clinical Trial means the first dosing of the first subject in the relevant Clinical Trial of a Licensed Collaboration Product in accordance with the applicable protocol and Applicable Law; provided, however, that a Clinical Trial that does not constitute a Registrational Trial at the time the first patient is dosed shall not be deemed to be Initiated for purposes of the Milestone Payments for Registrational Trials pursuant to Section 8.2 until the first patient is first dosed in such Clinical Trial after such Clinical Trial constitutes a Registrational Trial, in accordance with Section 1.142 (or, with respect to an Adaptive Trial, after the Conversion Date for such Adaptive Trial).

1.81 "**Insolvency Event**" has the meaning set forth in Section 13.4.

1.82 "**Inventor Compensation**" has the meaning set forth in Section 8.14.

1.83 "**JNDA**" means a new drug application filed with the MHLW required for marketing approval for the applicable Licensed Collaboration Product in Japan.

1.84 "**JNDA Approval**" shall be achieved upon receiving Regulatory Approval of a JNDA by the MHLW and, if required by Applicable Law, receipt of pricing and reimbursement approvals, for the applicable Licensed Collaboration Product in Japan.

1.85 "**Joint Invention**" has the meaning set forth in Section 9.1(a).

1.86 "**Joint Patent**" means a Patent that claims a Joint Invention.

1.87 "**Joint Steering Committee**" or "**JSC**" means the committee formed by the Parties as described in Section 2.1(a).

1.88 "**Licensed Binder**" means, for a given Designated Target, any Target Binding Moieties Controlled by Schrödinger or its Affiliates for such Designated Target.

1.89 "**Licensed Collaboration Compound**" means, for a given Designated Target, any Target Compound Controlled by Schrödinger or any of its Affiliates as of the Effective Date or during the Term for such Designated Target [***] that [***].

1.90 "**Licensed Collaboration Product**" means, for a given Designated Target, any product containing a Licensed Collaboration Compound for such Designated Target as an active ingredient (alone or with other active ingredients) for use in the Field in the Territory in all presentations, formulations, and dosage forms.

1.91 "**Licensed Collaboration Product Information**" has the meaning set forth in the definition of "Confidential Information".

1.92 "**Licensed Other Modality Compound**" means, for a given Designated Target, any Target Compound Controlled by Schrödinger or any of its Affiliates as of the Effective Date or during the Term for such Designated Target [***] that is not a Licensed Collaboration Compound or Licensed Collaboration Product.

1.93 "**Licensed Other Modality Product**" means, for a given Designated Target, any product containing a Licensed Other Modality Compound for such Designated Target as an active ingredient (alone or with other active ingredients) for use in the Field in the Territory in all presentations, formulations, and dosage forms.

1.94 "**Licensed Compounds**" means, for a given Designated Target, all Licensed Collaboration Compounds and Licensed Other Modality Compounds for such Designated Target.

1.95 "**Licensed Products**" means, for a given Designated Target, all Licensed Collaboration Products and Licensed Other Modality Products for such Designated Target.

1.96 "**Lien**" means any lien, pledge, encumbrance, mortgage, security interest, purchase option, call or similar right, conditional and installment sale agreements, charges or claims of any kind (excluding any non-exclusive license or other non-exclusive rights granted to Third Parties under any of the Schrödinger Technology that do not conflict with or otherwise limit the rights granted to BMS under this Agreement).

1.97 "**Litigable Matter**" means any dispute between the Parties concerning the validity, scope, enforceability, inventorship, or ownership of intellectual property rights, or any breach or alleged breach by a Party of any of Sections [***] by a Party.

1.98 "**LO Criteria**" means, with respect to each Designated Target, the requirements for a Licensed Collaboration Compound for such Designated Target to achieve lead optimization status established pursuant to Section 3.5.

1.99 "**LO Timeline**" has the meaning set forth in Section 3.5(a).

1.100 "**MAA**" or "**Marketing Authorization Application**" means an NDA or similar application for Regulatory Approval for a Licensed Collaboration Product in a country or region of the Territory.

1.101 "**Major European Countries**" means [***].

1.102 "**Major Market**" means the United States, the Major European Countries and Japan.

1.103 "**Manufacture**" means all activities related to the manufacturing of a product or any component or ingredient thereof, including test method development and stability testing, formulation, process development, process qualification and validation, manufacturing scale-up whether before or after Regulatory Approval, manufacturing any product in bulk or finished form for Development or Commercialization (as applicable), including filling and finishing, packaging, labeling, shipping and holding, in-process and finished product testing, release of a product or any component or ingredient thereof, quality assurance and quality control activities related to manufacturing and release of a product, and regulatory activities related to any of the foregoing.

1.104 "**Materials**" means all biological materials, chemical compounds and other materials, including Clinical Trial samples, cell lines, compounds, lipids, assays, viruses and vectors.

1.105 "**MHLW**" means the Japanese Ministry of Health, Labour and Welfare, and any successor agency thereto.

1.106 "**Milestone Payment**" has the meaning set forth in Section 8.2(b).

1.107 "**NDA**" or "**New Drug Application**" has the meaning set forth as described in the FD&C Act and 21 C.F.R. Part 314.

1.108 "**NDA Approval**" means, with respect to a Licensed Collaboration Product, receipt of Regulatory Approval from the FDA of an NDA and, if required by Applicable Law, receipt of pricing and reimbursement approvals for such Licensed Collaboration Product, in the U.S.

1.109 "[***]" has the meaning set forth in Section [***].

1.110 "**Net Sales**" means the gross amount invoiced in arms-length transactions by a Related Party(ies) from or on account of the sale of Licensed Collaboration Products to a non-Related Party (net of any inventory management fees or similar fees based on or reasonably allocable to the sale of Licensed Collaboration Products), less the sum of the following:

[***]

A Licensed Collaboration Product shall be considered "sold" when invoiced. Such amounts shall be determined from the books and records of the Related Party.

It is understood that any accruals for individual items reflected in Net Sales are periodically (at least Calendar Quarterly) trued up and adjusted by each Related Party consistent with its customary practices and in accordance with GAAP.

[***].

Net Sales of any Combination Product for the purpose of calculating milestones or royalties due under this Agreement shall be determined on a country-by-country basis for a given accounting period as follows: first, the Related Party(ies) shall determine the actual Net Sales of such Combination Product (using the above provisions), and then: [***] (each, an "**Other Active Ingredient**") [***].

1.111 "**Neurology Targets**" means (a) the Initial Collaboration Targets designated as "Neurology Targets" on **Exhibit A** hereto, and (b) any Substitute Targets designated by the JSC as "Neurology Targets."

1.112 "[***]" means, [***].

1.113 "**Oncology Targets**" means (a) the Initial Collaboration Targets designated as "Oncology Targets" on **Exhibit A** hereto, and (b) any Substitute Targets designated by the JSC as "Oncology Targets."

1.114 "**Other Active Ingredient**" has the meaning set forth in the definition of "Net Sales".

1.115 "**Other Schrödinger Patents**" has the meaning set forth in Section 9.4(b).

1.116 "**Outstanding Capital Stock**" has the meaning set forth in the definition of "Change of Control Transaction".

1.117 "**Outstanding Voting Securities**" has the meaning set forth in the definition of "Change of Control Transaction".

1.118 "**Patent**" means (a) all patents and patent applications, including provisional patent applications, (b) all patent applications filed either from such patents, patent applications or provisional applications or from an application claiming priority from any of these, including divisionals, continuations, continuations-in-part, converted provisionals, and continued prosecution applications, (c) any and all patents that have issued or in the future issue from the foregoing patent applications in (a) and (b), including utility models, petty patents and design patents and certificates of invention, (d) any and all extensions or restorations by existing or future extension or restoration mechanisms, including adjustments, revalidations, reissues, re-examinations and extensions (including any supplementary protection certificates and the like) of the foregoing patents or patent applications in (a), (b) and (c), and (e) any similar rights, including so-called pipeline protection, or any importation, revalidation, confirmation or introduction patent or registration patent or patents of addition to any of such foregoing patent applications and patents.

1.119 "**Patent Challenge**" has the meaning set forth in Section 9.7(a).

1.120 "**Patent Contact**" has the meaning set forth in Section 9.9.

1.121 "**Patent Firm**" has the meaning set forth in Section 9.2(a).

1.122 "**Patent Prosecution Costs**" means the direct out-of-pocket costs (including the reasonable fees and expenses incurred to outside counsel and other Third Parties, including filing,

prosecution and maintenance fees incurred to Governmental Authorities) recorded as an expense by a Party or any of its Affiliates (in accordance with GAAP and its customary accounting practices) after the Effective Date and during the Term and pursuant to this Agreement, in connection with the preparation, filing, prosecution, maintenance and extension of Patents, including costs of Patent interference, appeal, opposition, reissue, reexamination, revocation, petitions or other administrative proceedings with respect to Patents and filing and registration fees.

1.123 "**Permitted Reserved Target Activities**" has the meaning set forth in Section 3.4(b)(ii).

1.124 "**Person**" means any individual, firm, corporation, partnership, limited liability company, trust, business trust, joint venture company, governmental authority, association or other entity.

1.125 "**Phase 1 Clinical Trial**" means a Clinical Trial of a Licensed Collaboration Product, the principal purpose of which is to evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of such Licensed Collaboration Product for a particular Indication or Indications and identifying a recommended dose and regimen for future studies as described in 21 C.F.R. 312.21(a), as amended from time to time, or a similar clinical study prescribed by the relevant Regulatory Authorities or Applicable Law in a country other than the U.S.

1.126 "**Phase 1b Clinical Trial**" means a Clinical Trial of a Licensed Collaboration Product, the principal purpose of which is a further determination of safety, pharmacokinetics and pharmacodynamics, and that includes an assessment of a preliminary signal of efficacy in a clinical outcome that is relevant to the proposed Indication or Indications, whether or not in combination with concomitant treatment after an initial Phase 1 Clinical Trial, prior to commencement of Phase 2 Clinical Trials or phase 3 Clinical Trials, and that provides (itself or together with other available data) sufficient evidence of safety and a preliminary signal of efficacy to be included in, and supportive of filings for a Phase 2 Clinical Trial or a phase 3 Clinical Trial with Regulatory Authorities, or a similar clinical study prescribed by the Regulatory Authorities in a foreign country.

1.127 "**Phase 2 Clinical Trial**" means (a) a Phase 2a Clinical Trial or (b) a controlled Clinical Trial of a Licensed Collaboration Product, the principal purpose of which is to evaluate the effectiveness of such Licensed Collaboration Product for a particular Indication or Indications in patients with the disease or condition under study and to determine the common short-term side effects and risks associated with such Licensed Collaboration Product, as described in 21 C.F.R. § 312.21(b), as amended from time to time, or a similar clinical study prescribed by the relevant Regulatory Authorities or Applicable Law in a country other than the U.S. For clarity, if a Phase 2 Clinical Trial that is an Adaptive Trial becomes a Converted Trial, such Phase 2 Clinical Trial shall be deemed a Registrational Trial after the Conversion Date.

1.128 "**Phase 2a Clinical Trial**" means a Clinical Trial of a Licensed Collaboration Product that (a) utilizes the pharmacokinetic and pharmacodynamic information obtained from one or more previously conducted Phase 1 Clinical Trials(s) or other Phase 2a Clinical Trial(s) in

order to confirm the optimal manner of use of such Licensed Collaboration Product and to better determine safety and efficacy, and (b) [***].

1.129 "**PHSA**" means the Public Health Service Act as set forth at 42 U.S.C. Chapter 6A, as may be amended from time to time, together with any rules, regulations and requirements promulgated thereunder (including all additions, supplements, extensions and modifications thereto).

1.130 "**Platform IP**" has the meaning set forth in Section 8.4(e)(ii)A.

1.131 "[***]" means [***].

1.132 "**Primary Activity**" means:

(a) [***]

(b) [***].

1.133 "**Prior CDA**" means the Confidentiality Agreement entered into by BMS and Schrödinger effective as of [***] (as amended).

1.134 "**Product Marks**" has the meaning set forth in Section 10.1.

1.135 "**Product Specific Infringement Action**" has the meaning set forth in Section 9.5(b).

1.136 "**Product Specific Patent**" means, for a given Designated Target, any Patent (including [***]. As of the Effective Date, the Product Specific Patents consist of the Patents listed in **Exhibit C**.

1.137 "**Prosecute**" or "**Prosecution**" has the meaning set forth in Section 9.2(a).

1.138 "**Publication**" has the meaning set forth in Section 12.4.

1.139 "**R&D Expert**" means an Expert with sufficient experience for the relevant matter at issue, who has both relevant scientific and business expertise in the research and development of human therapeutic products.

1.140 "**R&D Expert Matters**" has the meaning set forth in Section 16.1.

1.141 "**Receiving Party**" has the meaning set forth in Section 12.1, subject to the proviso in the definition of Confidential Information.

1.142 "**Registrational Trial**" means, with respect to a Licensed Collaboration Product, a Clinical Trial (whether or not designated a phase 3 clinical trial) for such Licensed Collaboration Product with a sufficient number of subjects, (a) the results of which, together with prior data and information concerning such Licensed Collaboration Product, are intended to establish that such Licensed Collaboration Product is safe and effective for its intended Indication; and (b) that forms the basis (alone or with one (1) or more additional Registrational Trials) of an effectiveness claim

in support of Regulatory Approval of an NDA for such Licensed Collaboration Product for its intended Indication. For clarity, a Converted Trial shall only constitute a Registrational Trial for purposes of this Agreement from and after the Conversion Date with respect to such Converted Trial.

1.143 "**Regulatory Approval**" means with respect to a country, extra-national territory, province, state, or other regulatory jurisdiction, any and all approvals, licenses, registrations or authorizations of any Regulatory Authority necessary in order to commercially distribute, sell, Manufacture, import, export or market a product in such country, state, province, or some or all of such extra-national territory or regulatory jurisdiction, including any applicable pricing and reimbursement approvals and labeling approval in such country.

1.144 "**Regulatory Authority**" means, with respect to a particular country, extra-national territory, province, state, or other regulatory jurisdiction, any applicable Governmental Authority with authority over the Development, Manufacture or Commercialization of Licensed Collaboration Products in or for such country, extra-national territory, province, state, or other regulatory jurisdiction, including the FDA, the EMA, the European Commission and the MHLW, and in each case including any successor thereto.

1.145 "**Regulatory Exclusivity Period**" means, with respect to each Licensed Collaboration Product in any country in the Territory, a period of exclusivity (other than Patent exclusivity) granted or afforded by Applicable Law or by a Regulatory Authority in such country that confers exclusive marketing rights with respect to such Licensed Collaboration Product, as applicable, in such country, such as new chemical entity exclusivity, orphan drug exclusivity, non-patent related pediatric exclusivity or any other applicable marketing exclusivity, including any such periods listed in the FDA's Orange Book or any such periods under national implementations in the EU of Article 10 of Directive 2001/83/ED, Article 14(11) of Parliament and Council Regulation (EC) No. 726/2004, Parliament and Council Regulation (ED) No. 141/2000 on orphan medicines, Parliament and Council Regulation (ED) No. 1901/2006 on medicinal products for pediatric use and all international equivalents of any of the foregoing.

1.146 "**Regulatory Materials**" means regulatory applications, submissions, dossiers, notifications, registrations, Regulatory Approvals or other filings or communications made to or with, or other approvals granted by, a Regulatory Authority that are necessary or reasonably desirable in order to Develop, Manufacture or Commercialize a Licensed Collaboration Product in a particular country or regulatory jurisdiction. Regulatory Materials include INDs, MAAs and NDAs.

1.147 "**Related Party**" means BMS, its Affiliates, and its and their respective Sublicensees (and such Sublicensees' Affiliates) of one or more Licensed Collaboration Products. For clarity, Related Party shall not include any distributors, wholesalers or the like unless such entity is an Affiliate of BMS.

1.148 "**Research Plan**" has the meaning set forth in Section 3.3(a).

1.149 "**Research Program**" has the meaning set forth in Section 3.1(a).

1.150 "**Research Term**" has the meaning set forth in Section 3.2(a).

1.151 "**Reserved Target**" means (a) those Targets included on the Reserved Target List as of the Effective Date, (b) any Neurology Target added to the Reserved Target List by BMS pursuant to Section 3.4(b)(i), (c) any other Targets that the Parties mutually agree to include on the Reserved Target List during the Term (including in accordance with Section 3.4(b)), and (d) [***], in each case (a)-(c), for so long as any such Target remains on the Reserved Target List. For clarity, any Reserved Target that is removed or released from the Reserved Target List pursuant to Section 3.4(b) shall no longer be a Reserved Target or a Collaboration Target from and after the date on which such Reserved Target is removed or released.

1.152 "**Reserved Target List**" has the meaning set forth in Section 3.4(b)(i).

1.153 "**Reversion Compounds**" has the meaning set forth in Section 13.8(a).

1.154 "**Reversion IP**" has the meaning set forth in Section 13.8(b).

1.155 "**Reversion Products**" has the meaning set forth in Section 13.8(a).

1.156 "**Royalty Floor**" has the meaning set forth in Section 8.4(h).

1.157 "**Royalty Rate Matter**" means any dispute concerning the determination of the royalty rate for Termination Products pursuant to Section 13.8(b).

1.158 "**Royalty Term**" means, for each Licensed Collaboration Product, on a country-by-country basis, the period commencing on the First Commercial Sale of such Licensed Collaboration Product in such country and ending on the later of (a) ten (10) years after the First Commercial Sale of such Licensed Collaboration Product in such country, (b) the expiration of the last Valid Claim of the last to expire [***], in each case, Covering the Licensed Collaboration Product in such country (excluding any method of manufacturing Patent), [***] in such country, and (c) expiration of any Regulatory Exclusivity Period for such Licensed Collaboration Product in such country.

1.159 "**Safety Reason**" means, with respect to a Licensed Collaboration Compound or Licensed Collaboration Product, it is BMS' or any of its Affiliates' or Sublicensees' reasonable belief that based upon additional information that becomes available or an analysis of the existing information at any time, that the medical risk/benefit of further Development or Commercialization of such Licensed Collaboration Compound or Licensed Collaboration Product is so unfavorable as to be incompatible with the welfare of patients.

1.160 "**Schrödinger Claims**" has the meaning set forth in Section 15.2.

1.161 "**Schrödinger Indemnitees**" has the meaning set forth in Section 15.2.

1.162 "**Schrödinger Know-How**" means, for a given Designated Target, all Information Controlled by Schrödinger or, subject to Section 12.6, its Affiliate(s) as of the Effective Date or thereafter during the Term that are [***].

1.163 "**Schrödinger Materials**" means all Materials in the possession and Control of Schrödinger or its Affiliate(s) as of the Effective Date or thereafter during the Term that are

necessary or reasonably useful for the evaluation, Development or Manufacture of a Licensed Collaboration Compound or a Licensed Collaboration Product.

1.164 "**Schrödinger New In-License**" has the meaning set forth in Section 8.4(e)(ii)B.

1.165 "**Schrödinger Patent Challenge**" has the meaning set forth in Section 13.5.

1.166 "**Schrödinger Patent Rights**" means, for a given Designated Target, all Patents that are Controlled by Schrödinger or, subject to Section 12.6, its Affiliate(s) as of the Effective Date or thereafter during the Term and that are [***].

1.167 "**Schrödinger Platform**" means Schrödinger's or any of its Affiliates' proprietary physics-based computational, software products and programs that can predict critical properties of molecules, excluding any Licensed Collaboration Product Information. As of the Effective Date, the Schrödinger Platform includes the software products and programs set forth on Schedule 1.167. Upon BMS' written request, Schrödinger will provide an updated Schedule 1.167 to BMS.

1.168 "**Schrödinger Platform Inventions**" has the meaning set forth in Section 9.1(b).

1.169 "**Schrödinger Technology**" means the Schrödinger Patent Rights, Schrödinger Know-How and Schrödinger Materials.

1.170 "**Schrödinger Technology Services**" means the following services and activities: [***].

1.171 "**SEC**" means the U.S. Securities and Exchange Commission.

1.172 "**Segregated Technology**" has the meaning set forth in Section 12.6(b).

1.173 "**Specified Person**" has the meaning set forth in the definition of "Change of Control Transaction".

1.174 "**Sole Inventions**" has the meaning set forth in Section 9.1(a).

1.175 "[***]" has the meaning set forth in Section [***].

1.176 "[***]" has the meaning set forth in Section [***].

1.177 "**Sublicensee**" means any Third Party granted a sublicense under Section 7.2 hereof to the rights licensed to BMS hereunder, but shall not include any wholesaler or distributor that does not market or promote such Licensed Product.

1.178 "[***]" has the meaning set forth in Section [***].

1.179 "**Substitute Target**" has the meaning set forth in Section 3.4(c)(i).

1.180 "**Substitution Period**" means, for a given Designated Target, the earlier of (a) the date on which the JSC or the R&D Expert determines that a Licensed Collaboration Compound for such Designated Target meets the LO Criteria and (b) [***]; provided, however, that [***].

1.181 "**Target**" means (a) any specific DNA or protein identified by its ENSEMBL GENE ID number, and (b) if applicable, its genomic mutant identifier.

1.182 "**Target Binding Moiety**" means a ligand that binds to the protein of interest.

1.183 "**Target Compound**" means, for a given Designated Target, any Compound that [***]. By way of example, [***].

1.184 "**Term**" has the meaning set forth in Section 13.1.

1.185 "**Terminated Target**" means a Designated Target that becomes a "Terminated Target" as expressly set forth in this Agreement. For clarity, once a Designated Target is deemed a "Terminated Target" it shall no longer be a Collaboration Target or Designated Target for purposes of this Agreement.

1.186 "**Termination Compound**" has the meaning set forth in Section 13.8(b).

1.187 "**Termination Notice**" has the meaning set forth in Section 13.3(a).

1.188 "**Termination Product**" has the meaning set forth in Section 13.8(b).

1.189 "**Termination Product Regulatory Materials**" has the meaning set forth in Section 13.8(c).

1.190 "**Territory**" means all countries of the world.

1.191 "**Therapeutic Area**" means, for a given Designated Target, the therapeutic area for such Designated Target that is the focus of the Research Program for such Designated Target. For clarity, the Therapeutic Area for a Designated Target will be immunology, oncology or neurology.

1.192 "**Third Party**" means any Person other than Schrödinger or BMS or an Affiliate of either of Schrödinger or BMS.

1.193 "**Title 11**" has the meaning set forth in Section 17.3(a).

1.194 "**U.S.**" means the United States of America and its territories, districts and possessions.

1.195 "**Valid Claim**" means either (a) a claim of an issued and unexpired patent that has not been held permanently revoked, unenforceable or invalid by a decision of a court or other governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal and that is not admitted to be invalid or unenforceable through reissue, disclaimer or otherwise (i.e., only to the extent the subject matter is disclaimed or is sought to be deleted or amended through reissue), or (b) a claim of a pending patent application that has not been abandoned, finally rejected or expired without the possibility of appeal or refiling, provided however, that (x) Valid Claim shall exclude any such pending claim in an application that has not been granted within [***] following the earliest priority filing date for such application (unless and until such claim is granted) and (y) Valid Claim shall exclude any such pending claim that

does not have a reasonable bona fide basis for patentability (such reasonable bona fide basis to be determined by arbitrators pursuant to Section 16.2 who shall be an outside counsel selected by the Parties in the event that the Parties disagree as to whether there is a reasonable bona fide basis for patentability for such a claim), in either case of (x) or (y) unless and until such claim is granted at which time such claim will constitute a Valid Claim pursuant to the foregoing clause (a) if and for so long as it otherwise meets the requirements of the foregoing clause (a).

1.196 "**Valuation Expert**" has the meaning set forth in Section 16.2(d)(i).

1.197 "**Valuation Notice**" has the meaning set forth in Section 16.2(d)(i).

1.198 "**Variant**" means, with respect to a Target, any and all naturally occurring mutations, alternative sequences thereof, and fragments or peptides thereof, including post-translational modifications thereof, that are of sufficient specificity, sequence identity, sequence similarity, or length to still uniquely match the original ENSEMBL GENE ID for such Target. For example, [***].

1.199 "**Working Group**" has the meaning set forth in Section 2.1(d).

2. GOVERNANCE

2.1 Joint Steering Committee.

(a) **Establishment of JSC.** Promptly after the Effective Date and no later than the date which is [***] subsequent to the Effective Date, the Parties will establish a joint steering committee with the roles set forth in Section 2.1(c) (the "**Joint Steering Committee**" or "**JSC**"). Each Party will initially appoint [***] representatives to the JSC. The JSC may change its size from time to time by mutual consent of its members, provided that the JSC will consist at all times of an equal number of representatives of each of Schrödinger and BMS. The JSC membership and procedures are further described in this Section 2.1. Each Party may at any time appoint different JSC representatives by written notice to the other Party.

(b) **Membership of JSC.** Each of Schrödinger and BMS will designate representatives with appropriate expertise to serve as members of the JSC. Each of Schrödinger and BMS will select from their representatives a co-chairperson for the JSC, and each Party may change its designated co-chairperson from time to time upon written notice to the other Party. The Alliance Managers will be responsible for calling meetings and preparing and circulating an agenda in advance of each meeting; provided that the Alliance Managers will call an ad hoc meeting of the JSC promptly upon the reasonable written request of either co-chairperson to convene such ad hoc meeting. The Alliance Managers or other employees or consultants of a Party who are not representatives of such Party on the JSC may attend meetings of the JSC with the prior written consent of the other Party, not to be unreasonably withheld, conditioned or delayed; provided, however, that such attendees (i) shall not vote or otherwise participate in the decision-making process of the JSC and (ii) are bound by obligations of confidentiality and non-disclosure at least as protective of the other Party as those set forth in Article 12.

(c) **Role of JSC.** The JSC will be responsible for (i) the overall management of the Research Program, including serving as a forum for exchanging information and facilitating

discussions regarding the conduct of the Research Program, (ii) approving the adoption of the LO Criteria and the LO Timeline for each Designated Target, (iii) reviewing, revising and approving (A) each Research Plan prepared by Schrödinger in consultation with BMS for any Substitute Target that is selected as a Designated Target in accordance with Section 3.4(c) (including the Primary Activity, LO Criteria, the LO Timeline and DC Criteria with respect thereto) and recording the date of approval of the Research Plan for each new Substitute Target in the JSC minutes in accordance with Section 3.4(c) and (B) any changes, modifications, amendments and updates to any established Research Plan for a Designated Target, (iv) the monitoring, reviewing and recording of the progress of the Research Program, including all activities performed by the Working Groups, (v) on a Designated Target-by-Designated Target basis, confirming whether a Licensed Collaboration Compound has achieved the LO Criteria or DC Criteria (as applicable) for such Designated Target in accordance with Section 3.5(b) or Section 3.6(c) (as applicable), (vi) reviewing and discussing progress in any research and Development and other activities that the Parties perform in relation to Licensed Collaboration Compounds and Licensed Collaboration Products in the Field, including the use of any Third Party contractors by Schrödinger in the performance of Schrödinger's obligations in connection with the Research Program, subject to Section 3.12, (vii) reviewing and discussing any Permitted Reserved Target Activities, including the nature and scope of activities to be performed and the results thereof, (viii) reviewing and discussing proposed modifications to the Reserved Target List, (ix) facilitating the prosecution of the Product Specific Patents in accordance with Article 9 below, (x) reviewing, revising and approving a charter prepared by the Alliance Managers in accordance with Section 2.1(d) for each Working Group, (xi) [***] and (xii) performing such other responsibilities as expressly delegated to the JSC as set forth in this Agreement or as may be mutually agreed by the Parties in writing from time to time. As needed, the JSC shall establish subcommittees and working groups that will report to the JSC to further the objectives of the Research Program as described in Section 2.1(d) below.

(d) **Subcommittees and Working Groups**. From time to time, either Party may propose that the JSC may establish and delegate duties to other joint committees, subcommittees or directed teams (each, a "**Working Group**") on an "as needed" basis to oversee particular projects or activities, which may include activities under a Research Plan for a given Designated Target, which delegations shall be reflected in the minutes of the meetings of the JSC. Such Working Groups may be established on an ad hoc basis for purposes of a specific project, for the life of the Research Term or on such other basis as the JSC may determine, and shall be constituted and shall operate as the JSC may determine; provided, that each Working Group shall have equal representation from each Party shall be subject to Section 12.7 and decision making shall be by consensus, with each Party's representatives on the applicable Working Group collectively having one (1) vote on all matters brought before the Working Group. Each Working Group and its activities shall be subject to the direction, review and approval of, and shall report to, the JSC. The Alliance Managers will prepare for approval by the JSC in accordance with Section 2.1(c) a charter for each Working Group, which charter will reflect the agreed upon scope of activities for each Working Group; provided, for clarity, that (A) the scope of the Working Group's activities may address items and activities that are not included in the DC Criteria for a given Designated Target (e.g., combination studies, biomarkers, translational activities, transitional activities, patent prosecution, etc.), and (B) at all times Schrödinger will be solely responsible for the synthesis queue and modeling strategy for each Designated Target. If a Working Group proposes that the Parties conduct additional activities as part of the Research

Program, such activities (including the roles and responsibilities for each Party for such activities and, if applicable, the budget for non-DC Criteria required items) shall be set forth in the Research Plan or an amendment to the Research Plan for the applicable Designated Target. In no event shall the authority of the Working Group exceed that specified for the JSC in this Article 2. Any matter not resolved by a Working Group shall be referred to the JSC for resolution in accordance with Section 2.1(e).

(e) **Decisions.** Decisions of the JSC shall be by unanimous vote, with each Party having collectively one (1) vote, provided that if, after attempts to amicably resolve any disagreement at the JSC, the Parties are unable to agree on a matter to be decided by the JSC within [***] after it has met and attempted to reach such decision, then either Party may, by written notice to the other, have such issue referred to the Executive Officers for resolution. If the Executive Officers are unable to resolve the matter within [***], or such other longer time the Executive Officers may otherwise agree upon, after the matter is referred to them, then [***] shall have the final decision-making authority; provided further that, [***].

(f) **JSC Meetings.** The JSC will hold meetings at such times and places as the co-chairpersons may determine. The JSC will meet at least [***] during the Research Term until discontinuation of the JSC in accordance with Section 2.2 below. The meetings of the JSC need not be in person and may be by telephone or any other method determined by the JSC. Each Party will bear its own costs associated with attending such meetings, including any costs relating to travel or such Party's participation in such meetings.

2.2 Discontinuation of JSC. With respect to each Designated Target, the JSC shall continue to exist until the last to occur of (a) the end of the Research Term, and (b) the filing with FDA of the first NDA for the first Licensed Collaboration Product for such Designated Target. Thereafter, for a given Designated Target, the JSC shall have no further roles or responsibilities under this Agreement with respect to such Designated Target, and the JSC shall be replaced by designees of each Party (who may be the Alliance Manager) that shall serve as a forum for the Parties for the purposes of the exchange of information and for BMS to update Schrödinger on the progress of the Development and Commercialization of Licensed Collaboration Compounds or Licensed Collaboration Products, which update shall be in the form of [***] report describing BMS' ongoing Development and Commercialization efforts for any applicable active programs for Licensed Collaboration Compounds or Licensed Collaboration Products in accordance with Section 4.2(c).

2.3 Limitations on Authority of the JSC. The JSC will have solely the roles and responsibilities assigned to it in this Article 2. The JSC will have no authority to amend, modify or waive compliance with this Agreement. For avoidance of doubt, the JSC will have no authority to amend, modify or limit [***] as set forth in this Agreement. The JSC shall not have the authority to alter, or waive compliance by a Party with, a Party's obligations under this Agreement. For the avoidance of doubt, the JSC shall not have oversight over, and decision-making authority with respect to, the research, Development, Manufacturing and Commercialization of Degrader Compounds containing Licensed Binders by the Parties (which instead shall be governed by the Definitive Degrader Agreement if executed by the Parties) or, subject to Section 3.4(b)(ii), any other Licensed Other Modality Compounds or Licensed Other Modality Products.

2.4 Minutes. The Parties shall alternate responsibility for preparing and circulating minutes of each meeting of the JSC, setting forth, inter alia, an overview of the discussions at the meeting and a list of any actions, decisions or determinations approved by the JSC. Such minutes shall be effective only after such minutes have been approved by both Parties in writing. Definitive minutes of all JSC meetings shall be finalized no later than [***] after the meeting to which the minutes pertain.

2.5 Alliance Managers. Each of the Parties will appoint one representative who possesses a general understanding of Development issues to act as its alliance manager (each, an "**Alliance Manager**"). The role of the Alliance Manager is to act as a primary point of contact between the Parties to assure a successful relationship between the Parties. The Alliance Managers will attend all meetings of the JSC and support the co-chairpersons of the JSC in the discharge of their responsibilities. An Alliance Manager may bring any matter to the attention of the JSC if such Alliance Manager reasonably believes that such matter warrants such attention. Each Party may change its designated Alliance Manager from time to time upon written notice to the other Party. Any Alliance Manager may designate a substitute to temporarily perform the functions of such Alliance Manager upon written notice to the other Party's Alliance Manager. Each Alliance Manager will be charged with creating and maintaining a collaborative work environment within the JSC. Each Alliance Manager also will:

(a) provide a single point of communication both internally within the Parties' respective organizations and between the Parties, including during such time as the JSC is no longer constituted;

(b) plan and coordinate any cooperative efforts under this Agreement, if any, and internal and external communications;

(c) take responsibility for ensuring that JSC activities, such as the conduct of required JSC meetings, occur as set forth in this Agreement and that relevant action items, if any, resulting from such meetings are appropriately carried out or otherwise addressed; and

(d) be the point of first referral in all matters of conflict resolution.

3. RESEARCH PROGRAM

3.1 Research Program.

(a) During the Research Term, the Parties will collaborate in carrying out a research program with respect to each Designated Target hereunder to discover, research and preclinically Develop Licensed Collaboration Compounds until achievement of the DC Criteria for such Designated Target (collectively, the "**Research Program**"). The Research Program will be carried out in accordance with the Research Plans. Schrödinger will have primary responsibility for the day-to-day implementation of the Research Program, and, in addition to the Working Groups, the Parties may mutually agree for BMS to perform certain aspects of the Research Program in accordance with the Research Plans. The objective of the Research Program will be for Schrödinger to deliver one (1) Licensed Collaboration Compound for each Designated Target that achieves the DC Criteria for such Designated Target for BMS to advance into additional

preclinical Development, human Clinical Trials and ultimately Commercialize as Licensed Collaboration Product(s).

(b) The Research Program will be conducted by each Party in good scientific manner, and in compliance with applicable good laboratory practices and with Applicable Law, to attempt to achieve the objectives of the Research Program. Each Party will comply with all Applicable Law in the performance of work under this Agreement. Each Party shall use reasonable efforts to ensure that its Affiliates and Third Party contractors (as applicable) perform any activities under the Research Program in good scientific manner and in compliance in all material respects with the requirements of Applicable Law.

(c) Each Party will maintain laboratories, offices and all other facilities at its own cost and expense and risk necessary to carry out its responsibilities under the Research Program pursuant to the Research Plans. Each Party agrees to make its employees reasonably available at their respective places of employment to consult with the other Party on issues arising relating to the Research Program. BMS and Schrödinger will cooperate with each other in carrying out the Research Program in accordance with the Research Plans.

3.2 Research Term.

(a) The Research Program will be carried out during the period commencing on the Effective Date and ending on the earlier of (i) four (4) years after the Effective Date and (ii) the date of delivery by Schrödinger of one (1) DC Candidate for each Designated Target for a total of five (5) DC Candidates, unless (in each case) this Agreement (in its entirety or with respect to a Collaboration Target or Designated Target) is terminated in accordance with Article 13, in which case [***], Schrödinger may elect, in its sole discretion, to provide written notice to BMS to extend the Research Term for such Designated Target for an additional period of time that [***], and (B) the Parties may mutually agree to extend the Research Term for up to one (1) additional one (1)-year period (such period, as may be extended pursuant to this Section 3.2(a), being the "**Research Term**").

(b) For an extension of the Research Term for a given Designated Target, subject to Section 3.3, Schrödinger will prepare in consultation with BMS, and the JSC will review, revise and approve in accordance with Section 2.1, an update to the applicable Research Plan(s) for such Designated Target to identify the remaining activities under the Research Plan to deliver a DC Candidate for such Designated Target and the projected timelines for completion of such activities.

3.3 Research Plan.

(a) The Research Program with respect to each Designated Target will be carried out in accordance with a written research plan (the "**Research Plan**"). The purpose of the Research Plan is to detail the responsibilities and activities of Schrödinger, and, to the extent mutually agreed by the Parties, BMS, with respect to carrying out the Research Program. The Research Plan for each Designated Target [***] for such Designated Target that will be the subject matter of the Research Plan, a description of the specific activities to be performed by Schrödinger, and, if applicable, BMS, in support of the Research Program, the Primary Activity, the LO Criteria,

the DC Criteria, the Therapeutic Area, and the projected timelines for completion of the Parties' activities, and, as applicable, provisions for the supply of Licensed Collaboration Compounds by Schrödinger to BMS in accordance with Section 3.11, in each case for such Designated Target.

(b) The initial Research Plans for each Initial Collaboration Target are attached hereto as **Exhibit B**.

(c) The Parties acknowledge and agree that the Research Plan for the Initial Collaboration Target known as [***].

(d) [***].

(e) Each Research Plan will be reviewed by the JSC at least on a [***] basis and may be updated and amended from time to time, as the JSC determines, provided that if the JSC cannot reach agreement on any update or amendment, [***] shall have final decision making authority subject to Section 2.1(e).

3.4 Collaboration Targets.

(a) *Initial Collaboration Targets.* **Exhibit A** identifies the initial Targets agreed by the Parties as of the Effective Date for the Research Program (the "**Initial Collaboration Targets**").

(b) *Reserved Targets.*

(i) **Exhibit D** identifies the list of Targets that are reserved by the Parties as of the Effective Date to be Reserved Targets for the Research Program (as such list is updated from time to time in accordance with this Section 3.4(b)(i), the "**Reserved Target List**"). During the Substitution Period, the Parties may add additional Targets to or remove Targets from the Reserved Target List as mutually agreed by the Parties; provided that unless the Parties otherwise agree, (a) the Reserved Target List may contain no more than [***] at any given time; and (b) the Reserved Target List may contain no more than four (4) Targets in the aggregate at any given time. Any addition or removal of a Target from the Reserved Target List that is mutually agreed by the Parties will be recorded in the minutes of the JSC and will not require a separate amendment to this Agreement. Notwithstanding the foregoing, [***]. For clarity, (A) any Reserved Target that is removed from the Reserved Target List during the Substitution Period will no longer be a Reserved Target or a Collaboration Target effective upon the date that the Parties mutually agree to remove such Reserved Target, (B) all Reserved Targets that do not become Designated Targets will be released from the Reserved Target List and no longer be Reserved Targets or Collaboration Targets effective upon the earliest of (1) the end of the Substitution Period, (2) the date of its removal from the Reserved Target List, and (3) the expiration or termination of the Research Term, and (C) effective as of the date that the clause (A) or (B) applies with respect to a given Reserved Target, (x) the license grants in Sections 7.1(a) and 7.3 and (y) the exclusivity in Article 11, in each case ((x)-(y)) shall terminate with respect to such Reserved Target.

(ii) During the Substitution Period, the Parties acknowledge and agree that Schrödinger shall be entitled, at its election and at its sole cost and expense, to conduct or,

subject to Section 3.12, have conducted by a Third Party under and in furtherance of this Agreement *in silico*, *in vitro* and *in vivo* discovery and research activities (1) to validate any Reserved Target(s), and (2) [***] (collectively, "**Permitted Reserved Target Activities**"). In the event that Schrödinger elects to conduct any Permitted Reserved Target Activities, then Schrödinger shall provide to BMS (via the JSC) periodic updates regarding the Permitted Reserved Target Activities.

(c) *Substitute Targets.*

(i) During the Substitution Period, BMS (through the JSC) shall have the right to substitute and replace each Designated Target with a Reserved Target (such new Target, a "**Substitute Target**"); provided that (A) such right may be exercised no more than [***] with respect to any given [***] Target or [***] Target, (B) subject to Section [***] and Section [***], such right may be exercised (1) no more than [***] with respect to a [***] Target if such [***] Target is [***] or (2) no more than [***] with respect to a [***] Target if [***], and (3) unless the Parties otherwise mutually agree, a given Designated Target that is an Oncology Target, Neurology Target or Immunology Target may only be substituted for a Reserved Target that is also designated as an Oncology Target, Neurology Target or Immunology Target (e.g., a Designated Target that is an Oncology Target can only be substituted for a Reserved Target that is designated as an Oncology Target). Any such replacement of a Designated Target must be based on one of the following reasons: [***].

(ii) In the case where a Party desires to replace an existing Designated Target with a Reserved Target, such Party shall provide written notice to the other Party, through the JSC, of (1) the Designated Target that such Party wishes to replace, (2) such Party's basis (and providing technical/scientific supporting information) for wanting to replace such Designated Target, and (3) the identity of the Reserved Target that such Party proposes to become the Substitute Target. Within [***] after the date of such written notice, the JSC shall meet, consider and discuss in good faith the potential replacement of the Designated Target with the Reserved Target. If BMS determines that such Reserved Target should become a Substitute Target, then Schrödinger in consultation with BMS will prepare an initial draft of a Research Plan for such Reserved Target for review, revision and approval by the JSC, with the Research Plan expected to be similar in scope an effort as specified for each of the initial projects under the initial Research Plan, and such Reserved Target will become a "Substitute Target" and a "Designated Target," in accordance with the procedure and at the time set forth in Section 3.3(d) and from and after the date on which the new Research Plan (including the Primary Activity, LO Criteria, LO Timeline and DC Criteria) for such new Designated Target is approved by the JSC hereunder, the replaced Designated Target shall cease to be a Designated Target and shall become a Terminated Target.

(iii) In the case where BMS decides to substitute the Initial Collaboration Target [***].

3.5 LO Criteria.

(a) With respect to each Designated Target, (i) within [***] after the Effective Date for the Initial Collaboration Targets SOS1 and HIF 2α, (ii) within [***] after the Effective Date for each other Initial Collaboration Target, and (b) within [***] after the date of the JSC's

approval of a Research Plan for each Substitute Target, Schrödinger shall prepare in consultation with BMS for review, revision and approval of the JSC an update to the applicable Research Plan that sets forth the proposed LO Criteria with respect to such Designated Target and the proposed estimated timeline for achieving such LO Criteria (the "**LO Timeline**").

(b) With respect to each Designated Target, Schrödinger shall promptly provide a written report to the JSC when Schrödinger determines that a Licensed Collaboration Compound for such Designated Target has achieved the applicable LO Criteria for such Designated Target, and shall provide to the JSC [***] data and Information in support thereof that is reasonably necessary for the JSC to confirm that such Licensed Collaboration Compound for such Designated Target has achieved the applicable LO Criteria for such Designated Target. The JSC shall promptly (and in any event within [***] after the date of Schrödinger's disclosure) discuss and evaluate such report and such data and Information to determine whether or not the applicable Licensed Collaboration Compound has achieved the LO Criteria for such Designated Target and shall provide prompt written notice of such determination to each of Schrödinger and BMS. If the JSC determines that such Licensed Collaboration Compound satisfies the LO Criteria, then the Substitution Period for such Designated Target will expire. In the event that the JSC does not agree on whether such Licensed Collaboration Compound satisfies the LO Criteria after it has met and attempted to reach such decision, then either Party may, by written notice to the other, have such issue referred to the Executive Officers for resolution. If the Executive Officers are unable to resolve the matter within [***], or such other longer time the Executive Officers may otherwise agree upon, after the matter is referred to them, then the matter shall be referred to the R&D Expert in accordance with Section 16.3. Any determination that a Licensed Collaboration Compound satisfies the LO Criteria for a Designated Target by the JSC, or by the R&D Expert in accordance with Section 16.3, will be recorded in the minutes of the JSC.

3.6 DC Criteria.

(a) On a Designated Target-by-Designated Target basis, each Research Plan shall include the DC Criteria with respect to such Designated Target. The DC Criteria for any Substitute Target [***] shall be consistent in nature and scope with the DC Criteria for the Initial Collaboration Targets with respect to the activities to be performed and results to be achieved, recognizing that changes may be required to reflect differences between the DC Criteria for an Initial Collaboration Target and the Substitute Target as well as with respect to the applicable Indications to which the Initial Collaboration Target and the Substitute Target [***] relate. In the event that the JSC does not agree on DC Criteria for any Substitute Target [***] after it has met and attempted to reach such decision, then either Party may, by written notice to the other, have such issue referred to the Executive Officers for resolution. If the Executive Officers are unable to resolve the matter within [***], or such other longer time the Executive Officers may otherwise agree upon, after the matter is referred to them, then the matter shall be referred to the R&D Expert in accordance with Section 16.3.

(b) On a Designated Target-by-Designated Target basis, Schrödinger shall promptly provide a written report to the JSC when Schrödinger determines that a Licensed Collaboration Compound for such Designated Target has achieved the DC Criteria, and shall provide to the JSC (i) [***] data and other Information in support thereof that is reasonably necessary for the JSC to confirm that such Licensed Collaboration Compound for such Designated

Target has achieved the applicable DC Criteria for such Designated Target or that supports the clinical Development of such Licensed Collaboration Compound for such Designated Target, (ii) [***], and (iii) a summary of all Product Specific Patents, Collaboration In-Licenses and any other material intellectual property matters [***].

(c) The JSC shall promptly (and in any event within [***] after the date of Schrödinger's disclosure) discuss and evaluate such report and such data and Information to determine whether or not the applicable Licensed Collaboration Compound has achieved the DC Criteria for such Designated Target and shall provide prompt written notice of such determination to each of Schrödinger and BMS. If the JSC determines that such Licensed Collaboration Compound satisfies the DC Criteria for such Designated Target, then (i) such Licensed Collaboration Compound will be a DC Candidate for such Designated Target and (ii) BMS shall pay the DC Candidate payment in accordance with Section 8.2(a). In the event that the JSC does not agree on whether such Licensed Collaboration Compound satisfies the DC Criteria for such Designated Target, then such dispute with respect to whether a Licensed Collaboration Compound has achieved the DC Criteria shall be submitted for resolution by an R&D Expert in accordance with Section 16.3. Notwithstanding the foregoing, BMS may determine, in its sole discretion, that a Licensed Collaboration Compound that satisfies some but not all of the DC Criteria for a Designated Target will be selected by BMS as a DC Candidate for such Designated Target. Any determination that a Licensed Collaboration Compound satisfies the DC Criteria for a Designated Target by the JSC, or by the R&D Expert in accordance with Section 16.3, or selection of a Licensed Collaboration Compound as a DC Candidate for a Designated Target by BMS pursuant to the preceding sentence, will be recorded in the minutes of the JSC.

3.7 Research Program Costs and Expenses. Subject to Section 2.1(d) and clause (C) in Section 2.1(e), (a) Schrödinger will be responsible for all costs and expenses incurred by or on behalf of Schrödinger under the Research Program and its participants in any Working Group, and (b) BMS will be responsible for all costs and expenses incurred by or on behalf of BMS under the Research Program and its participants in any Working Group.

3.8 Research Program Records.

(a) Each Party will maintain, and cause its Affiliates and subcontractors to maintain, records of all work conducted in the performance of the Research Program and all results, data, inventions and developments made in the performance of the Research Program, which records will be complete and will be accurate in all material respects. Such records will be in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes.

(b) In order to protect the Parties' Patent rights under U.S. law in any patentable inventions conceived or reduced to practice during or as a result of the Research Program, each Party agrees to maintain a policy that requires its employees to record and maintain all data and information developed during the Research Program in such a manner as to enable the Parties to use such records to establish the earliest date of invention or diligence to reduction to practice. At a minimum, the policy shall require such individuals to record all patentable inventions generated by them in standard laboratory notebooks (paper or electronic) or other suitable means that are dated and corroborated by non-inventors on a regular, contemporaneous basis.

3.9 Disclosure of Results of Research Program. Each Party will furnish to the JSC, at each JSC meeting, to the extent applicable to such Party, an update on such Party's progress under the Research Plan for each Designated Target and any Permitted Reserved Target Activities during the relevant [***], including a summary of any material results and data generated by such Party under such Research Plan or for such Permitted Reserved Target Activities. Such Party will provide the JSC with such other results, data and other Information with respect to the activities under the Research Plan as any member of the JSC may reasonably request that are in such Party's possession or control and are reasonably necessary or useful for the JSC to perform its responsibilities under Section 2.1(c) or for either Party to exercise its rights under this Agreement; provided that Schrödinger will not be required to transfer any results, data or other Information relating to the Schrödinger Platform, Schrödinger Platform Inventions, any Licensed Other Modality Compounds or Licensed Other Modality Products or the exploitation of any of the foregoing.

3.10 Research Efforts. Schrödinger shall perform its responsibilities under the Research Plan and shall use Commercially Reasonable Efforts to do so in accordance with the timelines set forth therein and to achieve the objectives of the Research Program hereunder (including delivery of one (1) DC Candidate for each Designated Target). BMS shall use Commercially Reasonable Efforts to perform its responsibilities under the Research Plans in accordance with the timelines set forth therein and to achieve the objectives of the Research Program hereunder. If, notwithstanding a Party's use of Commercially Reasonable Efforts, such Party fails to perform or complete activities under the Research Program due to scientific or technical factors, such Party shall not be deemed to be in breach of this Agreement solely as a result of such failure. The Parties acknowledge and agree that (a) certain activities under the Research Program are experimental in nature and as such, nothing in this Agreement shall be construed as a guarantee or warranty by Schrödinger that, notwithstanding Schrödinger's use of Commercially Reasonable Efforts, Schrödinger will be able to deliver a DC Candidate for any Designated Target or that the Materials, Information or other results produced in connection therewith will meet the objectives of the Research Program and (b) that Schrödinger shall not be in breach of its obligations under this Section 3.10 to the extent, notwithstanding Schrödinger's use of Commercially Reasonable Efforts, Schrödinger is not able to perform its responsibilities under a Research Plan because of scientific infeasibility or impossibility.

3.11 Information and Materials Transfer.

(a) In order to facilitate the activities under the Research Program, either Party may, at its election (or as required hereunder), provide to the other Party certain Materials for use by the other Party in furtherance of the Research Program (in which case the transfer of such Materials shall be specified in the Research Plan or the minutes of the JSC). All such Materials (including, as applicable, any progeny, expression products, mutants, replicates, derivatives and modifications thereof that are made by the receiving Party and that include the Materials of the supplying Party, but excluding samples of Licensed Collaboration Compounds, and starting materials, intermediates and reagents for the synthesis of Licensed Collaboration Compounds, provided by Schrödinger to BMS under this Agreement), to the extent such Material is not generally available from a Third Party, shall be used by the receiving Party in accordance with the terms and conditions of this Agreement solely for purposes of performing its activities under the Research Program [***], and the receiving Party shall not transfer such Materials (including, as

applicable, any progeny, expression products, mutants, replicates, derivatives and modifications thereof) to any Third Party unless expressly contemplated by this Agreement or upon the written consent of the supplying Party. For clarity, this Section 3.11(a) shall not restrict either Party from using Materials that are publicly available from a Third Party.

(b) In addition, as and to the extent set forth in the Research Plan for a given Designated Target or this Agreement, Schrödinger shall provide BMS with Schrödinger Materials for use by BMS in accordance with the terms and conditions of this Agreement (including the applicable Research Plan). BMS shall have the right to use such Schrödinger Materials for purposes of performing its activities under such Research Plan. Notwithstanding anything to the contrary, Schrödinger shall have no obligation to provide BMS with any Schrödinger Materials under this Agreement with respect to Licensed Binders, Licensed Other Modality Compounds or Licensed Other Modality Products that are not or do not contain Licensed Collaboration Compounds.

(c) Any Materials (including Schrödinger Materials) provided by a Party to the receiving party (including, as applicable, any progeny, expression products, mutants, replicates, derivatives and modifications thereof, but excluding samples of Licensed Collaboration Compounds, and starting materials, intermediates and reagents for the synthesis of Licensed Collaboration Compounds, provided by Schrödinger to BMS under this Agreement) for use in the Research Program shall be used by the receiving party solely for purposes of conducting the Research Program in accordance with the applicable Research Plan and will be returned to the supplying Party (or destroyed as may be requested by the supplying Party in writing) promptly following the end of the Research Term or earlier upon request by the supplying Party. Neither Party shall, and shall not attempt to, and shall not permit any Affiliate of such Party or a Third Party to, or attempt to, identify or determine in any way the chemical, physical or structural characteristics or identity, fragmentation sequence or composition of any Materials (including Schrödinger Materials) provided by the other Party nor modify or make derivatives or analogs of any such Materials, including that it will not reverse engineer, reverse compile, disassemble or otherwise attempt to derive the composition or underlying information, structure or ideas of any such Materials, including analyzing such Materials by physical, chemical or biochemical means, except, in each case, as set forth in the Research Plan. Except with respect to Licensed Collaboration Product Information, all Information to the extent directed to such Materials shall be Confidential Information of the supplying Party. The receiving Party agrees to use all such Materials (including Schrödinger Materials) with prudence and appropriate caution in any experimental work, since all of their characteristics may not be known. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE MATERIALS AND SCHRÖDINGER MATERIALS PROVIDED HEREUNDER ARE EXPERIMENTAL IN NATURE AND ARE PROVIDED "AS IS". EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE SUPPLYING PARTY MAKES NO REPRESENTATIONS, EXTENDS NO IMPLIED WARRANTIES OF ANY KIND, AND EXPRESSLY DISCLAIMS ALL SUCH IMPLIED WARRANTIES, INCLUDING WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE MATERIALS (INCLUDING SCHRÖDINGER MATERIALS) PROVIDED HEREUNDER.

[***].

(d) Subject to the second sentence of this Section 3.11(d), upon reasonable request by BMS during the Research Term or within [***] thereafter, Schrödinger shall, at no additional cost or expense to BMS, [***]. For clarity, Schrödinger's obligations under this Section 3.11(d) do not apply with respect to the Permitted Reserved Target Activities, which shall be disclosed to the JSC pursuant to Section 3.9, unless and until the Reserved Target [***] to which such Permitted Reserved Target Activities relate becomes a Designated Target, Substitute Target [***].

(e) The Alliance Managers shall work in good faith to establish processes by which the Parties will coordinate with respect to the sharing of Information and Materials as contemplated pursuant to this Section 3.11, which such processes shall ensure that such requests are made and fulfilled in a manner to facilitate collaboration but that does not interfere with the efficient conduct of the activities required to be performed by either Party hereunder. Nothing in this Section 3.11 shall (A) modify BMS' obligations of confidentiality under Article 12, or (B) expand the licenses or rights granted to BMS under this Agreement.

3.12 Subcontracting. Subject to the oversight of the JSC, each Party may (sub)contract any of the work for which it is responsible in the performance of the Research Program. In the case of any (sub)contracting of Research Program activities by a Party to a Third Party, for any contract entered into after the Effective Date, such Third Party must have entered into a written agreement with such Party that includes terms and conditions protecting and limiting use and disclosure of Information that are consistent with the obligations under Article 12 of this Agreement; provided, that the term of such Third Party's obligations regarding the use and disclosure of Information shall be as long as reasonably negotiated with such Third Party, but in any event no less than [***] after the date of expiration or earlier termination of the applicable subcontract agreement between the subcontracting Party and such Third Party. Each Party is responsible for compliance by such Third Party with the applicable terms and conditions of this Agreement in the same way and to the same extent as such Party.

3.13 Animal Testing. In order to assure the appropriate care and use of animals used in the performance of its obligations under the Agreement (including pursuant to any Research Plan) by Schrödinger, Schrödinger acknowledges and agrees that any Person (including any Third Party contractor engaged by Schrödinger) performing any activities under this Agreement relating to projects or research involving animals shall be in compliance with the current *Guide for the Care and Use of Laboratory Animals (Institute for Laboratory Animal Resources, National Research Council, National Academy of Sciences)* (the "**Animal Care Guidelines**") as the same may be updated or amended from time-to-time by the Association for Assessment and Accreditation of Laboratory Animal Care International. Schrödinger shall provide BMS with written notice prior to performing any projects or research involving animals or prior to engaging any Third Party to perform projects or research involving animals pursuant to this Agreement (including pursuant to any Research Plan) in order to allow BMS to perform a reasonable assessment of Schrödinger's or any such Third Party's compliance with the Animal Care Guidelines with respect to the intended studies and animal species involved in any such project or research. Such notice to BMS shall include the contact information of any Third Party contractor (if applicable) to be engaged by Schrödinger in connection with any such project or research involving animals.

4. DEVELOPMENT AND REGULATORY MATTERS

4.1 Transfer.

(a) For a given Designated Target, Schrödinger will promptly (but no later than [***]) following the earlier of (i) the selection of a DC Candidate for such Designated Target pursuant to Section 3.6(c), and (ii) the end of the Research Term (for each Designated Target, the "**Handoff**"), transfer to BMS or its designated Affiliate a copy of [***] Schrödinger Know-How related to the DC Candidate and other Licensed Collaboration Compounds for such Designated Target in its possession or Control as of the Handoff, including any documentation (whether held in paper or electronic format) or similar removable media (including e-mails, documents, spreadsheets, copies of standard operating procedures or technical specifications); provided that (A) any documentation transferred electronically will be in an electronic format reasonably acceptable to BMS; and (B) Schrödinger will not be required to transfer any Information relating to the Schrödinger Platform or Schrödinger Platform Inventions, Licensed Binders, Licensed Other Modality Compounds or Licensed Other Modality Products, or the exploitation of any of the foregoing.

(b) For a given Designated Target, after the Handoff for such Designated Target, in the event that BMS or Schrödinger reasonably believes additional Schrödinger Know-How is necessary for the continued Development or Commercialization of the DC Candidate or Licensed Collaboration Compounds for such Designated Target, BMS may request such additional Schrödinger Know-How from Schrödinger. BMS and Schrödinger will discuss in good faith and Schrödinger will transfer to BMS such additional Schrödinger Know-How in Schrödinger's possession or Control, including any documentation (whether held in paper or electronic format) or similar removable media (including e-mails, documents, spreadsheets, copies of standard operating procedures or technical specifications); provided that (i) any documentation transferred electronically will be in an electronic format reasonably acceptable to BMS; and (ii) Schrödinger will not be required to transfer any Information relating to the Schrödinger Platform or Schrödinger Platform Inventions, Licensed Binders, Licensed Other Modality Compounds or Licensed Other Modality Products, or the exploitation of any of the foregoing.

(c) To assist with the transfer of Schrödinger Know-How under this Section 4.1 and BMS' exploitation thereof in accordance with the terms of this Agreement, for [***] after the date of Handoff with respect to a given Designated Target (if any), Schrödinger [***].

(d) After the Handoff for a given Designated Target, if BMS reasonably believes that [***] Schrödinger Materials that were developed or used by or on behalf of Schrödinger or its Affiliates in connection with the Research Program are reasonably necessary or useful for the Development or Manufacturing of Licensed Collaboration Compounds or Licensed Collaboration Products by or on behalf of BMS, upon request by BMS, Schrödinger shall transfer to BMS such Schrödinger Materials to enable BMS to use such Schrödinger Materials in order to permit BMS to perform its Development or Manufacturing obligations under this Agreement.

(e) After the Handoff for a given Designated Target, upon reasonable request by BMS, Schrödinger shall deliver to BMS (at BMS' cost and expense) or dispose of any animals in Schrödinger's possession as of immediately prior to such Handoff.

(f) After the Handoff for a given Designated Target, Schrödinger shall, at no additional cost or expense to BMS, transfer to BMS, and shall cause its Third Party manufacturers (if applicable) to transfer to BMS, reasonable quantities of Licensed Collaboration Compounds and Licensed Collaboration Products in order to permit BMS to perform its Development or Manufacturing obligations under this Agreement.

4.2 Development.

(a) *Development Responsibilities*. Except for the Parties' respective responsibilities in the conduct of the Research Program, BMS shall have the sole right and responsibility for the Development (including having an Affiliate or Third Party Develop on its behalf) of DC Candidates, Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target in the Field in the Territory during the Term at its own cost and expense (including responsibility for all funding, resourcing and decision-making), including, subject to BMS' compliance with its obligations under this Section 4.2(a), whether to advance DC Candidates, Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target into Development and to terminate this Agreement with respect to such Designated Target in accordance with Article 13. From and after the Handoff for such Designated Target, BMS, by itself or through its Affiliates and Sublicensees, shall use Commercially Reasonable Efforts to Develop, and seek and obtain Regulatory Approval for, at least one Licensed Collaboration Product for such Designated Target in the Field in each of (i) the U.S., (ii) Japan and (iii) the European Union, [***].

(b) *Development Records.* For each Designated Target, BMS shall prepare and maintain and shall cause its Affiliates and Sublicensees to prepare and maintain records regarding the Development of DC Candidates, Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target in the Field in the Territory, which will records be complete and accurate in all material respects.

(c) Development and Commercialization Reports by BMS.

(i) For each Designated Target, BMS will furnish to the JSC, on a [***] basis, an update on BMS' Development and regulatory efforts in the Major Markets for Licensed Collaboration Compounds and Licensed Collaboration Products for such Designated Target, including a summary of any material results and data generated by BMS and its Affiliates and Sublicensees in connection with such activities.

(ii) From and after the discontinuation of the JSC with respect to a given Designated Target pursuant to Section 2.2, on [***] basis, BMS shall provide to Schrödinger a summary report regarding (i) the status of Development and regulatory efforts in the Major Markets for Licensed Collaboration Compounds and Licensed Collaboration Products for such Designated Target, and (ii) the Commercialization activities for Licensed Collaboration Products for such Designated Target performed by BMS and its Affiliates and Sublicensees in the Major Markets, in each case (i) and (ii) conducted since the prior report by BMS.

(d) *Companion Diagnostics*. For each Designated Target, as between the Parties, BMS shall have the sole right to Exploit Companion Diagnostics for Licensed

Collaboration Compounds or Licensed Collaboration Products for such Designated Target in the Field in the Territory at its sole cost and expense (including having an Affiliate or Third Party Develop on its behalf). BMS shall not Develop any Licensed Collaboration Compounds or Licensed Collaboration Products as a stand-alone diagnostic product except as a Companion Diagnostic.

4.3 Regulatory Matters. For each Designated Target, except with respect to Schrödinger's responsibilities under the Research Plan for such Designated Target, BMS shall, at its sole cost and expense, have sole responsibility and decision making authority with respect to regulatory matters for DC Candidates, Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target, including the content of any regulatory filing or dossier, pharmacovigilance reporting, labeling, safety, and the decision to file or withdraw any MAA or to cease or suspend any Clinical Trial for Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target. BMS shall have sole responsibility for preparing and submitting all Regulatory Materials for Licensed Collaboration Compounds and Licensed Collaboration Products for such Designated Target in the Field in the Territory, including preparing, submitting and holding all INDs and MAAs for Licensed Collaboration Products for such Designated Target. Schrödinger shall reasonably cooperate with BMS and provide to BMS [***] Schrödinger Know-How, in each case as may be reasonably requested by BMS and necessary or reasonably useful for BMS, in order to prepare or support any Regulatory Materials for Licensed Products in the Field in the Territory and interactions with any Regulatory Authority in connection with Development or Regulatory Approval of Licensed Collaboration Products for such Designated Target. BMS will own all Regulatory Materials for Licensed Collaboration Products for such Designated Target and all such Regulatory Materials shall be submitted in the name of BMS (or its Affiliate or Sublicensee, as applicable).

4.4 Notice of Regulatory Action. For each Designated Target, if any Regulatory Authority takes or gives notice to a Party of its intent to take any regulatory action with respect to any activity of such Party related to the Research Program, then such Party shall promptly notify the other Party through the JSC of such contact, inspection or notice or action. To the extent applicable, Schrödinger shall be responsible for preparing draft responses to any such regulatory action that relates to any activity of Schrödinger related to the Research Program and to provide such draft responses to BMS through the JSC. The JSC (and BMS) shall review and comment on any such responses to Regulatory Authorities that pertain to the Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target; provided, that BMS shall have the final decision making authority with respect to such responses to the extent relating to the Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target.

4.5 No Use of Debarred Person. During the Term, each Party agrees that it will not use any employee or consultant that is debarred by any Regulatory Authority or, to the best of such Party's knowledge, is the subject of debarment proceedings by any Regulatory Authority. If a Party learns that any employee or consultant performing on its behalf under this Agreement has been debarred by any Regulatory Authority, or has become the subject of debarment proceedings by any Regulatory Authority, such Party will promptly notify the other Party and will prohibit such employee or consultant from performing on its behalf under this Agreement.

4.6 Standards of Conduct. For each Designated Target, BMS shall perform, and shall use Commercially Reasonable Efforts to ensure that its Affiliates, Sublicensees and Third Party contractors perform, its Development, Manufacturing and Commercialization activities with respect to Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target in good scientific manner, and in compliance with applicable good laboratory practices and with Applicable Law in the performance of work under this Agreement.

5. COMMERCIALIZATION

5.1 Commercialization of Licensed Products. For each Designated Target, BMS shall have the sole right and responsibility for the Commercialization of Licensed Collaboration Products for such Designated Target in the Field in the Territory at its sole cost and expense (including having an Affiliate or Third Party Commercialize on its behalf). With respect to each Designated Target for which Schrödinger has delivered a DC Candidate, BMS will use Commercially Reasonable Efforts to Commercialize at least one (1) Licensed Collaboration Product for such Designated Target in each of the Major Markets for which BMS receives Regulatory Approval for a Licensed Collaboration Product.

5.2 Decision-Making Authority. For each Designated Target, BMS shall have the sole decision-making authority for the operations and Commercialization strategies and decisions, including funding and resourcing, related to the Commercialization of Licensed Collaboration Products for such Designated Target.

5.3 Companion Diagnostics. For each Designated Target, as between the Parties, BMS shall have the sole right to Commercialize Companion Diagnostics for Licensed Collaboration Products for such Designated Target in the Field in the Territory at its sole cost and expense (including having an Affiliate or Third Party Commercialize on its behalf). BMS shall not commercialize any Licensed Collaboration Compounds or Licensed Collaboration Products as a stand-alone diagnostic product except as a Companion Diagnostic.

6. MANUFACTURING

Except as necessary for the conduct of the Research Plan, which shall be Schrödinger's responsibility, for a given Designated Target, BMS shall, at its cost and expense, have the exclusive right and shall be solely responsible for the Manufacture (including having a Third Party Manufacture on its behalf) of all Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target (including all such Manufacturing for use in Clinical Trials and for Commercialization), including all activities related to developing the process, analytics and formulation for the Manufacture of clinical and commercial quantities of Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target, the production, Manufacture, processing, filling, finishing, packaging, labeling, inspection, receiving, holding and shipping of Licensed Collaboration Compounds or Licensed Collaboration Products, or any raw materials or packaging materials with respect thereto, or any intermediate of any of the foregoing, including process and cost optimization, process qualification and validation, commercial Manufacture, stability, in-process and release testing, quality assurance and quality control.

7. GRANT OF RIGHTS AND LICENSES

7.1 Licenses to BMS.

(a) Subject to the terms and conditions of this Agreement, during the Term with respect to each Designated Target and, during the Substitution Period with respect to each Reserved Target for so long as such Reserved Target is a Collaboration Target, Schrödinger hereby grants to BMS an exclusive (even as to Schrödinger) license, with the right to grant sublicenses through multiple tiers of Sublicensees as provided in Section 7.2, under the Schrödinger Technology and Product Specific Patents, to clinically Develop, Manufacture, have Manufactured, use, sell, offer for sale, export and import (including the exclusive right to Develop, have Developed, Commercialize and have Commercialized) and otherwise Exploit Licensed Compounds and Licensed Products for such Designated Target or Collaboration Target (as applicable) in the Field in the Territory. BMS' rights under this Section 7.1 include the right to modify, enhance or improve Licensed Collaboration Compounds or Licensed Collaboration Products for a given Designated Target, provided that any such modifications, enhancements or improvements will be classified as Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target and subject to the terms and conditions of this Agreement.

(b) [***].

7.2 Sublicensing by BMS. BMS shall have the right to sublicense any or all of the rights granted to it by Schrödinger under this Agreement [***]. In connection with any such sublicensing of Development or Commercialization rights, BMS may disclose and provide to such permitted Sublicensees any applicable Schrödinger Know-How or Schrödinger Materials in connection therewith. BMS shall ensure that each of its Sublicensees is bound by a written agreement that is consistent with the terms and conditions of, this Agreement. In addition, BMS shall be responsible for the performance of any of its Sublicensees that are exercising rights under a sublicense of the rights granted by Schrödinger to BMS under this Agreement, and the grant of any such sublicense shall not relieve BMS of its obligations under this Agreement, except to the extent they are satisfactorily performed by any such Sublicensee(s). Schrödinger shall have the right to proceed directly against BMS for any act or omission of any Sublicensee that is a breach of any of BMS' obligations without any obligation to first proceed against such Sublicensee. Each sublicense agreement with a Sublicensee shall be subject to the applicable terms and conditions of this Agreement. Promptly following the execution of each sublicense agreement to a Third Party as provided in this Section 7.2, BMS shall provide Schrödinger with a written notice of each such sublicense identifying the Sublicensee after the execution thereof.

7.3 Licenses to Schrödinger.

(a) **Grant Back.** Subject to the terms and conditions of this Agreement, during the Term, BMS hereby grants to Schrödinger a non-exclusive, sublicensable (solely to its Affiliates or subcontractors), worldwide, fully paid up, royalty-free license under (i) the Schrödinger Technology and Product Specific Patents licensed pursuant to Section 7.1 solely to conduct (A) the Research Program, (B) the Permitted Reserved Target Activities during the Research Term, (C) research and preclinical Development activities for any Collaboration Target, or (D) any activities under the Definitive Degrader Agreement (if any), and not for any other purpose and (ii)

the Schrödinger Technology licensed pursuant to Section 7.1 solely to conduct the Schrödinger Technology Services.

(b) **Research Program License.** Subject to the terms and conditions of this Agreement, BMS hereby grants to Schrödinger a limited, non-exclusive, sublicensable (solely to Affiliates or subcontractors), worldwide, fully paid-up, royalty-free license under the BMS Patents, BMS Sole Inventions and BMS' interest in Joint Patents solely to conduct the Research Program, and not for any other purpose.

7.4 No Other Rights. Except for the licenses and rights expressly granted under this Agreement, no right, title, or interest of any nature whatsoever is granted whether by implication, estoppel, reliance, or otherwise, by a Party to the other Party. All rights with respect to Information, Patents or other intellectual property rights that are not specifically granted herein are reserved to the owner thereof. Further, the licenses and other rights granted to BMS herein are subject to the rights retained by the counterparty to each Collaboration In-License, to the extent such agreements are applicable.

7.5 Public Domain Information. Nothing in this Agreement shall prevent either Party or its Affiliates from using for any purpose any Information or Confidential Information that is in the public domain.

7.6 Degrader Program. The Parties intend to negotiate a separate agreement (the "**Definitive Degrader Agreement**") pursuant to which Schrödinger will transfer Licensed Binders to BMS for one or more Designated Targets to use the Licensed Binders to research, develop and commercialize Degrader Compounds containing such Licensed Binders (the "**Degrader Program**") and that will set forth the financial and other terms for Degrader Compounds containing Licensed Binders. The Parties will negotiate the Definitive Degrader Agreement in good faith for a period of [***] after the Effective Date. The Parties intend that the Definitive Degrader Agreement will be consistent with the terms and conditions attached hereto as **Exhibit E** and such other terms and conditions as the Parties may mutually agree. Notwithstanding anything to the contrary in this Agreement, (a) neither Party shall have any obligation to enter into the Definitive Degrader Agreement, and (b) Schrödinger shall have no obligation to provide any Licensed Binders to BMS unless and until the Parties enter into the Definitive Degrader Agreement.

7.7 Software Exclusions. Notwithstanding anything herein to the contrary, BMS acknowledges that Schrödinger and its Affiliates have certain Information, Patents or other intellectual property rights that consist of, or with respect to Patents claim, software, source code or object code related to the Schrödinger Platform or Schrödinger Platform Inventions. It is understood and agreed that (a) as between the Parties, Schrödinger or its Affiliates will perform any and all activities under this Agreement pertaining to the use of such software, source code or object code related to the Schrödinger Platform or Schrödinger Platform Inventions and (b) (i) no (sub)license is granted by Schrödinger or its Affiliates to BMS pursuant to this Agreement, (ii) under this Agreement, Schrödinger does not "Control" and (iii) BMS shall have no right under this Agreement to use or access, in each case (i)-(iii), any Information, Patents or other intellectual property rights that consist of, or with respect to Patents claim, software, source code or object code related to the Schrödinger Platform or Schrödinger Platform Inventions.

8. PAYMENTS

8.1 Upfront Payment. BMS shall pay Schrödinger a signing payment of fifty-five million Dollars ($55,000,000) within [***] after the Effective Date. Such payment shall be noncreditable, nonrefundable and not subject to set off.

8.2 DC Candidate Payment; Development Milestone Payments for Licensed Compounds or Licensed Products.

(a) For each Designated Target, BMS shall pay to Schrödinger a DC Candidate payment of [***] Dollars ($[***]) for the first DC Candidate for such Designated Target within [***] after such Licensed Collaboration Compound is classified as a DC Candidate in accordance with Section 3.6(c) (each, a "**DC Payment**"). The DC Payment set forth in this Section 8.2(a) [***]. For the avoidance of doubt, [***]. Each DC Payment will be [***].

(b) BMS shall pay to Schrödinger the milestone payments set forth in Table 1, Table 2 or Table 3 (each, a "**Milestone Payment**") for each Designated Target that is an Oncology Target, Neurology Target or Immunology Target, respectively, within [***] after the first achievement of the specified milestone event by BMS, its Sublicensees or their Affiliates for a Licensed Collaboration Compound or Licensed Collaboration Product for a given Designated Target; provided that [***], and (ii) the payment amounts set forth in Table 1, Table 2 or Table 3, as applicable, shall be subject to Section 8.2(c). Such payments shall be noncreditable, nonrefundable and not subject to set off. BMS shall provide written notice to Schrödinger within [***] after the first achievement of the specified milestone event by BMS or its Affiliates and within [***] after the first achievement of the specified milestone event by its Sublicensees or their Affiliates.

Table 1: Oncology Targets

	Milestone (Per Licensed Collaboration Product for an Oncology Target)	**Milestone Payment**		
1	[***]	[***]		
		1st Indication	**2nd Indication**	**3rd Indication**
2	[***]	[***]	[***]	[***]
3	[***]	[***]	[***]	[***]
4	[***]	[***]	[***]	[***]
5	[***]	[***]	[***]	[***]
	Total	[***]	[***]	[***]
	Total per Licensed Collaboration Product per Oncology Target: $[***] (excluding any DC Payment owed pursuant to Section 8.2(a))			

Table 2: Neurology Targets

	Milestone (Per Licensed Collaboration Product for a Neurology Target)	**Milestone Payment**		
1	[***]	[***]		
		1st Indication	**2nd Indication**	**3rd Indication**
2	[***]	[***]	[***]	[***]
3	[***]	[***]	[***]	[***]
4	[***]	[***]	[***]	[***]
5	[***]	[***]	[***]	[***]
	Total	[***]	[***]	[***]
	Total per Licensed Collaboration Product per Neurology Target: $[***] (excluding any DC Payment owed pursuant to Section 8.2(a))			

Table 3: Immunology Targets

	Milestone (Per Licensed Collaboration Product for an Immunology Target)	**Milestone Payment**		
1	[***]	[***]		
		1st Indication	**2nd Indication**	**3rd Indication**
2	[***]	[***]	[***]	[***]
3	[***]	[***]	[***]	[***]
4	[***]	[***]	[***]	[***]
5	[***]	[***]	[***]	[***]
	Total	[***]	[***]	[***]

Total per Licensed Collaboration Product per Immunology Target: $[***] (excluding any DC Payment owed pursuant to Section 8.2(a))

(c) Subject to Section 8.2(b), the Milestone Payments shall be payable by BMS to Schrödinger for a given Designated Target upon achievement of the milestone event by a Licensed Collaboration Compound or Licensed Collaboration Product for such Designated Target (subject to the limitations in this Section 8.2(c)). [***].

(d) The term "[***]" as used herein means, with respect to a Licensed Collaboration Compound or Licensed Collaboration Product, [***]. For the avoidance of doubt:

[***].

8.3 Sales Milestone Payments. With respect to each Designated Target:

(a) A milestone payment of [***] Dollars ($[***]) shall be payable by BMS to Schrödinger when the total Net Sales within a given Calendar Year of all Licensed Collaboration Product(s) for such Designated Target in the Territory by BMS, its Affiliates and Sublicensees first equals or exceeds [***] Dollars ($[***]).

(b) A milestone payment of [***] Dollars ($[***]) shall be payable by BMS to Schrödinger when the total Net Sales within a given Calendar Year of all Licensed Collaboration Product(s) for such Designated Target in the Territory by BMS, its Affiliates and Sublicensees first equals or exceeds [***] Dollars ($[***]).

(c) A milestone payment of [***] Dollars ($[***]) shall be payable by BMS to Schrödinger when the total Net Sales within a given Calendar Year of all Licensed Collaboration Product(s) for such Designated Target in the Territory by BMS, its Affiliates and Sublicensees first equals or exceeds [***] Dollars ($[***]).

The sales-based milestones set forth in clauses (a) through (c) above shall be payable only once for each Designated Target, and in any event shall not exceed two hundred twenty-five million Dollars ($225,000,000) in the aggregate for such Designated Target. Each sales-based milestone that becomes payable under this Section 8.3 shall be due within [***] following the end of the Calendar Year in which the Licensed Collaboration Product(s) for such Designated Target first reaches the applicable Net Sales threshold. More than one of the sales-based milestone payments in this Section 8.3 may be payable for a given Designated Target based on the same Calendar Year Net Sales of the Licensed Collaboration Product(s) for such Designated Target. For example, if more than one sales-based milestone set forth in clauses (a) through (c) above for a given Designated Target is achieved in the same Calendar Year, then each corresponding sales-based milestone payment for such sales-based milestone events for such Designated Target shall be payable. Such sales-based milestone payments will be noncreditable, nonrefundable and not subject to set off.

8.4 Royalty Payments to Schrödinger.

(a) **General**. Subject to the other provisions of this Article 8 and other provisions of this Agreement, in consideration of the licenses granted by Schrödinger to BMS hereunder, BMS shall pay to Schrödinger royalties based on the Net Sales of each Licensed Collaboration Product during the applicable Royalty Term for such Licensed Collaboration Product. The royalty payable with respect to each particular Licensed Collaboration Product shall be based on the level of total annual Net Sales of such Licensed Collaboration Product in the Territory in a given Calendar Year period by BMS, its Sublicensees and their Affiliates, with the royalty rate tiered based upon the level of such total annual Net Sales of such Licensed Collaboration Product in the Territory in such Calendar Year period. Royalties shall be calculated by multiplying the applicable royalty rates by the corresponding amount of the portion of Net Sales of the applicable Licensed Collaboration Product within each of the Net Sales tiers during such Calendar Year as set forth below.

(b) **Royalty on Licensed Products**. BMS will pay to Schrödinger a royalty on Net Sales of Licensed Collaboration Products, on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis, by BMS, its Sublicensees and their Affiliates in the Territory based on the Net Sales tiers and royalty rates as set forth in the table below (the "**Base Royalty Rate**") (subject to any offsets or reductions set forth below in this Section 8.4).

Table 4

For Oncology Targets	
Base Royalty Rate	**Portion of Total Annual Net Sales in the Territory (Determined Separately for Each Licensed Collaboration Product)**
[***]%	Less than $[***];
[***]%	Equal to and greater than $[***] and less than $[***];
[***]%	Equal to and greater than $[***] and less than $[***];
[***]%	Equal to and greater than $[***];

For Neurology Targets or Immunology Targets	
Base Royalty Rate	**Portion of Total Annual Net Sales in the Territory (Determined Separately for Each Licensed Collaboration Product)**
[***]%	Less than $[***];
[***]%	Equal to and greater than $[***] and less than $[***];
[***]%	Equal to and greater than $[***];

For clarity, the Net Sales thresholds in the tables above shall be determined on a Licensed Collaboration Product-by-Licensed Collaboration Product basis. By way of example, if the total annual Net Sales of a Licensed Collaboration Product for an Oncology Target in the Territory in a particular Calendar Year are $[***], the amount of royalties payable hereunder shall be calculated as follows (subject to any applicable reductions under this Section 8.4): [***].

(c) Notwithstanding the foregoing and subject to Section 8.4(h), on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis, during any part of the Royalty Term for which the condition in clause (b) of Royalty Term is met, with respect to such Licensed Collaboration Product in such country, for the remaining part of the Royalty Term, the Base Royalty Rate as applied to the sale of such Licensed Collaboration Product in each such country shall be reduced by [***] percent ([***]%) (i.e., the Base Royalty Rate shall be [***] the rates set forth above in Table 4 above).

(d) Subject to Section 8.4(h), on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis, if during any Calendar Quarter during the Royalty Term for a Licensed Collaboration Product there are one or more Generic Products or Biosimilar Products, as applicable, being sold in a country with respect to such Licensed Collaboration Product, then the Base Royalty Rate payable under this Agreement with respect to such Licensed Collaboration Product in such country for such Calendar Quarter and subsequent Calendar Quarters during the Royalty Term shall be reduced as follows:

[***].

Market share shall be based on the aggregate market in such country of such Licensed Collaboration Product and the Generic Product(s) or Biosimilar Product(s), as applicable (based on the number of units of such Licensed Collaboration Product and such Generic Product(s) or Biosimilar Product(s), as applicable in the aggregate sold in such country, as reported by a well-known reporting service agreed between the Parties acting reasonably (e.g., [***])).

(e) **Third Party Payments**.

(i) Schrödinger shall bear all Third Party license payments, milestones, royalties and other payments owed with respect to a Licensed Collaboration Compound or Licensed Collaboration Product (including payments with respect to methods of making, using, selling, or identifying such Licensed Collaboration Compound and Licensed Collaboration Product) involving (A) intellectual property (including Patents) that is licensed or otherwise Controlled by Schrödinger as of the Effective Date [***].

(ii) If, after the Effective Date and during the Term, Schrödinger acquires from a Third Party rights to Patents or other intellectual property that is necessary or reasonably useful to research, discover, Develop, make, have made, Manufacture, use, sell, offer for sale, import, export or otherwise Commercialize a Licensed Collaboration Compound or Licensed Collaboration Product in the Field in the Territory ("**Future In-Licensed IP**"), the following shall apply:

A. [***].

B. If any Future In-Licensed IP [***] may be included within the Schrödinger Technology or Product Specific Patents, then Schrödinger shall disclose the terms and conditions of the agreement under which such Future In-Licensed IP was acquired (subject to applicable confidentiality obligations and reasonable redaction of provisions that do not relate to the use of intellectual property in-licensed thereunder) (such agreement, a "**Schrödinger New In-License**"), to enable BMS to evaluate and elect, in its sole discretion, whether or not to include such Future In-Licensed IP within the Schrödinger Technology or Product Specific Patents, as applicable. If BMS so elects to include such Future In-Licensed IP as Schrödinger Technology or Product Specific Patents, as applicable, then (A) such Schrödinger New In-License shall become a "**Collaboration In-License**", (B) Future In-Licensed IP in-licensed under such Schrödinger In-License will be deemed "Controlled" by Schrödinger or its Affiliates for purposes of this Agreement and will be included in the Schrödinger Technology or Product Specific Patents, as applicable, (C) BMS shall be responsible for payments that become due under such Collaboration In-License with respect to the Development, Manufacturing and Commercialization of a Licensed Collaboration Compound or Licensed Collaboration Product by BMS, its Sublicensees and its and their Affiliates, [***], (D) BMS agrees to comply with any obligations under such Collaboration In-License that apply to BMS, including any obligation to make such payments. If BMS does not elect to include such Future In-Licensed IP, then (1) Schrödinger may use such Future In-Licensed IP in the course of performing any Research Plan activities, unless the use of such Future In-Licensed IP by Schrödinger would make it necessary or useful for BMS to take a sublicense under such Schrödinger In-License in order for BMS or its Affiliates to Exploit a Licensed Collaboration Compound or Licensed Collaboration for a Designated Target, (2) such Schrödinger New In-License shall not become a Collaboration In-License hereunder, (3) such Future In-Licensed IP shall not be deemed "Controlled" by Schrödinger or its Affiliates for purposes of this Agreement and will be excluded from Schrödinger Technology or Product Specific Patents, and (4) BMS shall have no right or license under any rights granted under such Schrödinger New In-License. Schrödinger shall provide BMS with a reasonably detailed invoice for any payments to be made by BMS pursuant to this Section 8.4(e)(ii)B under any Collaboration In-License, and BMS shall pay the undisputed portion of such invoices to Schrödinger within [***] of receipt thereof; provided that [***].

C. If, on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis, BMS deems it necessary to obtain a license or other right from any Third Party under any Patent or other intellectual property in order to Develop, Manufacture or Commercialize any given Licensed Collaboration Compound or Licensed Collaboration Product, BMS shall have the right to enter into such licenses or other agreement with such Third Party with respect to such Patent or other intellectual property. BMS may deduct up to [***] percent ([***]%) of the amount of [***] actually paid by BMS or its Affiliates or its or their Sublicensees [***] to such Third Party on account of such license or other agreement [***], that are attributable to the Development, Manufacture or Commercialization of such Licensed Collaboration Compound or Licensed Collaboration Product in such country, from royalties otherwise due and payable by BMS to Schrödinger under this Agreement in a Calendar Quarter, subject to Section 8.4(h); provided that [***].

(f) **One Royalty**. For clarity, only one royalty shall be due to Schrödinger with respect to the same unit of Licensed Collaboration Product.

(g) **Royalty Term**. Royalties payable by BMS to Schrödinger under Section 8.4 shall be paid on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis for the duration of the Royalty Term for such Licensed Collaboration Product in such country. For clarity, BMS shall not owe royalties on any Licensed Collaboration Product sold in a country after expiration of the Royalty Term for such Licensed Collaboration Product in such country. Upon the expiration of the Royalty Term with respect to a Licensed Collaboration Product in a country, BMS shall have a fully-paid-up perpetual license under Section 7.1 for the making, using, selling, offering for sale and importing of such Licensed Collaboration Product in such country. [***].

(h) **Royalty Floor**. Notwithstanding the foregoing, in no event shall the royalties payable to Schrödinger pursuant to Section 8.4(b) during the Royalty Term for a Licensed Collaboration Product in a country in any given Calendar Quarter be reduced to less than [***] percent ([***]%) of the amounts payable by BMS for such Licensed Collaboration Product (the "**Royalty Floor**"). [***].

8.5 Royalty Payments and Reports. All amounts payable to Schrödinger pursuant to Section 8.4 shall be paid in Dollars within [***] after the end of the Calendar Quarter in which the applicable Net Sales were recorded. Each payment of royalties shall be accompanied by a royalty report providing a statement, on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis, of: (a) the amount of Net Sales of Licensed Collaboration Products in the Territory during the applicable Calendar Quarter calculated in Dollars, (b) a calculation of the amount of royalty payment due in Dollars on such Net Sales for such Calendar Quarter, (c) the amount of withholding taxes, if any, required by Applicable Law to be deducted with respect to such royalties, calculated in Dollars, and (d) with respect to calculations applicable to countries outside of the United States, the exchange rate used to calculate the foregoing amounts ((a)-(c)).

8.6 Payment Method. All payments due under this Agreement to Schrödinger shall be made by electronic funds transfer in immediately available funds to an account designated by Schrödinger. All payments hereunder shall be made in Dollars.

8.7 Taxes. Schrödinger will pay any and all taxes levied on account of all payments it receives under this Agreement. If laws or regulations require that taxes be withheld with respect to any payments by BMS to Schrödinger under this Agreement, BMS will: (a) deduct those taxes from the remittable payment, (b) pay the taxes to the proper taxing authority, and (c) send evidence of the obligation together with proof of tax payment to Schrödinger on a timely basis following that tax payment. To the extent that amounts are so withheld, such withheld amounts shall be treated for all purposes of this Agreement as having been delivered and paid to Schrödinger. Each Party agrees to cooperate with the other Party in claiming refunds or exemptions from such deductions or withholdings under any relevant agreement or treaty which is in effect. The Parties shall discuss applicable mechanisms for minimizing such taxes to the extent possible in compliance with Applicable Law. In addition, the Parties shall cooperate in accordance with Applicable Law to minimize indirect taxes (such as value added tax, sales tax, consumption tax and other similar taxes) in connection with this Agreement.

8.8 **Foreign Exchange**. Conversion of sales recorded in local currencies to Dollars shall be performed in a manner consistent with BMS' normal practices used to prepare its audited financial statements for internal and external reporting purposes.

8.9 **Records**. BMS shall keep, and shall cause its Affiliates and Sublicensees to keep, complete, true and accurate books of accounts and records sufficient to determine and establish the amounts payable incurred under this Agreement, and compliance with the other terms and conditions of this Agreement. Such books and records shall be kept reasonably accessible and shall be made available for inspection for a [***] period in accordance with Section 8.10 below.

8.10 **Inspection of BMS Records**. Upon reasonable prior notice, BMS shall permit an independent nationally recognized certified public accounting firm (subject to obligations of confidentiality to BMS), appointed by Schrödinger and reasonably acceptable to BMS, to inspect the audited financial records of BMS to the extent relating to payments to Schrödinger; provided, that such inspection shall not occur more often than [***], unless a material error is discovered as part of such inspection in which case Schrödinger shall have the right to conduct a more thorough inspection for such period. Any inspection conducted under this Section 8.10 shall be at the cost and expense of Schrödinger, unless such inspection reveals any underpayment of the royalties due hereunder for the audited period by at least [***] percent ([***]%), in which case the full costs of such inspection for such period shall be borne by BMS. Any underpayment shall be paid by BMS to Schrödinger within [***] with interest on the underpayment at the rate specified in Section 8.11 from the date such payment was originally due, and any overpayment shall be credited against future amounts due by BMS to Schrödinger.

8.11 **Late Payments**. Any payments or portions thereof due hereunder that are not paid on the date such payments are due under this Agreement shall bear interest at a rate equal to the lesser of: (a) [***] above the prime rate as published by Citibank, N.A., New York, New York, or any successor thereto, at 12:01 a.m. on the first day of each Calendar Quarter in which such payments are overdue or (b) the maximum rate permitted by Applicable Law; in each case calculated on the number of days such payment is delinquent, compounded monthly.

8.12 **Payments to or Reports by Affiliates**. Any payment required under any provision of this Agreement to be made to either Party or any report required to be made by any Party shall be made to or by an Affiliate of that Party if designated in writing by that Party as the appropriate recipient or reporting entity.

8.13 **No Payments for Degrader Compounds**. For the avoidance of doubt, no payments shall be payable by BMS under this Article 8 with respect to the development or commercialization of Degrader Compounds or in connection with the Degrader Program.

8.14 **Inventor Compensation.** Schrödinger shall be responsible for and shall bear all costs associated with any Inventor Compensation for any employees of Schrödinger or any of its Affiliates (or of any Third Party contractors of Schrödinger or any of its Affiliates), whether employed at any time prior to the Effective Date or during the Term of the Agreement. In addition, as between the Parties, Schrödinger shall be responsible for and shall bear all costs associated with any Inventor Compensation for any other developers or inventors of the Schrödinger Technology or Product Specific Patents developed or invented as of the Effective Date. "**Inventor**

Compensation" means any compensation that is or may in the future become payable for or based upon the use or Exploitation of the Schrödinger Technology, Product Specific Patents, Licensed Collaboration Compounds or Licensed Collaboration Products, including the use and Exploitation of Schrödinger Technology, Product Specific Patents, Licensed Collaboration Compounds or Licensed Collaboration Products by or on behalf of BMS pursuant to this Agreement.

8.15 Companion Diagnostics. Notwithstanding any terms to the contrary in this Article 8, the milestones and royalties in this Article 8 shall not apply with respect to the development or commercialization of Companion Diagnostics developed by or on behalf BMS. In the event that BMS develops any Companion Diagnostic, the Parties will negotiate in good faith appropriate economic terms, if any, that would be applicable to such Companion Diagnostic consistent with industry practices and taking into consideration the benefits Schrödinger would derive from such Companion Diagnostic through the Development and Commercialization of Licensed Collaboration Compounds or Licensed Collaboration Products by or on behalf of BMS or its Affiliates or its or their Sublicensees pursuant to this Agreement.

9. OWNERSHIP OF INVENTIONS, PATENT PROSECUTION AND ENFORCEMENT

9.1 Ownership of Information and Inventions.

(a) Except as expressly set forth in Section 9.1(b), as between the Parties, each Party will own all inventions (and Patents that claim such inventions) solely conceived of by or on behalf of it or its Affiliates or its or their respective employees, agents and independent contractors in the course of conducting its activities under this Agreement (collectively, "**Sole Inventions**"). All inventions conceived of jointly by employees, Affiliates, agents, or independent contractors of each Party or any of its Affiliates in the course of conducting its activities under this Agreement (collectively, "**Joint Inventions**") and Joint Patents will be owned jointly by the Parties. This Agreement will be understood to be a joint research agreement under 35 U.S.C. §103(c)(3) entered into for the purpose of researching, identifying and developing Licensed Collaboration Compounds or Licensed Collaboration Products under the terms set forth herein. Subject to the rights and licenses granted under this Agreement, it is understood that neither Party shall have any obligation to account to the other Party for profits, or to obtain any approval of the other Party to license, assign or otherwise exploit such Joint Inventions, by reason of joint ownership thereof, and each Party hereby waives any right it may have under the Applicable Law of any jurisdiction to require any such approval or accounting.

(b) As between the Parties, any inventions (and Patents that claim such inventions) conceived by or on behalf of either Party or its Affiliates or its or their respective employees, agents and independent contractors (whether solely, jointly or with one (1) or more Third Party(ies)) in the course of conducting its activities under this Agreement during the Research Term to the extent such inventions relate specifically to the Schrödinger Platform, including those that constitute improvements to the Schrödinger Platform (the "**Schrödinger Platform Inventions**") will be owned by Schrödinger. For clarity, [***]. To the extent BMS or its Affiliates has or obtains any right, title or interest in or to the Schrödinger Platform Inventions, BMS and its Affiliates will, and hereby do, assign to Schrödinger or one or more of its designated Affiliates, its and its Affiliates' rights, title and interest in any Schrödinger Platform Inventions

conceived by BMS or its Affiliates or its or their respective employees, agents and independent contractors (whether solely, jointly or with one (1) or more Third Party(ies)) during the Research Term. BMS will take all reasonable actions and provide Schrödinger with all reasonably requested assistance to effect such assignment and will execute any and all documents necessary to perfect such assignment. Promptly following BMS' or any of its Affiliate's receipt of an invention disclosure with respect to any invention conceived, solely or jointly, by BMS or its Affiliates that constitutes a Schrödinger Platform Invention, BMS will promptly disclose to Schrödinger in writing, and will cause its Affiliates to so disclose, such Schrödinger Platform Invention.

(c) Inventorship for patentable inventions conceived during the course of the performance of activities pursuant to this Agreement shall be determined in accordance with U.S. Patent laws for determining inventorship and other Applicable Law in the U.S. without regard to conflict of law, irrespective of where or when such conception, discovery, development or making occurs. If U.S. law otherwise would not apply to the conception, reduction to practice, discovery, development or other making of any Information or inventions hereunder, each Party shall, and does hereby, assign, and shall cause its Affiliates and its and their Sublicensees to so assign, to the other Party, without additional compensation, such right, title and interest in and to any Information and inventions as well as any intellectual property rights with respect thereto, as is necessary to fully effect, as applicable, the sole ownership or the joint ownership provided for in Section 9.1(a) or Section 9.1(b).

9.2 Prosecution of Product Specific Patents and Joint Patents.

(a) BMS will have the first right, but not the obligation, to draft, file, prosecute and maintain (including any oppositions, interferences, reissue proceedings, reexaminations and post-grant proceedings) in all jurisdictions in the Territory the Product Specific Patents and the Joint Patents (such activities with respect to Patents being the "**Prosecution**", with the term "**Prosecute**" having the corresponding meaning). Such Prosecution of the Product Specific Patents or Joint Patents shall be handled by outside counsel mutually agreed upon by the Parties that will jointly represent the Parties (the "**Patent Firm**"). Subject to Section 9.2(b), BMS shall bear one hundred percent (100%) of the Patent Prosecution Costs for the Product Specific Patents and each Party shall bear its own Patent Prosecution Costs for the Joint Patents. BMS shall have lead responsibility and decision-making control for such Prosecution of the Product Specific Patents and Joint Patents. For clarity, each Party will bear its own internal costs (i.e., those costs that are not Patent Prosecution Costs) with respect to its Prosecution activities for the Product Specific Patents and Joint Patents.

(b) In the event that BMS elects not to Prosecute in any country any Patent within the Product Specific Patents or Joint Patents, BMS will give Schrödinger at least [***] notice before any relevant deadline and provide to Schrödinger information it reasonably requests relating to the Product Specific Patent or Joint Patent. Schrödinger will then have the right to assume responsibility, using patent counsel of its choice, for the Prosecution of such Product Specific Patent or Joint Patent. If Schrödinger assumes responsibility for the Prosecution for any such Product Specific Patents or Joint Patents as set forth above, then the Patent Prosecution Costs incurred by Schrödinger in the course of such Prosecution will thereafter be borne by Schrödinger, and such Product Specific Patent shall thereafter be deemed to be an Other Schrödinger Patent and BMS' license rights with respect to such Product Specific Patent (and any continuation or

divisional thereof) under Section 7.1 shall become nonexclusive. The Parties will cooperate in such Prosecution in all respects.

(c) Each Party will provide the other Party all reasonable assistance and cooperation in the Prosecution of the Product Specific Patents and Joint Patents in all respects, including providing any necessary powers of attorney and executing any other required documents or instruments for such Prosecution, as necessary to Prosecute the Product Specific Patents and Joint Patents. Each Party will provide the other Party with copies of any documents it receives or prepares in connection with such Prosecution and will inform the other Party of the progress of it. Before filing in connection with such Prosecution any document with a patent office, each Party will provide a copy of the document to the other Party sufficiently in advance to enable the other Party to comment on it, and the first Party will give due consideration to such comments and will reasonably incorporate any of such comments in the first Party's filings or responses to the extent such comments are provided sufficiently in advance of any applicable filing deadlines. In particular, each Party agrees to provide the other Party with all information necessary or desirable to enable the other Party to comply with the duty of candor/duty of disclosure requirements of any patent authority.

(d) **Patent Term Extensions**. The Parties will confer regarding the desirability of seeking in any country any patent term extension, supplemental patent certificate or related extension of rights with respect to the Product Specific Patents and Joint Patents. BMS shall have the sole right, but not the obligation, to apply for any such extension or supplemental patent certificate or related extension of rights with respect to the Product Specific Patents or Joint Patents. Neither Party will proceed with such an extension until the Parties have consulted with one another and agreed to a strategy therefor, provided that in the case where the Parties are unable to reach consensus, BMS will have the final decision making authority with respect to such decision, including whether or not to seek an extension for any Product Specific Patent and Joint Patent. Without limiting the foregoing, Schrödinger covenants that it will not seek patent term extensions, supplemental protection certificates, or similar rights or extensions for the Product Specific Patents without the prior written consent of BMS. Each Party will cooperate fully with and provide all reasonable assistance to the other Party and use all commercially reasonable efforts consistent with its obligations under Applicable Law (including any applicable consent order or decree) in connection with obtaining any such extensions for the Product Specific Patents consistent with such strategy. To the extent reasonably and legally required in order to obtain any such extension in a particular country, each Party will make available to the other a copy of the necessary documentation to enable such other Party to use the same for the purpose of obtaining the extension in such country.

9.3 Regulatory Exclusivity. As applicable, BMS will have the sole right and authority for securing, maintaining and enforcing exclusivity rights that may be available under Applicable Law in a country for a Licensed Collaboration Product, such as any data, market, pediatric, orphan drug or other regulatory exclusivity periods. Schrödinger will cooperate fully with and provide all reasonable assistance to BMS and use all commercially reasonable efforts consistent with its obligations under Applicable Law (including any applicable consent order or decree) to seek, maintain and enforce all regulatory exclusivity periods available for the Licensed Collaboration Products.

9.4 Prosecution and Enforcement of Other Patents

(a) **BMS Patents**. As between the Parties, BMS will have the sole right and authority with respect to BMS Patents in any jurisdiction, including Prosecution and enforcement. BMS will be responsible for all costs incurred by it (including all Patent Prosecution Costs) in the course of Prosecuting and enforcing such BMS Patents.

(b) **Other Schrödinger Patent Rights**. As between the Parties, Schrödinger will have the sole right and authority with respect to all Schrödinger Patent Rights other than the Joint Patents and Product Specific Patents ("**Other Schrödinger Patents**"), including Prosecution and enforcement. Schrödinger will be responsible for all costs incurred by it (including all Patent Prosecution Costs) in the course of Prosecuting and enforcing such Other Schrödinger Patents.

9.5 Infringement of Product Specific Patents, Joint Patents and Other Schrödinger Patents by Third Parties.

(a) **Notification**. On a Designated Target-by-Designated Target basis, the Parties will promptly notify each other of any actual, threatened, alleged or suspected infringement by a Third Party (an "**Infringement**") of the Product Specific Patents, Joint Patents or Schrödinger Patent Rights with respect to any Third Party products targeting, modulating or otherwise directed to such Designated Target in the Territory. A notice under 42 U.S.C. 262(l) (however such section may be amended from time to time during the Term) with respect to a Licensed Collaboration Compound or Licensed Collaboration Product will be deemed to describe an act of Infringement, regardless of its content. As permitted by Applicable Law, each Party will promptly notify the other Party in writing of any such Infringement of which it becomes aware, and will provide evidence in such Party's possession demonstrating such Infringement. In particular, each Party will notify and provide the other Party with copies of any allegations of patent invalidity, unenforceability or non-infringement of any Product Specific Patents, Joint Patents or Schrödinger Patent Rights Covering a Licensed Collaboration Compound or Licensed Collaboration Product (including methods of use or manufacture thereof). Such notification and copies will be provided by the Party receiving such certification to the other Party as soon as practicable and, unless prohibited by Applicable Law, at least within [***] after the receiving Party receives such certification. Such notification and copies will be sent by facsimile and overnight courier to BMS at the address set forth below, and to Schrödinger at the address specified in Section 17.5.

Bristol-Myers Squibb Company
P.O. Box 4000
Route 206 & Province Line Road
Princeton, New Jersey 08543-4000
Attention: Senior Vice President, Innovation Law
Telephone: [***]
Facsimile: [***]

(b) **Enforcement of Product Specific Patents and Joint Patents**. BMS will have the first right, but not the obligation, to bring and control, at its cost and expense, an appropriate suit or other action before any government or private tribunal against any person or entity allegedly engaged in any Infringement of any Product Specific Patent or Joint Patent

("**Product Specific Infringement Action**") to remedy the Infringement (or to settle or otherwise secure the abatement of such Infringement). The foregoing right of BMS shall include the right to perform all actions of a reference product sponsor set forth in 42 USC 262(l). Schrödinger will have the right, at its own cost and expense and by counsel of its choice, to be represented in (but not control) any Product Specific Infringement Action. At BMS' request, Schrödinger will join any Product Specific Infringement Action as a party (all at BMS' cost and expense) if doing so is necessary for the purposes of establishing standing or is otherwise required by Applicable Law to pursue such action. BMS will have a period of [***] after its receipt or delivery of notice and evidence pursuant to Section 9.5(a) to elect to so enforce such Product Specific Patents or Joint Patents in the applicable jurisdiction to remedy the Infringement (or to settle or otherwise secure the abatement of such Infringement), provided, however, that such period will be more than [***] to the extent Applicable Law prevents earlier enforcement of such Product Specific Patents or Joint Patents (such as the enforcement process set forth in 42 USC 262(l)) and such period will be less than [***] to the extent that a delay in bringing an action to enforce the applicable Product Specific Patents or Joint Patents against such alleged Third Party infringer would limit or compromise the remedies (including monetary and injunctive relief) available against such alleged Third Party infringer. In the event BMS does not so elect to remedy the Infringement (or settle or otherwise secure the abatement of such Infringement) within the aforementioned period of time or [***] before the time limit, if any, for the filing of a Product Specific Infringement Action, whichever is sooner, it will so notify Schrödinger in writing and in the case where Schrödinger then desires to commence a suit or take action to enforce the applicable Product Specific Patents or Joint Patents with respect to such Infringement (or settle or otherwise secure the abatement of such Infringement) in the applicable jurisdiction, the Parties will confer and, upon BMS' prior written consent (not to be unreasonably withheld, conditioned or delayed), Schrödinger will have the right to commence such a suit or take such action to enforce the applicable Product Specific Patents or Joint Patents with respect to such Infringement (or settle or otherwise secure the abatement of such Infringement), at Schrödinger's cost and expense. Each Party will provide to the Party enforcing any such rights under this Section 9.5(b) reasonable assistance in such enforcement, at such enforcing Party's request and cost and expense, including joining such action as a party plaintiff if required by Applicable Law to pursue such action. The enforcing Party will keep the other Party regularly informed of the status and progress of such enforcement efforts, and will reasonably consider the other Party's comments on any such efforts.

(c) **Settlement**. Without the prior written consent of the other Party (not to be unreasonably withheld, conditioned or delayed), neither Party will settle any Product Specific Infringement Action in any manner that would adversely affect a Product Specific Patent or Joint Patent; provided, that BMS shall have the right to grant (sub)licenses under the Product Specific Patents and Joint Patents in its sole discretion and Schrödinger shall reasonably cooperate with such efforts (including by granting any license to BMS to effect the same) or that would limit or restrict the ability of BMS (or its Affiliates or its or their Sublicensees, as applicable) to sell Licensed Collaboration Products anywhere in the Territory.

(d) **Expenses and Recoveries**. A Party bringing a Product Specific Infringement Action under this Section 9.5 against any Third Party engaged in Infringement of the Product Specific Patents or Joint Patents will be solely responsible for any costs and expenses incurred by such Party as a result of such Product Specific Infringement Action. If such Party recovers monetary damages from such Third Party in such Product Specific Infringement Action,

such recovery will first be applied to all out-of-pocket costs and expenses incurred by the Parties in connection therewith, including attorneys' fees, but excluding any costs and expenses incurred by Schrödinger pursuant to the third sentence of Section 9.5(b). If such recovery is insufficient to cover all such costs and expenses of both Parties, it will be shared pro-rata in proportion to the relative amount of such costs and expenses incurred by each Party. If after such reimbursement any funds remain from such damages, such funds will be shared as follows: (i) if BMS is the Party bringing such Product Specific Infringement Action, such remaining funds will be retained by BMS and treated as Net Sales of the applicable Licensed Product, and (ii) if Schrödinger is the Party bringing such Product Specific Infringement Action, such remaining funds will be retained by Schrödinger.

9.6 Third Party Rights.

(a) The Parties will promptly notify each other of any written allegation that any activity pursuant to this Agreement infringes or misappropriates the Patent rights of any Third Party. In addition, the Parties will notify each other if either Party desires to obtain a license or otherwise pursue a defense or settlement with respect to any Third Party Patent that may be considered to Cover Licensed Collaboration Compounds or Licensed Collaboration Products or their Manufacture or use.

(b) Subject to Section 9.6(c), (d) and (e), with respect to any Third Party Patent under Section 9.6(a), and without limiting the right of a Party against whom a claim of infringement of any Third Party Patent is filed to seek indemnification for such claim pursuant to Article 15, as between the Parties, notwithstanding any right of the Indemnifying Party to control as set forth in Section 15.3, BMS will have the sole right to seek a license, at its cost and expense, with respect to such Third Party Patent that Covers the composition, formulation, method of use or method of Manufacture of any Licensed Collaboration Compound or Licensed Collaboration Product pursuant to Section 8.4(e).

(c) Notwithstanding the foregoing, in the case a claim of infringement of a Patent is brought against a Party in a suit or other action or proceeding with respect to any Third Party Patent under Section 9.6(a), such Party will have the right, at its own cost and expense and by counsel of its own choice, to prosecute and defend any such claim in such suit or other action or proceeding. If both Parties are named, the Parties shall meet and determine who is best situated to lead any such suit or other action or proceeding.

(d) Without the prior written consent of the other Party (not to be unreasonably withheld, conditioned or delayed), neither Party will settle any claim under this Section 9.6 in any manner that would impose any material obligations, restriction or limitation on the other Party; provided, however, that the foregoing shall not restrict BMS' right to grant or take a license or sublicense to settle or avoid litigation related to the alleged infringement by a Licensed Collaboration Product or the Exploitation thereof of any Patent or other intellectual property of a Third Party or the alleged non-infringement, invalidity or unenforceability of any Patent Covering a Licensed Product, including any Product Specific Patent.

(e) The Parties will reasonably cooperate with one another in prosecuting or defending any action pursuant to this Section 9.6.

9.7 Patent Challenges.

(a) The Parties will promptly notify each other in the event that any Third Party files, or threatens to file, any paper in a court, patent office or other Governmental Authority, seeking to invalidate, reexamine, oppose or compel the licensing of any Schrödinger Patent Right, Joint Patent or Product Specific Patent (any such Third Party action being a "**Patent Challenge**").

(b) Without limiting the right of a Party against whom a claim of infringement of any Third Party Patent is filed to seek indemnification for such claim pursuant to Article 15, as between the Parties, notwithstanding any right of the Indemnifying Party to control as set forth in Section 15.3, BMS will have the first right, but not the obligation, to bring and control, at its cost and expense (but without limiting its right to seek indemnification, if applicable), any effort in defense of such a Patent Challenge against a Product Specific Patent or Joint Patent, except in the case where such Patent Challenge is made in connection with a Product Specific Infringement Action, in which case the enforcing Party in the Product Specific Infringement Action will have the first right, but not the obligation, to bring and control the defense of such Patent Challenge and such Patent Challenge will be considered part of the Product Specific Infringement Action under this Article 9. In the case where BMS controls the defense of such Patent Challenge, Schrödinger will have the right, at its own cost and expense and by counsel of its choice, to be represented in (but not control) any such effort. If BMS fails to take action to defend such Patent Challenge within [***] of the time limit for bringing such defense (or within such shorter period to the extent that a delay in bringing such defense would limit or compromise the outcome of such defense of such Patent Challenge), then Schrödinger will have the right, but not the obligation, to bring and control any effort in defense of such Patent Challenge at its own cost and expense (but without limiting its right to seek indemnification, if applicable).

(c) Schrödinger will have the sole right, but not the obligation, to bring and control, at its cost and expense, any effort in defense of such a Patent Challenge related to any Other Schrödinger Patent.

9.8 Disclosure of Inventions. Each Party will promptly disclose to the other Party all invention disclosures submitted to such Party by its or its Affiliates' employees describing Sole Inventions made under or in connection with the Research Program or Joint Inventions. Each Party will also respond promptly to reasonable requests from the other Party for more Information relating to such inventions.

9.9 Patent Contacts. Each Party will designate patent counsel representatives who will be responsible for coordinating the activities between the Parties in accordance with this Article 9 (each a "**Patent Contact**"). Each Party will designate its initial Patent Contact within [***] following the Effective Date and will promptly thereafter notify the other Party of such designation. If at any time a vacancy occurs for any reason, the Party that appointed the prior incumbent will as soon as reasonably practicable appoint a successor. Each Party will promptly notify the other Party of any substitution of another person as its Patent Contact. The Patent Contacts will, from time to time, coordinate the respective patent strategies of the Parties relating to this Agreement. In particular the Patent Contacts will review and update the list of Schrödinger Patent Rights and Product Specific Patents from time to time to ensure that all Licensed

Collaboration Compounds or Licensed Collaboration Products being Developed or Commercialized are covered.

9.10 Personnel Obligations. Prior to receiving any Confidential Information or beginning work under the Research Program, each employee, agent or independent contractor of BMS or Schrödinger or of either Party's respective Affiliates will be bound in writing by non-disclosure and invention assignment obligations which are consistent with the obligations of BMS or Schrödinger under this Agreement (provided that where necessary in the case of a Third Party (i) such Third Party shall agree to grant BMS or Schrödinger, as the case may be, an exclusive license with the right to grant sublicenses with respect to resulting inventions and Patents; provided that such obligation to obtain ownership or an exclusive license will not apply to any improvements to the proprietary core or platform technology owned or in-licensed by such Third Party unless such improvements are necessary or reasonably useful to research, Develop, Manufacture or Commercialize Licensed Collaboration Compounds or Licensed Collaboration Products with respect to which such Third Party conducted its activities under such contract; and (ii) the period of time with respect to non-disclosure obligations may be shorter, if customary).

9.11 Further Action. Each Party will, upon the reasonable request of the other Party, provide such assistance and execute such documents as are reasonably necessary for such Party to exercise its rights and perform its obligations pursuant to this Article 9; provided, however, that neither Party will be required to take any action pursuant to Article 9 that such Party reasonably determines in its sole judgment and discretion conflicts with or violates any applicable court or government order or decree or Applicable Law.

10. TRADEMARKS

10.1 Licensed Product Trademarks. BMS shall be solely responsible for the selection (including the creation, searching and clearing), registration, maintenance, policing and enforcement of all trademarks developed for use in connection with the marketing, sale or distribution of Licensed Compounds and Licensed Products in the Field in the Territory (the "**Product Marks**"). As between the Parties, BMS shall own all Product Marks, and all trademark registrations for said marks.

10.2 Use of Name. Neither Party shall, without the other Party's prior written consent, use any trademarks or other marks of the other Party (including the other Party's corporate name), trademarks, advertising taglines or slogans confusingly similar thereto, in connection with such Party's marketing or promotion of Licensed Compounds or Licensed Products under this Agreement or for any other purpose, except as may be expressly authorized in writing in connection with activities under this Agreement and except to the extent required to comply with Applicable Law.

10.3 Further Actions. Each Party shall, upon the reasonable request of the other Party, provide such assistance and execute such documents as are reasonably necessary for such Party to exercise its rights or perform its obligations pursuant to this Article 10; provided, however, that neither Party shall be required to take any action pursuant to Article 10 that such Party reasonably determines in its sole judgment and discretion conflicts with or violates any applicable court or government order or decree or Applicable Law.

11. EXCLUSIVITY

11.1 Exclusivity Regarding Development and Commercialization of Target Compounds.

(a) Subject to this Article 11, (i) during the Term, with respect to each Designated Target, and (ii) during the Substitution Period, with respect to each Reserved Target (unless such Reserved Target becomes a Designated Target under this Agreement, in which case clause (i) shall apply to such Designated Target), Schrödinger shall not, for itself, or with, through or for its Affiliates or any Third Party (including the grant of any license, option or other right to any Third Party), [***] engage in, directly or indirectly, any clinical development or commercialization anywhere in the Territory with respect to any Target Compound or any other Compound, or any product containing any Target Compound or other Compound, in each case that specifically modulates as its primary mechanism of action (or, if applicable, its Primary Activity), or is designed to specifically modulate, such Designated Target or Reserved Target (as applicable) [***], including any Licensed Compound or Licensed Product for such Designated Target or [***]. By way of example, [***].

(b) In the event that any Designated Target is substituted for a Substitute Target in accordance with Section 3.4(c), (i) upon the JSC approving the Research Plan (including the Primary Activity, LO Criteria, LO Timeline and DC Criteria) for such Substitute Target in accordance with Section 3.4(c), the foregoing exclusivity obligations shall no longer apply with respect to the former Designated Target except to the extent otherwise provided in the Definitive Degrader Agreement.

11.2 [***].

11.3 Exceptions.

(a) The restrictions set forth in Section 11.1 and Section 11.2 shall not apply to Schrödinger's or its any of its Affiliates' performance of (i) the Research Program under and in accordance with this Agreement, (ii) the Permitted Reserved Target Activities, (iii) the Schrödinger Technology Services, or (iv) activities under and in accordance with the Definitive Degrader Agreement (if any); provided that with respect to [***].

(b) The Parties hereby acknowledge and agree that the restrictions set forth in Sections 11.1 and 11.2 shall not apply to any activities intended by Schrödinger or any of its Affiliates to ensure its compliance with Sections 11.1 or 11.2 (*e.g.*, counter-screening).

11.4 Acquisition of Distracting Product. Notwithstanding the provisions of Section 11.1 and Section 11.2, if Schrödinger or any of its Affiliates acquires rights to clinically develop or commercialize a product in the Field as the result of a merger, acquisition or combination with or of a Third Party other than a Change of Control Transaction of Schrödinger (each, an "**Acquisition Transaction**") and, on the date of the closing of such Acquisition Transaction, such product is being clinically developed or commercialized and such activities would, but for the provisions of this Section 11.4, constitute a breach of Section 11.1 or 11.2 (such product, a "**Distracting Product**"), Schrödinger will, within [***] after the closing of such Acquisition Transaction notify BMS in writing of such acquisition and either:

[***].

11.5 Change of Control. If there is a Change of Control Transaction of Schrödinger, the obligations of Sections 11.1 and 11.2 will not preclude the Acquirer or any of its Affiliates (other than such Party and any Person that was an Affiliate of Schrödinger prior to such Change of Control Transaction or any successor entity to Schrödinger or any such Affiliates thereof) from exploiting any program, compound or product of the Acquirer; provided that [***].

12. CONFIDENTIALITY

12.1 Confidentiality. Except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the Parties, each Party (the "**Receiving Party**") agrees that, for the Term and for [***] thereafter, it shall keep confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as provided for in this Agreement (which includes the exercise of any rights or the performance of any obligations hereunder) any Confidential Information of the other Party (the "**Disclosing Party**") pursuant to this Agreement except for that portion of such Confidential Information that the Receiving Party can demonstrate by competent written proof:

(a) was already known to the Receiving Party or any of its Affiliates, other than under an obligation of confidentiality or any restriction on its use to the Disclosing Party, at the time of disclosure by the other Party; provided, however, this exception shall not apply with respect to Licensed Collaboration Product Information or Confidential Information that is deemed to be the Confidential Information of both Parties under this Agreement;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the Receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the Receiving Party in breach of this Agreement;

(d) is subsequently disclosed to the Receiving Party or any of its Affiliates by a Third Party lawfully in possession thereof and without obligations of confidentiality or restriction on its use to the Disclosing Party with respect thereto; or

(e) is subsequently independently discovered or developed by the Receiving Party or its Affiliates without the aid, application, or use of Confidential Information of the Disclosing Party, as demonstrated by documented evidence prepared contemporaneously with such independent development provided, however, this exception shall not apply with respect to Licensed Collaboration Product Information or Confidential Information that is deemed to be the Confidential Information of both Parties under this Agreement.

Any combination of features or disclosures will not be deemed to fall within the foregoing exclusions merely because individual features are published or available to the general public or in the rightful possession of the Receiving Party unless the combination itself and principle of operation are published or available to the general public or in the rightful possession of the Receiving Party, and any individual feature or disclosure will not be deemed to fall within the

foregoing exclusions merely because a broader or related combination of such feature or disclosure is published or available to the general public unless the individual feature or disclosure itself and principle of operation are published or available to the general public or in the rightful possession of the Receiving Party.

12.2 Authorized Disclosure. Notwithstanding the obligations of confidentiality and non-use set forth in Section 12.1, each Party may disclose Confidential Information of the Disclosing Party to the extent such disclosure is reasonably necessary in the following situations:

(a) filing or prosecuting Patents in accordance with Article 9;

(b) subject to Section 12.3, regulatory filings and other filings with Governmental Authorities (including Regulatory Authorities), including filings with the FDA, as necessary for the Development or Commercialization of a Licensed Collaboration Compound or Licensed Collaboration Product, as required in connection with any filing, application or request for Regulatory Approval; provided, however, that reasonable measures will be taken to seek confidential treatment of such information, if available;

(c) prosecuting or defending litigation;

(d) subject to Section 12.3, complying with Applicable Law, including regulations promulgated by securities exchanges;

(e) disclosure of this Agreement (including its material terms) to any bona fide potential or actual investor, stockholder, investment banker, lender, acquirer, merger partner or other actual financial partner and their representatives and advisors (including attorneys and accountants) on a reasonable need-to-know basis; provided, that each disclosee must be bound by obligations of confidentiality and non-use at least as equivalent in scope as and no less restrictive than those set forth in this Article 12 prior to any such disclosure (but of shorter duration, if customary);

(f) disclosure of the stage of research or Development of Licensed Collaboration Compounds or Licensed Collaboration Products under this Agreement (but no other Licensed Collaboration Product Information) to any bona fide potential or actual investor, stockholder, investment banker, lender, acquirer, merger partner or other potential or actual financial partner and their representatives and advisors (including attorneys and accountants); provided, that each disclosee must be bound by obligations of confidentiality and non-use at least as equivalent in scope as and no less restrictive than those set forth in this Article 12 prior to any such disclosure (but of shorter duration, if customary);

(g) disclosure of data generated under this Agreement on a “need to know basis” to any bona fide potential or actual investor, stockholder, investment banker, lender, acquirer, merger partner or other potential or actual financial partner and their representatives and advisors (including attorneys and accountants); provided, that each disclosee must be bound by obligations of confidentiality and non-use at least as equivalent in scope as and no less restrictive than those set forth in this Article 12 prior to any such disclosure (but of shorter duration, if customary);

(h) solely on a "need to know basis" to actual research and development collaborators, subcontractors, advisors (including attorneys and accountants) or to bona fide potential subcontractors who have entered into good faith discussions with such Party that are subject to obligations of confidentiality and non-use at least as equivalent in scope as and no less restrictive than those set forth in this Article 12, in each case, in connection with activities in connection with the Research Program; and

(i) disclosure pursuant to Section 12.5.

Notwithstanding the foregoing, in the event a Party is required to make a disclosure of the other Party's Confidential Information pursuant to Sections 12.2(a), 12.2(c) or 12.2(d), it will, except where impracticable, (i) give reasonable advance notice to the other Party of such disclosure (including as to the form and terms of such disclosure), (ii) give the other Party copies of any such disclosure, (iii) give the other Party a reasonable opportunity to review and comment on any such disclosure (including the form and terms thereof) and consider such comments in good faith, and (iv) and use reasonable efforts to secure confidential treatment of such information. In any event, the Parties agree to take all reasonable action to avoid disclosure of Confidential Information hereunder, except as permitted in this Section 12.2.

Nothing in Sections 12.1 or 12.2 shall limit either Party in any way from disclosing to any Third Party such Party's U.S. or foreign income tax treatment and the U.S. or foreign income tax structure of the transactions relating to such Party that are based on or derived from this Agreement, as well as all materials of any kind (including opinions or other tax analyses) relating to such tax treatment or tax structure, except to the extent that nondisclosure of such matters is reasonably necessary in order to comply with applicable securities laws.

12.3 Publicity; Terms of Agreement.

(a) The Parties agree that the existence and terms of this Agreement are the Confidential Information of both Parties, subject to the special authorized disclosure provisions set forth in Section 12.2 and this Section 12.3. Except as set forth in Section 12.3(b) and 12.3(c), each Party agrees not to issue any press release or other public announcement disclosing the terms of this Agreement or the transaction contemplated hereby without the prior written consent of the other Party. Notwithstanding the foregoing, the Parties agree to issue a press release to announce the execution of this Agreement in the form attached hereto as **Exhibit F**; thereafter, Schrödinger and BMS may each disclose to Third Parties the information contained in such press release without the need for further approval by the other Party.

(b) In the case of a press release or governmental filing concerning the terms of this Agreement or the transaction contemplated hereby required by Applicable Law (where reasonably advised by the disclosing Party's counsel), the disclosing Party shall give prior advance notice (to the extent it reasonably can) of the proposed text of such release or filing to the other Party for its prior review not later than [***] prior to such release or filing and shall consider and incorporate in good faith any comments provided by the other Party in connection therewith.

(c) The Parties acknowledge that either or both Parties may be obligated to file under Applicable Law a copy of this Agreement with the SEC or other Governmental Authorities.

Each Party shall be entitled to make such a required filing, provided that it requests confidential treatment of at least the financial terms and sensitive technical terms hereof and thereof to the extent such confidential treatment is reasonably available to such Party. In the event of any such filing, each Party will provide the other Party with a copy of this Agreement marked to show provisions for which such Party intends to seek confidential treatment not less than [***] (or a shorter period of time if required by Applicable Law) prior to such filing (and any revisions to such portions of the proposed filing a reasonable time prior to the filing thereof), and shall reasonably consider the other Party's comments thereon to the extent consistent with the legal requirements, with respect to the filing Party, governing disclosure of material agreements and material information that must be publicly filed, and shall only disclose Confidential Information which it is advised by counsel or the applicable Governmental Authority is legally required to be disclosed. No such notice shall be required under this Section 12.3(c) if the substance of the description of or reference to this Agreement contained in the proposed filing has been included in any previous filing made by either Party hereunder or otherwise approved by the other Party and such information remains accurate as of such time.

(d) Each Party shall require each of its Affiliate to which Confidential Information of the other Party is disclosed as permitted hereunder to comply with the covenants and restrictions set forth in Section 12.1 through Section 12.3 as if each such Affiliate were a Party to this Agreement and shall be fully responsible for any breach of such covenants and restrictions by any such Affiliate.

12.4 Publications. Neither Party shall publicly present or publish results of studies carried out under the Research Program (each such presentation or publication a "**Publication**") without the opportunity for prior review by the other Party, except to the extent otherwise required by Applicable Law, in which case Section 12.3 shall apply with respect to disclosures required by the SEC or for regulatory filings. The submitting Party shall provide the other Party the opportunity to review any proposed Publication at least [***] prior to the earlier of its presentation or intended submission for publication. The submitting Party agrees, upon request by the other Party, not to submit or present any Publication until the other Party has had [***] to comment on any material in such Publication. The submitting Party shall consider the comments of the other Party in good faith, but will retain the sole authority to submit the manuscript for Publication; provided, that the submitting Party agrees to delay such Publication as necessary to enable the Parties to file a Patent if such Publication might adversely affect such Patent. The submitting Party shall provide the other Party a copy of the Publication at the time of the submission or presentation. On a Designated Target-by-Designated Target basis, from and after Handoff with respect to such Designated Target, (i) BMS shall have the sole right to publicly present or publish results of studies with respect to Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target in its sole discretion, and (ii) Schrödinger shall have no right to publicly present or publish results of studies with respect to Licensed Collaboration Compounds or Licensed Collaboration Products for such Designated Target without BMS' prior written approval (which may be withheld in BMS' sole discretion).

Nothing contained in this Section 12.4 shall prohibit the inclusion of Confidential Information of the other Party in a patent application claiming or Covering the Manufacture, use, sale or formulation of a Licensed Collaboration Compound, provided that the non-filing Party is given an opportunity to review, comment upon and approve the information to be included prior

to submission of such patent application, where and to the extent required by Article 9 hereof. Notwithstanding the foregoing, BMS shall not have the right to publish or present Schrödinger's Confidential Information without Schrödinger's prior written consent, and Schrödinger shall not have the right to publish or present BMS' Confidential Information without BMS' prior written consent. Each Party agrees to acknowledge the contributions of the other Party, and the employees of the other Party, in all publications as scientifically appropriate. This Section 12.4 shall not limit and shall be subject to Section 12.5.

Notwithstanding the foregoing, the Parties recognize that independent investigators have been engaged, and will be engaged in the future, to conduct Clinical Trials. The Parties recognize that such investigators operate in an academic environment and may release information regarding such studies in a manner consistent with academic standards; provided, that each Party will use reasonable efforts to prevent publication prior to the filing of relevant patent applications and to ensure that no Confidential Information of either Party is disclosed.

12.5 Publication and Listing of Clinical Trials and Compliance with other Policies, Orders and Agreements. The Parties agree to comply, with respect to the Licensed Collaboration Compounds and Licensed Collaboration Products, with (a) the Pharmaceutical Research and Manufacturers of America (PhRMA) Guidelines on the listing of Clinical Trials and the Publication of Clinical Trial results, (b) any applicable court order, stipulations, consent agreements and settlements entered into by a party, and (c) BMS' research and development policy concerning Clinical Trials registration and disclosure of results as amended from time to time and other BMS policies or other policies adopted by it for the majority of its other pharmaceutical products with regard to the same (to the extent the same either are not in direct conflict with the documents referred to in clauses (a) and (c) above and, in the case of Schrödinger, to the extent such policies are provided by BMS to Schrödinger in writing prior to requiring their implementation under this Agreement).

12.6 Effect of Change of Control Transaction of Schrödinger. In the event that Schrödinger undergoes a Change of Control Transaction with a Third Party (an Acquirer as defined below), then:

(a) the Material, Information, Patents or intellectual property of such Acquirer owned or controlled by such Acquirer or any of such Acquirer's Affiliates prior to such acquisition ("**Acquirer Technology**") shall not be deemed "Controlled" by Schrödinger or its Affiliates and shall be excluded from, and shall not be used or incorporated into, the Schrödinger Technology or Product Specific Patents; and

(b) [***] (such intellectual property that satisfies all of the foregoing clauses (i)-(iii), the "**Segregated Technology**") shall not be deemed "Controlled" by Schrödinger or its Affiliates and shall be excluded from, and shall not be used or incorporated into, the Schrödinger Technology or Product Specific Patents; and

(c) [***].

(d) As used herein, "**Acquirer**" means the Third Party involved in the Change of Control Transaction, and any Affiliate of such Third Party that was not an Affiliate of the

Acquired Party immediately prior to the effective date of the Change of Control Transaction, but, for clarity, does not include any successors to an Acquired Party; and "**Acquired Party**" means the Party that was the subject of such Change of Control Transaction, together with any entity that was its Affiliate immediately prior to the effective date of the Change of Control Transaction, and any of their successors.

12.7 BMS Personnel. With respect to any personnel of BMS [***] this Agreement.

12.8 Termination of Prior CDA. This Agreement terminates, as of the Effective Date, the Prior CDA. All Information exchanged between the Parties under the Prior CDA shall be deemed Confidential Information of the corresponding Party under this Agreement and shall be subject to the terms of this Article 12.

13. TERM AND TERMINATION

13.1 Term. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 13, shall continue until it expires as follows (the "**Term**"): (a) on a Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis on the date of the expiration of all payment obligations under this Agreement in such country with respect to such Licensed Collaboration Product and (b) in its entirety, upon the expiration of all payment obligations under this Agreement with respect to all Licensed Collaboration Products in all countries in the Territory.

13.2 Termination by BMS.

(a) **Termination by BMS at Will**. BMS may terminate this Agreement as a whole, or on a Collaboration Target-by-Collaboration Target basis, at any time after the Effective Date, for any reason or no reason, effective upon (i) sixty (60) days' prior written notice to Schrödinger in the case where a DC Candidate that meets the applicable DC Criteria has not been delivered to BMS for the applicable Collaboration Target, (ii) ninety (90) days' prior written notice to Schrödinger in the case where a DC Candidate that meets the applicable DC Criteria has been delivered to BMS but Regulatory Approval has not been obtained for any applicable Licensed Collaboration Product for such Collaboration Target in either the U.S. or the EU, or (iii) upon one hundred and eighty (180) days' prior written notice to Schrödinger in the case where Regulatory Approval has been obtained in either the U.S. or the EU for an applicable Licensed Collaboration Product for such Collaboration Target. For clarity, following any such notice of termination under this Section 13.2(a), [***] with respect to this Agreement as a whole, [***]; provided, however, that if [***]. For clarity, if, with respect to [***].

(b) **Termination by BMS for Safety Reasons**. BMS may terminate this Agreement on a Collaboration Target-by-Collaboration Target basis upon written notice to Schrödinger based on Safety Reasons. Upon such termination for Safety Reasons, BMS shall be responsible, at its cost and expense, for the wind-down of any Development of applicable Licensed Collaboration Products for such Collaboration Target (including any Clinical Trials for the applicable Licensed Product being conducted by or on behalf of BMS) and any Commercialization activities for applicable Licensed Collaboration Products for such Collaboration Target. Such termination shall become effective upon the date that BMS notifies Schrödinger in writing that

such wind-down is complete. Following any such notice of termination under this Section 13.2(b), no milestone payments will be due on milestones achieved during the period between the notice of termination and the effective date of termination.

13.3 Termination by Either Party for Breach.

(a) Subject to Section 13.3(b), in the event that a Party materially breaches this Agreement with respect to one or more Collaboration Target(s), the other Party may terminate this Agreement with respect to the affected Collaboration Target(s) if such breach shall have continued for (i) [***] in the case of a material breach as a result of non-payment, or (ii) [***] in the case of any other material breach, after written notice shall have been provided to the breaching Party by the non-breaching Party requiring such breach to be remedied and stating an intention to terminate if not so cured (such period, the "**Cure Period**") and such notice, a "**Termination Notice**"). Except as set forth in Section 13.3(a), any such termination shall become effective at the end of such Cure Period unless the breaching Party has cured any such breach prior to the expiration of the Cure Period (or, if a material breach described in clause (ii) above cannot be cured within such Cure Period, (A) in the case of a material breach of a Party's obligations to use Commercially Reasonable Efforts for research, Development or Commercialization hereunder, then such Cure Period shall be extended for an additional [***] period or (B) in the case of any other material breach described in clause (ii) above, then such Cure Period shall be extended for an additional [***] period, in each case ((A)-(B)) if the alleged breaching Party has commenced and diligently continues good faith efforts to cure such breach during such extension period). To the extent Schrödinger delivers a Termination Notice to BMS in the case of a material breach of BMS' obligations to use Commercially Reasonable Efforts to research or Develop Licensed Collaboration Compounds or Licensed Collaboration Products for a given Designated Target, the Parties will promptly meet in good faith to discuss such Termination Notice and whether BMS will prepare a plan (including timelines and objectives) to cure such breach or whether BMS is considering terminating such Designated Target pursuant to Section 13.2(a).

(b) If the alleged breaching Party disputes the existence or materiality of a breach specified in a Termination Notice provided by the other Party in accordance with Section 13.3(a), and such alleged breaching Party provides the other Party notice of such dispute within the applicable Cure Period after receiving such Termination Notice, then the matter will be resolved as provided in Article 16 and the non-breaching Party shall not have the right to terminate this Agreement under Section 13.3(a) with respect to the applicable Collaboration Target unless and until such dispute has been submitted to arbitration in accordance with Article 16 and it has been finally determined under Section 16.2 that this Agreement has been materially breached, and the breaching Party fails to cure such breach within [***] following such arbitrators' decision under Section 16.2 (or if such breach cannot be cured within such [***] period, if the alleged breaching Party has not commenced and diligently continues good faith efforts to cure such breach, except to the extent such breach involves the failure to make a payment when due, which breach must be cured within [***] following such arbitrators' decision). Except as provided in this Section 13.3(b), during the pendency of any such dispute, all of the terms and conditions of this Agreement shall remain in effect and the Parties shall continue to perform all of their respective obligations hereunder and the Cure Period set forth in Section 13.3(a) shall be tolled from the date the breaching Party notifies the non-breaching Party of such dispute and through the resolution of such dispute in accordance with the applicable provisions of this Agreement.

(c) [***] the effective date of termination; provided, however, if the [***]. In any event, if [***] of this Agreement [***].

13.4 Termination by Either Party for Insolvency. A Party shall have the right to terminate this Agreement upon written notice if the other Party incurs an Insolvency Event; provided, however, in the case of any involuntary bankruptcy proceeding, such right to terminate shall only become effective if the Party that incurs the Insolvency Event consents to the involuntary bankruptcy or if such proceeding is not dismissed or stayed within [***] after the filing thereof. "**Insolvency Event**" means circumstances under which a Party (a) has a receiver or similar officer appointed over all or a material part of its assets or business; (b) passes a resolution for winding-up of all or a material part of its assets or business (other than a winding-up for the purpose of, or in connection with, any solvent amalgamation or reconstruction) or a court enters an order to that effect; (c) has entered against it an order for relief recognizing it as a debtor under any insolvency or bankruptcy laws (or any equivalent order in any jurisdiction); or (d) enters into any composition or arrangement with its creditors with respect to all or a material part of its assets or business (other than relating to a solvent restructuring).

13.5 Termination for Patent Challenge. Schrödinger shall have the right to terminate this Agreement with respect to a Collaboration Target upon written notice to BMS in the event that BMS, its Sublicensees or any of its or their Affiliates commences or actively and voluntarily participates in any action or proceeding, or otherwise asserts any claim, challenging in a legal or administrative proceeding the patentability, enforceability or validity of any Schrödinger Patent Right or Product Specific Patent that Covers a Licensed Compound or Licensed Product for such Collaboration Target (except (a) as required under a court order or subpoena, (b) as a defense against a claim, action or proceeding asserted by or on behalf of Schrödinger (or any of its Affiliates or Sublicensees) against BMS, its Sublicensees or any of its or their Affiliates, or otherwise in connection with an assertion of a cross-claim or a counterclaim, or (c) any involvement in any interference proceeding or other adversarial proceeding similar to an interference, including as instituted by the U.S. Patent & Trademark Office or other agency or tribunal in any jurisdiction between the Schrödinger Patent Right or Product Specific Patent and any inventions claimed in Patents owned, licensed or controlled by BMS that was not pursuant to suggestion of interference by BMS or its Affiliates) (a "**Schrödinger Patent Challenge**"); provided that Schrödinger shall not have the right to terminate this Agreement under this Section 13.5 for any such Schrödinger Patent Challenge if such Schrödinger Patent Challenge is dismissed within [***] of Schrödinger's notice to BMS under this Section 13.5 and not thereafter continued.

13.6 Terminated Targets. With respect to any Designated Target for which this Agreement has been terminated (a) such Designated Target shall no longer be considered a Collaboration Target for all purposes of this Agreement and shall become a Terminated Target, (b) each Party's rights and obligations under this Agreement with respect to the research, Development, Manufacture, Commercialization or other Exploitation of such Terminated Target(s) shall automatically cease as of the effective date of termination and (c) Schrödinger and its Affiliates will be free to, alone or for or with any Third Party, research, develop, Manufacture or commercialize any compound, product or companion diagnostic for such Terminated Target. For clarity, if this Agreement is terminated in its entirety all Designated Targets shall be Terminated Targets.

13.7 Effects of Termination of this Agreement.

(a) **In General**. Upon termination of this Agreement in its entirety or with respect to one or more Collaboration Target(s) by a Party pursuant to Section 13.2 through Section 13.5, the following terms will apply to this Agreement, either in its entirety or with respect to Collaboration Target(s) that are the subject of such termination, as the case may be, and except as the application of such Sections may be limited as provided in a given subsection of this Section 13.7, and except as provided in the Definitive Degrader Agreement:

(i) Except in the case of Schrödinger for any Confidential Information of BMS that is Reversion IP, within [***] after the effective date of termination with respect to a Collaboration Target, each Party shall destroy all tangible items comprising, bearing or containing any Confidential Information of the other Party that are in its or its Affiliates' Control that is solely related to such terminated Collaboration Target; provided, that such Party may retain one copy of such Confidential Information for its legal archives, and provided further that such Party shall not be required to destroy electronic files containing Confidential Information that are made in the ordinary course of its business information back-up procedures pursuant to its electronic record retention and destruction practices that apply to its own general electronic files and information.

(ii) [***], Schrödinger shall remain entitled to receive all payments that accrued but were unpaid before the effective date of such termination;

(iii) If this Agreement is terminated in its entirety, the JSC (and all Working Groups and committees) will be dissolved as of the effective date of such termination; and

(iv) Certain provisions herein will survive termination, in accordance with Section 13.12.

13.8 Effects of Termination of the Agreement by BMS under Section 13.2(a) or by Schrödinger under Section 13.3, Section 13.4, or Section 13.5. Upon termination of this Agreement by BMS under Section 13.2 or by Schrödinger under Section 13.3, Section 13.4, or Section 13.5 with respect to one or more Collaboration Targets, the following shall apply with respect to DC Candidates ("**Reversion Compounds**") and Licensed Collaboration Products containing DC Candidates ("**Reversion Products**") for such Terminated Target(s) (in addition to any other rights and obligations under this Agreement with respect to such termination).

(a) **Obligations**. The licenses granted to BMS in Section 7.1(a) with respect to the Terminated Target(s) shall terminate with respect to all Licensed Compounds and Licensed Products for the Terminated Target(s) for which the termination becomes effective. Subject to patient and other ethical considerations, BMS shall wind-down any ongoing Clinical Trials for any Reversion Compounds or Reversion Products for the Terminated Target(s) in accordance with Applicable Law, at BMS' cost.

(b) **Licenses**. With respect to each Terminated Target, BMS shall grant, and hereby grants, to Schrödinger for any Reversion Compound that is [***] (each, a "**Termination Compound**" and a "**Termination Product**", respectively): (A) an exclusive, sublicensable (through multiple tiers of sublicensees) license to research, develop, manufacture, have

manufactured, use, sell, offer for sale, export and import (including the exclusive right to develop, have developed, commercialize and have commercialized) such Termination Compounds or Termination Products, and (B) a non-exclusive, sublicensable (through multiple tiers of sublicensees) license, to research, develop, manufacture, have manufactured, use, sell, offer for sale, export and import (including the exclusive right to develop, have clinically developed, commercialize and have commercialized) such Termination Compounds or Termination Products, under all of BMS' or its Affiliates' right, title and interest in and to, [***] (collectively, the "**Reversion IP**"); provided, that in consideration for such license, on a Termination Product-by-Termination Product basis, the Parties shall negotiate in good faith, and Schrödinger shall pay BMS, a reasonable royalty on net sales of all Termination Products until, on a Termination Product-by-Termination Product and country-by-country basis for a royalty term to be negotiated in good faith by the Parties, but consistent with the Royalty Term as defined in this Agreement. If the Parties are unable to agree on the reasonable royalty rate or term under this Section 13.8(b), either Party may submit such dispute to arbitration for resolution in accordance with the provisions in Section 16.2 as a Royalty Rate Matter. With respect to any Termination Product that is a Combination Product that includes as its only other active ingredient(s) one or more generic compound(s) (x) that are Controlled by BMS or its Affiliates as to which either BMS or any of its Affiliates has any Information or Patent rights or other intellectual property or other proprietary rights and (y) are not subject to any rights or obligations of any Third Party, then, upon Schrödinger's request, the Parties shall meet in good faith to discuss whether and how any such Termination Product should be exploited following the effect date of termination, including an appropriate allocation of responsibilities and economics and other terms and conditions with respect to such other active ingredient. [***].

(c) **Regulatory Materials**. Upon Schrödinger's written request, BMS shall (i) provide Schrödinger with copies of material existing preclinical and clinical data and all regulatory applications, submissions, dossiers, notifications, registrations, Regulatory Approvals or other filings or communications made to or with, or other approvals (including INDs, MAAs and NDAs) granted by, a Regulatory Authority that are necessary to clinically develop, Manufacture or commercialize a Termination Compound or Termination Product in the Territory ("**Termination Product Regulatory Materials**") that are held or Controlled by or under authority of BMS, its Sublicensees and its or their Affiliates, that are necessary for the Development, Manufacture or Commercialization of such Termination Compounds or Termination Products in the Territory, (ii) and hereby does, and will cause its Affiliates to, effective as of the effective date of termination, assign to Schrödinger all of its rights, title and interests in and to all Termination Product Regulatory Materials, to the extent allowed under Applicable Law, (iii) to the extent permitted by Applicable Law, use commercially reasonable efforts to transfer to Schrödinger any Regulatory Approval that is solely for any Termination Compound or Termination Product, including submitting to each applicable regulatory authority a letter or other necessary documentation (with a copy to Schrödinger) notifying such regulatory authority of the transfer of each Regulatory Approval and (iv) and hereby does, grant to Schrödinger a right of reference to such Termination Product Regulatory Materials with respect to such Termination Compound and Termination Product. The Parties shall discuss and establish appropriate arrangements with respect to safety data exchange.

(d) **Materials**. Upon Schrödinger's written request, BMS shall transfer all existing and available clinical material for Termination Compounds or Termination Products to

Schrödinger at BMS' fully burdened Manufacturing cost. If a Termination Compound or Termination Product is marketed in any country of the Territory on the date of the notice of termination of this Agreement, upon the request of Schrödinger, BMS shall transfer all existing and available amount of such Termination Compound or Termination Product to Schrödinger at BMS' fully burdened Manufacturing cost.

(e) **Trademarks**. BMS will promptly transfer and assign to Schrödinger all of BMS' and its Affiliates' rights, title and interests in and to trademarks owned or in-licensed by BMS or its Affiliates solely used to identify the Termination Compounds or Termination Products (but not any house marks, or logos or any trademark of BMS or its Affiliates, containing the words "BMS" or "Bristol-Myers Squibb" or any such Affiliate) owned by BMS and used for the Termination Compounds or Termination Products in the Field.

(f) **Third Party Agreements**. If Schrödinger so requests, and to the extent permitted under BMS' obligations to Third Parties on the effective date of termination, BMS will transfer to Schrödinger any Third Party agreements relating solely to the research, development, Manufacture, commercialization or other Exploitation of the Termination Compounds or Termination Products to which BMS is a party, subject to any required consents of such Third Party, which BMS will use commercially reasonable efforts to obtain promptly; provided that BMS shall not be obligated to make any payment to secure such consent.

(g) **Separate Agreement**. If requested by Schrödinger in writing within [***] after the termination of this Agreement with respect to a Designated Target, the Parties shall use good faith efforts to memorialize the foregoing with respect to such Designated Target in a separate document; provided that, unless expressly agreed by the Parties, in their sole and absolute discretion, no such agreement shall expand or limit the rights and obligations under this Section 13.8.

13.9 Additional Remedies of BMS in Lieu of Termination of Agreement by BMS under Section 13.3(a) or Section 13.4. In the event that (a) BMS notifies Schrödinger in writing of a material breach of this Agreement by Schrödinger, either in its entirety or with respect to a given Collaboration Target, and BMS would have the right to terminate this Agreement in its entirety or with respect to a given Collaboration Target, as applicable pursuant to Section 13.3(a) at the end of the Cure Period or (b) BMS has the right to terminate this Agreement in its entirety under Section 13.4, then in lieu of BMS terminating pursuant to Section 13.3(a) or Section 13.4, BMS shall have the right to elect, by providing written notice to Schrödinger, (i) to have this Agreement continue in full force and effect (in its entirety or with respect to the applicable Collaboration Target, as applicable), provided that:

(a) all rights and licenses granted to BMS under Sections 7.1 and 7.2 of this Agreement shall survive but shall become perpetual and irrevocable;

(b) BMS' obligations to pay royalties and milestones under Sections 8.2 through 8.4 of this Agreement shall survive such termination, provided that all such royalties and milestones shall be reduced to fifty percent (50%) of the amount that would otherwise have been payable under this Agreement;

(c) Schrödinger shall remain entitled to receive payments that accrued before the effective date of such termination, as adjusted pursuant to Section 13.8(b); and

(d) [***].

13.10 Effects of Expiration of Agreement. Upon the expiration of the Royalty Term (i.e., in the case where there is no earlier termination pursuant to this Article 13), on a Licensed Collaboration Compound-by-Licensed Collaboration Compound basis, Licensed Collaboration Product-by-Licensed Collaboration Product and country-by-country basis, the licenses granted to BMS under Section 7.1 with respect to Schrödinger Technology and Product Specific Patents shall convert to a perpetual, fully paid-up, non-royalty-bearing license. Certain provisions herein will survive expiration, in accordance with Section 13.12.

13.11 Other Remedies. Except as otherwise provided in this Article 13, expiration or earlier termination of this Agreement for any reason shall not release either Party from any liability or obligation (including payments) that already has accrued prior to such expiration or termination, nor affect the survival of any provision hereof to the extent it is expressly stated to survive such termination. Subject to and without limiting the terms and conditions of this Agreement (including Section 15.4), expiration or termination of this Agreement shall not preclude any Party from (a) claiming any other damages, compensation or relief that it may be entitled to upon such expiration or termination, (b) subject to Section 13.9, any right to receive any amounts accrued under this Agreement prior to the expiration or termination date but which are unpaid or become payable thereafter and (c) any right to obtain performance of any obligation provided for in this Agreement which shall survive expiration or termination.

13.12 Survival. Termination or expiration of this Agreement in its entirety or with respect to a Collaboration Target shall not affect rights or obligations of the Parties under this Agreement that have accrued prior to the date of termination or expiration of this Agreement in its entirety or with respect to such Collaboration Target. Notwithstanding anything to the contrary, the following provisions shall survive and apply after expiration or termination of this Agreement: Sections 3.11(c) (with respect to materials transferred before such termination or expiration), 7.1(b), 7.4, 7.5, 7.7, 9.1, 9.2 (with respect to Joint Patents), 9.4, 9.5 (solely with respect to Joint Patents), 9.8 (solely with respect to Schrödinger Platform Inventions), 9.9 (solely with respect to Joint Patents), 10.2, 12.1-12.3 (inclusive, for the applicable time period set forth therein), 12.8, 13.6, 13.7, 13.11, 13.12, 14.3, 15.1-15.4 (inclusive) and Articles 1 (to the extent necessary to interpret other surviving sections), 8 (to the extent payment obligations exist at the time of termination or expiration), 16, and 17; and

(a) with respect to a termination by BMS pursuant to Section 13.2(a) (at will termination) or by Schrödinger pursuant to Section 13.3(a) (BMS' breach), Section 13.4 (BMS' insolvency) or Section 13.5 (BMS' patent challenge): 13.8; and

(b) with respect to expiration (but not earlier termination) of this Agreement: Section 13.10.

All provisions not surviving in accordance with the foregoing shall terminate upon expiration or termination of this Agreement and be of no further force and effect.

14. REPRESENTATIONS AND WARRANTIES

14.1 Mutual Representations and Warranties. Each Party hereby represents, warrants, and covenants (as applicable) to the other Party as of the Effective Date as follows:

(a) It is a company or corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction in which it is incorporated, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted and as contemplated in this Agreement, including the right to grant the licenses granted by it hereunder.

(b) It has the full corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder. It has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms.

(c) It is not a party to any agreement, outstanding order, judgment or decree of any court or Governmental Authority that would prevent it from granting the rights granted to the other Party under this Agreement or performing its obligations under this Agreement.

(d) In the course of the Development of Target Compounds to any Collaboration Target, such Party has not used prior to the Effective Date and shall not use, during the Term, any employee, agent or independent contractor who has been debarred by any Regulatory Authority, or, to such Party's knowledge, is the subject of debarment proceedings by a Regulatory Authority.

(e) It has not, and will not, after the Effective Date and during the Term, grant any right to any Third Party that would conflict with the rights granted to the other Party hereunder.

14.2 Representations and Warranties and Covenants by Schrödinger. Schrödinger hereby represents and warrants as of the Effective Date and, where denoted below, covenants to BMS as follows:

(a) Schrödinger has sufficient legal or beneficial title, ownership or license rights under its Patents and Information to grant the licenses and rights under such Patents and Information granted to BMS under this Agreement. The Schrödinger Technology existing as of the Effective Date is free and clear from any Liens, and Schrödinger has sufficient legal or beneficial title, ownership or license thereunder to grant the licenses to BMS as purported to be granted pursuant to this Agreement. As of the Effective Date, Schrödinger is the sole owner of all right, title and interest in and to (free and clear from any Liens of any kind) the Product Specific Patents listed on **Exhibit C** and Schrödinger Patent Rights, respectively (the "**Existing Patents**"). All fees required to maintain the Existing Patent rights have been paid to date, the pending applications included in Existing Patents are being diligently prosecuted in the respective patent offices in the Territory in accordance with Applicable Law. The Existing Patents constitute all Patents Controlled by Schrödinger as of the Effective Date that are necessary or reasonably useful to research, Develop, make, have made, Manufacture, use, sell, offer for sale, import, export or

Commercialize Licensed Collaboration Compounds or Licensed Collaboration Products (but for the license granted by Schrödinger to BMS under Section 7.1).

(b) Schrödinger has not entered into any agreements, either oral or written, with any Third Party under which Schrödinger has obtained a license or sublicense of rights from a Third Party to any Licensed Collaboration Compound or Licensed Collaboration Product that require a license or sublicense to BMS under this Agreement.

(c) Schrödinger has not [***].

(d) To Schrödinger's knowledge [***].

(e) There are no pending, and, to Schrödinger's knowledge, no threatened, (i) actions, suits or proceedings against Schrödinger involving the Schrödinger Technology or the Product Specific Patents as it relates to the Research Program, or any Collaboration Target, Licensed Collaboration Compounds or Licensed Collaboration Products, (ii) inter partes reviews, post-grant reviews, interferences, re-examinations or oppositions involving the Existing Patents that are in or before any patent authority (or other governmental authority performing similar functions) or (iii) any inventorship challenges involving the Existing Patents that are in or before any patent or other governmental authority.

(f) To Schrödinger's knowledge, [***].

(g) To Schrödinger's knowledge, the claims included in any issued Schrödinger Patent Rights or Product Specific Patents are valid and in full force and effect as of the Effective Date.

(h) Schrödinger has not granted any license or any option for a license under, or any right, title or interest in or to, the Schrödinger Technology or Product Specific Patents to any Third Party to Develop, Manufacture, Commercialize or otherwise Exploit any Target Compound, including any Licensed Compound or a Licensed Product, that is for any Initial Collaboration Target or the Reserved Targets in any country in the Territory. Schrödinger has not granted any Lien with respect to this Agreement or any of the Schrödinger Technology licensed by it to BMS under this Agreement. Schrödinger has not granted (and Schrödinger covenants that during the Term it shall not grant) to any Third Party any license, option or other right to enforce or obtain any patent term extension for any of the Product Specific Patents.

(i) Schrödinger has disclosed in writing to BMS' in-house patent counsel (i) all Schrödinger Patent Rights and Product Specific Patents existing as of the Effective Date, and (ii) the jurisdiction(s) by or in which each such Schrödinger Patent Right and Product Specific Patent has been issued or in which an application for such Schrödinger Patent Right or Product Specific Patent has been filed, together with the respective patent or application numbers and all fees paid or payable in connection with the foregoing.

(j) No person, other than former or current employees or consultants of Schrödinger who are obligated in writing to assign his/her inventions to Schrödinger, is an inventor of any of the inventions claimed in the Schrödinger Patent Rights or Product Specific Patents filed or issued as of the Effective Date. All inventors of any inventions included within the Schrödinger

Technology that exist as of the Effective Date have assigned or have a contractual obligation to assign or license their entire right, title and interest in and to such inventions and the corresponding Patent rights to Schrödinger. To Schrödinger's knowledge, no present or former employee or consultant of Schrödinger owns or has any proprietary, financial or other interest, direct or indirect, in the Schrödinger Patent Rights or Product Specific Patents. To Schrödinger's knowledge, there are no claims that have been asserted in writing challenging the inventorship of the Schrödinger Patent Rights or Product Specific Patents.

(k) There is no Information or Patent owned by or otherwise in the possession or control of Schrödinger or any of its Affiliates as of the Effective Date that specifically relates to a Licensed Collaboration Compound or a Licensed Collaboration Product that is not within the Schrödinger Know-How, Schrödinger Patent Rights or Product Specific Patents. Neither Schrödinger nor any of its Affiliates has previously entered into any agreement, whether written or oral, with respect to or otherwise assigned, transferred, licensed, conveyed or otherwise encumbered its right, title or interest in or to any Patent or other intellectual property or proprietary right or Information that would be Schrödinger Patent Rights, Product Specific Patents or Schrödinger Know-How but for such assignment, transfer, license, conveyance or encumbrance.

(l) The inventions claimed by the Existing Patents and any other intellectual property necessary for the Development, Manufacture or Commercialization of any Licensed Collaboration Compound or Licensed Collaboration Product were not conceived, reduced to practice, discovered, developed or otherwise made in connection with any research activities funded, in whole or in part, by any grants, funds, and other money received from any Governmental Authority, and no Governmental Authority or academic institution has any right to, ownership of (including any "step-in" or "march-in" rights with respect to), or right to royalties for, or to impose any restriction on the assignment, transfer, grant of licenses or other disposal of the Existing Patents or the Schrödinger Know-How, or to impose any requirement or restriction on the Exploitation of any Licensed Collaboration Compound or Licensed Collaboration Product as contemplated herein.

(m) To Schrödinger's knowledge, [***].

(n) [***].

14.3 No Other Representations or Warranties. EXCEPT AS EXPRESSLY STATED IN THIS ARTICLE 14 OR SECTION [***], NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, OR THAT ANY OF THE DEVELOPMENT OR COMMERCIALIZATION EFFORTS WITH REGARD TO ANY COMPOUND OR PRODUCT WILL BE SUCCESSFUL, IS MADE OR GIVEN BY OR ON BEHALF OF A PARTY. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

15. INDEMNIFICATION AND LIMITATION OF LIABILITY

15.1 Indemnification by Schrödinger for Third Party Claims. Schrödinger shall defend, indemnify, and hold BMS, its Affiliates, and its and their respective officers, directors, employees, and agents (collectively, the "**BMS Indemnitees**") harmless from and against any and all damages, losses, liabilities, or other amounts payable to a Third Party, as well as any reasonable attorneys' fees and costs of litigation incurred by such BMS Indemnitees, all to the extent arising out of or resulting from any claims, suits, proceedings or causes of action brought by such Third Party (collectively, "**BMS Claims**") against such BMS Indemnitee that arise out of or result from: (a) a breach of any of Schrödinger's representations, warranties, covenants and obligations under this Agreement; (b) the gross negligence, recklessness or willful misconduct of any Schrödinger Indemnitees in connection with this Agreement; or (c) the research, Development, Manufacture or Commercialization of Licensed Collaboration Compounds or Licensed Collaboration Products with respect to a Collaboration Target or any Reversion Compound or Reversion Product with respect to a Terminated Target by or on behalf of Schrödinger or its Affiliates before the Effective Date or during or after the Term. The foregoing indemnity obligation shall not apply to the extent that any BMS Claim arises out of or results from the negligence of any BMS Indemnitee, or is subject to indemnity pursuant to Section 15.2(b) or Section 15.2(c).

15.2 Indemnification by BMS for Third Party Claims. BMS shall defend, indemnify, and hold Schrödinger, its Affiliates, and its and their respective officers, directors, employees, and agents (collectively, the "**Schrödinger Indemnitees**") harmless from and against any and all damages, losses, liabilities, or other amounts payable to a Third Party, as well as any reasonable attorneys' fees and costs of litigation incurred by such Schrödinger Indemnitees, all to the extent arising out of or resulting from any claims, suits, proceedings or causes of action brought by such Third Party (collectively, "**Schrödinger Claims**") against such Schrödinger Indemnitee that arise out of or result from: (a) the clinical Development, Manufacture, use, sale, offer for sale, exportation and importation, Commercialization, and other Exploitation of any Licensed Collaboration Compounds or Licensed Collaboration Products with respect to a Collaboration Target by or on behalf of BMS or its Sublicensees and its and their Affiliates during the Term for such Collaboration Target; (b) a breach of any of BMS' representations, warranties, covenants and obligations under this Agreement; or (c) the gross negligence, recklessness or willful misconduct of any BMS Indemnitees in connection with this Agreement. The foregoing indemnity obligation shall not apply to the extent that any Schrödinger Claim arises out of or results from the negligence of any Schrödinger Indemnitee, or is subject to indemnity pursuant to Section 15.1(a) or Section 15.1(b).

15.3 Indemnification Procedures. The Party claiming indemnity under this Article 15 (the "**Indemnified Party**") shall give written notice to the Party from whom indemnity is being sought (the "**Indemnifying Party**") promptly after learning of the claim, suit, proceeding or cause of action for which indemnity is being sought ("**Claim**") (it being understood and agreed, however, that the failure or delay by an Indemnified Party to give such notice of a Claim shall not affect the indemnification provided hereunder except to the extent the Indemnifying Party shall have been prejudiced as a result of such failure or delay to give such notice), and, provided that the Indemnifying Party is not contesting the indemnity obligation, shall permit the Indemnifying Party to control and assume the defense of any litigation relating to such claim and disposition of any such Claim unless the Indemnifying Party is also a party (or likely to be named a party) to the

proceeding in which such claim is made and the Indemnified Party gives notice to the Indemnifying Party that it may have defenses to such claim or proceeding that are in conflict with the interests of the Indemnifying Party, in which case the Indemnifying Party shall not be so entitled to assume the defense of the case. If the Indemnifying Party does assume the defense of any Claim, it (a) shall act diligently and in good faith with respect to all matters relating to the settlement or disposition of any Claim as the settlement or disposition relates to Parties being indemnified under this Article 15, (b) shall cause such defense to be conducted by counsel reasonably acceptable to the Indemnified Party and (c) shall not settle or otherwise resolve any Claim without prior notice to the Indemnified Party and the consent of the Indemnified Party if such settlement involves anything other than the payment of money by the Indemnifying Party (including, for example, any settlement admitting fault or wrongdoing of the Indemnified Party, or consenting to any injunctive relief). The Indemnified Party shall reasonably cooperate with the Indemnifying Party in its defense of any claim for which the Indemnifying Party has assumed the defense in accordance with this Section 15.3, and shall have the right, at its own cost and expense, to be present in person or through counsel at all legal proceedings giving rise to the right of indemnification; provided, however, that, the Indemnifying Party shall pay such costs and expenses of the Indemnified Party if (x) the employment thereof has been specifically authorized in writing by the Indemnifying Party, (y) the Indemnifying Party has failed to assume the defense and employ counsel and the Indemnified Party controls the defense in accordance with this Section 15.3 or (c) the Indemnifying Party and the Indemnified Party have conflicting interests with respect to such Claim such that the representation by the same counsel of both Parties and any respective Indemnified Parties is prohibited under Applicable Law, ethical rules or equitable principles. So long as the Indemnifying Party is diligently defending the Claim in good faith, the Indemnified Party shall not settle any such Claim without the prior written consent of the Indemnifying Party. If the Indemnifying Party does not assume and conduct the defense of the Claim as provided above, (i) the Indemnified Party may defend against, and consent to the entry of any judgment or enter into any settlement with respect to the Claim in any manner the Indemnified Party may deem reasonably appropriate (and the Indemnified Party need not consult with, or obtain any consent from, the Indemnifying Party in connection therewith), and (ii) the Indemnifying Party will remain responsible to indemnify the Indemnified Party as provided in this Article 15.

15.4 Limitation of Liability. EXCEPT FOR (A) INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES PAID OR PAYABLE TO A THIRD PARTY BY AN INDEMNIFIED PARTY FOR WHICH THE INDEMNIFIED PARTY IS ENTITLED TO INDEMNIFICATION PURSUANT TO SECTION 15.1 OR 15.2 HEREUNDER, (B) A BREACH OF ARTICLE 11, (C) ANY BREACH OF SECTION 12.1 BY A PARTY OR ITS AFFILIATES OR ITS OR THEIR SUBLICENSEES AND THEIR AFFILIATES OR (D) DAMAGES THAT ARE DUE TO THE GROSS NEGLIGENCE OR WILLFUL MISCONDUCT OF THE LIABLE PARTY IN CONNECTION WITH THIS AGREEMENT, IN NO EVENT SHALL EITHER PARTY, ITS DIRECTORS, OFFICERS, EMPLOYEES, AGENTS OR AFFILIATES BE LIABLE TO THE OTHER PARTY FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY OR CONSEQUENTIAL DAMAGES, WHETHER BASED UPON A CLAIM OR ACTION OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY OR OTHER TORT, OR OTHERWISE, ARISING OUT OF THIS AGREEMENT, IRRESPECTIVE OF WHETHER THAT PARTY OR

ANY REPRESENTATIVE OF THAT PARTY HAS BEEN ADVISED OF, OR OTHERWISE MIGHT HAVE ANTICIPATED THE POSSIBILITY OF, ANY SUCH LOSS OR DAMAGE.

15.5 Insurance. BMS shall maintain a program of self-insurance sufficient to fulfill its obligations under this Agreement and Schrödinger shall procure and maintain insurance, including product liability insurance, with respect to its Research Program activities and other obligations to be performed hereunder and which are consistent with normal business practices of prudent companies similarly situated to such Party at all times during which any Licensed Product is being clinically tested in human subjects or commercially distributed or sold. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 15. BMS shall provide Schrödinger with written evidence of such insurance upon request, which evidence shall be treated as BMS Confidential Information. BMS shall provide Schrödinger with written notice at least [***] prior to the cancellation, non-renewal or material change in such insurance.

16. DISPUTE RESOLUTION

16.1 Disputes; Resolution by Executive Officers. The Parties recognize that disputes as to certain matters may from time to time arise during the Term that relate to decisions to be made by the Parties herein or to the Parties' respective rights or obligations hereunder. It is the desire of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to arbitration or litigation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 16 if and when a dispute arises under this Agreement, subject to Section 16.7.

Accordingly, other than a matter (a) within the final decision making authority of BMS or otherwise to be escalated to the Executive Officers as set forth in Section 2.1(e) or (b) directly to the R&D Expert as set forth in Section 3.5(a) or Section 3.6(c) (such disputes in clause (b), "**R&D Expert Matters**"), any disputes, controversies or differences which may arise between the Parties out of or in relation to or in connection with this Agreement shall be promptly presented to the Alliance Managers for resolution. If the Alliance Managers are unable to resolve such dispute within [***] after a matter has been presented to them, then upon the request of either Party by written notice, the Parties agree to meet and discuss in good faith a possible resolution thereof, which good faith efforts shall include at least [***] between the Executive Officers of each Party within [***] after receipt by the other Party of such written notice. If the matter is not resolved within [***] following presentation to the Executive Officers, then:

(a) if such dispute, controversy or difference involves an Arbitrable Matter, either Party may invoke the provisions of Section 16.2; or

(b) if such dispute, controversy or difference involves a Litigable Matter, either Party may pursue such remedies as it may deem necessary or appropriate; or

(c) if such dispute, controversy or difference involves a Royalty Rate Matter, either Party may invoke the provisions of Section 16.2(d); or

(d) if such dispute, controversy or difference involves an R&D Expert Matter, either Party may invoke the provisions of Section 16.3.

16.2 Arbitration. Any Arbitrable Matter that is not resolved pursuant to Section 16.1, shall be settled by binding arbitration to be conducted as set forth below in this Section 16.2.

(a) Either Party, following the end of the [***] period referenced in Section 16.1, may refer such issue to arbitration by submitting a written notice of such request to the other Party. In any proceeding under this Section 16.2, there shall be three (3) arbitrators. Within [***] after delivery of such notice, each Party will nominate one arbitrator in accordance with the then current rules of the AAA. The two arbitrators so nominated will nominate a third arbitrator to serve as chair of the arbitration tribunal, such nomination to be made within [***] after the selection of the second arbitrator. The arbitrators shall be neutral and independent of both Parties and all of their respective Affiliates, shall have significant experience and expertise in licensing and partnering agreements in the pharmaceutical and biotechnology industries, shall have appropriate experience with respect to the matter(s) to be arbitrated, and shall have some experience in mediating or arbitrating issues relating to such agreements. In the case of any dispute involving an alleged failure to use Commercially Reasonable Efforts, each arbitrator shall in addition be an individual with experience and expertise in the worldwide development and commercialization of pharmaceuticals and the business, legal and scientific considerations related thereto. In the case of a dispute involving a scientific or accounting matter or determination, an Expert having applicable expertise and experience will be selected by the Parties to assist the arbitrators in such scientific or accounting matter or determination (and the arbitrators will select such Expert if the Parties cannot agree on such Expert within [***] following the selection of the arbitrators). The governing law in Section 17.10 shall govern such proceedings. No individual will be appointed to arbitrate a dispute pursuant to this Agreement unless he or she agrees in writing to be bound by the provisions of this Section 16.2. The place of arbitration will be New York, New York, unless otherwise agreed to by the Parties, and the arbitration shall be conducted in English.

(b) The arbitrators shall set a date for a hearing that shall be held no later than [***] following the appointment of the last of such three arbitrators. The Parties shall have the right to be represented by counsel. Except as provided herein, the arbitration shall be governed by the commercial arbitration rules of the AAA (the "**Commercial Arbitration Rules**") applicable at the time of the notice of arbitration pursuant to Section 16.2(a), including the right of each Party to undertake document requests and up to [***] depositions.

(c) The arbitrators shall use their best efforts to rule on each disputed issue within [***] after completion of the hearing described in Section 16.2(b). The determination of the arbitrators as to the resolution of any dispute shall be binding and conclusive upon the Parties, absent manifest error. All rulings of the arbitrators shall be in writing and shall be delivered to the Parties as soon as is reasonably possible. Nothing contained herein shall be construed to permit the arbitrators to award punitive, exemplary or any similar damages. The arbitrators shall render a "reasoned decision" within the meaning of the Commercial Arbitration Rules which shall include findings of fact and conclusions of law. Any arbitration award may be entered in and enforced by a court in accordance with Section 16.4 and Section 16.10.

(d) Any Royalty Rate Matter shall be settled by binding arbitration to be conducted as set forth below in this Section 16.2(d):

(i) within [***] after the effective date of the applicable termination, then upon either Party's written request made within [***] after the expiration of such [***] period, each Party shall provide the other Party in writing with such Party's last best offer for the royalty rate payable with respect to Termination Products pursuant to Section 13.8(b) (a "**Final Offer**") within [***] after such Party's request. Either Party shall have the right, upon written notice to the other Party (a "**Valuation Notice**"), to engage one (1) independent, impartial and neutral Third Party valuation expert (a "**Valuation Expert**") to elect to determine a commercially reasonable royalty rate. The Valuation Expert shall be mutually agreed to by the Parties; provided that if the Parties are unable to agree on one (1) Valuation Expert within [***] after a Party provides the other Party the Valuation Notice, then each Party shall select one (1) Third Party Valuation Expert and those two (2) Third Party Valuation Experts will select the one (1) Valuation Expert within [***] thereafter, which one (1) Valuation Expert selected shall determine a commercially reasonable royalty rate; provided further that such selected Valuation Expert shall not be a current or former employee, officer, director, consultant or subcontractor of either Party or any of its Affiliates (or have been within the previous [***]). The Parties shall use their best efforts to cause the one (1) Valuation Expert to be selected and retained within [***] after a Party provides the other Party the Valuation Notice.

(ii) Each Party shall submit to the Valuation Expert and the other Party (A) the Final Offer such Party provided to the other Party pursuant to Section 16.2(d)(i) and such information concerning such Party's requested royalty rate as such Party may deem appropriate, including any supporting information with respect to such Final Offer, within [***] after the retention of the Valuation Expert and (B) such other information as may be requested by the Valuation Expert within [***] after such request. Any such information provided to the Valuation Expert by a Party shall be simultaneously provided to the other Party. The Valuation Expert shall determine the most commercially reasonable royalty rate within [***] after its retention by selecting one (1) or the other of the two (2) Final Offers submitted by the Parties, which determination shall be final and binding on the Parties and not subject to appeal of any kind, except in the case of fraud, willful misconduct or gross negligence or manifest error. The Valuation Expert shall promptly notify the Parties of such determined royalty rate in writing, upon receipt of which this Agreement shall be deemed to automatically incorporate such determined royalty rate.

16.3 R&D Expert Matters. Any R&D Expert Matter shall be resolved by binding expedited arbitration by an R&D Expert as follows:

(a) The Parties will discuss in good faith and agree on one (1) R&D Expert to resolve such disputed matter; provided that if the Parties are unable to agree on one (1) R&D Expert within [***] after a Party provides the other Party with notice of a dispute, then each Party shall select one (1) R&D Expert and those two (2) R&D Experts will select the one (1) R&D Expert within [***] thereafter, which one (1) R&D Expert selected shall be the R&D Expert for the R&D Expert Matter.

(b) Each Party will prepare and submit a written summary of such Party's position with respect to such disputed matter and any relevant evidence in support thereof to the R&D Expert within [***] of selection of the R&D Expert. Such R&D Expert will be responsible for setting reasonable procedural limitations for the Parties' submissions (e.g., length, format, style).

(c) Upon receipt of such summaries and evidence from both Parties, the R&D Expert will provide copies of the same to the other Party and each Party shall have a period of [***] after receipt of such summary and evidence to provide to the R&D Expert and the other Party a written response with respect thereto. The R&D Expert will make a final decision with respect to such disputed matter within [***] following the earlier of (a) expiration of such [***] response period and (b) receipt of such written responses from both Parties. The R&D Expert will provide the Parties with a written statement briefly setting forth his/her decision and the basis of such decision.

(d) The decision by the R&D Expert will be final and binding on the Parties and not subject to appeal of any kind, except in the case of fraud, willful misconduct or gross negligence or manifest error.

16.4 Award. Any award to be paid by one Party to the other Party as determined by the arbitrators as set forth above under Section 16.2 shall be promptly paid in Dollars free of any tax, deduction or offset; and any costs, fees or taxes incident to enforcing the award shall, to the maximum extent permitted by law, be charged against the Party resisting enforcement. Each Party agrees to abide by the award rendered in any arbitration conducted pursuant to this Article 16, and agrees that, subject to the Federal Arbitration Act, judgment may be entered upon the final award in a court of competent jurisdiction and that other courts may award full faith and credit to such judgment in order to enforce such award. With respect to money damages, nothing contained herein shall be construed to permit the arbitrators or any court or any other forum to award punitive or exemplary damages. By entering into this agreement to arbitrate, the Parties expressly waive any claim for punitive or exemplary damages. The only damages recoverable under this Agreement are compensatory damages.

16.5 Costs. Each Party shall bear its own legal fees in connection with any arbitration procedure. The arbitrators may in their discretion assess the arbitrators' cost, fees and expenses (and those any Expert hired by the arbitrators) against the Party losing the arbitration.

16.6 WAIVER OF JURY TRIAL. EXCEPT AS LIMITED BY APPLICABLE LAW, EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIONS OF ANY PARTY HERETO IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT HEREOF.

16.7 Injunctive Relief. Nothing in this Article 16 will preclude either Party from seeking equitable relief or interim or provisional relief from a court of competent jurisdiction, including a temporary restraining order, preliminary injunction or other interim equitable relief, concerning a dispute either prior to or during any arbitration if necessary to protect the interests of such Party or to preserve the status quo pending the arbitration proceeding. For the avoidance of doubt, nothing in this Section 16.7 shall otherwise limit a breaching Party's opportunity to cure a material breach as permitted in accordance with Section 13.3 or Section 13.4. No remedy referred to in this Agreement is intended to be exclusive, but each shall be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under Applicable Law.

16.8 Confidentiality. The arbitration proceeding shall be confidential and the arbitrators shall issue appropriate protective orders to safeguard each Party's Confidential Information. Except as required by Applicable Law, no Party shall make (or instruct the arbitrators to make) any public announcement with respect to the proceedings or decision of the arbitrators without prior written consent of the other Party. The existence of any dispute submitted to arbitration, and any award, shall be kept in confidence by the Parties and the arbitrators, except as required in connection with the enforcement of such award or as otherwise required by Applicable Law. Notwithstanding the foregoing, each Party shall have the right to disclose information regarding the arbitration proceeding to the same extent as it may disclose Confidential Information of the other Party under Article 12 above.

16.9 Survivability. Any duty to arbitrate under this Agreement shall remain in effect and be enforceable after termination of this Agreement for any reason.

16.10 Patent and Trademark Disputes. Notwithstanding Section 16.2, any dispute, controversy or claim relating to the inventorship, scope, validity, enforceability or infringement of any Patents Covering the Manufacture, use, importation, offer for sale or sale of Licensed Products or Product Marks shall be submitted to a court of competent jurisdiction in the country in which such patent or trademark rights were granted or arose.

17. MISCELLANEOUS

17.1 Entire Agreement; Amendments. This Agreement, including the Exhibits hereto (which are incorporated into and made a part of this Agreement), sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof and supersedes, as of the Effective Date, all prior agreements and understandings between the Parties with respect to the subject matter hereof, including the Prior CDA. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties with respect to the subject matter hereof other than as are set forth herein. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized representative of each Party. Notwithstanding anything herein to the contrary, this Agreement does not amend, supersede or replace any software license entered into, or contemplated to be entered into, by the Parties or any of their Affiliates on Schrödinger's form End User License Agreement.

17.2 Export Control. This Agreement is made subject to any restrictions concerning the export of products or technical information from the U.S. or other countries which may be imposed upon or related to Schrödinger or BMS from time to time. Each Party agrees that it shall not export, directly or indirectly, any technical information acquired from the other Party under this Agreement or any products using such technical information to a location or in a manner that at the time of export requires an export license or other governmental approval, without first obtaining the written consent to do so from the appropriate agency or other governmental entity.

17.3 Rights in Bankruptcy.

(a) All rights and licenses granted under or pursuant to this Agreement by one Party to the other are, for all purposes of Section 365(n) of Title 11 of the United States Code ("**Title 11**"), licenses of rights to "intellectual property" as defined in Title 11, and, in the event that a case under Title 11 is commenced by or against either Party (the "**Bankrupt Party**"), the other Party shall have all of the rights set forth in Section 365(n) of Title 11 to the maximum extent permitted thereby. During the Term, each Party shall create and maintain current copies to the extent practicable of all such intellectual property. Without limiting the Parties' rights under Section 365(n) of Title 11, if a case under Title 11 is commenced by or against the Bankrupt Party, the other Party shall be entitled to a copy of any and all such intellectual property and all embodiments of such intellectual property, and the same, if not in the possession of such other Party, shall be promptly delivered to it (i) before this Agreement is rejected by or on behalf of the Bankrupt Party, within [***] after the other Party's written request, unless the Bankrupt Party, or its trustee or receiver, elects within [***] to continue to perform all of its obligations under this Agreement, or (ii) after any rejection of this Agreement by or on behalf of the Bankrupt Party, if not previously delivered as provided under clause (i) above. All rights of the Parties under this Section 17.3 and under Section 365(n) of Title 11 are in addition to and not in substitution of any and all other rights, powers, and remedies that each Party may have under this Agreement, Title 11, and any other Applicable Law. The non-Bankrupt Party shall have the right to perform the obligations of the Bankrupt Party hereunder with respect to such intellectual property, but neither such provision nor such performance by the non-Bankrupt Party shall release the Bankrupt Party from any such obligation or liability for failing to perform it.

(b) The Parties agree that they intend the foregoing non-Bankrupt Party rights to extend to the maximum extent permitted by law and any provisions of applicable contracts with Third Parties, including for purposes of Title 11, (i) the right of access to any intellectual property (including all embodiments thereof) of the Bankrupt Party or any Third Party with whom the Bankrupt Party contracts to perform an obligation of the Bankrupt Party under this Agreement, and, in the case of the Third Party, which is necessary for the Development, Regulatory Approval, Manufacture and Commercialization of Licensed Products and (ii) the right to contract directly with any Third Party described in (i) in this sentence to complete the contracted work.

(c) Any intellectual property provided pursuant to the provisions of this Section 17.3 shall be subject to the licenses set forth elsewhere in this Agreement and the payment obligations of Section 8.2, Section 8.3 and Section 8.4, which shall be deemed to be royalties for purposes of Title 11.

(d) In the event that after the Effective Date Schrödinger enters into a license agreement with a Third Party with respect to intellectual property that will be sublicensed to BMS hereunder, Schrödinger will use commercially reasonable efforts to enable BMS to receive a direct license from any such Third Party in the event that such license agreement between Schrödinger and such Third Party is terminated or rejected under Section 365(a) of Title 11 during the Term solely on account of Schrödinger becoming a Bankrupt Party.

(e) Notwithstanding anything to the contrary in Article 9, in the event that Schrödinger is the Bankrupt Party, BMS may take appropriate actions in connection with the filing, prosecution, maintenance and enforcement of any Product Specific Patents licensed to BMS under

this Agreement without being required to consult with Schrödinger before taking any such actions, provided that such actions are consistent with this Agreement.

17.4 **Force Majeure**. Each Party shall be excused from the performance of its obligations under this Agreement to the extent that such performance is prevented by force majeure (defined below) and the nonperforming Party promptly provides notice of such prevention to the other Party. Such excuse shall be continued so long as the condition constituting force majeure continues provided that the Party affected by such force majeure shall take reasonable efforts to remove the condition constituting such force majeure. The Party affected by such force majeure also shall notify the other Party of the anticipated duration of such force majeure and any actions being taken to avoid or minimize its effect after such occurrence. For purposes of this Agreement, "**force majeure**" shall include conditions beyond the reasonable control of the Parties, including an act of God, acts of terrorism, voluntary or involuntary compliance with any regulation, law or order of any government, war, acts of war (whether war be declared or not), labor strike or lockout, civil commotion, epidemic or pandemic arising after the Effective Date or any material worsening of the ongoing COVID-19 pandemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe; provided, however that the affected Party promptly notifies the other Party in writing stating the nature of the cause of non-performance, its anticipated duration and any action being taken to avoid or minimize its effect. The affected Party shall use its Commercially Reasonable Efforts to avoid or remove such causes of non-performance and to mitigate the effect of such occurrence, and shall continue performance in accordance with the terms of this Agreement whenever such causes are removed. The nonperforming Party shall promptly provide notice of such resumed performance to the other Party. The payment of invoices due and owing hereunder shall in no event be delayed by the payer because of a force majeure affecting the payer.

17.5 **Notices**. Any notice required or permitted to be given under this Agreement shall be in writing, shall specifically refer to this Agreement, and shall be addressed to the appropriate Party at the address specified below or such other address as may be specified by such Party in writing in accordance with this Section 17.5, and shall be deemed to have been given for all purposes (a) when received, if hand-delivered or sent by a reputable international expedited delivery service, or (b) five (5) Business Days after mailing, if mailed by first class certified or registered mail, postage prepaid, return receipt requested.

For Schrödinger: Schrödinger, Inc.
120 West 45th Street, 17th Floor
New York, New York, 10036
Attention: General Counsel

With a copy to: Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attn: Sarah Solomon

For BMS: Bristol-Myers Squibb Company
Route 206 and Province Line Road
Princeton, NJ 08543-4000

Attention: Executive Vice President, Strategy and Business Development

With a copy to: Bristol-Myers Squibb Company
Route 206 and Province Line Road
Princeton, NJ 08543-4000
Attention: Senior Vice President and Associate General Counsel, Transactions Law

Furthermore, a copy of any notices required or given under Section 9.5(b) of this Agreement shall also be addressed to the Senior Vice President, Innovation Law of BMS at the address set forth in Section 9.5(b).

17.6 Independent Contractors. Each Party shall act solely as an independent contractor, and nothing in this Agreement shall be construed to give either Party the power or authority to act for, bind, or commit the other Party in any way. Nothing herein shall be construed to create the relationship of partners, principal and agent, or joint-venture partners between the Parties.

17.7 Maintenance of Records. Each Party shall maintain complete and accurate records of all work conducted under this Agreement and all results, data and developments made pursuant to its efforts under this Agreement. Such records shall be complete and accurate and shall fully and properly reflect all work done and results achieved in the performance of this Agreement in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. Each Party shall keep and maintain all records required by Applicable Law with respect to Licensed Products.

17.8 No Third Party Beneficiaries. The covenants and agreements set forth in this Agreement are for the sole benefit of the Parties and their successors and permitted assigns and they shall not be construed as conferring any rights on any other Persons. For clarity, there are no express or implied Third Party beneficiaries hereunder.

17.9 Assignment. Neither Party may assign this Agreement or assign or transfer any rights or obligations hereunder without the prior written consent of the other, except that a Party may make such an assignment or transfer without the other Party's consent (a) to any Affiliate of such Party, provided that such assignment or transfer shall not adversely affect the other Party's rights and obligations under this Agreement and that such assigning/transferring Party remains jointly and severally liable with such Affiliate for the performance of this Agreement or the assigned obligations, or (b) to any Third Party in connection with the sale of all or substantially all of the business or assets of such Party to which this Agreement relates (with such business and assets, [***], whether in a merger, combination, reorganization, sale of stock, sale of assets or other transaction; provided, however, that in each case (a) and (b) that the assigning Party provides written notice to the other Party of such assignment and the assignee shall have agreed in writing to be bound (or is otherwise required by operation of Applicable Law to be bound) in the same manner as such assigning Party hereunder. Any permitted assignment shall be binding on the successors of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 17.9 shall be null, void and of no legal effect. For clarity, the

provisions of this Section 17.9 shall not apply to or encompass sublicensing of the rights licensed to a Party under this Agreement. Subject to the terms of this Agreement, including Section 7.2 and Section 7.3(b), each Party and its Affiliates and, in the case of BMS, its Sublicensees, shall have the right to enter into subcontracts in connection with the exercise of its rights and the performance of its obligations under this Agreement and this Section 17.9 shall not apply with respect thereto.

17.10 Governing Law. This Agreement shall be governed by and construed and enforced under the substantive laws of the State of New York, excluding any conflicts or choice of law rule or principle that might otherwise make this Agreement subject to the substantive law of another jurisdiction. For clarification, any dispute relating to the inventorship, scope, validity, enforceability or infringement of any patent right shall be governed by and construed and enforced in accordance with the patent laws of the applicable jurisdiction.

17.11 Performance by Affiliates. Subject to the terms and conditions of this Agreement, each Party may discharge any obligations and exercise any right hereunder through any of its Affiliates. Each Party hereby guarantees the performance by its Affiliates of such Party's obligations under this Agreement, and shall cause its Affiliates to comply with the provisions of this Agreement in connection with such performance. Any breach by a Party's Affiliate of any of such Party's obligations under this Agreement shall be deemed a breach by such Party, and the other Party may proceed directly against such Party without any obligation to first proceed against such Party's Affiliate.

17.12 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

17.13 Compliance with Applicable Law. Each Party shall comply with Applicable Law in the course of performing its obligations or exercising its rights pursuant to this Agreement. Neither Party (nor any of their Affiliates or Sublicensees) shall be required under this Agreement to take any action or to omit to take any action otherwise required to be taken or omitted by it under this Agreement if the taking or omitting of such action, as the case may be, could in its opinion violate any settlement, consent order, corporate integrity agreement, or judgment to which it may be subject from time to time during the Term. Notwithstanding anything to the contrary in this Agreement, neither Party nor any of its Affiliates shall be required to take, or shall be penalized for not taking, any action that such Person reasonably believes is not in compliance with Applicable Law.

17.14 Severability. If any one or more of the provisions of this Agreement are held to be invalid or unenforceable by an arbitrator or any court of competent jurisdiction from which no appeal can be or is taken, the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

17.15 No Waiver. Neither Party may waive or release any of its rights or interests in this Agreement except in writing. The failure of either Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement shall not constitute a waiver of that right

or excuse a similar subsequent failure to perform any such term or condition. No waiver by either Party of any condition or term in any one or more instances shall be construed as a continuing waiver of such condition or term or of another condition or term.

17.16 Interpretation. The captions and headings to this Agreement are for convenience only, and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement. Unless specified to the contrary, references to Articles, Sections or Exhibits mean the particular Articles, Sections or Exhibits of this Agreement and references to this Agreement include all Exhibits hereto. Unless context otherwise clearly requires, whenever used in this Agreement: (a) the words "include", "includes" or "including" shall be construed as incorporating also the phrase "but not limited to" or "without limitation"; (b) the word "day" shall mean calendar day (unless Business Day is specified); (c) the word "notice" shall mean notice in writing (whether or not specifically stated) and shall include notices, consents, approvals and other written communications contemplated under this Agreement; (d) the words "hereof," "herein," "hereby" and derivative or similar words refer to this Agreement (including any Exhibits); (e) provisions that require that a Party, the Parties or the JSC hereunder "agree," "consent" or "approve" or the like shall require that such agreement, consent or approval be specific and in writing, whether by written agreement, letter, approved minutes or otherwise; (f) words of any gender include the other gender; (g) words using the singular or plural number also include the plural or singular number, respectively; (h) references to any specific law, rule or regulation, or article, section or other division thereof, shall be deemed to include the then-current amendments thereto or any replacement law, rule or regulation thereof; (i) the word "will" shall be construed to have the same meaning and effect as the word "shall" and (j) except where the context dictates otherwise, "or" has the inclusive meaning represented by the phrase "and/or". Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision. The language of this Agreement shall be deemed to be the language mutually chosen by the Parties and no rule of strict construction shall be applied against either Party hereto. This Agreement should be interpreted in its entirety and the fact that certain provisions of this Agreement may be cross-referenced in a Section shall not be deemed or construed to limit the application of other provisions of this Agreement to such Section and vice versa.

17.17 Counterparts. This Agreement may be executed in counterparts with the same effect as if both Parties had signed the same document, each of which shall be deemed an original, shall be construed together and shall constitute one and the same instrument. This Agreement may be executed and delivered through the email of pdf copies of the executed Agreement.

[signature page follows]

In Witness Whereof, the Parties have caused this Agreement to be executed by their duly authorized representatives effective as of the Effective Date.

BRISTOL-MYERS SQUIBB COMPANY	SCHRÖDINGER, INC.
By: /s/ Jeffrey Staiger	By: /s/ Ramy Farid
Name: Jeffrey Staiger	Name: Ramy Farid
Title: VP, Business Development	Title: President & CEO

Exhibit A

Initial Collaboration Targets
[***]

Oncology Target	Neurology Target	Immunology Target
[***]	[***]	[***]
HIF 2α [***]		
SOS1 [***]		

[***]

[*Signature Page to Collaboration and License Agreement*]

EXHIBIT 10.38

Schrödinger, Inc.

2021 INDUCEMENT EQUITY INCENTIVE PLAN

1. Purpose

The purpose of this 2021 Inducement Equity Incentive Plan (the "Plan") of Schrödinger, Inc., a Delaware corporation (the "Company"), is to advance the interests of the Company's stockholders by enhancing the Company's ability to attract, retain and motivate persons who are expected to make important contributions to the Company with an inducement material for such persons to enter into employment with the Company and by providing such persons with equity ownership opportunities and performance-based incentives that are intended to better align the interests of such persons with those of the Company's stockholders. Except where the context otherwise requires, the term "Company" shall include any of the Company's present or future parent or subsidiary corporations as defined in Sections 424(e) or (f) of the Internal Revenue Code of 1986, as amended, and any regulations thereunder (the "Code") and any other business venture (including, without limitation, joint venture or limited liability company) in which the Company has a controlling interest, as determined by the Board of Directors of the Company (the "Board").

2. Eligibility

Awards under the Plan may only be granted to persons who (a) were not previously an employee or director of the Company or (b) are commencing employment with the Company following a bona fide period of non-employment, in either case as an inducement material to the individual's entering into employment with the Company and in accordance with the requirements of Nasdaq Stock Market Rule 5635(c)(4). For the avoidance of doubt, neither consultants nor advisors shall be eligible to participate in the Plan. Each person who is granted an Award under the Plan is deemed a "Participant." "Award" means Options (as defined in Section 5), SARs (as defined in Section 6), Restricted Stock (as defined in Section 7), Restricted Stock Units (as defined in Section 7) and Other Stock-Based Awards (as defined in Section 8).

3. Administration and Delegation

(a) Administration by Board of Directors. The Plan will be administered by the Board. The Board shall have authority to grant Awards and to adopt, amend and repeal such administrative rules, guidelines and practices relating to the Plan as it shall deem advisable. The Board may construe and interpret the terms of the Plan and any Award agreements entered into under the Plan. The Board may correct any defect, supply any omission or reconcile any inconsistency in the Plan or any Award in the manner and to the extent it shall deem expedient and it shall be the sole and final judge of such expediency. All decisions by the Board shall be made in the Board's sole discretion and shall be final and binding on all persons having or claiming any interest in the Plan or in any Award. Notwithstanding the foregoing or anything in the Plan to the contrary, the grant of any Award under the Plan must be approved by the Company's independent compensation committee or a majority of the Company's independent directors (as defined in Nasdaq Stock Market Rule 5605(a)(2)) in order to comply with the

exemption from the stockholder approval requirement for "inducement grants" provided under Nasdaq Stock Market Rule 5635(c)(4).

(b) Appointment of Committees. To the extent permitted by applicable law and the Nasdaq Stock Market rules, the Board may delegate any or all of its powers under the Plan to one or more committees or subcommittees of the Board (a "Committee"). All references in the Plan to the "Board" shall mean the Board or a Committee of the Board or the officers referred to in Section 3(c) to the extent that the Board's powers or authority under the Plan have been delegated to such Committee or officers.

(c) Delegation to Officers. Subject to any requirements of applicable law (including as applicable Sections 152 and 157(c) of the General Corporation Law of the State of Delaware) and the Nasdaq Stock Market rules, the Board may delegate to one or more officers of the Company the power to grant Awards (subject to any limitations under the Plan) to employees or officers of the Company and to exercise such other powers under the Plan as the Board may determine, provided that the Board shall fix the terms of Awards to be granted by such officers, the maximum number of shares subject to Awards that the officers may grant, and the time period in which such Awards may be granted; and provided further, that no officer shall be authorized to grant Awards to any "executive officer" of the Company (as defined by Rule 3b-7 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) or to any "officer" of the Company (as defined by Rule 16a-1(f) under the Exchange Act).

4. Stock Available for Awards

(a) Authorized Number of Shares. Subject to adjustment under Section 9, Awards may be made under the Plan for up to 500,000 shares of common stock, $0.01 par value per share, of the Company (the "Common Stock"). Shares issued under the Plan may consist in whole or in part of authorized but unissued shares or treasury shares.

(b) Share Counting. For purposes of counting the number of shares available for the grant of Awards under the Plan under this Section 4:

(1) all shares of Common Stock covered by SARs shall be counted against the number of shares available for the grant of Awards under the Plan; *provided*, *however*, that (i) SARs that may be settled only in cash shall not be so counted and (ii) if the Company grants an SAR in tandem with an Option for the same number of shares of Common Stock and provides that only one such Award may be exercised (a "Tandem SAR"), only the shares covered by the Option, and not the shares covered by the Tandem SAR, shall be so counted, and the expiration of one in connection with the other's exercise will not restore shares to the Plan;

(2) to the extent a Restricted Stock Unit award may be settled only in cash, no shares shall be counted against the shares available for the grant of Awards under the Plan;

(3) if any Award (i) expires or is terminated, surrendered or canceled without having been fully exercised or is forfeited in whole or in part (including as the result of shares of Common Stock subject to such Award being repurchased by the Company at

the original issuance price pursuant to a contractual repurchase right) or (ii) results in any Common Stock not being issued (including as a result of an SAR that was settleable either in cash or in stock actually being settled in cash), the unused Common Stock covered by such Award shall again be available for the grant of Awards; provided, however, that in the case of the exercise of an SAR, the number of shares counted against the shares available under the Plan shall be the full number of shares subject to the SAR multiplied by the percentage of the SAR actually exercised, regardless of the number of shares actually used to settle such SAR upon exercise and (3) the shares covered by a Tandem SAR shall not again become available for grant upon the expiration or termination of such Tandem SAR; and

(4) shares of Common Stock delivered (by actual delivery, attestation, or net exercise) to the Company by a Participant to (i) purchase shares of Common Stock upon the exercise of an Award or (ii) satisfy tax withholding obligations with respect to Awards (including shares retained from the Award creating the tax obligation) shall be added back to the number of shares available for the future grant of Awards.

5. Stock Options

(a) General. The Board may grant options to purchase Common Stock (each, an "Option") and determine the number of shares of Common Stock to be covered by each Option, the exercise price of each Option and the conditions and limitations applicable to the exercise of each Option, including conditions relating to applicable federal or state securities laws, as it considers necessary or advisable. All Options under the Plan shall be Nonstatutory Stock Options. A "Nonstatutory Stock Option" is an Option which is not intended to be an "incentive share option" within the meaning of Section 422 of the Code.

(b) Exercise Price. The Board shall establish the exercise price of each Option or the formula by which such exercise price will be determined. The exercise price shall be specified in the applicable Option agreement. The exercise price shall be not less than 100% of the Grant Date Fair Market Value (as defined below) of the Common Stock on the date the Option is granted; provided that if the Board approves the grant of an Option with an exercise price to be determined on a future date, the exercise price shall be not less than 100% of the Grant Date Fair Market Value on such future date. "Grant Date Fair Market Value" of a share of Common Stock for purposes of the Plan will be determined as follows:

(1) if the Common Stock trades on a national securities exchange, the closing sale price (for the primary trading session) on the date of grant; or

(2) if the Common Stock does not trade on any such exchange, the average of the closing bid and asked prices on the date of grant as reported by an over-the-counter marketplace designated by the Board; or

(3) if the Common Stock is not publicly traded, the Board will determine the Grant Date Fair Market Value for purposes of the Plan using any measure of value it determines to be appropriate (including, as it considers appropriate, relying on appraisals)

in a manner consistent with the valuation principles under Code Section 409A, except as the Board may expressly determine otherwise.

For any date that is not a trading day, the Grant Date Fair Market Value of a share of Common Stock for such date will be determined by using the closing sale price or average of the bid and asked prices, as appropriate, for the immediately preceding trading day and with the timing in the formulas above adjusted accordingly. The Board can substitute a particular time of day or other measure of "closing sale price" or "bid and asked prices" if appropriate because of exchange or market procedures or can, in its sole discretion, use weighted averages either on a daily basis or such longer period as complies with Code Section 409A.

The Board has sole discretion to determine the Grant Date Fair Market Value for purposes of the Plan, and all Awards are conditioned on the Participants' agreement that the Board's determination is conclusive and binding even though others might make a different determination.

(c) Duration of Options. Each Option shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable option agreement; provided, however, that no Option will be granted with a term in excess of 10 years.

(d) Exercise of Options. Options may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic, and which may be provided to a third party equity plan administrator) approved by the Company, together with payment in full (in the manner specified in Section 5(e)) of the exercise price for the number of shares for which the Option is exercised. Shares of Common Stock subject to the Option will be delivered by the Company as soon as practicable following exercise.

(e) Payment Upon Exercise. Common Stock purchased upon the exercise of an Option granted under the Plan shall be paid for as follows:

(1) in cash (including via a wire transfer) or by check, payable to the order of the Company;

(2) except as may otherwise be provided in the applicable Option agreement or approved by the Board, by (i) delivery of an irrevocable and unconditional undertaking by a creditworthy broker to deliver promptly to the Company sufficient funds to pay the exercise price and any required tax withholding or (ii) delivery by the Participant to the Company of a copy of irrevocable and unconditional instructions to a creditworthy broker to deliver promptly to the Company cash or a check sufficient to pay the exercise price and any required tax withholding;

(3) to the extent provided for in the applicable Option agreement or approved by the Board, by delivery (either by actual delivery or attestation) of shares of Common Stock owned by the Participant valued at their fair market value (valued in the manner determined by (or in a manner approved by) the Board), provided (i) such method of payment is then permitted under applicable law, (ii) such Common Stock, if acquired directly from the Company, was owned by the Participant for such minimum period of

time, if any, as may be established by the Board and (iii) such Common Stock is not subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements;

(4) to the extent provided for in the applicable Nonstatutory Stock Option agreement or approved by the Board, by delivery of a notice of "net exercise" to the Company, as a result of which the Participant would receive (i) the number of shares underlying the portion of the Option being exercised, less (ii) such number of shares as is equal to (A) the aggregate exercise price for the portion of the Option being exercised divided by (B) the fair market value of the Common Stock (valued in the manner determined by (or in a manner approved by) the Board) on the date of exercise;

(5) to the extent permitted by applicable law and provided for in the applicable Option agreement or approved by the Board by payment of such other lawful consideration as the Board may determine; or

(6) by any combination of the above permitted forms of payment, to the extent approved by the Board.

(g) Limitation on Repricing. Unless such action is approved by the Company's stockholders, the Company may not (except as provided for under Section 9): (1) amend any outstanding Option granted under the Plan to provide an exercise price per share that is lower than the then-current exercise price per share of such outstanding Option, (2) cancel any outstanding option (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise price per share lower than the then-current exercise price per share of the cancelled option, (3) cancel in exchange for a cash payment any outstanding Option with an exercise price per share above the then-current fair market value of the Common Stock (valued in the manner determined by (or in the manner approved by) the Board) or (4) take any other action under the Plan that constitutes a "repricing" within the meaning of the rules of the Nasdaq Stock Market or any other exchange or marketplace on which the Company stock is listed or traded (the "Exchange").

6. Stock Appreciation Rights

(a) General. The Board may grant Awards consisting of stock appreciation rights ("SARs") entitling the holder, upon exercise, to receive an amount of Common Stock or cash or a combination thereof (such form to be determined by the Board) determined by reference to appreciation, from and after the date of grant, in the fair market value of a share of Common Stock (valued in the manner determined by (or in the manner approved by) the Board) over the measurement price established pursuant to Section 6(b). The date as of which such appreciation is determined shall be the exercise date.

(b) Measurement Price. The Board shall establish the measurement price of each SAR and specify it in the applicable SAR agreement. The measurement price shall not be less than 100% of the Grant Date Fair Market Value of the Common Stock on the date the SAR is granted; provided that if the Board approves the grant of an SAR effective as of a future date, the

measurement price shall be not less than 100% of the Grant Date Fair Market Value on such future date.

(c) Duration of SARs. Each SAR shall be exercisable at such times and subject to such terms and conditions as the Board may specify in the applicable SAR agreement; provided, however, that no SAR will be granted with a term in excess of 10 years.

(d) Exercise of SARs. SARs may be exercised by delivery to the Company of a notice of exercise in a form (which may be electronic) approved by the Company, together with any other documents required by the Board.

(e) Limitation on Repricing. Unless such action is approved by the Company's stockholders, the Company may not (except as provided for under Section 9): (1) amend any outstanding SAR granted under the Plan to provide a measurement price per share that is lower than the then-current measurement price per share of such outstanding SAR, (2) cancel any outstanding SAR (whether or not granted under the Plan) and grant in substitution therefor new Awards under the Plan covering the same or a different number of shares of Common Stock and having an exercise or measurement price per share lower than the then-current measurement price per share of the cancelled SAR, (3) cancel in exchange for a cash payment any outstanding SAR with a measurement price per share above the then-current fair market value of the Common Stock (valued in the manner determined by (or in a manner approved by) the Board) or (4) take any other action under the Plan that constitutes a "repricing" within the meaning of the rules of the Exchange.

7. Restricted Stock; Restricted Stock Units

(a) General. The Board may grant Awards entitling recipients to acquire shares of Common Stock ("Restricted Stock"), subject to the right of the Company to repurchase all or part of such shares at their issue price or other stated or formula price (or to require forfeiture of such shares if issued at no cost) from the recipient in the event that conditions specified by the Board in the applicable Award are not satisfied prior to the end of the applicable restriction period or periods established by the Board for such Award. The Board may also grant Awards entitling the recipient to receive shares of Common Stock or cash to be delivered as soon as practicable after the time such Award vests or is settled ("Restricted Stock Units") (Restricted Stock and Restricted Stock Units are each referred to herein as a "Restricted Stock Award").

(b) Terms and Conditions for All Restricted Stock Awards. The Board shall determine the terms and conditions of a Restricted Stock Award, including the conditions for vesting and repurchase (or forfeiture) and the issue price, if any.

(c) Additional Provisions Relating to Restricted Stock.

(1) Dividends. Unless otherwise provided in the applicable Award agreement, any dividends (whether paid in cash, stock or property) declared and paid by the Company with respect to shares of Restricted Stock ("Accrued Dividends") shall be paid to the Participant only if and when such shares become free from the restrictions on transferability and forfeitability that apply to such shares. Each payment of Accrued Dividends will be made no later than the end of the calendar year in which the dividends

are paid to stockholders of that class of stock or, if later, the 15th day of the third month following the lapsing of the restrictions on transferability and the forfeitability provisions applicable to the underlying shares of Restricted Stock.

(2) Stock Certificates. The Company may require that any stock certificates issued in respect of shares of Restricted Stock, as well as dividends or distributions paid on such Restricted Stock, shall be deposited in escrow by the Participant, together with a stock power endorsed in blank, with the Company (or its designee) (or that any shares of Restricted Stock reflected in book entry be similarly legended). At the expiration of the applicable restriction periods, the Company (or such designee) shall deliver the certificates no longer subject to such restrictions to the Participant or if the Participant has died, to his or her Designated Beneficiary. "Designated Beneficiary" means (i) the beneficiary designated, in a manner determined by the Board, by a Participant to receive amounts due or exercise rights of the Participant in the event of the Participant's death or (ii) in the absence of an effective designation by a Participant, the Participant's estate.

(d) Additional Provisions Relating to Restricted Stock Units.

(1) Settlement. As soon as practicable after the vesting of and/or lapsing of any other restrictions (i.e., settlement) with respect to each Restricted Stock Unit, the Participant shall be entitled to receive from the Company such number of shares of Common Stock or (if so provided in the applicable Award agreement) an amount of cash equal to the fair market value (valued in the manner determined by (or in a manner approved by) the Board) of such number of shares of Common Stock as are set forth in the applicable Restricted Stock Unit agreement. The Board may provide that settlement of Restricted Stock Units shall be deferred, on a mandatory basis or at the election of the Participant in a manner that complies with Section 409A of the Code.

(2) Voting Rights. A Participant shall have no voting rights with respect to any Restricted Stock Units.

(3) Dividend Equivalents. The Award agreement for Restricted Stock Units may provide Participants with the right to receive an amount equal to any dividends or other distributions declared and paid on an equal number of outstanding shares of Common Stock ("Dividend Equivalents"). Dividend Equivalents may be settled in cash and/or shares of Common Stock and shall be subject to the same restrictions on transfer and forfeitability as the Restricted Stock Units with respect to which paid, in each case to the extent provided in the Award agreement.

8. Other Stock-Based Awards

(a) General. The Board may grant other Awards of shares of Common Stock, and other Awards that are valued in whole or in part by reference to, or are otherwise based on, shares of Common Stock or other property ("Other Stock-Based Awards"). Such Other Stock-Based Awards shall also be available as a form of payment in the settlement of other Awards granted under the Plan or as payment in lieu of compensation to which a Participant is otherwise

entitled. Other Stock-Based Awards may be paid in shares of Common Stock or cash, as the Board shall determine.

(b) Terms and Conditions. Subject to the provisions of the Plan, the Board shall determine the terms and conditions of each Other Stock-Based Award, including any purchase price applicable thereto.

9. Adjustments for Changes in Common Stock and Certain Other Events

(a) Changes in Capitalization. In the event of any stock split, reverse stock split, stock dividend, recapitalization, combination of shares, reclassification of shares, spin-off or other similar change in capitalization or event, or any dividend or distribution to holders of Common Stock other than an ordinary cash dividend, (i) the number and class of securities available under the Plan, (ii) the share counting rules set forth in Section 4, (iii) the number and class of securities and exercise price per share of each outstanding Option, (iv) the share and per-share provisions and the measurement price of each outstanding SAR, (v) the number of shares subject to and the repurchase price per share subject to each outstanding award of Restricted Stock and (vi) the share and per-share-related provisions and the purchase price, if any, of each outstanding Restricted Stock Unit award and each outstanding Other Stock-Based Award, shall be equitably adjusted by the Company (or substituted Awards may be made, if applicable) in the manner determined by the Board. Without limiting the generality of the foregoing, in the event the Company effects a split of the Common Stock by means of a stock dividend and the exercise price of and the number of shares subject to an outstanding Option are adjusted as of the date of the distribution of the dividend (rather than as of the record date for such dividend), then an optionee who exercises an Option between the record date and the distribution date for such stock dividend shall be entitled to receive, on the distribution date, the stock dividend with respect to the shares of Common Stock acquired upon such Option exercise, notwithstanding the fact that such shares were not outstanding as of the close of business on the record date for such stock dividend.

(b) Reorganization Events.

(1) Definition. A "Reorganization Event" shall mean: (a) any merger or consolidation of the Company with or into another entity as a result of which all of the Common Stock of the Company is converted into or exchanged for the right to receive cash, securities or other property or is cancelled, (b) any transfer or disposition of all of the Common Stock of the Company for cash, securities or other property pursuant to a share exchange or other transaction or (c) any liquidation or dissolution of the Company.

(2) Consequences of a Reorganization Event on Awards Other than Restricted Stock.

(A) In connection with a Reorganization Event, the Board may take any one or more of the following actions as to all or any (or any portion of) outstanding Awards other than Restricted Stock on such terms as the Board determines (except to the extent specifically provided otherwise in an applicable Award agreement or another agreement between the Company and the

Participant): (i) provide that such Awards shall be assumed, or substantially equivalent Awards shall be substituted, by the acquiring or succeeding corporation (or an affiliate thereof), (ii) upon written notice to a Participant, provide that all of the Participant's unvested Awards will be forfeited immediately prior to the consummation of such Reorganization Event and/or unexercised Awards will terminate immediately prior to the consummation of such Reorganization Event unless exercised by the Participant (to the extent then exercisable) within a specified period following the date of such notice, (iii) provide that outstanding Awards shall become exercisable, realizable or deliverable, or restrictions applicable to an Award shall lapse, in whole or in part prior to or upon such Reorganization Event, (iv) in the event of a Reorganization Event under the terms of which holders of Common Stock will receive upon consummation thereof a cash payment for each share surrendered in the Reorganization Event (the "Acquisition Price"), make or provide for a cash payment to Participants with respect to each Award held by a Participant equal to (A) the number of shares of Common Stock subject to the vested portion of the Award (after giving effect to any acceleration of vesting that occurs upon or immediately prior to such Reorganization Event) multiplied by (B) the excess, if any, of (I) the Acquisition Price over (II) the exercise, measurement or purchase price of such Award and any applicable tax withholdings, in exchange for the termination of such Award, (v) provide that, in connection with a liquidation or dissolution of the Company, Awards shall convert into the right to receive liquidation proceeds (if applicable, net of the exercise, measurement or purchase price thereof and any applicable tax withholdings) and (vi) any combination of the foregoing. In taking any of the actions permitted under this Section 9(b)(2), the Board shall not be obligated by the Plan to treat all Awards, all Awards held by a Participant, or all Awards of the same type, identically.

(B) Notwithstanding the terms of Section 9(b)(2)(A), in the case of outstanding Restricted Stock Units that are subject to Section 409A of the Code: (i) if the applicable Restricted Stock Unit agreement provides that the Restricted Stock Units shall be settled upon a "change in control event" within the meaning of Treasury Regulation Section 1.409A-3(i)(5)(i), and the Reorganization Event constitutes such a "change in control event", then no assumption or substitution shall be permitted pursuant to Section 9(b)(2)(A)(i) and the Restricted Stock Units shall instead be settled in accordance with the terms of the applicable Restricted Stock Unit agreement; and (ii) the Board may only undertake the actions set forth in clauses (iii), (iv) or (v) of Section 9(b)(2)(A) if the Reorganization Event constitutes a "change in control event" as defined under Treasury Regulation Section 1.409A-3(i)(5)(i) and such action is permitted or required by Section 409A of the Code; if the Reorganization Event is not a "change in control event" as so defined or such action is not permitted or required by Section 409A of the Code, and the acquiring or succeeding corporation does not assume or substitute the Restricted Stock Units pursuant to clause (i) of Section 9(b)(2)(A), then the unvested Restricted Stock Units shall terminate immediately prior to the consummation of the Reorganization Event without any payment in exchange therefor.

(C) For purposes of Section 9(b)(2)(A)(i), an Award (other than Restricted Stock) shall be considered assumed if, following consummation of the Reorganization Event, such Award confers the right to purchase or receive pursuant to the terms of such Award, for each share of Common Stock subject to the Award immediately prior to the consummation of the Reorganization Event, the consideration (whether cash, securities or other property) received as a result of the Reorganization Event by holders of Common Stock for each share of Common Stock held immediately prior to the consummation of the Reorganization Event (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding shares of Common Stock); provided, however, that if the consideration received as a result of the Reorganization Event is not solely common stock of the acquiring or succeeding corporation (or an affiliate thereof), the Company may, with the consent of the acquiring or succeeding corporation, provide for the consideration to be received upon the exercise or settlement of the Award to consist solely of such number of shares of common stock of the acquiring or succeeding corporation (or an affiliate thereof) that the Board determines to be equivalent in value (as of the date of such determination or another date specified by the Board) to the per share consideration received by holders of outstanding shares of Common Stock as a result of the Reorganization Event.

(3) Consequences of a Reorganization Event on Restricted Stock. Upon the occurrence of a Reorganization Event other than a liquidation or dissolution of the Company, the repurchase and other rights of the Company with respect to outstanding Restricted Stock shall inure to the benefit of the Company's successor and shall, unless the Board determines otherwise, apply to the cash, securities or other property which the Common Stock was converted into or exchanged for pursuant to such Reorganization Event in the same manner and to the same extent as they applied to such Restricted Stock; provided, however, that the Board may provide for termination or deemed satisfaction of such repurchase or other rights under the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, either initially or by amendment. Upon the occurrence of a Reorganization Event involving the liquidation or dissolution of the Company, except to the extent specifically provided to the contrary in the instrument evidencing any Restricted Stock or any other agreement between a Participant and the Company, all restrictions and conditions on all Restricted Stock then outstanding shall automatically be deemed terminated or satisfied.

10. General Provisions Applicable to Awards

(a) Transferability of Awards. Awards shall not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution or pursuant to a qualified domestic relations order, and, during the life of the Participant, shall be exercisable only by the Participant; provided, however, that, except with respect to Awards subject to Section 409A of the Code, the Board may permit or provide in an Award for the gratuitous transfer of the Award by the Participant to or for the benefit of any immediate family member, family trust or other entity established for the benefit of the Participant and/or an immediate family member thereof if the

Company would be eligible to use a Form S-8 under the Securities Act of 1933, as amended, for the registration of the sale of the Common Stock subject to such Award to such proposed transferee; provided further, that the Company shall not be required to recognize any such permitted transfer until such time as such permitted transferee shall, as a condition to such transfer, deliver to the Company a written instrument in form and substance satisfactory to the Company confirming that such transferee shall be bound by all of the terms and conditions of the Award. References to a Participant, to the extent relevant in the context, shall include references to authorized transferees. For the avoidance of doubt, nothing contained in this Section 10(a) shall be deemed to restrict a transfer to the Company.

(b) Documentation; Press Release. Each Award shall be evidenced in such form (written, electronic or otherwise) as the Board shall determine. Each Award may contain terms and conditions in addition to those set forth in the Plan. Promptly following the grant of an Award hereunder, the Company must disclose in a press release the material terms of the grant, the number of shares involved, and, if required by law or the rules of the Exchange, the identity of the Participant and each Participant, by accepting the Award, consents to the foregoing.

(c) Board Discretion. Except as otherwise provided by the Plan, each Award may be made alone or in addition or in relation to any other Award. The terms of each Award need not be identical, and the Board need not treat Participants uniformly.

(d) Termination of Status. The Board shall determine the effect on an Award of the disability, death, termination or other cessation of employment, authorized leave of absence or other change in the employment or other status of a Participant and the extent to which, and the period during which, the Participant, or the Participant's legal representative, conservator, guardian or Designated Beneficiary, may exercise rights under the Award.

(e) Withholding. The Participant must satisfy all applicable federal, state, and local or other income and employment tax withholding obligations before the Company will deliver stock certificates or otherwise recognize ownership of Common Stock under an Award. The Company may elect to satisfy the withholding obligations through additional withholding on salary or wages. If the Company elects not to or cannot withhold from other compensation, the Participant must pay the Company the full amount, if any, required for withholding or have a broker tender to the Company cash equal to the withholding obligations. Payment of withholding obligations is due before the Company will issue any shares on exercise, vesting or release from forfeiture of an Award or at the same time as payment of the exercise or purchase price, unless the Company determines otherwise. If provided for in an Award or approved by the Board, a Participant may satisfy the tax obligations in whole or in part by delivery (either by actual delivery or attestation) of shares of Common Stock, including shares retained from the Award creating the tax obligation, valued at their fair market value (valued in the manner determined by (or in a manner approved by) the Company); provided, however, except as otherwise provided by the Board, that the total tax withholding where stock is being used to satisfy such tax obligations cannot exceed the Company's minimum statutory withholding obligations (based on minimum statutory withholding rates for federal, state and local tax purposes, including payroll taxes, that are applicable to such supplemental taxable income), except that, to the extent that the Company is able to retain shares of Common Stock having a fair market value (determined by, or in a manner approved by, the Company) that exceeds the statutory minimum applicable

withholding tax without financial accounting implications or the Company is withholding in a jurisdiction that does not have a statutory minimum withholding tax, the Company may retain such number of shares of Common Stock (up to the number of shares having a fair market value equal to the maximum individual statutory rate of tax (determined by, or in a manner approved by, the Company)) as the Company shall determine in its sole discretion to satisfy the tax liability associated with any Award. Shares used to satisfy tax withholding requirements cannot be subject to any repurchase, forfeiture, unfulfilled vesting or other similar requirements.

(f) Amendment of Award. Except as otherwise provided in Sections 5(g) and 6(e) with respect to repricings, the Board may amend, modify or terminate any outstanding Award, including but not limited to, substituting therefor another Award of the same or a different type and changing the date of exercise or realization provided that no amendment that would require stockholder approval under the rules of the Exchange may be made effective unless and until the Company's stockholders approve such amendment. The Participant's consent to such action shall be required unless (i) the Board determines that the action, taking into account any related action, does not materially and adversely affect the Participant's rights under the Plan or (ii) the change is permitted under Section 9.

(g) Conditions on Delivery of Stock. The Company will not be obligated to deliver any shares of Common Stock pursuant to the Plan or to remove restrictions from shares previously issued or delivered under the Plan until (i) all conditions of the Award have been met or removed to the satisfaction of the Company, (ii) in the opinion of the Company's counsel, all other legal matters in connection with the issuance and delivery of such shares have been satisfied, including any applicable securities laws and regulations and any applicable stock exchange or stock market rules and regulations and (iii) the Participant has executed and delivered to the Company such representations or agreements as the Company may consider appropriate to satisfy the requirements of any applicable laws, rules or regulations.

(h) Acceleration. The Board may at any time provide that any Award shall become immediately exercisable in whole or in part, free from some or all restrictions or conditions, or otherwise realizable in whole or in part, as the case may be.

11. Miscellaneous

(a) No Right To Employment or Other Status. No person shall have any claim or right to be granted an Award by virtue of the adoption of the Plan, and the grant of an Award shall not be construed as giving a Participant the right to continued employment or any other relationship with the Company. The Company expressly reserves the right at any time to dismiss or otherwise terminate its relationship with a Participant free from any liability or claim under the Plan, except as expressly provided in the applicable Award.

(b) No Rights As Stockholder; Clawback Policy. Subject to the provisions of the applicable Award, no Participant or Designated Beneficiary shall have any rights as a stockholder with respect to any shares of Common Stock to be issued with respect to an Award until becoming the record holder of such shares. In accepting an Award under the Plan, a Participant agrees to be bound by any clawback policy the Company has in effect or may adopt in the future.

(c) Effective Date. The Plan shall become effective on the date on which it is adopted by the Board. It is expressly intended that approval of the Company's stockholders not be required as a condition to the effectiveness of the Plan, and the Plan's provisions shall be interpreted in a manner consistent with such intent for all purposes.

(d) Amendment of Plan. The Board may amend, suspend or terminate the Plan or any portion thereof at any time provided that no amendment that would require stockholder approval under the rules of the Exchange may be made effective unless and until the Company's stockholders approve such amendment. Unless otherwise specified in the amendment, any amendment to the Plan adopted in accordance with this Section 11(d) shall apply to, and be binding on the holders of, all Awards outstanding under the Plan at the time the amendment is adopted, provided the Board determines that such amendment, taking into account any related action, does not materially and adversely affect the rights of Participants under the Plan.

(e) Authorization of Sub-Plans (including for Grants to non-U.S. Employees). The Board may from time to time establish one or more sub-plans under the Plan for purposes of satisfying applicable securities, tax or other laws of various jurisdictions. The Board shall establish such sub-plans by adopting supplements to the Plan containing (i) such limitations on the Board's discretion under the Plan as the Board deems necessary or desirable or (ii) such additional terms and conditions not otherwise inconsistent with the Plan as the Board shall deem necessary or desirable. All supplements adopted by the Board shall be deemed to be part of the Plan, but each supplement shall apply only to Participants within the affected jurisdiction and the Company shall not be required to provide copies of any supplement to Participants in any jurisdiction which is not the subject of such supplement.

(f) Compliance with Section 409A of the Code. If and to the extent (i) any portion of any payment, compensation or other benefit provided to a Participant pursuant to the Plan in connection with his or her employment termination constitutes "nonqualified deferred compensation" within the meaning of Section 409A of the Code and (ii) the Participant is a specified employee as defined in Section 409A(a)(2)(B)(i) of the Code, in each case as determined by the Company in accordance with its procedures, by which determinations the Participant (through accepting the Award) agrees that he or she is bound, such portion of the payment, compensation or other benefit shall not be paid before the day that is six months plus one day after the date of "separation from service" (as determined under Section 409A of the Code) (the "New Payment Date"), except as Section 409A of the Code may then permit. The aggregate of any payments that otherwise would have been paid to the Participant during the period between the date of separation from service and the New Payment Date shall be paid to the Participant in a lump sum on such New Payment Date, and any remaining payments will be paid on their original schedule.

The Company makes no representations or warranty and shall have no liability to the Participant or any other person if any provisions of or payments, compensation or other benefits under the Plan are determined to constitute nonqualified deferred compensation subject to Section 409A of the Code but do not to satisfy the conditions of that section.

(g) Limitations on Liability. Notwithstanding any other provisions of the Plan, no individual acting as a director, officer, employee or agent of the Company will be liable to any

Participant, former Participant, spouse, beneficiary, or any other person for any claim, loss, liability, or expense incurred in connection with the Plan, nor will such individual be personally liable with respect to the Plan because of any contract or other instrument he or she executes in his or her capacity as a director, officer, employee or agent of the Company. The Company will indemnify and hold harmless each director, officer, employee or agent of the Company to whom any duty or power relating to the administration or interpretation of the Plan has been or will be delegated, against any cost or expense (including attorneys' fees) or liability (including any sum paid in settlement of a claim with the Board's approval) arising out of any act or omission to act concerning the Plan unless arising out of such person's own fraud or bad faith.

(h) Governing Law. The provisions of the Plan and all Awards made hereunder shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than the State of Delaware.

EXHIBIT 10.39

Schrödinger, Inc.

NONSTATUTORY STOCK OPTION AGREEMENT

Granted under 2021 Inducement Equity Incentive Plan

Schrödinger, Inc. (the "Company") hereby grants the following stock option pursuant to its 2021 Inducement Equity Incentive Plan. The terms and conditions attached hereto are also a part hereof.

Notice of Grant

Name of optionee (the "Participant"):	
Grant Date:	
Number of shares of the Company's Common Stock subject to this option ("Shares"):	
Option exercise price per Share:[1]	
Number, if any, of Shares that vest immediately on the grant date:	
Shares that are subject to vesting schedule:	
Vesting Start Date:	
Final Exercise Date:[2]	

Vesting Schedule:

Vesting Date:	Number of Options that Vest:
All vesting is dependent on the Participant remaining an Eligible Participant, as provided herein.	

This option satisfies in full all commitments that the Company has to the Participant with respect to the issuance of stock, stock options or other equity securities.

_____
Signature of Participant

_____
Street Address

_____
City/State/Zip Code

Schrödinger, Inc.

By: _____
Name of Officer
Title:

1 This must be at least 100% of the Grant Date Fair Market Value (as defined in the Plan) of the Common Stock on the date of grant.

2 The Final Exercise Date must be no more than 10 years from the date of grant. The correct approach to calculate the final exercise date is to use the day immediately prior to the date ten years out from the date of the stock option award grant.

Schrödinger, Inc.
Nonstatutory Stock Option Agreement
Granted under 2021 Inducement Stock Incentive Plan
Incorporated Terms and Conditions

1. Grant of Option.

This agreement evidences the grant by the Company, on the grant date (the "Grant Date") set forth in the Notice of Grant that forms part of this agreement (the "Notice of Grant"), to the Participant of an option to purchase, in whole or in part, on the terms provided herein and in the Company's 2021 Inducement Equity Incentive Plan (the "Plan"), the number of Shares set forth in the Notice of Grant of common stock, $0.01 par value per share, of the Company ("Common Stock"), at the exercise price per Share set forth in the Notice of Grant. Unless earlier terminated, this option shall expire at 5:00 p.m., Eastern time, on the Final Exercise Date set forth in the Notice of Grant (the "Final Exercise Date").

The option evidenced by this agreement was granted to the Participant pursuant to the inducement grant exception under Nasdaq Stock Market Rule 5635(c)(4) as an inducement that is material to the Participant's employment with the Company.

It is intended that the option evidenced by this agreement shall not be an incentive stock option as defined in Section 422 of the Internal Revenue Code of 1986, as amended, and any regulations promulgated thereunder (the "Code"). Except as otherwise indicated by the context, the term "Participant", as used in this option, shall be deemed to include any person who acquires the right to exercise this option validly under its terms.

2. Vesting Schedule.

This option will become exercisable ("vest") in accordance with the vesting schedule set forth in the Notice of Grant.

The right of exercise shall be cumulative so that to the extent the option is not exercised in any period to the maximum extent permissible it shall continue to be exercisable, in whole or in part, with respect to all Shares for which it is vested until the earlier of the Final Exercise Date or the termination of this option under Section 3 hereof or the Plan.

3. Exercise of Option.

(a) Form of Exercise. Each election to exercise this option shall be in writing, in the form of the Stock Option Exercise Notice attached as Annex A, signed by the Participant, and received by the Company at its principal office, accompanied by this agreement, or in such other form (which may be electronic or through a third party equity plan administrator) as is approved by the Company, together with payment in full in the manner provided in the Plan. The Participant may purchase less than the number of shares covered hereby, provided that no partial exercise of this option may be for any fractional share.

(b) Continuous Relationship with the Company Required. Except as otherwise provided in this Section 3, this option may not be exercised unless the Participant, at the time he or she exercises this option, is, and has been at all times since the Grant Date, an employee, director or officer of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants, or advisors of which are eligible to receive option grants under the Plan (an "Eligible Participant").

(c) Termination of Relationship with the Company. If the Participant ceases to be an Eligible Participant for any reason, then, except as provided in paragraphs (d) and (e) below, the right to exercise this option shall terminate three months after such cessation (but in no event after the Final Exercise Date), provided that this option shall be exercisable only to the extent that the Participant was entitled to exercise this option on the date of such cessation. Notwithstanding the foregoing, if the Participant, prior to the Final Exercise Date, violates the restrictive covenants (including, without limitation, the non-competition, non-solicitation, or confidentiality provisions) of any employment contract, any non-competition, non-solicitation, confidentiality or assignment agreement to which the Participant is a party, or any other agreement between the Participant and the Company, the right to exercise this option shall terminate immediately upon such violation.

(d) Exercise Period Upon Death or Disability. If the Participant dies or becomes disabled (within the meaning of Section 22(e)(3) of the Code) prior to the Final Exercise Date while he or she is an Eligible Participant and the Company has not terminated such relationship for "cause" as specified in paragraph (e) below, this option shall be exercisable, within the period of one year following the date of death or disability of the Participant, by the Participant (or in the case of death by an authorized transferee), provided that this option shall be exercisable only to the extent that this option was exercisable by the Participant on the date of his or her death or disability, and further provided that this option shall not be exercisable after the Final Exercise Date.

(e) Termination for Cause. If, prior to the Final Exercise Date, the Participant's employment or other relationship with the Company is terminated by the Company for Cause (as defined in below), the right to exercise this option shall terminate immediately upon the effective date of such termination of employment or other relationship. If, prior to the Final Exercise Date, the Participant is given notice by the Company of the termination of his or her employment or other relationship by the Company for Cause, and the effective date of such employment or other relationship termination is subsequent to the date of delivery of such notice, the right to exercise this option shall be suspended from the time of the delivery of such notice until the earlier of (i) such time as it is determined or otherwise agreed that the Participant's employment or other relationship shall not be terminated for Cause as provided in such notice or (ii) the effective date of such termination of employment or other relationship (in which case the right to exercise this option shall, pursuant to the preceding sentence, terminate upon the effective date of such termination of employment or other relationship). If the Participant is party to an employment, consulting or severance agreement with the Company which agreement, plan or arrangement contains a definition of "cause" for termination of employment, "Cause" shall have the meaning ascribed to such term in such agreement, plan or arrangement. Otherwise, "Cause" shall mean willful misconduct by the Participant or willful failure by the Participant to perform his or her responsibilities to the Company (including, without limitation, breach by the Participant of any provision of any employment, consulting, advisory, nondisclosure, non-competition or other similar agreement between the Participant and the Company), as determined by the Company, which determination shall be conclusive. The Participant's employment shall be considered to have been terminated for Cause if the Company determines, within 30 days after the Participant's resignation, that termination for Cause was warranted.

4. Withholding.

No Shares will be issued pursuant to the exercise of this option unless and until the Participant pays to the Company, or makes provision satisfactory to the Company for payment of, any federal, state or local withholding taxes required by law to be withheld in respect of this option.

5. Transfer Restrictions; Clawback.

(a) This option may not be sold, assigned, transferred, pledged or otherwise encumbered by the Participant, either voluntarily or by operation of law, except by will or the laws of descent and distribution, and, during the lifetime of the Participant, this option shall be exercisable only by the Participant.

(b) In accepting this option, the Participant agrees to be bound by any clawback policy that the Company has in place or may adopt in the future.

6. Provisions of the Plan.

This option is subject to the provisions of the Plan (including the provisions relating to amendments to the Plan), a copy of which is furnished to the Participant with this option.

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ANNEX A

Schrödinger, Inc.

Stock Option Exercise Notice

Schrödinger, Inc.
120 West 45th Street
17th Floor
New York, NY 10036-4041

Dear Sir or Madam:

I, _____(the "Participant"), hereby irrevocably exercise the right to purchase shares of the Common Stock, $0.01 par value per share (the "Shares"), of Schrödinger, Inc. (the "Company") at $_____ per share pursuant to the Company's 2021 Inducement Equity Incentive Plan and a stock option agreement with the Company dated (the "Option Agreement"). Enclosed herewith is a payment of $_____, the aggregate purchase price for the Shares. The certificate for the Shares should be registered in my name as it appears below or, if so indicated below, jointly in my name and the name of the person designated below, with right of survivorship.

Dated: _____

_____
Signature
Print Name:

Address:

_____

_____

Name and address of persons in whose name the Shares are to be jointly registered (if applicable):

_____

EXHIBIT 10.40

Schrödinger, Inc.

RESTRICTED STOCK UNIT AGREEMENT

Granted under 2021 Inducement Equity Incentive Plan

Schrödinger, Inc. (the "Company") hereby grants the following restricted stock units pursuant to its 2021 Inducement Equity Incentive Plan. The terms and conditions attached hereto are also a part hereof.

Notice of Grant

Name of recipient (the "Participant"):	
Grant Date:	
Number of restricted stock units ("RSUs") granted:	
Number, if any, of RSUs that vest immediately on the grant date:	
RSUs that are subject to vesting schedule:	
Vesting Start Date:	

Vesting Schedule:

Vesting Date:	Number of RSUs that Vest:
All vesting is dependent on the Participant remaining an Eligible Participant, as provided herein.	

This grant of RSUs satisfies in full all commitments that the Company has to the Participant with respect to the issuance of stock, stock options or other equity securities.

Signature of Participant

Street Address

City/State/Zip Code

Schrödinger, Inc.

By: _____

Name of Officer
Title:

Schrödinger, Inc.
Restricted Stock Unit Agreement
Granted under 2021 Inducement Equity Incentive Plan
Incorporated Terms and Conditions

1. Award of Restricted Stock Units.

In consideration of services rendered and to be rendered to the Company by the Participant, the Company has granted to the Participant, subject to the terms and conditions set forth in this Restricted Stock Unit Agreement (this "Agreement") and in the Company's 2021 Inducement Equity Incentive Plan (the "Plan"), an award with respect to the number of restricted stock units (the "RSUs") set forth in the Notice of Grant that forms part of this Agreement (the "Notice of Grant"). Each RSU represents the right to receive one share of common stock, $0.01 par value per share, of the Company (the "Common Stock") upon vesting of the RSU, subject to the terms and conditions set forth herein.

The RSUs evidenced by this Agreement were granted to the Participant pursuant to the inducement grant exception under Nasdaq Stock Market Rule 5635(c)(4), as an inducement that is material to the Participant's employment with the Company.

2. Vesting.

The RSUs shall vest in accordance with the Vesting Schedule set forth in the Notice of Grant (the "Vesting Schedule"). Any fractional shares resulting from the application of any percentages used in the Vesting Schedule shall be rounded down to the nearest whole number of RSUs. As soon as practicable after the vesting of the RSU, the Company will deliver to the Participant, for each RSU that becomes vested, one share of Common Stock, subject to the payment of any taxes pursuant to Section 7. The Common Stock will be delivered to the Participant as soon as practicable following each vesting date, but in any event within 30 days of such date.

3. Forfeiture of Unvested RSUs Upon Cessation of Service.

In the event that the Participant ceases to be an Eligible Participant (as defined below) for any reason or no reason, with or without cause, all of the RSUs that are unvested as of the time of such cessation shall be forfeited immediately and automatically to the Company, without the payment of any consideration to the Participant, effective as of such cessation. The Participant shall have no further rights with respect to the unvested RSUs or any Common Stock that may have been issuable with respect thereto. The Participant shall be an "Eligible Participant" if he or she is an employee, director or officer of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants or advisors of which are eligible to receive awards of RSUs under the Plan.

4. Restrictions on Transfer.

The Participant shall not sell, assign, transfer, pledge, hypothecate, encumber or otherwise dispose of, by operation of law or otherwise (collectively "transfer") any RSUs, or any interest therein. The Company shall not be required to treat as the owner of any RSUs or issue any Common Stock to any transferee to whom such RSUs have been transferred in violation of any of the provisions of this Agreement.

5. Rights as a Stockholder.

The Participant shall have no rights as a stockholder of the Company with respect to any shares of Common Stock that may be issuable with respect to the RSUs until the issuance of the shares of Common Stock to the Participant following the vesting of the RSUs.

6. Provisions of the Plan.

This Agreement is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this Agreement.

7. Tax Matters.

(a) Acknowledgments; No Section 83(b) Election. The Participant acknowledges that he or she is responsible for obtaining the advice of the Participant's own tax advisors with respect to the award of RSUs and the Participant is relying solely on such advisors and not on any statements or representations of the Company or any of its agents with respect to the tax consequences relating to the RSUs. The Participant understands that the Participant (and not the Company) shall be responsible for the Participant's tax liability that may arise in connection with the acquisition, vesting and/or disposition of the RSUs. The Participant acknowledges that no election under Section 83(b) of the Internal Revenue Code of 1986, as amended, (the "Code") is available with respect to RSUs.

(b) Withholding. The Participant acknowledges and agrees that the Company has the right to deduct from payments of any kind otherwise due to the Participant any federal, state, local or other taxes of any kind required by law to be withheld with respect to the vesting of the RSUs. At such time as the Participant is not aware of any material nonpublic information about the Company or the Common Stock and the Participant is not subject to any restriction on trading activities with respect to the Common Stock pursuant to any Company insider trading or other policy, the Participant shall execute the instructions set forth in Schedule A attached hereto (the "Automatic Sale Instructions") as the means of satisfying such tax obligation. If the Participant does not execute the Automatic Sale Instructions prior to an applicable vesting date, then the Participant agrees that if under applicable law the Participant will owe taxes at such vesting date on the portion of the award then vested the Company shall be entitled to immediate payment from the Participant of the amount of any tax required to be withheld by the Company. The Company shall not deliver any shares of Common Stock to the Participant until it is satisfied that all required withholdings have been made.

8. Miscellaneous.

(a) Section 409A. The RSUs awarded pursuant to this Agreement are intended to be exempt from or comply with the requirements of Section 409A of the Code and the Treasury Regulations issued thereunder ("Section 409A"). The delivery of shares of Common Stock on the vesting of the RSUs may not be accelerated or deferred unless permitted or required by Section 409A.

(b) Participant's Acknowledgements. The Participant acknowledges that he or she: (i) has read this Agreement; (ii) has been represented in the preparation, negotiation and execution of this Agreement by legal counsel of the Participant's own choice or has voluntarily declined to seek such counsel; (iii) understands the terms and consequences of this Agreement; (iv) is fully aware of the legal and binding effect of this Agreement; and (v) agrees that in accepting this award, he or she will be bound by any clawback policy that the Company may adopt in the future.

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Schedule A

Automatic Sale Instructions

The undersigned hereby consents and agrees that any taxes due on a vesting date as a result of the vesting of RSUs on such date shall be paid through an automatic sale of shares as follows:

(a) Upon any vesting of RSUs pursuant to Section 2 hereof, the Company shall arrange for the sale of such number of shares of Common Stock issuable with respect to the RSUs that vest pursuant to Section 2 as is sufficient to generate net proceeds sufficient to satisfy the Company's minimum statutory withholding obligations with respect to the income recognized by the Participant upon the vesting of the RSUs (based on minimum statutory withholding rates for all tax purposes, including payroll and social security taxes, that are applicable to such income), and the net proceeds of such sale shall be delivered to the Company in satisfaction of such tax withholding obligations.

(b) The Participant hereby appoints the Chief Executive Officer, the Chief Financial Officer and the Chief Legal Officer (or a person holding a similar title), and any of them acting alone and with full power of substitution, to serve as his or her attorneys in fact to arrange for the sale of the Participant's Common Stock in accordance with this Schedule A. The Participant agrees to execute and deliver such documents, instruments and certificates as may reasonably be required in connection with the sale of the shares pursuant to this Schedule A.

(c) The Participant represents to the Company that, as of the date hereof, he or she is not aware of any material nonpublic information about the Company or the Common Stock and is not subject to any restriction on trading activities with respect to the Common Stock pursuant to any Company insider trading policy or other policy. The Participant and the Company have structured this Agreement, including this Schedule A, to constitute a "binding contract" relating to the sale of Common Stock, consistent with the affirmative defense to liability under Section 10(b) of the Securities Exchange Act of 1934 under Rule 10b5-1(c) promulgated under such Act.

The Company shall not deliver any shares of Common Stock to the Participant until it is satisfied that all required withholdings have been made.

Participant: _____

Date: _____

EXHIBIT 10.41

Schrödinger, Inc.

RESTRICTED STOCK UNIT AGREEMENT FOR NON-U.S. PARTICIPANTS

Granted under 2021 Inducement Equity Incentive Plan

Schrödinger, Inc. (the "Company") hereby grants the following restricted stock units pursuant to its 2021 Inducement Equity Incentive Plan. The terms and conditions attached hereto are also a part hereof.

Notice of Grant

Name of recipient (the "Participant"):	
Grant Date:	
Number of restricted stock units ("RSUs") granted:	
Number, if any, of RSUs that vest immediately on the grant date:	
RSUs that are subject to vesting schedule:	
Vesting Start Date:	

Vesting Schedule:

Vesting Date:	Number of RSUs that Vest:
All vesting is dependent on the Participant remaining an Eligible Participant, as provided herein.	

This grant of RSUs satisfies in full all commitments that the Company has to the Participant with respect to the issuance of stock, stock options or other equity securities.

Signature of Participant

Street Address

City/State/Zip Code

Schrödinger, Inc.

By:

Name of Officer
Title:

Schrödinger, Inc.

Restricted Stock Unit Agreement for Non-U.S. Participants
Granted under 2021 Inducement Equity Incentive Plan
Incorporated Terms and Conditions

1. Award of Restricted Stock Units.

The Company hereby grants to the Participant, subject to the terms and conditions set forth in this Restricted Stock Unit Agreement for Non-U.S. Participants, including any additional terms and conditions for the Participant's country included in the appendix attached hereto (this "Agreement") and in the Company's 2021 Inducement Equity Incentive Plan (the "Plan"), an award with respect to the number of restricted stock units (the "RSUs") set forth in the Notice of Grant that forms part of this Agreement (the "Notice of Grant"). Each RSU represents the right to receive one share of common stock, $0.01 par value per share, of the Company (the "Common Stock") upon vesting of the RSU, subject to the terms and conditions set forth herein.

The RSUs evidenced by this Agreement were granted to the Participant pursuant to the inducement grant exception under Nasdaq Stock Market Rule 5635(c)(4), as an inducement that is material to the Participant's employment with the Company.

2. Vesting.

The RSUs shall vest in accordance with the Vesting Schedule set forth in the Notice of Grant (the "Vesting Schedule"). Any fractional shares resulting from the application of any percentages used in the Vesting Schedule shall be rounded down to the nearest whole number of RSUs. As soon as practicable after the vesting of the RSU, the Company will deliver to the Participant, for each RSU that becomes vested, one share of Common Stock, subject to the payment of any taxes pursuant to Section 7. The Common Stock will be delivered to the Participant as soon as practicable following each vesting date, but in any event within 30 days of such date.

3. Forfeiture of Unvested RSUs Upon Cessation of Service.

In the event that the Participant ceases to be an Eligible Participant (as defined below) for any reason or no reason, with or without cause, all of the RSUs that are unvested as of the time of such cessation shall be forfeited immediately and automatically to the Company, without the payment of any consideration to the Participant, effective as of such cessation. The Participant shall have no further rights with respect to the unvested RSUs or any Common Stock that may have been issuable with respect thereto. The Participant shall be an "Eligible Participant" if he or she is an employee, director or officer of, or consultant or advisor to, the Company or any other entity the employees, officers, directors, consultants or advisors of which are eligible to receive awards of RSUs under the Plan.

For purposes of the RSUs, the Participant's status as an Eligible Participant will be considered terminated as of the date the Participant is no longer actively providing services to the Company, the Employer (as defined below) or any of the other affiliates of the Company (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or engaged or the terms of the Participant's employment or service agreement, if any), and unless otherwise expressly provided in this Agreement or determined by the Company, the Participant's right to vest in the RSUs under the Plan, if any, will terminate as of such date and will not be extended by any notice period (e.g., the period of service would not include any contractual notice period or any period of "garden leave" or similar period mandated under employment laws in the jurisdiction where the participant is employed or providing services or the terms of the Participant's employment or service agreement, if any); the Committee shall have the exclusive discretion to determine when the Participant is no longer actively providing services for purposes of the RSU grant (including whether the Participant may still be considered to be providing services while on a leave of absence).

4. Restrictions on Transfer.

The Participant shall not sell, assign, transfer, pledge, hypothecate, encumber or otherwise dispose of, by operation of law or otherwise (collectively "transfer") any RSUs, or any interest therein. The Company shall not be required to treat as the owner of any RSUs or issue any Common Stock to any transferee to whom such RSUs have been transferred in violation of any of the provisions of this Agreement.

5. Rights as a Stockholder.

The Participant shall have no rights as a stockholder of the Company with respect to any shares of Common Stock that may be issuable with respect to the RSUs until the issuance of the shares of Common Stock to the Participant following the vesting of the RSUs.

6. Provisions of the Plan.

This Agreement is subject to the provisions of the Plan, a copy of which is furnished to the Participant with this Agreement.

7. Nature of Grant.

In accepting the grant, the Participant acknowledges, understands and agrees that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, to the extent permitted by the Plan;

(b) the grant of the RSUs is exceptional, voluntary and occasional and does not create any contractual or other right to receive future grants of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted in the past;

(c) all decisions with respect to future RSUs or other grants, if any, will be at the sole discretion of the Company;

(d) the RSU grant and participation in the Plan shall not create a right to employment or other service relationship with the Company;

(e) the RSU grant and participation in the Plan shall not be interpreted as forming or amending an employment or service contract with the Company or the Employer, and shall not interfere with the ability of the Company, the Employer or any affiliate of the Company, as applicable, to terminate the Participant's employment relationship (if any);

(f) the Participant is voluntarily participating in the Plan;

(g) the RSUs and the shares of Common Stock subject to the RSUs, and the income from and value of same, are not intended to replace any pension rights or compensation;

(h) the RSUs and the shares of Common Stock subject to the RSUs, and the income and value of same, are not part of normal or expected compensation for purposes of, including but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, holiday pay, long-service awards, pension or retirement or welfare benefits or similar payments;

(i) unless otherwise agreed with the Company in writing, the RSUs and the shares of Common Stock subject to the RSUs, and the income and value of same, are not granted as consideration for, or in connection with, the service the Participant may provide as a director of a subsidiary of the Company;

(j) the future value of the underlying shares of Common Stock is unknown, indeterminable and cannot be predicted with certainty;

(k) no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs resulting from the termination of the Participant's employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where the Participant is employed or engaged or the terms of the Participant's employment agreement, if any); and

(l) neither the Company, the Employer nor any other subsidiary or affiliate of the Company shall be liable for any foreign exchange rate fluctuation between the Participant's local currency and the United States Dollar that may affect the value of the RSU or of any amounts due to me pursuant to the settlement of the RSU or the subsequent sale of any shares of Common Stock acquired upon settlement.

8.Tax Matters.

(a) Acknowledgments; Responsibility for Taxes. The Participant acknowledges that, regardless of any action taken by the Company or, if different, the Participant's employer (the "Employer"), the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to the Participant's participation in the Plan and legally applicable or deemed applicable to the Participant ("Tax-Related Items"), is and remains the Participant's responsibility and may exceed the amount actually withheld by the Company or the Employer. The Participant further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of this award of RSUs, and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the RSUs to reduce or eliminate the Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if the Participant is subject to Tax-Related Items in more than one jurisdiction, the Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

(b) Withholding. Prior to the relevant taxable or tax withholding event, as applicable, the Participant agrees to make adequate arrangements satisfactory to the Company and/or the Employer to satisfy all Tax-Related Items. At such time as the Participant is not aware of any material nonpublic information about the Company or the Common Stock and the Participant is not subject to any restriction on trading activities with respect to the Common Stock pursuant to any Company insider trading or other policy, the Participant shall execute the instructions set forth in Schedule A attached hereto (the "Automatic Sale Instructions") as the means of satisfying such tax obligation. If the Participant does not execute the Automatic Sale Instructions prior to an applicable taxable or tax withholding event, the Participant hereby authorizes the Company and/or the Employer to satisfy the obligations with regard to all Tax-Related Items by one or a combination of the following:

(i) withholding from the Participant's wages or other cash compensation paid to the Participant by the Company and/or the Employer or any affiliate;

(ii) Participant's payment of a cash amount (including by check representing readily available funds or a wire transfer); or

(iii) any other arrangement approved by the Committee and permitted under applicable law.

The Company may withhold or account for Tax-Related Items by considering statutory or other withholding rates, including minimum or maximum rates applicable in the Participant's jurisdiction(s). In the event of over-withholding, the Participant may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in shares of Common Stock), or if not refunded, the Participant may seek a refund from the local tax authorities. In the event of under-withholding, the Participant may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company and/or the Employer. If the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, for tax purposes, the Participant will be deemed to have been issued the full number of shares of Common Stock subject to the vested RSUs, notwithstanding that a number of the shares of Common Stock is held back solely for the purpose of paying the Tax-Related Items.

The Company may refuse to issue or deliver the shares or the proceeds of the sale of shares of Common Stock, if the Participant fails to comply with his or her obligations in connection with the Tax-Related Items.

9. Data Protection.

If the Participant would like to participate in the Plan, the Participant will need to review the information provided in this Section 9 and, declare with its signature under this agreement consent to processing of Participant's personal data for such processing activities requiring consent.

If the Participant is based in the EEA+ (as defined below), the Participant has the right to withdraw his or her consent for such processing activities at any time and declares that he read the transparency document on the website of the Company or, if different, the Participant's employer. The withdrawal of consent does not affect the lawfulness of processing based on consent before its withdrawal. Other processing activities (e.g. the transfer of personal data to tax authorities) are based on other legal grounds, e.g. a legal obligation to which the controller is subject, or a legitimate interest pursued by the controller or by a third party. For such processing activities consent is not needed or given by the Participant.

(a) EEA+ Controller and Representative. If the Participant is based in the European Union ("EU"), the European Economic Area, or the United Kingdom (collectively "EEA+"), the Participant should note that the Company, with its registered address at 120 West 45th Street, 17th Floor, New York, New York 10036, United States of America, is the controller responsible for the processing of the Participant's personal data in connection with the Agreement and the Plan. The Company's representative in the EU by means of Art. 27 GDPR is Prof. Dr. h.c. Heiko Jonny Maniero, DGD Deutsche Gesellschaft für Datenschutz GmbH, Fraunhoferring 3, 85238 Petershausen. The representative can be reached by email at heiko.maniero@dg-datenschutz.de.

(b) Data Collection and Usage. The Company collects, uses and otherwise processes certain personal data about the Participant, including, but not limited to, the Participant's name, home address and telephone number, email address, date of birth, social insurance number, passport or other identification number (e.g., resident registration number), salary, nationality, job title, any shares of stock or directorships held in the Company, details of all RSUs or any other entitlement to shares of stock awarded, canceled, exercised, vested, unvested or outstanding in the Participant's favor, which the Company receives from the Participant, Participant's Employer or otherwise in connection with this Agreement or the Plan ("Data"), for the purposes of implementing, administering and managing the Plan and allocating shares of Common Stock pursuant to the Plan.

If the Participant is based in the EEA+, the legal basis, where required, for the processing of Data by the Company is the necessity of the data processing for the Company to (i) perform its contractual obligations under this Agreement, (ii) comply with legal obligations established in the EEA+, (iii) pursue the legitimate interest of complying with legal obligations established outside of the EEA+, or (iv) consent of the Participant.

If the Participant is based outside of the EEA+, the legal basis, where required, for the processing of Data by the Company is the Participant's consent, as further described below.

(c) Stock Plan Administration Service Providers. The Company grants access to Data to TD Ameritrade, Inc., an independent service provider, which is assisting the Company with the implementation, administration and management of the Plan ("Broker"). In the future, the Company may select a different service provider and share Data with such other provider serving in a similar manner. Broker will open an account for the Participant to receive and trade shares of Common Stock acquired under the Plan. The Participant may be asked to agree on separate terms and data processing practices with Broker, with such agreement being a condition to the ability to participate in the Plan.

(d) International Data Transfers. In the event the Participant resides, works or is otherwise located outside of the U.S., Data will be transferred from the Participant's country to the U.S., where the Company and its service providers are based. The Participant understands and acknowledges that the U.S. might not provide a level of protection of personal data equivalent to the level of protection in the Participant's country.

If the Participant is based in the EEA+, the legal basis, where required, for the transfer of Data from the EEA+ to the Company and for the access to Data granted by the Company to Broker or, as the case may be, a different service provider of the Company in the U.S. is to satisfy the Company's contractual obligations under the terms of this Agreement and/or its use of the standard data protection clauses adopted by the EU Commission.

If the Participant is based outside of the EEA+, the Company's legal basis, where required, for the transfer of Data from the Participant's country to the Company and for the access to Data granted by the Company to Broker or, as the case may be, a different service provider of the Company is the Participant's consent, as further described below.

(e) Data Retention. The Company will hold and use the Data only as long as is necessary to implement, administer and manage the Participant's participation in the Plan, or as required to comply with legal or regulatory obligations, including under tax and security laws.

(f) Data Subject Rights. The Participant may have a number of rights under data privacy laws in his or her jurisdiction. Depending on where the Participant is based and subject to the conditions set out in applicable law, such rights may include the right to request from the Company access to and rectification, erasure or portability of Data, to restrict or object to the processing of Data, lodge a complaint with a supervisory authority and/or to receive a list with the names and addresses of any potential recipients of Data. To receive additional information regarding these rights or to exercise these rights, the Participant can contact the Company's data privacy representative at heiko.maniero@dg-datenschutz.de.

(g) Necessary Disclosure of Personal Data. The Participant understands that providing the Company with Data is necessary for the performance of the Agreement and that the Participant's refusal to provide Data would make it impossible for the Company to perform its contractual obligations and may affect the Participant's ability to participate in the Plan.

(h) Voluntariness and Consequences of Consent Denial or Withdrawal. Participation in the Plan is voluntary and the Participant is providing any consents referred to herein on a purely voluntary basis. The Participant understands that he or she may withdraw any such consent at any time with future effect for any or no reason. If the Participant does not consent, or if the Participant later seeks to withdraw the Participant's consent, the Participant's salary from or employment and career with the Employer will not be affected; the only consequence of refusing or withdrawing the Participant's consent is that the Company would not be able to grant the RSUs or other awards to the Participant or administer or maintain the RSUs. For more information on the consequences of refusal to consent or withdrawal of consent, the Participant should contact the Company's data privacy representative at heiko.maniero@dg-datenschutz.de.

If the Participant is based outside of the EEA+, by accepting the RSUs and indicating consent via the Company's online acceptance procedure, the Participant explicitly declares his or her consent to the entirety of the Data processing operations described in this Section 9 including, without limitation, access to Data provided by the Company to Broker or, as the case may be, a different service provider of the Company in the U.S.

10. Miscellaneous.

(a) Section 409A. The RSUs awarded pursuant to this Agreement are intended to be exempt from or comply with the requirements of Section 409A of the Code and the Treasury Regulations issued thereunder ("Section 409A"). The delivery of shares of Common Stock on the vesting of the RSUs may not be accelerated or deferred unless permitted or required by Section 409A.

(b) No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding participation in the Plan, or the acquisition or sale of the underlying shares of Common Stock. The Participant understands and agrees that he or she should consult with the Participant's own personal tax, legal and financial advisors regarding participation in the Plan before taking any action related to the Plan.

(c) Governing Law and Venue. The provisions of this Agreement shall be governed by and interpreted in accordance with the laws of the State of Delaware, excluding choice-of-law principles of the law of such state that would require the application of the laws of a jurisdiction other than the State of Delaware. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or this Agreement, the parties hereby submit to the exclusive jurisdiction of the State of New York and agree that such

litigation shall be conducted only in the courts of New York County, New York, or the federal courts for the United States for the Southern District of New York, and no other courts, where this grant is made and/or to be performed.

(d) Entire Agreement; Enforcement of Rights. This Agreement, together with the Plan, sets forth the entire agreement and understanding of the parties relating to the subject matter herein and supersedes all prior discussions, agreements, commitments, or negotiations between the parties. No adverse modification or amendment of this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by the parties to this Agreement (which may be electronic). The failure by either party to enforce any rights under this Agreement will not be construed as a waiver of any rights of such party.

(e) Severability. If one or more provisions of this Agreement are held to be unenforceable under applicable laws, the parties agree to renegotiate such provision in good faith. In the event that the parties cannot reach a mutually agreeable and enforceable replacement for such provision, then (a) such provision shall be excluded from this Agreement, (b) the balance of this Agreement shall be interpreted as if such provision were so excluded, and (c) the balance of this Agreement shall be enforceable in accordance with its terms.

(f) Consent to Electronic Delivery and Participation. The Company may, in its sole discretion, decide to deliver any documents related to current or future participation in the Plan by electronic means. The Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through an on-line or electronic system established and maintained by the Company or a third party designated by the Company.

(g) Language. The Participant acknowledges that the Participant is proficient in the English language and, accordingly, understands the provisions of this Agreement and the Plan. If the Participant has received this Agreement, or any other document related to the RSUs and/or the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

(h) Compliance with Law. Notwithstanding any other provision of the Plan or this Agreement, unless there is an exemption from any registration, qualification or other legal requirement applicable to the shares of Common Stock, the Company shall not be required to deliver any shares issuable upon settlement of the RSU prior to the completion of any registration or qualification of the shares under any local, state, federal or foreign securities or exchange control law or under rulings or regulations of the U.S. Securities and Exchange Commission ("SEC") or of any other governmental regulatory body, or prior to obtaining any approval or other clearance from any local, state, federal or foreign governmental agency, which registration, qualification or approval the Company shall, in its absolute discretion, deem necessary or advisable. The Participant understands that the Company is under no obligation to register or qualify the shares with the SEC or any state or foreign securities commission or to seek approval or clearance from any governmental authority for the issuance or sale of the shares. Further, the Participant agrees that the Company shall have unilateral authority to amend the Agreement without the Participant's consent to the extent necessary to comply with securities or other laws applicable to issuance of shares.

(i) Country-Specific Provisions. The RSUs shall be subject to any special terms and conditions set forth in the Appendix for the Participant's country. Moreover, if the Participant relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to the Participant to the extent the Company determines that the application of such terms and conditions is necessary or advisable for legal or administrative reasons. The Appendix constitutes part of this Agreement.

(j) Imposition of Other Requirements. The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the RSUs, and on any shares of Common Stock issued upon the vesting of the RSUs, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require the Participant to accept any additional agreements or undertakings that may be necessary to accomplish the foregoing.

(k) Insider Trading/Market Abuse Laws. The Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions, including, but not limited to, the United States and the Participant's country, which may affect the Participant's ability to accept, acquire, sell, or otherwise dispose of shares of Common Stock, rights to shares of Common Stock (*e.g.*, RSUs), or rights linked to the value of shares of Common

Stock under the Plan during such times as the Participant is considered to have "inside information" regarding the Company (as defined by the laws in the applicable jurisdictions). Insider trading laws and regulations may prohibit the cancellation or amendment of orders the Participant placed before the Participant possessed inside information. Furthermore, the Participant could be prohibited from (i) disclosing the inside information to any third party, which may include fellow employees and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under the Company's trading policy. Neither the Company nor any of its affiliates will be responsible for such restrictions or liable for the failure on the Participant's part to know and abide by such restrictions. The Participant should consult with his or her own personal advisor regarding compliance with such restrictions.

(l) Participant's Acknowledgements. The Participant acknowledges that he or she: (i) has read this Agreement; (ii) has been represented in the preparation, negotiation and execution of this Agreement by legal counsel of the Participant's own choice or has voluntarily declined to seek such counsel; (iii) understands the terms and consequences of this Agreement; (iv) is fully aware of the legal and binding effect of this Agreement; and (v) agrees that in accepting this award, to the extent permitted by law, he or she will be bound by any clawback policy that the Company may adopt in the future.

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Schrödinger, Inc.

COUNTRY-SPECIFIC APPENDIX TO

RESTRICTED STOCK UNIT AGREEMENT FOR NON-U.S. PARTICIPANTS

Granted under 2021 Inducement Equity Incentive Plan

Capitalized terms used but not defined in this Country-Specific Appendix (the "Appendix") shall have the same meanings assigned to them in the Plan or the Agreement.

Terms and Conditions

This Appendix, which is part of the Agreement, includes additional terms and conditions that govern the RSUs if the Participant works and/or resides in one of the countries listed below. If the Participant is a citizen or resident of a country other than the one in which he or she is currently working (or is considered as such for local law purposes), or if the Participant transfers employment or residency to a different country after receiving the RSUs, the Company will, in its discretion, determine the extent to which the terms and conditions contained herein will be applicable to the recipient.

Notifications

This Appendix also includes information regarding certain other issues about which the Participant should be aware with respect to participation in the Plan. The information is based on the securities, exchange control and other laws in effect in the respective countries as of February 2021. Such laws are often complex and change frequently. As a result, the recipient should not rely on the information noted herein as the only source of information relating to the consequences of participation in the Plan because the information may be out-of-date when the RSUs vest and/or the Participant sells any shares of Common Stock acquired under the Plan.

In addition, the information contained herein is general in nature and may not apply to the Participant's particular situation. As a result, the Company is not in a position to assure the Participant of any particular result. Accordingly, the Participant is strongly advised to seek appropriate professional advice as to how the relevant laws in the recipient's country may apply to his or her situation.

If the Participant is a citizen or resident of a country other than the one in which he or she is currently working (or is considered as such for local law purposes), or transfers employment/residency to a different country after receiving the RSUs, the notifications contained in this Appendix may not be applicable to the Participant in the same manner.

AUSTRALIA

Notifications

Tax Conditions. Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) applies to the RSUs granted under the Plan, such that the RSU grant is intended to be subject to deferred taxation.

Securities Law Information. This grant of RSUs is intended to comply with the provisions of the Corporations Act 2001, ASIC Regulatory Guide 49 and ASIC Class Order CO 14/1000. Additional details are set forth in the Australian Offer Document provided herewith.

Exchange Control Information. If the Participant is an Australian resident, exchange control reporting is required for cash transactions exceeding AUD10,000 and international fund transfers. If an Australian bank is assisting with the transaction, the bank will file the report on the Participant's behalf. If there is no Australian bank involved with the transfer, the Participant will be required to file the report.

FRANCE

Terms and Conditions

Consent to Receive Information in English. By accepting the RSUs, the Participant confirms having read and understood the Plan and the Agreement, including all terms and conditions included therein, which were provided in the English language. The Participant accepts the terms of those documents accordingly.

En acceptant les RSUs, le Titulaire de les RSUs confirme avoir lu et compris le Plan et le Contrat y relatifs, incluant tous leurs termes et conditions, qui ont été transmis en langue anglaise. Le Titulaire de les RSUs accepte les dispositions de ces documents en connaissance de cause.

Notifications

Tax Information. The RSUs are not intended to qualify for special tax and social security treatment applicable to restricted stock units granted under Section L.225-197-1 to L.225-197-6 of the French Commercial Code, as amended.

Exchange Control Information. If the Participant imports or exports cash (e.g., proceeds from the sale of shares of Common Stock acquired under the Plan) with a value equal to or exceeding a certain threshold (currently €10,000), and does not use a financial institution to do so, he or she must submit a report to the customs and excise authorities.

Foreign Asset/Account Reporting Information. If the Participant holds cash or shares of Common Stock outside of France, the Participant must declare all foreign bank and brokerage accounts (including any accounts that were opened or closed during the tax year) on an annual basis, on form No. 3916, together with their income tax return. It is the Participant's responsibility to comply with French foreign asset and account reporting requirements, and neither the Company nor the Employer will be liable for any resulting fines or penalties.

GERMANY

Notifications

Exchange Control Information. Cross-border payments in excess of €12,500 in connection with the purchase or sale of securities (*e.g.*, transfer of proceeds from the sale of shares of Common Stock into Germany) must be reported monthly to the German Federal Bank. In the event that German residents make or receive a payment in excess of this amount, the resident must report the payment to Bundesbank electronically using the "General Statistics Reporting Portal" (*Allgemeines Meldeportal Statistik*) available via Bundesbank's website: www.bundesbank.de.

Foreign Asset/Account Reporting Information. If the acquisition of shares of Common Stock under the Plan leads to a "qualified participation" at any point during the calendar year, the Participant will need to report the acquisition when the Participant files his or her tax return for the relevant year. A qualified participation is attained if (i) the value of the shares of Common Stock acquired exceeds €150,000 or (ii) in the unlikely event the Participant holds shares of Common Stock exceeding 10% of the Company's total Common Stock.

INDIA

Notifications

Exchange Control Information. Indian residents are required to repatriate the proceeds from the sale of shares of Common Stock to India within specified timeframes. The Participant must retain the foreign inward remittance certificate received from the bank where the foreign currency is deposited in the event that the Reserve Bank of India or the Employer requests proof of repatriation. It is the Participant's responsibility to comply with these requirements. Neither the Company nor the Employer will be liable for any fines or penalties resulting from the Participant's failure to comply with any applicable laws.

Foreign Asset/Account Reporting Information. Indian residents are required to declare any foreign bank accounts and any foreign financial assets (including shares of Common Stock held outside of India) in their annual tax returns. The

Participant is responsible for complying with this reporting obligation and should confer with his or her personal tax advisor to determine the Participant's obligations in this regard.

IRELAND

Notifications

Director Notification Obligation. If the Participant is a director, shadow director, or secretary of an Irish affiliate, the Participant is required to notify such Irish affiliate in writing if the Participant receives or disposes of an interest in the Company representing more than 1% of the Company's voting share capital (e.g., RSUs, shares of Common Stock, etc.), if the Participant becomes aware of the event giving rise to such notification requirement, or if the Participant becomes a director, shadow director, or secretary of an Irish affiliate if such an interest exists at the time. This notification requirement also applies with respect to the interests of a spouse or children under the age of 18 (whose interests will be attributed to the director, shadow director, or secretary).

JAPAN

Notifications

Foreign Asset / Account Reporting Information. The Participant will be required to report details of any assets held outside of Japan as of December 31st to the extent such assets have a total net fair market value exceeding ¥50,000,000. Such report will be due by March 15th each year. *The Participant should consult with his or her personal tax advisor as to whether the reporting obligation applies to him or her and whether the requirement extends to any outstanding RSUs, shares of Common Stock and/or cash acquired under the Plan.*

UNITED KINGDOM

Terms and Conditions

Tax Matters. The following provision supplements Section 8 of the Agreement:

Without limitation to Section 8 of the Agreement, the Participant agrees that the Participant is liable for all Tax-Related Items and hereby covenants to pay all such Tax-Related Items, as and when requested by the Company or the Employer or by Her Majesty's Revenue and Customs ("HMRC") (or any other tax authority or any other relevant authority). The Participant also agrees to indemnify and keep indemnified the Company and the Employer against any Tax-Related Items that they are required to pay or withhold or have paid or will pay to HMRC (or any other tax authority or any other relevant authority) on the Participant's behalf.

Notwithstanding the foregoing, if the Participant is a director or an executive officer of the Company (within the meaning of such terms for purposes of Section 13(k) of the Exchange Act), the Participant acknowledges that the Participant may not be able to indemnify the Company or the Employer for the amount of any income tax not collected from or paid by the Participant, as it may be considered a loan. In this case, the amount of any income tax not collected within 90 days of the end of the U.K. tax year in which the event giving rise to the Tax-Related Item(s) occurs may constitute an additional benefit to the Participant on which additional income tax and National Insurance contributions ("NICs") may be payable. The Participant will be responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime and for reimbursing the Company or the Employer (as appropriate) for the value of any employee NICs due on this additional benefit, which the Company or the Employer may recover from the Participant by any of the means referred to in the Plan or Section 8 of the Agreement.

NIC Joint Election. As a condition of participation in the Plan and the vesting and settlement of the Award or receipt of any benefit in connection with the Award, the Participant agrees to accept any liability for secondary Class 1 NICs that may be payable by the Company or the Employer (or any successor to the Company or the Employer) in connection with the RSUs and any event giving rise to Tax-Related Items (the "Employer's Liability").Without prejudice to the foregoing, the Participant agrees to enter into the following joint election with the Company, the form

of such joint election being formally approved by HMRC (the "Joint Election"), and any other required consent or elections. The Participant further agrees to enter into such other Joint Elections as may be required between the Participant and any successor to the Company and/or the Employer for the purpose of continuing the effectiveness of the Joint Election. The Participant further agrees that the Company and/or the Employer may collect the Employer's Liability from the Participant by any of the means set forth in the Plan or Section 8 of the Agreement.

If the Participant does not enter into the Joint Election prior to the vesting of the RSUs or any other event giving rise to Tax-Related Items, the Participant will not be entitled to vest in the RSUs and receive shares of Common Stock (or receive any other benefit in connection with the RSUs) unless and until the Participant enters into the Joint Election, and no shares of Common Stock or other benefit will be issued to the Participant under the Plan, without any liability to the Company, the Employer or any other service recipient.

Schedule A

Automatic Sale Instructions

The undersigned hereby consents and agrees that any taxes due on a vesting date as a result of the vesting of RSUs on such date shall be paid through an automatic sale of shares as follows:

(a) Upon any vesting of RSUs pursuant to Section 2 hereof, the Company shall arrange for the sale of such number of shares of Common Stock issuable with respect to the RSUs that vest pursuant to Section 2 as is sufficient to generate net proceeds sufficient to satisfy the Company's minimum statutory withholding obligations with respect to the income recognized by the Participant upon the vesting of the RSUs (based on minimum statutory withholding rates for all tax purposes, including payroll and social security taxes, that are applicable to such income), and the net proceeds of such sale shall be delivered to the Company in satisfaction of such tax withholding obligations.

(b) The Participant hereby appoints the Chief Executive Officer, the Chief Financial Officer and the Chief Legal Officer (or a person holding a similar title), and any of them acting alone and with full power of substitution, to serve as his or her attorneys in fact to arrange for the sale of the Participant's Common Stock in accordance with this Schedule A. The Participant agrees to execute and deliver such documents, instruments and certificates as may reasonably be required in connection with the sale of the shares pursuant to this Schedule A.

(c) The Participant represents to the Company that, as of the date hereof, he or she is not aware of any material nonpublic information about the Company or the Common Stock and is not subject to any restriction on trading activities with respect to the Common Stock pursuant to any Company insider trading policy or other policy. The Participant and the Company have structured this Agreement, including this Schedule A, to constitute a "binding contract" relating to the sale of Common Stock, consistent with the affirmative defense to liability under Section 10(b) of the Securities Exchange Act of 1934 under Rule 10b5-1(c) promulgated under such Act.

The Company shall not deliver any shares of Common Stock to the Participant until it is satisfied that all required withholdings have been made.

Participant: _____

Date: _____

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Schrödinger, Inc.:

We consent to the incorporation by reference in the registration statement (No. 333-236297) on Form S-8 of Schrödinger, Inc. and subsidiaries (the Company) of our report dated March 4, 2021, with respect to the consolidated balance sheets of Schrödinger, Inc. and subsidiaries as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, convertible preferred stock and stockholders' equity (deficit), and cash flows for the years then ended, and the related notes, which report appears in the December 31, 2020 annual report on Form 10-K of the Company.

/s/ KPMG LLP

Portland, Oregon
March 4, 2021

EXHIBIT 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES
EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Ramy Farid, certify that:

1. I have reviewed this Annual Report on Form 10-K of Schrödinger, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2021

/s/ Ramy Farid

President and Chief Executive Officer (Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES
EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Joel Lebowitz, certify that:

1. I have reviewed this Annual Report on Form 10-K of Schrödinger, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 4, 2021

/s/ Joel Lebowitz

Chief Financial Officer (Principal Financial Officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Schrödinger, Inc. (the "Company") hereby certifies, to his knowledge, that:

(i) the accompanying Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 4, 2021

/s/ Ramy Farid

President and Chief Executive Officer (Principal Executive Officer)

Exhibit 32.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, the undersigned officer of Schrödinger, Inc. (the "Company") hereby certifies, to his knowledge, that:

(i) the accompanying Annual Report on Form 10-K of the Company for the fiscal year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 4, 2021

/s/ Joel Lebowitz

Chief Financial Officer (Principal Financial Officer)