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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, 2023

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: 001-36294

uniQure N.V.
(Exact name of Registrant as specified in its charter)

The Netherlands
(Jurisdiction of incorporation or organization)

Paasheuvelweg 25,
1105 BP Amsterdam, The Netherlands
(Address of principal executive offices) (Zip Code)

+31-20-240-6000
(Registrant's telephone number, including area code)

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

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Ordinary shares, par value €0.05 per share	QURE	The Nasdaq Stock Market LLC (The Nasdaq Global Select Market)

Securities registered under 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 Section 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, a 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. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of the voting and non-voting ordinary shares held by non-affiliates of the registrant as of June 30, 2023 was $546.67 million, based on the closing price reported as of June 30, 2023 on the Nasdaq Global Select Market.

As of February 23, 2024, the registrant had 47,838,275 ordinary shares, par value €0.05, outstanding.

The documents incorporated by reference are as follows:

Portions of the registrant's definitive Proxy Statement for its 2024 Annual Meeting of Shareholders to be filed with the Securities and Exchange Commission no later than April 29, 2024 and are herein incorporated by reference in Part III of this Annual Report on Form 10-K.

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SPECIAL CAUTIONARY NOTICE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains "forward-looking statements" as defined under federal securities laws. Forward-looking statements are based on our current expectations of future events and many of these statements can be identified using terminology such as "believes," "expects," "anticipates," "plans," "may," "will," "projects," "continues," "estimates," "potential," "opportunity" and similar expressions. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. These forward-looking statements include, without limitation, statements concerning: our ability to fund our future operations; our financial position, revenues, costs, expenses, uses of cash and capital requirements; our need for additional financing or the time period for which our existing cash resources will be sufficient to meet our operating requirements; the success, progress, number, scope, cost, duration, timing or results of our research and development activities, preclinical and clinical trials, including the timing for initiation or completion of or availability of results from any preclinical studies and clinical trials or for the submission, review or approval of any regulatory filing; the timing of, and our ability to, obtain and maintain regulatory approvals for any of our product candidates; the potential benefits that may be derived from any of our product candidates; our strategies, prospects, plans, goals, expectations, forecasts or objectives; the success of our collaborations with third parties; our ability to identify and develop new product candidates and technologies; our intellectual property position; our commercialization, marketing and manufacturing capabilities and strategy; our estimates regarding future expenses and needs for additional financing; our ability to identify, recruit and retain key personnel; our financial performance; developments and projections relating to our competitors in the industry; and our liquidity and working capital requirements.

Although we believe that we have a reasonable basis for each forward-looking statement contained in this Annual Report on Form 10-K, such statements are only predictions based on management's current views and assumptions and involve risks and uncertainties, and actual results could differ materially from those projected or implied. The most significant factors known to us that could materially adversely affect our business, operations, industry, financial position or future financial performance include, without limitation, the clinical results and the development and timing of our programs, which may not support further development of our product candidates; actions of regulatory agencies, which may affect the initiation, timing and progress of clinical trials; our ability to continue to build and maintain the company infrastructure and personnel needed to achieve our goals; our effectiveness in managing current and future clinical trials and regulatory processes; the continued development and acceptance of gene therapies; our ability to demonstrate the therapeutic benefits of our gene therapy candidates in clinical trials; our ability to obtain, maintain and protect intellectual property; our ability to enforce our patents against infringers and defend our patent portfolio against challenges from third parties; our ability to fund our operations and to raise additional capital as needed; competition from others developing therapies for similar uses; the impact of global economic uncertainty, rising inflation, rising interest rates or market disruptions on our business; as well as those discussed in Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K, as well as other factors which may be identified from time to time in our other filings with the Securities and Exchange Commission ("SEC"), or in the documents where such forward-looking statements appear. You should carefully consider that information before you make an investment decision.

You should not place undue reliance on these forward-looking statements, which speak only as of the date that they were made. Our actual results or experience could differ significantly from those anticipated in the forward-looking statements and from historical results, due to the risks and uncertainties described in this Annual Report on Form 10-K including in Part I, Item 1A. "Risk Factors," as well as others that we may consider immaterial or do not anticipate at this time. These cautionary statements should be considered in connection with any written or oral forward-looking statements that we may make in the future or may file or furnish with the SEC. We do not undertake any obligation to release publicly any revisions to these forward-looking statements after completion of the filing of this Annual Report on Form 10-K to reflect later events or circumstances or to reflect the occurrence of unanticipated events. All forward-looking statements attributable to us are expressly qualified in their entirety by these cautionary statements.

In addition, with respect to all our forward-looking statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995.

Summary Risk Factors

Below is a summary of the principal risks associated with an investment in our ordinary shares speculative or risky. This summary does not address all of the risks that we face. Additional discussion of the risks summarized in this risk factor summary and other risks that we face can be found below under the heading "Item 1A. Risk Factors".

- We are dependent on the success of our lead product candidate in clinical development, AMT-130 for the treatment of Huntington's disease. A failure of AMT-130 in clinical development, challenges associated with its regulatory pathway, or its inability to demonstrate sufficient efficacy to warrant further clinical development could adversely affect our business.
- We have encountered and may encounter future delays in and impediments to the progress of our clinical trials or fail to demonstrate the safety and efficacy of our product candidates.
- Our progress in early-stage clinical trials may not be predictive of long-term efficacy in late-stage clinical trials, and our progress in trials for one product candidate may not be predictive of progress in trials for other product candidates.
- We may not be successful in our efforts to use our gene therapy technology platform to build a pipeline of additional product candidates or otherwise leverage our research and technology to remain competitive.
- Our future success depends on our ability to retain key executives, technical staff, and other employees and to attract, retain and motivate qualified personnel.
- Actions that we have taken to restructure our business in alignment with our strategic priorities may not be as effective as anticipated, may not result in cost savings to us and could disrupt our business.
- Gene therapies are complex, expensive and difficult to manufacture. We could experience capacity, production or technology transfer challenges that could result in delays in our development or commercialization schedules or otherwise adversely affect our business.
- We will need to raise additional funding in order to advance the development of our product candidates, which may not be available on acceptable terms, or at all. Failure to obtain capital when needed may force us to delay, limit or terminate our product development efforts or other operations which could have a material adverse effect on our business, financial condition, results of operations and cash flows.
- We had net losses in the years ended December 31, 2023 and 2022, have incurred significant losses in previous years and expect to incur losses during the current and over the next several years and may never achieve or maintain profitability.
- The price of our ordinary shares has been and may in the future be volatile and fluctuate substantially.
- If we do not achieve our projected development goals in the timeframes we announce and expect, the commercialization of our product candidates may be delayed and, as a result, our stock price may decline.
- If we are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection is not sufficiently broad, our ability to successfully commercialize our products may be impaired.
- We may become involved in lawsuits to protect or enforce our patents or other intellectual property, or third parties may assert their intellectual property rights against us, which could be expensive, time consuming and unsuccessful.
- We rely, and expect to continue to rely, on third parties to conduct, supervise, and monitor our preclinical studies and clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines in the conduct or completion of such trials or failing to comply with regulatory requirements.
- We rely on third parties for important aspects of our development programs. If these parties do not perform successfully or if we are unable to enter into or maintain key collaborations or other contractual arrangements, our business could be adversely affected.
- We face substantial competition, and others may discover, develop, or commercialize competing products before or more successfully than we do.
- Our business development strategy depends on our ability to obtain rights to key technologies through in-licenses and support the development of our product pipeline through out-licenses, and those efforts may not be successful.

- Our business development strategy may not produce the cash flows expected or could result in additional costs and challenges.
- We may be adversely affected by unstable market and economic conditions, such as inflation, which may negatively impact our business, financial condition and stock price.

Part I

Unless the context requires otherwise, references in this report to "uniQure," "Company," "we," "us" and "our" and similar designations refer to uniQure N.V. and our subsidiaries.

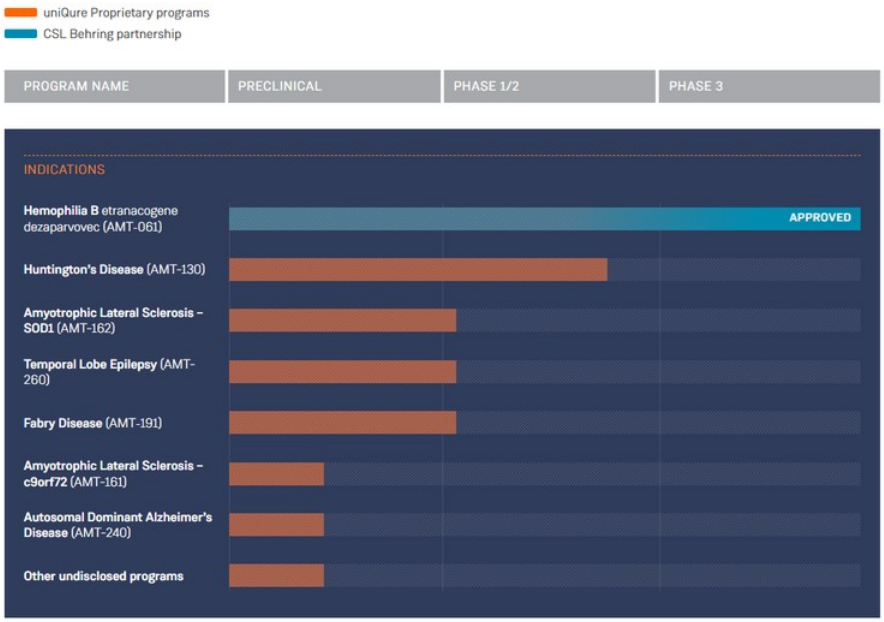
Item 1. Business.

Overview

We are a leader in the field of gene therapy, seeking to deliver to patients suffering from rare and other devastating diseases single treatments with potentially curative results. We are advancing a focused pipeline of innovative gene therapies, including our clinical candidates for the treatment of Huntington's disease, amyotrophic lateral sclerosis ("ALS"), refractory mesial temporal lobe epilepsy ("MTLE") and Fabry disease. Our internally developed HEMGENIX®, a gene therapy for the treatment of hemophilia B, has been approved for commercialization by the United States Food and Drug Administration (the "FDA") and the European Medicines Agency ("EMA"). The approval of HEMGENIX® follows more than a decade of research and clinical development, represents a major milestone in the field of gene therapy and ushers in a new treatment approach for patients living with hemophilia B. We license HEMGENIX® to CSL Behring LLC ("CSL Behring"), which is responsible for its commercialization. We are manufacturing HEMGENIX® for CSL Behring and are entitled to specific milestone payments and royalties on net sales of the product, a portion of which we sold to a royalty acquisition company in 2023 in exchange for up-front cash.

We believe our validated technology platform and manufacturing capabilities provide us with distinct competitive advantages, including the potential to reduce development risk, cost, and time to market. We produce our adeno-associated virus-based gene therapies in our own facilities with a proprietary, current good manufacturing practices ("GMP") - compliant manufacturing process. We believe our Lexington, Massachusetts-based facility is one of the world's leading, most versatile, gene therapy manufacturing facilities.

A summary of our key development programs is provided below:



Recent Product Candidate Developments

Huntington's disease program (AMT-130)

AMT-130 is our novel gene therapy candidate for the treatment of Huntington's disease, which utilizes our proprietary, gene-silencing miQURE platform and incorporates an AAV vector carrying a miRNA specifically designed to silence the huntingtin gene and the potentially highly toxic exon 1 protein fragment.

We are currently conducting a multi-center randomized, controlled, and blinded Phase I/II clinical trial for AMT-130 in the U.S. in which 26 patients with early-manifest Huntington's disease have been enrolled. The low-dose cohort of this trial includes 10 patients, of which six patients received treatment with AMT-130 and four patients received imitation surgery. The high-dose cohort includes 16 patients, of which 10 patients received treatment with AMT-130 and six patients received imitation surgery. Patients in the high-dose cohort that received imitation surgery had the option to cross over after 12 months if they met the inclusion criteria for the study. In July 2022, we began crossing over patients in the high-dose cohort who received the imitation surgical procedure. Four of the six control patients in the high-dose cohort have been crossed over to treatment (three patients received the high dose and one patient received the low dose). The remaining two control patients in the high-dose cohort did not meet all the inclusion criteria for the study and were not eligible for crossover. All four crossover patients received a short course of immunosuppression therapy concurrent with the administration of AMT-130.

We are also conducting an open-label Phase Ib/II study in the EU and the United Kingdom, which has enrolled 13 patients with the same early-manifest criteria for Huntington's disease as the U.S. study. Six of these patients were treated with AMT-130 in the initial low-dose cohort and seven patients were treated in the subsequent high-dose cohort.

We completed the enrollment of all 26 patients in the first two cohorts of our Phase I/II clinical trial of AMT-130 in the U.S. in March 2022. In June 2022, we announced initial safety and biomarker data from 10 patients enrolled in the low-dose cohort of the ongoing U.S. Phase I/II clinical trial of AMT-130. In June 2023, we announced additional interim data from U.S. Phase I/II clinical trial of AMT-130, including up to 24-month follow-up from the 26 patients enrolled.

In December 2023 we announced updated interim data, including up to 30 months of follow-up from 39 patients enrolled in the ongoing U.S. and European Phase I/II clinical trials, as described in more detail below under "*—Our Development of AMT-130 for Huntington's Disease*". The combined U.S. and European interim data were subject to a September 30, 2023 cut-off date and did not include outcome or biomarker data from the control patients who crossed over to treatment with AMT-130 following the 12-month core study period.

- AMT-130 was generally well tolerated with a manageable safety profile at both doses. Serious adverse events ("SAE") cases of CNS inflammation attributable to AMT-130 have improved with the administration of glucocorticoids.

- Patients treated with both doses of AMT-130 showed evidence of preserved neurologic function relative to pre-treatment baseline measurements and potential clinical benefit relative to a non-concurrent natural history cohort, based in each case on certain clinical and functional measurements.

- CSF NfL trends for the low-dose cohort remained below baseline through month 30 and CSF NfL for the high-dose cohort also further declined and was near baseline at month 18, together suggesting a reduction in neurodegeneration when compared to an expected increase from baseline in CSF NfL based on natural history data. Mean changes in Mutant Huntingtin Protein ("mHTT") levels measured in CSF samples compared to baseline continued to be variable and impacted by baseline levels near or below the lower limit of quantification.

- Brain volumetric changes did not appear to be clinically meaningful or associated with protracted increases in neurodegeneration as measured by NfL.

Amyotrophic Lateral Sclerosis program (AMT-162)

In January 2023, we announced that we had entered into a global licensing agreement with Apic Bio, Inc. ("Apic Bio") for a one-time, intrathecally administered investigational gene therapy for ALS caused by mutations in superoxide dismutase 1 ("SOD1"), a rapidly progressing, rare motor neuron disease that leads to loss of everyday functions and is uniformly fatal (previously known as APB-102). Mutations in the SOD1 gene of ALS account for approximately one-fifth of all inherited forms of this fatal disease. APB-102 is comprised of a recombinant AAVrh10 vector that expresses a miRNA designed to knock down the expression of SOD1 with the goal of slowing down or potentially reversing the progression of ALS in patients with SOD1 mutations.

The FDA has cleared the IND application for APB-102 and has granted Orphan Drug and Fast Track designation.

Other Business Developments

Reorganization

In October 2023, we announced the implementation of a reorganization plan (the "Reorganization"). As a result of the Reorganization, we discontinued investments in more than half of our then-existing research programs, including AMT-210 for the treatment of Parkinson's disease, and certain other technology projects. Following the Reorganization, we are prioritizing advancing our clinical-stage programs, including referenced in the pipeline graphic above, to clinical proof of concept. As a result of the Reorganization, which was completed in December 2023, we eliminated approximately 20% of our total workforce and closed our research laboratory in Lexington, Massachusetts. As part of the Reorganization we consolidated all good manufacturing practices ("GMP") manufacturing into our Lexington manufacturing facility and consolidated process and analytical development into our Amsterdam, Netherlands facility. In addition, we appointed Richard Porter, Ph.D., who previously served as our Chief Business Officer, to serve as our Chief Business and Scientific Officer, effective as of October 2023.

Royalty Financing Agreement

In May 2023, we entered into a royalty purchase agreement (the "Royalty Purchase Agreement") with HemB SPV, L.P. (the "Purchaser") for the sale of a portion of the royalty rights due to us from CSL Behring under the commercialization and license agreement we entered into with CSL Behring in June 2020 (the "Commercialization and License Agreement"). Under the terms of the Royalty Financing Agreement, we received an upfront payment of $375.0 million in exchange for the Purchaser's rights to the lowest royalty tier on CSL Behring's worldwide net sales of HEMGENIX® for certain current and future royalties due to us. We are also eligible to receive an additional $25.0 million milestone payment under the Royalty Financing Agreement if 2024 net sales of HEMGENIX® exceed a pre-specified threshold. We retained the rights to all other royalties, as well as contractual milestones totaling up to $1.3 billion, under the terms of the CSL Behring Agreement. See Note 14, "*Royalty Financing Agreement*" for additional information on the terms of the Royalty Purchase Agreement and payments thereunder.

Our Mission and Strategy

Our mission is to deliver curative, one-time administered genomic medicines that transform the lives of patients. We aim to build an industry-leading, fully integrated, and global company that leverages its technology and proprietary manufacturing platform to deliver these medicines to patients with serious unmet medical needs. Our strategy to achieve this mission is to:

Advance the development of AMT-130, a potential one-time gene-therapy approach for the treatment of Huntington's disease. AMT-130 is the first AAV-based gene therapy that entered into clinical development for Huntington's disease. It consists of an AAV5 vector carrying an artificial miRNA specifically tailored to silence the huntingtin gene and leverages our proprietary miQURE™ silencing technology. The therapeutic goal of AMT-130 is to inhibit the production of the mutant HTT protein. We enrolled 39 patients into our U.S. Phase I/II and our European Phase Ib/II clinical trials. We announced preliminary results from these clinical trials in June 2022, June 2023 and December 2023. Together, these studies are intended to establish safety, proof of concept, and the optimal dose of AMT-130.

In November 2023 we commenced enrollment of a third cohort to further investigate both doses in combination with perioperative immune suppression with a focus on evaluating near-term safety. Up to 12 patients will be treated in this cohort, all of whom will receive AMT-130 using the current, established stereotactic neurosurgical delivery procedure. We intend to use these additional data from our ongoing clinical trials to define our regulatory and ongoing clinical development strategy for AMT-130.

Advance our pipeline of clinical-stage gene therapy candidates. The INDs for our product candidates AMT-260 for the treatment of MTLE, AMT-162 for the SOD1-ALS, and AMT-191 for the treatment of Fabry disease were accepted by the FDA in 2023. We have initiated clinical trials for these three programs with the objective of generating initial safety and tolerability data and generating clinical proof-of concept.

Support the commercialization and global expansion of HEMGENIX®. HEMGENIX® is an FDA and EMA approved one-time administered gene therapy for the treatment of patients with severe and moderately severe hemophilia B. In 2020 we licensed the commercial rights to HEMGENIX® to CSL Behring. We will be supplying CSL Behring with HEMGENIX® for a number of years.

Prioritize technology development on next-generation AAV capsids and novel cargo technologies. We are developing technologies that have the potential to augment the safety and efficacy of our product candidates and broaden the applicability of our gene therapies to a wider range of diseases and patients. These technologies include next-generation delivery approaches, such as smart AAV capsids potentially capable of improved central nervous system ("CNS") transduction and crossing the blood-brain barrier, as well as novel cargo technologies such as miQURE, our one-time administered gene silencing platform, linkQURE to combine multiple miRNAs to suppress different genes, and goQURE for simultaneous silencing of a disease gene and replacement with a healthy gene.

Central Nervous System Diseases

Huntington's Disease

Huntington's Disease and Market Background

Huntington's disease is a severe genetic neurodegenerative disorder causing loss of muscle coordination, behavioral abnormalities, and cognitive decline, often resulting in complete physical and mental deterioration over a 12 to 15-year period. The median survival time after onset is 15 to 18 years (range: 5 to >25 years). Huntington's disease is caused by an inherited defect in a single gene that codes for a protein called Huntingtin ("HTT"). The estimated prevalence of Huntington's disease is three to seven per 100,000 in the general population, similar in men and women, and it is therefore considered a rare disease. Huntington's disease mutation carriers can be identified decades before onset. There is currently no available therapy that can delay onset or slow progression of the disease. Although some symptomatic treatments are available, they only are transiently effective despite significant side effects.

Our Development of AMT-130 for Huntington's Disease

AMT-130 is our novel gene therapy candidate for the treatment of Huntington's disease. AMT-130 utilizes our proprietary, gene-silencing miQURE platform and incorporates an AAV vector carrying a miRNA specifically designed to silence the huntingtin gene and the potentially highly toxic exon 1 protein fragment.

We are currently conducting a Phase I/II clinical trial for AMT-130 in the U.S. and a Phase Ib/II study in the EU. Together, these studies are intended to establish safety, proof of concept, and the optimal dose of AMT-130. AMT-130 has received Orphan Drug and Fast Track designations from the FDA and Orphan Medicinal Product Designation from the EMA.

Our goal for AMT-130 is to develop a gene therapy with the following profile:

(1) one-time administration of disease-modifying therapy into the striatum, the area of the brain where Huntington's disease is known to manifest;
(2) biodistribution of the therapy in both the deep and cortical structures of the brain via transport of the AAV vector and through secondary exosome-mediated delivery; and
(3) safe, on-target and durable knockdown of HTT and exon 1 HTT.

On March 21, 2022, we announced that we completed the enrollment of all 26 patients in the first two cohorts of our randomized, double-blinded, Phase I/II clinical trial of AMT-130 taking place in the U.S. In the study, patients are randomized to either treatment with AMT-130 or to an imitation surgical procedure. The treated patients have received a single administration of AMT-130 using MRI-guided, convection-enhanced stereotactic neurosurgical delivery directly into the striatum (caudate and putamen). The trial consists of a blinded 12-month period followed by unblinded long-term follow-up for five years. The lower-dose cohort includes 10 patients, of which six patients received treatment with AMT-130 and four patients received imitation surgery between June 19, 2020 and April 5, 2021. The higher-dose cohort includes 16 patients, of which 10 patients received treatment with AMT-130 and six patients received imitation surgery between June 13, 2021 and March 21, 2022. In July 2022, we began crossing over patients in the high-dose cohort who received the imitation surgical procedure. Four of the six control patients in the high-dose cohort have been crossed over to treatment (three patients received the high dose and one patient received the low dose). The remaining two control patients in the high-dose cohort did not meet all the inclusion criteria for the study and were not eligible for crossover. All four crossover patients received a short course of immunosuppression therapy concurrent with the administration of AMT-130.

On June 23, 2022, we announced that in our open-label, Phase Ib/II study in Europe all six patients in the lower-dose cohort and five out of the nine patients in the higher-dose cohort had been treated with AMT-130.

On August 8, 2022, we announced a voluntary postponement of AMT-130 higher-dose procedures due to suspected unexpected serious adverse reactions ("SUSARs") reported in three of the 14 patients that were treated with the higher dose of AMT-130. In October 2022, after completing a comprehensive safety investigation, the DSMB recommended resuming treatment at the higher dose of AMT-130. All three patients have experienced full resolution of the reported SUSARs. following the investigation we have added additional risk mitigation procedures including closer patient monitoring during the first two weeks after the administration of AMT-130 and a seven-day, post-surgical in-person visit. The DSMB recommended that the use of immunosuppression remain at the discretion of the treating physician.

On June 23, 2022, we announced safety and biomarker data from the 10 patients enrolled in the lower-dose cohort. At 12 months of follow-up on the patients in the lower-dose cohort:

- AMT-130 was generally well-tolerated with no serious adverse events related to AMT-130 reported in the treated patients at the lower dose of $6x10^{12}$ vector genomes;
- Measurements of CSF NfL increased as expected following the AMT-130 surgical procedure and approached baseline at 12 months;
- Measurements of mHTT protein in the CSF of evaluable treated patients showed potential decreases compared to baseline through 12 months

On June 21, 2023, we announced interim data, including up to 24-month follow-up, from 26 patients enrolled in the ongoing U.S. Phase I/II clinical trial of AMT-130. Efficacy and biomarker data from the crossover patients are not included in the following summary.

- AMT-130 continues to be generally well-tolerated across both dose cohorts;
- Patients treated with AMT-130 potentially show preserved function compared to baseline and clinical benefits relative to natural history of the disease;
- NfL in the CSF was below baseline at 24 months in patients treated with the low-dose of AMT-130 and declining towards baseline at 12 months in patients treated with the high-dose of AMT-130; and

On December 19, 2023 ,we announced updated interim data, including up to 30 months of follow-up from 39 patients enrolled in the ongoing U.S. and European Phase I/II clinical trials:

Safety and tolerability

We believe AMT-130 was generally well-tolerated, with a manageable safety profile in patients treated with the lower dose of $6x10^{12}$ vector genomes and the higher dose of $6x10^{13}$ vector genomes. The most common adverse events in the treatment groups were related to the surgical procedure.

There were four serious adverse events (SAE) unrelated to AMT-130 (post-operative delirium, major depression, suicidal ideation and epistaxis) in the low-dose cohort, six unrelated SAEs in the high-dose cohort (back pain, hypothermia, post procedural hematoma, post-lumbar puncture syndrome (n=2), pulmonary embolism), and one SAE (deep vein thrombosis) in the control group. In addition, there were four AMT-130-related SAEs in the high-dose cohort (central nervous system inflammation (n=3), and severe headache (n=1) that, retrospectively, also was attributable to central nervous system inflammation.

Patients with symptomatic central nervous system inflammation improved with glucocorticoid medication. Additionally, six high-dose patients have received preoperative steroids with the administration of AMT-130 to reduce the risk of inflammation.

Exploratory efficacy data

Clinical and functional measurements for treated patients in each dose cohort were compared to baseline measurements, as well as to control patients (up to 12 months) and a non-concurrent criteria-matched natural history cohort. The natural history cohort was developed by us in collaboration with the Cure Huntington's Disease Initiative (CHDI) using the TRACK-HD natural history study of patients with early Huntington's disease. The cohort includes 31 patients that met our clinical trial inclusion criteria of i) total functional capacity, ii) diagnostic classification level and (iii) minimum striatal volumes.

- Updated clinical data through 30 months for the low-dose cohort and 18 months for the high-dose show ongoing evidence of potential dose-dependent clinical benefit relative to the non-concurrent criteria-matched natural history.
- For patients receiving the high dose, neurological function as measured by composite Unified Huntington's Disease Rating Scale ("cUHDRS") and each of its individual components was preserved or improved at 18 months compared to pre-treatment baseline measurements.
- For patients receiving the low dose, neurological function as measured by Total Motor Score (TMS) and Total Functional Capacity (TFC) was preserved at 30 months compared to pre-treatment baseline measurements.

- When compared to the expected rate of decline from the natural history cohort, AMT-130 showed favorable trends in cUHDRS, TFC and TMS.

  - cUHDRS: AMT-130 showed a favorable difference in cUHDRS of 0.39 points at 30 months and 1.24 points at 18 months for the low- and high-dose, respectively (baseline values: 14.1 in low-dose and 14.9 in high-dose).

  - TFC: AMT-130 showed a favorable difference in TFC of 0.95 points at 30 months in the low-dose and 0.49 points at 18 months in the high-dose (baseline values: 11.9 in low-dose and 12.2 in high-dose).

  - TMS: AMT-130 showed a favorable difference in TMS of 2.80 points at 30 months in the low-dose and 1.70 points in the high-dose at 18 months (baseline values: 13.3 in low-dose and 12.1 in high-dose).

Biomarkers and Volumetric Imaging Data

NfL: Mean CSF NfL for the low-dose cohort remained below baseline through month 30 and was 6.6% below baseline. Mean CSF NfL for the high-dose cohort also further declined and is near baseline at month 18. These data suggest a reduction in neurodegeneration when compared to an expected increase from baseline in CSF NfL based on natural history data. As expected, all patients treated with AMT-130 experienced a transient increase in CSF NfL related to the surgical procedure that peaked at approximately one month following the procedure and declined thereafter. These transient increases were not dose dependent.

mHTT: Given AMT-130 is directly administered deep within the brain, the pharmacodynamics of mHTT in the CSF are not believed to be materially representative of mHTT in the targeted brain regions. Mean changes in mHTT levels measured in CSF samples compared to baseline continue to be variable and impacted by baseline levels near or below the lower limit of quantification.

Total Brain Volume: Changes in the total brain volume of patients treated with AMT-130 were observed after the surgical procedure and trended below natural history. The volumetric changes do not appear to be clinically meaningful or associated with protracted increases in neurodegeneration as measured by NfL.

In November 2023 we commenced enrollment of a third cohort to further investigate both doses in combination with perioperative immune suppression with a focus on evaluating near-term safety. Up to 12 patients will be treated in this cohort, all of whom will receive AMT-130 using the current, established stereotactic neurosurgical delivery procedure.

Temporal Lobe Epilepsy Program (AMT-260)

Temporal Lobe Epilepsy Disease and Market Background

TLE affects approximately 1.0 million people in the U.S. and E.U. alone, of which approximately 0.3 million U.S. patients are inadequately treated through anti-seizure medications and are considered refractory. 240,000 of U.S. refractory TLE patients have a lesion in the mesial temporal lobe (hippocampus), which is expressed as sclerosis, atrophy or scarring. Mesial TLE (“MTLE”) is often caused by brain injury, infections or prolonged febrile seizures which can lead to hyperexcitability of the hippocampus and repeated seizures which can further damage the hippocampus over time. Refractory MTLE patients have a poor quality of life and a reduced lifespan. Surgical treatment for refractory patients is lobectomy or laser tissue ablation but only 1-2% of eligible patients undergo surgery.

Our Development of AMT-260 for Temporal Lobe Epilepsy

In July 2021, we acquired uniQure France SAS (“uniQure France,” formerly Corlieve Therapeutics SAS) and its lead program now known as AMT-260 to treat refractory MTLE. AMT-260 is being developed based on exclusive licenses to certain patents uniQure France SAS obtained following its formation in 2019 from two French research institutions that continue to collaborate with us.

AMT-260 is a gene therapy using an AAV9 vector. The use of AAV9 to deliver any sequence that affects the expression of the GRIK2 gene in humans has been exclusively licensed from Regenxbio Inc ("Regenxbio").

AMT-260, employs miRNA silencing technology to target suppression of aberrantly expressed GluK2 containing kainate receptors in the hippocampus of patients with MTLE.

In October 2021, we presented preclinical data for AMT-260 at the European Society of Gene and Cell Therapy ("ESGCT"). AMT-260 reduces the expression of GluK2 in cortical neurons, reduces epileptiform activity and hyperlocomotion in a preclinical model of epilepsy and blocks epileptiform discharges in organotypic slices from patients with MTLE.

In July 2022, we initiated IND-enabling, GLP toxicology studies in non-human primates for our gene therapy candidate in MTLE.

On September 5, 2023 we announced that the FDA had cleared the IND application for AMT-260. The first-in-human Phase I/IIa clinical trial will be conducted in the United States and consist of two parts. The first part is a multicenter, open-label trial with two dosing cohorts of six patients each to assess safety, tolerability, and first signs for efficacy of AMT-260 in patients with refractory MTLE. The second part is expected to be a randomized, controlled trial to generate proof of concept ("POC") data.

Amyotrophic Lateral Sclerosis ("ALS")

ALS Disease and Market Background

ALS commonly known as Lou Gehrig's disease, is a progressive and fatal neuromuscular disease with the majority of ALS patients dying within 2 to 5 years of receiving a diagnosis. Familial ALS, a hereditary form of the disease, accounts for 5-10% of cases, whereas the remaining cases (sporadic ALS) have no clearly defined etiology. ALS affects persons of all races and ethnicities; however, persons of certain demographics (Caucasians, males, non-Hispanics and persons aged 60 years or older) and those with a family history of ALS are more likely to develop the disease.

ALS affects approximately 17,800 to 31,800 adults in the U.S. and a similar number of adults in Europe. Evidence from prevalence studies suggests that prevalence and incident rates can vary significantly between regions and ethnicities. Most cases are sporadic ("sALS") but approximately 10% are found to have a familial, i.e., dominant genetic causation ("fALS"). fALS can be caused by mutations in various genes including chromosome 9 open reading frame 72 ("C9ORF72"), SOD1, tyrosyl-DNA phosphodiesterase 2 and others.

The most common genetic mutation that causes ALS is a G4C2 hexanucleotide repeat expansion in the chromosome 9 open reading frame 72 ("C9ORF72") gene. The hexanucleotide expansion causes the formation of ribonucleic acid ("RNA") aggregates and the production of toxic dipeptides that ultimately lead to neuronal death. It is estimated that there are approximately 600 incident cases per year in the U.S. and Europe.

Another genetic mutation that causes ALS are pathogenic mutations in the superoxide dismutase enzyme 1("SOD1"). SOD1 is an enzyme that that is responsible for catalyzing toxic superoxide to hydrogen peroxide and dioxygen. While the exact mechanism for disease is not known, it is believed that a toxic gain of function in SOD1 results in oxidative stress and cell death of motor neurons. More than 100 pathogenic SOD-1 have been identified. Mutations are concentrated in a few regions of the protein. Mutations can be both dominant and recessive. Most common mutations occur in the D90A, G93A, A4H and D46R genes.

Patients with different mutations progress at different rates. It is estimated that there are approximately 300 incident cases per year in the U.S. and Europe.

Our Development of AMT-162 for ALS – SOD1

On January 31, 2023, we announced that we entered into a global licensing agreement with Apic Bio for a novel, one-time, intrathecally administered gene therapy for ALS caused by SOD1 mutations (formerly APB-102). The FDA has cleared the IND for APB-102 and has granted it Orphan Drug and Fast Track designation. APB-102 is comprised of a recombinant AAVrh10 vector that expresses a miRNA designed to knock down the expression of SOD1 with the goal of slowing down or potentially reversing the progression of ALS in patients with SOD1 mutations.

Our Development of AMT-161 for ALS – C9ORF72

AMT-161 is a one-time, intra cerebrospinal fluid-administered AAV gene therapy that targets the repeat-expanded C9ORF72 allele to lower toxic RNA aggregates and prevent dipeptide protein formation. AMT-161 uses our miQURE and linQURE gene silencing technology to target the toxic sense and antisense alleles of C9ORF72 as a potential treatment for ALS.

Alzheimer's Disease (AMT-240)

Alzheimer's Disease and Market Background

Alzheimer's disease causes loss of memory and dementia and is the most common neurodegenerative disease. Human genetic studies suggest that the Apolipoprotein E (APOE) gene is an important factor in the pathogenesis of Alzheimer's disease. APOE consists of 3 major isoforms that are structurally and functionally different. The APOE4 isoform is associated with earlier onset of Alzheimer's disease while APOE2 and variants of APOE3 are protective.

Our Development of AMT-240 for Alzheimer's disease

AMT-240 is our preclinical product candidate for the treatment autosomal dominant Alzheimer's disease. AMT-240 is a one-time intra cerebrospinal fluid-administered AAV gene therapy overexpressing a protective APOE variant with or without a miQure designed to knockdown the toxic APOE4 variant. It is initially targeted as a treatment for autosomal dominant Alzheimer's disease patients but may be effective for a broader population of patients.

Liver-directed diseases

Hemophilia B (HEMGENIX® or etranacogene dezaparvovec)

Hemophilia B Disease and Market Background

Hemophilia B is a rare, lifelong bleeding disorder caused by a single gene defect, resulting in insufficient production of factor IX, a protein primarily produced by the liver that helps blood clots form. Treatments for moderate to severe hemophilia B include prophylactic infusions of factor IX replacement therapy to temporarily replace or supplement low levels of blood-clotting factor and, while these therapies are effective, those with hemophilia B must adhere to strict, lifelong infusion schedules. They may also still experience spontaneous bleeding episodes as well as limited mobility, joint damage or severe pain as a result of the disease. For appropriate patients, HEMGENIX® allows people living with hemophilia B to produce their own factor IX, which can lower the risk of bleeding.

CSL Behring collaboration

On June 24, 2020, we entered into the CSL Behring Agreement pursuant to which CSL Behring received exclusive global rights to HEMGENIX®. The transaction became fully effective on May 6, 2021.

Unless earlier terminated as described below, the CSL Behring Agreement will continue on a country-by-country basis until expiration of the royalty term in a country. The royalty term expires in a country on the later of (a) 15 years after the first commercial sale of the Product in such country, (b) expiration of regulatory exclusivity for the Product in such country and (c) expiration of all valid claims of specific licensed patents covering the Product in such country. Either we or CSL Behring may terminate the CSL Behring Agreement for the other party's material breach if such breach is not cured within a specified cure period. In addition, if CSL Behring fails to commercialize the Product in any of a group of major countries for an extended period of time following the first regulatory approval of the Product in any of such group of countries (other than due to certain specified reasons) and such failure has not been cured within a specified cure period, then we may terminate the CSL Behring Agreement. CSL Behring may also terminate the CSL Behring Agreement for convenience.

In March and April 2022, we received the total $55.0 million owed to us by CSL Behring related to CSL Behring's submissions of marketing applications for HEMGENIX® in the EU in March 2022 and the U.S. in April 2022.

In July 2023 we collected a $100.0 million payment from CSL Behring following the first sale of the Product in the U.S in June 2023.

We and CSL Behring also entered into a development and commercial supply agreement, pursuant to which, among other things, we will supply the Product to CSL Behring. We are contractually obligated to supply the Product until such time that these capabilities are transferred to CSL Behring or its designated contract manufacturing organization. On September 6, 2022, CSL Behring notified us of its intent to transfer manufacturing technology in the coming years related to HEMGENIX® to a third-party contract manufacturer designated by CSL Behring.

Fabry disease program (AMT-191)

Fabry Disease and Market Background

Fabry disease is a progressive, inherited, multisystemic lysosomal storage disease characterized by specific neurological, cutaneous, renal, cardiovascular, cochleo-vestibular, and cerebrovascular manifestations. Fabry disease is caused by a defect in a gene that encodes for a protein called α-galactosidase A ("GLA"). The GLA protein is an essential enzyme required to breakdown globotriaosylsphingosine ("Gb3") and lyso-globotriaosylsphingosine ("lyso-Gb3"). In patients living with Fabry disease, Gb3 and lyso-Gb3 accumulate in various cells throughout the body causing progressive clinical signs and symptoms of the disease. Current treatment options, which consist of bi-weekly intravenous enzyme replacement therapy, typically have no therapeutic benefit in patients with advanced renal or cardiac disease. Studies have also shown that a majority of male patients develop antibodies that inhibit the GLA protein and interfere with therapeutic efficacy.

Fabry disease has two major disease phenotypes: the type 1 "classic" and type 2 "later-onset" subtypes. Both lead to renal failure, and/or cardiac disease, and early death. Type 1 males have little or no functional a-Gal A enzymatic activity (<1% of normal mean) and marked accumulation of GL-3/Gb3 and related glycolipids in capillaries and small blood vessels which cause the major symptoms in childhood or adolescence. In contrast, males with the type 2 "later-onset" phenotype (previously called cardiac or renal variants) have residual a-Gal A activity, lack GL-3/Gb3 accumulation in capillaries and small blood vessels, and do not manifest the early manifestations of type 1 males. They experience an essentially normal childhood and adolescence. They typically present with renal and/or cardiac disease in the third to seventh decades of life. Most type 2 later-onset patients have been identified by enzyme screening of patients in cardiac, hemodialysis, renal transplant, and stroke clinics and recently by newborn screening. Fabry disease occurs in all racial and ethnic populations and affects males and females. It is estimated that type 1 classic Fabry disease affects approximately one in 40,000 males and approximately one in 20,000 females. The type 2 later-onset phenotype is more frequent, and in some populations may occur as frequently as about 1 in 1,500 to 4,000 males.

Our Development of AMT-191 for Fabry Disease

In September 2020, we selected a lead gene therapy candidate (AMT-191) for the treatment of Fabry disease. The lead candidate is a one-time administered AAV5 gene therapy incorporating the GLA transgene under control of our proprietary strong liver-specific promoter.

In October 2021, we presented preclinical data for AMT-191 at the ESGCT, confirming efficiency and cross correction in a Fabry mouse model, with increased gamma-linolenic acid in the liver, kidney, heart, and brain and normalized lysoglobotriaosylceramide-3 levels in main target organs.

On November 29, 2023 we announced that the FDA had cleared the IND application for AMT-191 and the first-in-human Phase I/IIa clinical trial will be conducted in the United States. The multicenter, open-label clinical trial consists of two dose-escalating cohorts of three patients each to assess safety, tolerability, and efficacy of AMT-191 in patients with Fabry disease. Three patients will be dosed in the initial dose. If no dose-limiting toxicology is identified, the dose will be escalated. If dose-limiting toxicology occurs in one of the three initial patients, three additional patients will be enrolled at the same dose level. If no additional patients in the cohort experience a dose-limiting toxicology, the dose will be escalated. Assessments will be made at three- and six-months post-treatment.

New Technology Development

We are seeking to develop next-generation technologies with the goal of further improving the potential of AAV-based gene therapies to treat patients suffering from debilitating diseases. We are focused on innovative technologies across each of the key components of an AAV-based gene therapy, including: (i) the capsid, or the outer viral protein shell that encloses the target deoxyribonucleic acid ("DNA"); (ii) the cargo, including the transgene or therapeutic gene, and promoters, or the DNA sequence that drives the expression of the transgene; and (iii) administration techniques.

We dedicate significant effort to designing and screening novel AAV capsids with the potential for (i) higher biological potency; (ii) improved biodistribution including greater cell transduction and increased cellular specificity; (iii) enhanced safety; and (iv) manufacturing efficiency. We believe we have significant expertise in vector engineering and have created promising genetically engineered capsids using both rational and directed evolution approaches.

We have also demonstrated the ability to deliver engineered DNA constructs that can silence or suppress disease-causing genes. Our miQURE gene silencing platform, based on exclusively licensed technology from Cold Spring Harbor Laboratory ("CSHL"), is designed to degrade mutated genes without off-target toxicity and induce silencing of the mutated gene in the entire target organ through secondary exosome-mediated delivery. miQURE-based gene therapy candidates, such as AMT-130, incorporate proprietary, therapeutic miRNA constructs that can be delivered using AAVs to potentially provide long-lasting activity. Preclinical studies of miQURE-based gene therapies have demonstrated several important advantages, including enhanced tissue-specificity, improved nuclear and cytoplasmic gene lowering and no off-target effects associated with impact to the cellular miRNA or messenger RNA transcriptome. The existing miQURE gene silencing strategy was expanded by linking several miRNA molecules in a single construct, resulting in the new linQURE platform.

Commercial-Scale Manufacturing Capabilities

The ability to reliably produce our products and product candidates at a high quality and at commercial scale is critical to the development of our AAV-based gene therapies. With the exception of AMT-260 and AMT-162, we produce our gene therapies either at our Amsterdam, the Netherlands facility (the "Amsterdam Facility") or our commercially licensed Lexington, Massachusetts-based manufacturing facility (the "Lexington Facility") using our proprietary baculovirus expression vector system. We believe our integrated manufacturing and process development capabilities provide us several potential advantages, including:

(1) *Know-how.* Since our founding in 1998, we have invested heavily in developing optimized processes, methods and formulations to reliably and reproducibly manufacture AAV-based gene therapies at commercial scale. During this time, we have accumulated significant internal experience and knowledge of the underlying manufacturing technology and critical quality attributes of our products. These learnings have been essential in developing a modular, third generation manufacturing platform that can be used to produce all our future gene therapy products.

(2) *Flexibility.* Controlling cGMP allows us to rapidly adapt our production schedule to meet the needs of our business. With the exception of AMT-260 and AMT-162 programs, we do not rely on contract manufacturers, nor do we require costly and time-consuming technology transfers to third parties. Our facility is designed to commercially supply multiple products and is flexibly designed to accommodate expansion and scale up as our needs change.

(3) *Faster Path to Market.* We believe our manufacturing platform enables us to rapidly produce new products for clinical investigation, minimize time between clinical phases and complete scale-up as product candidates advance into late-stage development and commercialization.

(4) *Scalability.* We have demonstrated our manufacturing process is reproducible at volumes ranging from 2 liters to 500 liters and believe it is possible to achieve higher scale production with our insect-cell, baculovirus system.

(5) *Low Cost of Goods.* We believe that our ability to scale production has the potential to significantly reduce unit costs. Our manufacturing process only utilizes disposable components, which enables faster change-over times between batches and avoid costs associated with cleaning and sterilization. Additionally, our production system does not require the use of plasmids, which can be a costly raw material.

Our Intellectual Property

We strive to protect the proprietary technologies that we believe are important to our business, including by seeking and maintaining patent protection in the U.S., Europe, and other countries for novel components of our gene therapies, the chemistries of and processes for manufacturing these gene therapies, the use of these components in gene therapies, our technology platform, and other inventions and related technology. We also rely on trade secrets, security measures and careful monitoring of our proprietary information to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

We expect that our probability of success will be significantly enhanced by our ability 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 patents, maintain our licenses to use intellectual property owned by third parties, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and other proprietary rights of third parties. We also rely on know-how, continuing technological innovation and in-licensing opportunities to develop, strengthen and maintain our proprietary position in the field of AAV-based gene therapies.

In some cases, we are dependent on the patented or proprietary technology of third parties to develop and commercialize our products. We must obtain licenses from such third parties on commercially reasonable terms, or our business could be harmed, possibly materially. For example, we license from third parties essential parts of the therapeutic gene cassettes as well as the principal AAV vectors we use and key elements of our manufacturing process. We anticipate that we will require licenses to additional technology in the future.

Because most patent applications throughout the world are confidential for 18 months after the earliest claimed priority date, and since the publication of discoveries in the scientific and patent literature often lags actual discoveries, we cannot be certain that we were the first to invent or file applications for the inventions covered by our pending patent applications. Moreover, we may have to participate in post-grant proceedings in the patent offices of the U.S. or foreign jurisdictions, such as oppositions, reexaminations, or interferences, in which the patentability or priority of our inventions are challenged. Such proceedings could result in substantial cost, even if the eventual outcome is favorable to us. For more information regarding the risks related to our intellectual property, please see Item 1A., *Risk factors—Risks Related to Our Intellectual Property*, in this Annual Report on Form 10-K.

Our intellectual property portfolio consists of owned and in-licensed patents, copyrights, licenses, trademarks, trade secrets and other intellectual property rights.

Patent Portfolio

Our gene therapy programs are protected by patents and patent applications directed to various aspects of our technology. For example, our gene therapy programs are protected by patents and patent applications with composition of matter or method of use claims that cover the therapeutic gene, the promoter, the viral vector capsid, or other specific parts of these technologies. We also seek protection of core aspects of our manufacturing process, particularly regarding our baculovirus expression system for AAV vectors in insect cells. In addition, we have filed manufacturing patent applications with claims directed to alternative compositions of matter and manufacturing processes to seek better protection from competitors.

We file the initial patent applications for our commercially important technologies in both Europe and the U.S. For the same technologies, we typically file international patent applications under the PCT within one year. We also may seek, usually on a case-by-case basis, local patent protection in Canada, Australia, Japan, China, India, Israel, South Africa, New Zealand, South Korea, and Eurasia, as well as South American jurisdictions such as Brazil and Mexico.

As of December 31, 2023, our intellectual property portfolio included 123 issued patents (including 30 U.S. patents and 14 patents granted by the European Patent Office ("EPO")) and 129 pending patent applications (including 23 U.S. patent applications and 31 EPO patent applications). These patents relate to a variety of technologies including our product candidates that are in development and our manufacturing and technology platform.

Our Patent Portfolio Related to Our Key Development Programs

Hemophilia B program (HEMGENIX®)

We own a patent family, including patents and patent applications, directed to the use of the Padua mutation in human Factor IX ("hFIX") for gene therapy in etranacogene dezaparvovec. CSL Behring received exclusive global rights to etranacogene dezaparvovec pursuant to the CSL Behring Agreement and is responsible for the prosecution and enforcement of the underlying patent portfolio pursuant to its obligations thereunder. See "Liver-directed diseases—Hemophilia B (HEMGENIX® or etranacogene dezaparvovec)" for more information on the CSL Behring collaboration.

Huntington's disease program (AMT-130)

We own three patent families directed to gene therapy treatment of Huntington's disease, including with AMT-130 and its formulation. This miQURE gene silencing technology platform is designed to degrade disease-causing genes without off-target toxicity and induce silencing of the entire target organ through secondary exosome-mediated delivery.

Temporal Lobe Epilepsy (AMT-260)

We co-own three patent families directed to gene therapy treatment of TLE, including with AMT-260 of which the other owners have exclusively licensed their rights to us. Additionally, we are the exclusive licensee to two other patent families directed to the Gluk2/Gluk5 antagonists and their use in TLE.

Amyotrophic Lateral Sclerosis (AMT-162)

We have obtained an exclusive license to two patent families directed to gene therapy treatment of ALS, including AMT-162.

Fabry's Disease (AMT-191)

We own a patent family directed to potent liver-specific promoters including the promoter present in our gene therapy treatment of Fabry product AMT-191. Additionally, we own a patent family directed to the formulation of AMT-191 for intravenous infusion.

Licenses

We have obtained exclusive or non-exclusive rights from third parties under a range of patents and other technology that we use in our product and development programs, as described below. Our agreements with these third parties generally grant us a license to make, use, sell, offer to sell, and import products covered by the licensed patent rights in exchange for our payment of some combination of an upfront amount, annual fees, royalties, a percentage of amounts we receive from our licensees and payments upon the achievement of specified development, regulatory or commercial milestones. Some of the agreements specify the extent of the efforts we must use to develop and commercialize licensed products. The agreements generally expire upon expiration of the last-to-expire valid claim of the licensed patents. Each licensor may terminate the applicable agreement if we materially breach our obligations and fail to cure the breach within a specified cure period.

Licensed Technology Used for Multiple Programs

We are exploiting technology from third-party sources described below in more than one of our programs.

Cold Spring Harbor Laboratory

In 2015, we entered into a license agreement with CSHL in which CSHL granted to us an exclusive, sublicensable license to develop and commercialize certain of CSHL's patented RNAi-related technology for use in connection with the treatment or prevention of Huntington's disease. We expanded the scope of the license agreement with CSHL in 2018 beyond Huntington's disease to include the diagnosis, treatment, or prevention of all CNS diseases in the field. Under the amended license agreement CSHL granted to us an exclusive license to develop and commercialize therapeutic products for the additional disease classifications in the field of liver diseases, neuromuscular diseases, and cardiovascular diseases, and we have subsequently added such products to our pipeline.

Under this license agreement, as amended, annual fees, development milestone payments and future single-digit royalties on net sales of a licensed product are payable to CSHL. The standard 20-year patent term for the licensed patents expires in 2031.

Protein Sciences

In 2016, we revised our existing license contract with Protein Sciences Corporation for the use of its *expresSF+* insect cell line and associated technology for human therapeutic and prophylactic uses (except influenza) to provide us with a royalty free, perpetual right and license to the technology in the field of AAV-based gene therapy.

Technology Used for Specific Development Programs

Hemophilia B program (HEMGENIX®)

Padua

In April 2017, we entered into an Assignment and License Agreement with Dr. Simioni (the "Padua Assignment"). Pursuant to the Padua Assignment, we acquired from Dr. Simioni all rights, title and interest in a patent family covering the variant of the FIX gene, carrying an R338L mutation (FIX-Padua; "Padua IP"). Under the Padua Assignment, we have also licensed certain know-how included in the Padua IP. We provided Dr. Simioni with an initial license fee and reimbursement of past expenses. Under the agreement, additional payments may come due upon the achievement of certain milestone events related to the development of the Padua IP or as royalties on a percentage of certain revenues. We have granted a license of the Padua IP back to Dr. Simioni for therapeutic or diagnostic use of a modified Factor IX protein (other than in connection with gene therapy) and any application for non-commercial research purposes. We have agreed to indemnify Dr. Simioni for claims arising from our research, development, manufacture, or commercialization of any product making use of the Padua IP, subject to certain conditions. The Padua Assignment will remain in effect, unless otherwise terminated pursuant to the terms of the Padua Assignment, until the later of (i) the expiration date of the last of the patents within the Padua IP and (ii) the expiration of the payment obligations under the Padua Assignment.

St. Jude Children's Research Hospital

In 2008, we entered into a license agreement with St. Jude Children's Research Hospital ("St. Jude"), which we amended in 2012. Under this license agreement, St. Jude has granted us an exclusive license, with a right to sublicense, to patent rights relating to expression of hFIX in gene therapy vectors, to make, import, distribute, use, and commercialize products containing hFIX covered by a valid patent claim in the field of gene therapy for treatment or prophylaxis of hemophilia B. In addition, we have a first right of negotiation regarding any patent applications that are filed by St. Jude for any improvements to the patent rights licensed to us. The U.S. patent rights will expire in 2028 and the European patents will expire in 2025.

We have agreed to pay St. Jude a royalty equal to a low single-digit percentage of net sales by us or our sublicensees of products covered by the licensed patent rights, and a portion of certain amounts we receive from sublicensees ranging from a mid-single digit to a mid-teen double-digit percentage of such amounts. With respect to our collaboration with CSL Behring, we have agreed with St. Jude on an apportionment of certain amounts we receive from CSL Behring as sublicensing revenue that is equivalent to a low-single digit percentage of such amounts.

The agreement will remain in effect until no further payment is due relating to any licensed product under this agreement or either we or St. Jude exercise our rights to terminate it. St. Jude may terminate the agreement in specified circumstances relating to our insolvency. We may terminate the agreement for convenience at any time subject to a specified notice period.

Temporal Lobe Epilepsy (AMT-260)

Regenxbio

In June 2020, uniQure France SAS entered into an agreement, subsequently amended in June 2021, with Regenxbio for an exclusive (in the field of using AAV9 to expression of the *GRIK2* gene in humans (the "Field")), sublicensable, royalty-bearing, worldwide license under Regenxbio's interest in EU patent application 19185533.7 (the "Foreground Patents") and related patents, as well as patents covering inventions developed during the collaboration and certain patents and know-how relating to AAV9. The license also includes non-exclusive rights to exploit the licensed Foreground Patents and certain related patents know-how developed in collaboration pursuant to the license agreement outside the Field. The license also includes retained and license back rights that permit Regenxbio and its upstream licensors to exploit for any research, development, commercialization, or other purposes certain patents, inventions and know-how (other than the Foreground Patents) subject to or created pursuant to the license agreement.

Payment obligations under the agreement provide for royalty payments on net sales in the mid-single digit to low-double digits, and milestone payments to Regenxbio in the mid-tens of millions of dollars related to clinical trials, commercialization, and net sales. The agreement also calls for sublicense fees in the low-double digit range. The royalty is paid on sales of license products using any of licensed patents or know-how for as long as the agreement is in effect. Royalty and milestone payments may continue to be owed under the license following termination of the agreement if licensed products are sold following termination of the license. Under the agreement, uniQure France SAS has certain diligence obligations and Regenxbio has certain obligations related to the pre-clinical development of manufacturing technology.

Inserm Transfert

In January 2020, uniQure France SAS entered into license agreement with Inserm Transfert SA (also acting as a delegate for the French National Institute of Health and Medical Research) and La societe SATT Aquitaine (the counterparties collectively referred to as "Inserm Transfert"). Under the license agreement, uniQure France SAS is granted an exclusive, sublicensable, royalty-bearing, worldwide license under European Patent ("EP") patent application 13306265.3 in the field of the prevention and treatment of epilepsy, and in Inserm Transfert's share in EP patent application 19185533.7 (which is co-owned by Regenxbio) in the field of all human use. uniQure France SAS also is granted a non-exclusive, sublicensable, royalty-bearing, worldwide license under certain know-how in the fields that may be developed by Inserm pursuant to the agreements. Under the agreements, Inserm retains certain rights for teaching, academic and/or research purposes.

Payment obligations under the agreements include a royalty on the net sales of license products in the low single digits, milestone payments associated with clinical trial and regulatory approval milestones of multiple licensed products totaling in the low-single digit millions of Euros. The agreement also calls for sublicense fees in the low to mid double-digit range depending on the timing of such sublicense. The obligation to pay royalties extends until the later of the expiration of the patent rights, any regulatory exclusivity period, and 10 years from the first commercial sale of a licensed product.

Amyotrophic Lateral Sclerosis (AMT-162)

Apic Bio

In January 2023, we announced that we had entered into a global licensing agreement with Apic Bio for a one-time, intrathecally administered investigational gene therapy for ALS caused by mutations in SOD-1, pursuant to which we acquired an exclusive global license (including a sublicense of rights granted to Apic Bio pursuant to an exclusive license agreement with a certain U.S.-based academic institution) to Apic Bio's rights under certain licensed technology to develop, manufacture, and commercialize any product incorporating a licensed construct (including APB-102, certain constructs expressing a SOD1-targeting microRNA or AAV that codes for a microRNA that silences SOD1 expression), in any dosage strength, formulation, concentration or method of delivery in the applicable field. We made an initial cash payment of $10.0 million to Apic Bio. In addition, we will pay Apic Bio up to $43.0 million in milestones upon achievement of regulatory approvals in the U.S. and Europe and pre-specified annual net sales, and a tiered royalty on net sales ranging from the mid-single digits to low double digits.

Trade Secrets

In addition to patents and licenses, we rely on trade secrets and know-how to develop and maintain our competitive position. For example, significant aspects of the process by which we manufacture our gene therapies are based on unpatented trade secrets and know-how. We seek to protect our proprietary technology and processes and obtain and maintain ownership of certain technologies, in part, through confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and commercial collaborator. We also seek to preserve the integrity and confidentiality of our data, trade secrets and know-how by maintaining physical security of our premises and physical and electronic security of our information technology systems.

Trademarks

We have a number of material registered trademarks, including "uniQure", that we have registered in various jurisdictions including the U.S. and the EU. We may seek trademark protection for other product candidates and technologies as and when appropriate.

Competition

The biotechnology and pharmaceutical industries, including in the gene therapy field, are characterized by rapidly advancing technologies, intense competition, and a strong emphasis on intellectual property. We face substantial competition from many different sources, including large and specialty pharmaceutical and biotechnology companies, academic research institutions and governmental agencies and public and private research institutions.

We face worldwide competition from larger pharmaceutical companies, specialty pharmaceutical companies and biotechnology firms, universities and other research institutions and government agencies that are developing and commercializing pharmaceutical products. Our key competitors focused on developing therapies in various indications, include among others, Pfizer, Freeline Therapeutics, Intellia Therapeutics, Sangamo Biosciences, Voyager Therapeutics, Passage Bio, Roche, PTC Therapeutics, Prilenia Therapeutics, CombiGene, Caritas Therapeutics, Alnylam, Wave Life Sciences, Bayer AG (AskBio), Amicus Therapeutics, 4D Molecular Therapeutics, Sanofi, Idorsia, Amicus, Spark, Takeda, Chiesi, CANbridge, Abeona, Annexon, Vico, Alexion (AZ), Neurona, Combigene, NeuExcell, EpiBlok, Biogen, ionis, Eisai and Lexeo,

We also compete with existing standards of care, therapies, and symptomatic treatments, as well as any new therapies and novel technologies, that may become available in the future for the indications we are targeting.

Many of our current or potential competitors, either alone or with their collaborators, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials regulatory affairs, and marketing approved products than we do. Mergers and acquisitions in the pharmaceutical, biotechnology and gene therapy industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

The key competitive factors affecting the success of all our programs are likely to be their efficacy, safety, convenience, price, and the availability of reimbursement from government and other third-party payers. We also believe that, due to the small size of the patient populations in the orphan indications we target, being first to market will be a significant competitive advantage. We believe that our advantages in vector and manufacturing technology will enable us to reach market in a number of indications ahead of our competitors, and to potentially capture the markets in these indications either by being first or in those markets with larger populations having a differentiated product.

Government Regulation and Reimbursement

Government authorities in the U.S., EU and other countries extensively regulate, among other things, the approval, research, development, nonclinical and clinical testing, manufacture (including any manufacturing changes), packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, marketing, post-approval monitoring and reporting, reimbursement, and import and export of pharmaceutical products, biological products, and medical devices. We believe that all our product candidates will be regulated as biological products, or biologics, and in particular, as gene therapies, and will be subject to such requirements and regulations under U.S. and foreign laws. For other countries outside of the U.S. and the EU, marketing approval and pricing and reimbursement requirements vary from country to country. If we fail to comply with applicable regulatory requirements, we may be subject to, among other things, civil penalties, refusal to approve pending applications, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions, and criminal prosecution.

Regulation in the United States

In the U.S., the FDA regulates biologics under the Public Health Service Act ("PHSA") and the Federal Food, Drug, and Cosmetic Act ("FDCA") and regulations and guidance implementing these laws. These laws and regulatory guidance are continually evolving. By example, various actions have been taken by the U.S. Congress and President over recent years with respect to drug shortage prevention and reporting, supply chain security, and the promotion of U.S. domestic manufacturing. The FDA also continually issues nonbinding guidance documents that provide the FDA's interpretation of its laws and regulations, as well as the FDA's approach to scientific issues and questions.

Obtaining regulatory approvals and ensuring compliance with applicable statutes and regulatory requirements entails the expenditure of substantial time and financial resources, including payment of user fees for applications to the FDA. All our current product candidates are subject to regulation by the FDA as biologics. An applicant seeking approval to market and distribute a new biologic in the U.S. must typically undertake the following:

- completion of nonclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's current Good Laboratory Practice regulations;
- submission to the FDA of an IND application which allows human clinical trials to begin unless the FDA objects within 30 days; the sponsor of an IND or its legal representative must be based in the U.S.;
- approval by an independent institutional review board ("IRB") and, for some studies, Institutional Biosafety Committee ("IBC") before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with the FDA's cGCP to establish substantial evidence of the safety and efficacy for the proposed biological product for each indication;
- preparation and submission to the FDA of a Biologics License Application ("BLA");
- satisfactory completion of one or more FDA inspections or remote regulatory assessments of the manufacturing facility or facilities at which the product, or components thereof, are produced to assess compliance with cGMP requirements and to assure that the facilities, methods, and controls are adequate to preserve the product's identity, strength, quality, and purity, as well as selected clinical trial sites and investigators to determine cGCP compliance;
- approval of the BLA by the FDA, in consultation with an FDA advisory committee, if deemed appropriate by the FDA; and
- compliance with any post-approval commitments, including Risk Evaluation and Mitigation Strategies ("REMS"), and post-approval studies required by the FDA.

Human Clinical Studies in the United States under an IND

Before initiating clinical studies in the U.S. or under an IND, investigational product sponsors must first complete nonclinical studies. Nonclinical studies include laboratory evaluation of chemistry, pharmacology, toxicity, and product formulation, as well as animal studies to assess potential safety and efficacy. Such studies must generally be conducted in accordance with the FDA's GLPs.

Clinical trials involve the administration of the investigational biologic to human subjects under the supervision of qualified investigators in accordance with current GCP requirements, which includes requirements for informed consent, study conduct, and IRB review and approval. Special clinical trial ethical considerations also must be considered if a study involves children. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of an IND. Sponsors will be required to provide the FDA with diversity action plans. INDs include nonclinical study reports, together with manufacturing information, analytical data, any available clinical data, or literature, and proposed clinical study protocols among other things. A clinical trial may not proceed in the U.S. unless and until an IND becomes effective, which is 30 days after its receipt by the FDA. The FDA may raise concerns or questions related to one or more components of an IND and place the IND on clinical hold if during its review the FDA determines that study subjects would be exposed to significant risk of illness or injury. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Clinical holds also may be imposed by the FDA at any time before or during trials due to safety concerns or non-compliance.

The protocol and informed consent documents, as well as other subject communications must also be approved by an IRB that continues to oversee that trial. In the case of gene therapy studies, an IBC at the local level may also review and maintain oversight over the particular study, in addition to the IRB. The FDA, an IRB, and IBC, or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk or that research requirements are not being met.

Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor that regularly reviews accumulated data and advises the study sponsor regarding the continuing safety of the trial. This group may also review interim data to assess the continuing validity and scientific merit of the clinical trial. This group receives special access to unblinded data during the clinical trial and may advise the sponsor to halt, pause, or otherwise modify the clinical trial.

Information about certain clinical trials, including results, must be submitted within specific timeframes for listing on the ClinicalTrials.gov website. Sponsors or distributors of investigational products for the diagnosis, monitoring, or treatment of one or more serious diseases or conditions must also have a publicly available policy on evaluating and responding to requests for expanded access. Investigators must also provide certain information to the clinical trial sponsors to allow the sponsors to make certain financial disclosures to the FDA.

Subsequent clinical protocols and amendments must also be submitted to an active IND but are not subject to the 30-day review period imposed on an original IND. Progress reports detailing the results of the clinical trials must also be submitted at least annually to the FDA and the IRB and more frequently if serious adverse events or other significant safety information is found. There is a risk that once a new protocol or amendment is submitted to an active IND there may be an extended period before the FDA may comment or provide feedback. This may result in a need to modify an ongoing clinical trial to incorporate this feedback or even a clinical hold of the trial. There is also risk that FDA may not provide comments or feedback but may ultimately disagree with the design of the study once a BLA is submitted.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- Phase I: The biological product is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early understanding of its effectiveness.
- Phase II: The biological product is administered to a limited patient population to further identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.

- Phase III: The biological product is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in adequate and well-controlled clinical trials to generate sufficient data to statistically confirm the potency and safety of the product for approval, to establish the overall risk-benefit profile of the product and to provide adequate information for the labelling of the product. Typically, two Phase III trials are required by the FDA for product approval. Under some limited circumstances, however, the FDA may approve a BLA based upon a single Phase III clinical study plus confirmatory evidence or a single large multicenter trial without confirmatory evidence.

Recent legislation further established a new program that may be used to facilitate future marketing applications and development programs following a first product approval. Specifically, the Consolidated Appropriations Act, 2023 established a program whereby a platform technology that is incorporated within or utilized by an approved drug or biologic product may be designated as a platform technology, provided that certain conditions are met, in which case development and approval of subsequent products using such technology may be expedited.

In addition, under the Pediatric Research Equity Act (the "PREA"), a BLA or BLA supplement for a new active ingredient, indication, dosage form, dosage regimen, or route of administration, must contain data that are adequate to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. Orphan products are also exempt from the PREA requirements.

The manufacture of investigational drugs and biologics for the conduct of human clinical trials is subject to cGMP requirements. Investigational drugs and biologics and active ingredients and therapeutic substances imported into the U.S. are also subject to regulation by the FDA. Further, the export of investigational products outside of the U.S. is subject to regulatory requirements of the receiving country as well as U.S. export requirements under the FDCA.

Concurrent with clinical trials, companies usually complete additional nonclinical animal studies and must also develop additional information about the chemistry and physical characteristics of the product candidate 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 product candidate and, among other things, manufacturers must develop methods for testing the identity, strength, quality, potency, and purity of the final product. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that the product candidate does not undergo unacceptable deterioration over its shelf life.

Regulation and FDA Guidance Governing Gene Therapy Products

The FDA has and continues to issue various guidance documents with respect to the development and commercialization of gene therapies. These include guidance on, among other things, the proper preclinical and nonclinical assessment of gene therapies; the chemistry, manufacturing, and controls; the design and conduct of clinical trials; the design and analysis of shedding studies for virus or bacteria based gene therapies; the proper design of tests to measure product potency in support of an IND or BLA application; and measures to observe delayed adverse effects in subjects and patients who have been exposed to gene therapies via long-term follow-up with associated regulatory reporting. The FDA has also issued guidance on the development of gene therapies for the treatment of neurodegenerative diseases, rare diseases, and hemophilia, as such products may face special challenges.

Certain gene therapy studies are also subject to the National Institutes of Health's Guidelines for Research Involving Recombinant DNA Molecules, ("NIH Guidelines"). The NIH Guidelines include the review of the study by an IBC. The IBC assesses the compliance of the research with the NIH Guidelines, assesses the safety of the research and identifies any potential risk to public health or the environment.

Compliance with cGMP Requirements

Manufacturers of biologics must comply with applicable cGMP regulations, including quality control and quality assurance and maintenance of records and documentation. Manufacturers and others involved in the manufacture and distribution of such products must also register their establishments with the FDA and certain state agencies and provide the FDA a list of products manufactured at the facilities. Recently, the information that must be submitted to the FDA regarding manufactured products was expanded through the Coronavirus Aid, Relief, and Economic Security, or CARES, Act to include the volume of drugs produced during the prior year. Establishments may be subject to periodic unannounced inspections and remote regulatory assessments by government authorities to ensure compliance with cGMPs and other laws. Discovery of non-compliance may result in the FDA placing restrictions on a product, manufacturer, or holder of an approved BLA, and may extend to requiring withdrawal of the product from the market, recall, shutdown, enforcement letters, among other consequences. Noncompliance with the applicable manufacturing requirements may also require costly corrective and preventative actions. 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.

FDA Programs to Expedite Product Development

The FDA has several programs to expedite product development, including fast track designation and breakthrough therapy designation. These are outlined in specific FDA guidance. Under the fast track program, the sponsor of a biologic candidate may request the FDA to designate the product for a specific indication as a fast track product concurrent with or after the filing of the IND for the product candidate. To be eligible for a fast track designation, the FDA must determine that a product candidate is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. This may be demonstrated by clinical or nonclinical data. If granted, the benefits include greater interactions with the FDA and potentially rolling review of sections of the BLA. In some cases, a fast track product may be eligible for accelerated approval or priority review.

Moreover, under the provisions of the Food and Drug Administration Safety and Innovation Act, enacted in 2012, a sponsor can request designation of a product candidate as a breakthrough therapy. A breakthrough therapy is defined as a product that is intended, alone or in combination with one or more other products, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Products designated as breakthrough therapies are potentially eligible for rolling review, as well as intensive guidance on an efficient development program beginning as early as Phase I trials, and a commitment from the FDA to involve senior managers and experienced review staff in a proactive collaborative, cross disciplinary review.

Biologics studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval, which means the FDA may approve the product based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. A biologic candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase 4 or post-approval clinical trials to confirm the effect on the clinical endpoint. By the date of approval of an accelerated approval product, FDA must specify the conditions for the required post approval studies, including enrollment targets, the study protocol, milestones, and target completion dates. FDA may also require that the confirmatory Phase 4 studies be commenced prior to FDA granting a product accelerated approval. Reports on the progress of the required Phase 4 confirmatory studies must be submitted to FDA every 180 days after approval. Failure to conduct required post-approval studies, or confirm a clinical benefit during post-marketing studies, will allow the FDA to withdraw the drug or biologic from the market on an expedited basis using a statutorily defined streamlined process. Failure to conduct the required Phase 4 confirmatory studies or to conduct such studies with due diligence, as well as failure to submit the required update reports can subject a sponsor to penalties. All promotional materials for drug or biologic candidates approved under accelerated regulations are subject to prior review by the FDA. In recent years, the accelerated approval pathway has come under significant FDA and public scrutiny. Accordingly, the FDA may be more conservative in granting accelerated approval or, if granted, may be more apt to withdrawal approval if clinical benefit is not confirmed.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Submission of a BLA

The results of the nonclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls, and proposed labeling, among other things, are submitted to the FDA as part of a BLA requesting a license to market the product for one or more indications. The submission of a BLA is subject to an application user fee, though products with orphan designation are exempt from the BLA filing fee. The sponsor of an approved BLA is also subject to annual program user fees. Orphan products may also be exempt from program fees provided that certain criteria are met. These fees are typically increased annually. Under the Prescription Drug User Fee Act ("PDUFA") the FDA has agreed to specified performance goals in the review of BLAs.

Most such applications are meant to be reviewed within ten months from the filing acceptance date (typically 60 days after date of filing), and most applications for priority review products are meant to be reviewed within six months of the filing acceptance date (typically 60 days after date of filing). Priority review designation may be assigned to product candidates that are intended to treat serious conditions and, if approved, would provide significant improvements in the safety or effectiveness of the treatment, diagnosis, or prevention of the serious condition.

The FDA may refuse to file an application and request additional information. In this event, the application must be refiled with the additional information. The refiled application is also subject to assessment of content before the FDA accepts it for review. Once the submission is accepted, the FDA begins an in-depth substantive review. The FDA will assign a date for its final decision for the product (the "PDUFA action date") but can extend this date to complete review of a product application or to consider additional information submitted during the application review period. The PDUFA action date is only a goal, thus, the FDA does not always meet its PDUFA dates.

The FDA may also refer certain applications to an advisory committee. Before approving a product candidate for which no active ingredient (including any ester or salt of active ingredients) has previously been approved by the FDA, the FDA must either refer that product candidate to an external advisory committee or provide in an action letter, a summary of the reasons why the FDA did not refer the product candidate to an advisory committee. The FDA may also refer other product candidates to an advisory committee if the FDA believes that the advisory committee's expertise would be beneficial. An advisory committee is typically a panel that includes clinicians and other experts, which review, evaluate, and make 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 it considers such recommendations carefully when making decisions.

The FDA reviews applications to determine, among other things, whether a product candidate meets the agency's approval standards and whether the manufacturing methods and controls are adequate to assure and preserve the product's identity, strength, quality, potency, and purity. Before approving a marketing application, the FDA typically will inspect or conduct remote regulatory assessments of the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities, including contract manufacturers and subcontractors, are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving a marketing application the FDA will inspect or conduct remote regulatory assessments of one or more clinical trial sites to assure compliance with good clinical practices ("GCPs").

After evaluating the marketing application and all related information, including the advisory committee recommendation, if any, and inspection and remote regulatory inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter or a complete response letter. An approval letter authorizes commercial marketing of the biological 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 for the FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those deficiencies have been addressed to the FDA's satisfaction in a resubmission of the BLA, the FDA will issue an approval letter. Many drug applications receive complete response letters from the FDA during their first cycle of FDA review.

If the FDA approves a product, it may limit the approved indications for use of the product; require that contraindications, warnings, or precautions be included in the product labeling, including boxed warnings; require that post-approval studies, including Phase 4 clinical trials and trials to ensure that population representative data is collected, be conducted to further assess a biologic's efficacy and safety after approval; or require testing and surveillance programs to monitor the product after commercialization. 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 also not approve label statements that are necessary for successful commercialization and marketing.

In addition to the above conditions of approval, the FDA also may require submission of a REMS to ensure that the benefits of the product candidate outweigh the risks. The REMS plan could include medication guides, physician communication plans, and elements to assure safe use, such as restricted distribution methods, patient registries, or other risk minimization tools. An assessment of the REMS must also be conducted at set intervals. Following product approval, a REMS may also be required by the FDA if new safety information is discovered, and the FDA determines that a REMS is necessary to ensure that the benefits of the product outweigh the risks. In guidance, FDA stated that during the review of a BLA for a gene therapy, it will assess whether a REMS is necessary. Several gene therapy products that have been approved by FDA have required substantial REMS, which included requirements for dispensing hospital and clinic certification, training, adverse event reporting, documentation, and audits and monitoring conducted by the sponsor, among other conditions. REMS, such as these, can be expensive and burdensome to implement, and burdensome for hospitals, clinics, and healthcare providers to comply with.

Biosimilars and Exclusivity

The Biologics Price Competition and Innovation Act of 2009 ("BPCIA") which amended the PHSA authorized the FDA to approve biosimilars under Section 351(k) of the PHSA. Under the BPCIA, a manufacturer may apply for licensure of a biologic product that is biosimilar to or interchangeable with a previously approved biological product or reference product. For the FDA to approve a biosimilar product, it must find that it is highly similar to the reference product notwithstanding minor differences in clinically inactive components and that there are no clinically meaningful differences between the reference product and proposed biosimilar product in safety, purity or potency. A finding of interchangeability requires that a product is determined to be biosimilar to the reference product, and that the product can be expected to produce the same clinical results as the reference product and, for products administered multiple times, the biologic and the reference biologic may be switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic.

An application for a biosimilar product may not be submitted to the FDA until four years following approval of the reference product, and it may not be approved until 12 years following approval of the reference product. These exclusivity provisions only apply to biosimilar companies and not companies that rely on their own data and file a full BLA. Moreover, this exclusivity is not without limitation. Certain changes and supplements to an approved BLA, and subsequent applications filed by the same sponsor, manufacturer, licensor, predecessor in interest, or other related entity do not qualify for the twelve-year exclusivity period. Further, the twelve-year exclusivity period in the U.S. for biologics has been controversial and may be shortened in the future.

The PHSA also includes provisions to protect reference products that have patent protection. The biosimilar product sponsor and reference product sponsor may exchange certain patent and product information for the purpose of determining whether there should be a legal patent challenge. Based on the outcome of negotiations surrounding the exchanged information, the reference product sponsor may bring a patent infringement suit and injunction proceedings against the biosimilar product sponsor. The biosimilar applicant may also be able to bring an action for declaratory judgment concerning the patent.

The FDA maintains a list of approved biological products, which is commonly referred to as the Purple Book. This list includes product names, the date of licensure, and any periods of regulatory exclusivity. Following the exchange of patent information between the biosimilar and reference product sponsor, the reference product sponsor must also provide the exchanged patent information and patent expiry dates to the FDA. The FDA then publishes this information in the Purple Book.

To increase competition in the drug and biologic product marketplace, Congress, the executive branch, and the FDA have taken certain legislative and regulatory steps. By example, the FDA finalized a guidance to facilitate biologic product importation. Moreover, the 2020 Further Consolidated Appropriations Act included provisions requiring that sponsors of approved biologic products, including those subject to REMS, provide samples of the approved products to persons developing biosimilar products within specified timeframes, in sufficient quantities, and on commercially reasonable market-based terms. Failure to do so can subject the approved product sponsor to civil actions, penalties, and responsibility for attorney's fees and costs of the civil action. This same bill also includes provisions with respect to shared and separate REMS programs.

Orphan Drug Exclusivity

Under the Orphan Drug Act of 1983, the FDA may designate a biological product as an orphan drug if it is intended to treat a rare disease or condition that affects fewer than 200,000 individuals in the U.S., or more in cases in which there is no reasonable expectation that the cost of developing and making a biological product available in the U.S. for treatment of the disease or condition will be recovered from sales of the product. Additionally, sponsors must present a plausible hypothesis for clinical superiority to obtain orphan drug designation if there is a product already approved by the FDA that is considered by the FDA to be the same as the already approved product and is intended for the same indication. This hypothesis must be demonstrated to obtain orphan exclusivity. With respect to gene therapies, the FDA has issued a specific guidance on how the agency interprets its sameness regulations. Specifically, whether two products are deemed to be the same by the FDA will depend on the products' transgene expression, viral vectors groups and variants, and additional product features that may contribute to therapeutic effect. Minor product differences will not, generally, result in a finding that two products are different and there are some factors that FDA will consider on a case-by-case basis. Any of the FDA sameness determinations could impact our ability to receive approval for our product candidates and to obtain or retain orphan drug exclusivity.

If a product with orphan designation receives the first FDA approval, it may be granted seven years of marketing exclusivity, which means that the FDA may not approve any other applications for the same product for the same indication for seven years, unless clinical superiority is demonstrated. Competitors may receive approval of different products for the indication for which the orphan product has exclusivity and may obtain approval for the same product but for a different indication. Notably, a 2021 judicial decision, *Catalyst Pharms., Inc. v. Becerra*, 14 F. 4th 1299 (11th Cir 2021), challenged and reversed an FDA decision on the scope of orphan product exclusivity for the drug, Firdapse. Under this decision, orphan drug exclusivity for Firdapse blocked approval of another company's application for the same drug for the entire disease or condition for which orphan drug designation was granted, not just the disease or condition for which approval was received. In a January 2023 Federal Register notice, however, FDA stated that it intends to continue to apply its regulations tying the scope of orphan-drug exclusivity to the uses or indications for which a drug is approved. The exact scope of orphan drug exclusivity will likely be an evolving area.

Orphan drug designation does not change the FDA's standard for product approval. The FDA's regulations, however, provide flexibility in meeting such approval standards such that the FDA may exercise scientific judgment in determining the kind and quantity of data required for approval and during development programs. Per guidance issued by the FDA in 2023, "[t]his flexibility extends from the early stages of development to the design of adequate and well-controlled clinical investigations required to demonstrate effectiveness to support marketing approval and to establish safety data needed for the intended use." The FDA states that it "is committed to helping sponsors create successful drug development programs that address the particular challenges posed by each disease."

Pediatric Exclusivity

Under the Pediatric Research Equity Act of 2003, pediatric exclusivity provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity in the US, including orphan exclusivity and reference biologic exclusivity. This six-month exclusivity may be granted if the FDA issues a written request to the sponsor for the pediatric study, the sponsor submits a final study report after receipt of the written request and meets the terms and timelines in the FDA's written request.

Regenerative Advanced Therapy Designation

The 21st Century Cures Act became law in December 2016 and created a new program under Section 3033 in which the FDA has authority to designate a product as a regenerative medicine advanced therapy ("RMAT"). A drug is eligible for a RMAT designation if: 1) it is a regenerative medicine therapy which is a cell therapy, therapeutic tissue engineering product, human cell and tissue product, or any combination product using such therapies or products, except those products already regulated under Section 361 of the PHSA; 2) the drug is intended to treat, modify, reverse, or cure a serious or life-threatening disease or condition; and 3) preliminary clinical evidence indicates that the drug has the potential to address unmet medical needs for such disease or condition. A RMAT designation request must be made with the submission of an IND or as an amendment to an existing IND. FDA will determine if a product is eligible for RMAT designation within 60 days of submission. Advantages of the RMAT designation include all the benefits of the fast track and breakthrough therapy designation programs, including early interactions with the FDA. These early interactions may be used to discuss potential surrogate or intermediate endpoints to support accelerated approval. In 2019 the FDA stated in guidance that human gene therapies, including genetically modified cells, that lead to a sustained effect on cells or tissues, may meet the definition of a regenerative therapy.

FDA Regulation of Companion Diagnostics and Other Combination Products

We may seek to develop companion diagnostics for use in identifying patients that we believe will respond to our gene therapies. Similarly, our product candidates may require delivery devices. A biologic product may be regulated as a combination product if it is intended for use in conjunction with a medical device, such as a drug delivery device or an in vitro diagnostic device. For combination products, the biologic and device components must, when used together, be safe and effective and the product labeling must reflect their combined use. In some cases, the medical device component may require a separate premarket submission. Moreover, clinical trial sponsors using investigational devices in their studies must comply with FDA's investigational device exemption regulations. If the device component (e.g., in vitro diagnostic device) is not packaged with the drug component and authorized by the FDA as a combination product, or approved or cleared as a medical device, the device component must comply with the FDA general controls applicable to a medical device, including establishment registration, device listing, device labeling, unique device identifier, quality system regulation, medical device reporting, and reporting of corrections and removals requirements. If the device component is packaged with the drug component (e.g., drug delivery device), then only certain FDA general controls applicable to a medical device will apply (assuming the manufacturer's quality system complies with the cGMPs).

If the safety or effectiveness of a biologic product is dependent on the results of a diagnostic, the FDA may require that the in vitro companion diagnostic device and biologic product be contemporaneously authorized by the FDA, with labeling that describes the use of the two products together. The type of premarket submission required for a companion diagnostic device will depend on the FDA device classification. A premarket approval ("PMA"), application is required for high-risk devices classified as Class III; a 510(k) premarket notification is generally required for moderate risk devices classified as Class II. A de novo request may be used for novel devices not previously classified by the FDA (and hence are automatically Class III) but are low or moderate risk (due to the application of special controls) and thus are classified as Class II. Except in some limited circumstances, the FDA generally will not approve a biologic that is dependent upon the use of a companion diagnostic device if the device is not contemporaneously FDA-approved or -cleared. It's also possible that an in vitro diagnostic device could be subject to FDA enforcement discretion from compliance with the FDCA if it meets the definition of a Laboratory Developed Test ("LDT"). Recent regulatory and legislative proposals, however, may cause the FDA to actively regulate LDTs.

Post-approval Requirements

Any products manufactured or distributed pursuant to the FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements related to manufacturing, recordkeeping, and reporting, including adverse experience reporting, deviation reporting, shortage reporting, and periodic reporting, product sampling and distribution, advertising, marketing, promotion, certain electronic records and signatures, and post-approval obligations imposed as a condition of approval, such as Phase 4 clinical trials, REMS, and surveillance to assess safety and effectiveness after commercialization.

After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing annual program user fee requirements for approved products, excluding orphan products provided that certain criteria are met. Regulatory authorities may withdraw product approvals, require label modifications, or request product recalls, among other actions, if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

Changes to the manufacturing process are strictly regulated and often require prior FDA approval or notification before being implemented. In fact, in 2023, the FDA issued a guidance specifically on demonstrating product comparability, and the management and reporting of manufacturing changes for investigational and licensed cellular and gene therapy products. FDA regulations also require investigation and correction of any deviations from cGMP and specifications and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in production and quality control to maintain cGMP compliance.

The FDA also strictly regulates marketing, labeling, advertising, and promotion of products that are placed on the market. A company can make only those advertising and promotional claims relating to a product that are consistent with the label approved by the FDA. Physicians, in their independent professional medical judgment, may prescribe legally available products for unapproved indications that are not described in the product's labeling and that differ from those tested and that have been approved by the FDA. Biopharmaceutical companies, however, are required to promote their products only for the approved indications and in a manner that is consistent with the provisions of the approved label. Companies must also provide adequate balancing information on a product's risks in its advertising and promotional pieces. In 2023, the FDA took a few actions in the advertising and promotional spaces, including issuing a final rule and a guidance on risk and efficacy disclosures in direct-to-consumer advertising, and a guidance on communication of off-label scientific information about approved products. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including, but not limited to, criminal fines and civil penalties under the FDCA and False Claims Act, exclusion from participation in federal healthcare programs, mandatory compliance programs under corporate integrity agreements, suspension and debarment from government procurement and non-procurement programs, and refusal of orders under existing government contracts.

Moreover, the enacted Drug Quality and Security Act ("DQSA"), imposes obligations on sponsors of biopharmaceutical products related to product tracking and tracing. Among the requirements of this legislation, sponsors are required to provide certain information regarding the products to individuals and entities to which product ownership is transferred, are required to label products with a product identifier, and are required to keep certain records regarding the product. The transfer of information to subsequent product owners by sponsors is also required to be done electronically and will be required to allow interoperable electronic product tracing at the package level. Sponsors must also verify that purchasers of the sponsors' products are appropriately licensed. Further, under this legislation, manufactures have product verification responsibilities, as well as investigation, quarantine, disposition, and notification responsibilities related to counterfeit, diverted, stolen, and intentionally adulterated products that would result in serious adverse health consequences or death to humans, as well as products that are the subject of fraudulent transactions or which are otherwise unfit for distribution such that they would be reasonably likely to result in serious health consequences or death. Similar requirements additionally are also imposed through this legislation on other companies within the biopharmaceutical product supply chain, such as distributors and dispensers, as well as certain sponsor licensees and affiliates.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements before or after approval, may result in significant regulatory actions. Such actions may include refusal to approve pending applications, license or approval suspension or revocation, imposition of a clinical hold or termination of clinical trials, warning letters, untitled letters, cyber letters, modification of promotional materials or labeling, provision of corrective information, imposition of post-market requirements including the need for additional testing, imposition of distribution or other restrictions under a REMS, product recalls, product seizures or detentions, refusal to allow imports or exports, total or partial suspension of production or distribution, FDA debarment, injunctions, consent decrees, corporate integrity agreements, suspension and debarment from government procurement and non-procurement programs, refusal of orders under existing government contracts, exclusion from participation in federal and state healthcare programs, restitution, disgorgement, civil penalties, criminal prosecution, including fines and imprisonment, and adverse publicity, among other adverse consequences.

Additional Controls for Biologics

To help reduce the increased risk of the introduction of adventitious agents, the PHSA emphasizes the importance of manufacturing controls for products whose attributes cannot be precisely defined. The PHSA also provides authority to the FDA to immediately suspend licenses in situations where there exists a danger to public health, to prepare or procure products in the event of shortages and critical public health needs, and to authorize the creation and enforcement of regulations to prevent the introduction or spread of communicable diseases in the U.S. and between states.

After a BLA is approved, the product may also be subject to official lot release as a condition of approval. As part of the manufacturing process, the manufacturer is required to perform certain tests on each lot of the product before it is released for distribution. If the product is subject to official release by the FDA, the manufacturer submits samples of each lot of product to the FDA together with a release protocol showing the results of all the manufacturer's tests performed on the lot. The FDA may also perform certain confirmatory tests on lots of some products before releasing the lots for distribution by the manufacturer.

In addition, the FDA conducts laboratory research related to the regulatory standards on the safety, purity, potency, and effectiveness of biological products.

Patent Term Restoration

If approved, biologic products may also be eligible for periods of U.S. patent term restoration. If an application for patent term restoration is timely filed with the U.S. Patent and Trademark Office and granted, patent term restoration extends the patent life of a single unexpired patent, that has not previously been extended, for a maximum of five years. The total patent life of the product with the extension also cannot exceed fourteen years from the product's approval date. Subject to the prior limitations, the period of the extension is calculated by adding half of the time from the effective date of an IND to the initial submission of a complete marketing application, and all the time between the submission of the marketing application and its approval. This period may also be reduced by any time that the applicant did not act with due diligence.

Anti-Kickback Provisions and other Fraud and Abuse Requirements

The federal Anti-Kickback Statute is a criminal statute that prohibits, among other things, knowingly and willfully offering, paying, soliciting, or receiving remuneration directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for purchasing, leasing, ordering, or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs, in whole or in part. The term "remuneration" has been interpreted broadly to include anything of value. The Anti-Kickback Statute has been interpreted to apply to arrangements between biopharmaceutical industry members on the one hand and prescribers, purchasers, and formulary managers on the other. The Beneficiary Inducement Civil Monetary Penalties Law imposes similar restrictions on interactions between the biopharmaceutical industry and federal healthcare program beneficiaries. There are certain statutory exceptions and regulatory safe harbors to the Anti-Kickback Statute protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly, and practices that involve remuneration that may be alleged to be intended to induce or reward prescribing, purchases, or recommendations may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all its facts and circumstances.

Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce or reward referrals of federal healthcare program business, including purchases of products paid by federal healthcare programs, the statute has been violated. The Patient Protection and Affordable Care Act, of 2010, as amended, (the "ACA") modified the intent requirement under the Anti-Kickback Statute to a stricter standard, such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it to have committed a violation. In addition, the ACA also provided that a violation of the federal Anti-Kickback Statute is grounds for the government or a whistleblower to assert that a claim for reimbursement submitted to a federal healthcare program for payment of items or services resulting from such violation constitutes a per se false or fraudulent claim for purposes of the federal civil False Claims Act. The Department of Health and Human Services ("HHS") promulgated a regulation in November 2020 with respect to the safe harbors that is effective in two phases. First, the regulation excludes from the definition of "remuneration" limited categories of (a) Pharmacy Benefit Manager ("PBM") rebates or other reductions in price to a plan sponsor under Medicare Part D or a Medicaid Managed Care Organization plan reflected in point-of-sale reductions in price and (b) PBM service fees. Second, the regulation expressly provides that rebates to plan sponsors under Medicare Part D, either directly to the plan sponsor under Medicare Part D or indirectly through a PBM, will not be protected under the Anti-Kickback Statute discount safe harbor. The Inflation Reduction Act of 2022 extended a moratorium on the implementation, administration or enforcement of this final rule until January 1, 2032.

The federal civil False Claims Act prohibits any person from knowingly presenting, or causing to be presented, a false or fraudulent claim for payment to, or approval by, the federal government, knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government, or avoiding, decreasing, or concealing an obligation to pay money to the federal government. A claim includes "any request or demand" for money or property presented to the U.S. government. The civil False Claims Act has been used to assert liability on the basis of kickbacks and other improper referrals, improperly reported government pricing metrics such as Best Price or Average Manufacturer Price, improper use of Medicare provider or supplier numbers when detailing a provider of services, improper promotion of off-label uses not expressly approved by the FDA in a product's label, and allegations as to misrepresentations with respect to products, contract requirements, and services rendered. In addition, private payers have been filing follow-on lawsuits alleging fraudulent misrepresentation, although establishing liability and damages in these cases is more difficult than under the FCA. Intent to deceive is not required to establish liability under the civil False Claims Act. Rather, a claim may be false for deliberate ignorance of the truth or falsity of the information provided or for acts in reckless disregard of the truth or falsity of that information. Civil False Claims Act actions may be brought by the government or may be brought by private individuals on behalf of the government, called "qui tam" actions. If the government decides to intervene in a qui tam action and prevails in the lawsuit, the individual will share in the proceeds from any damages, penalties or settlement funds. If the government declines to intervene, the individual may pursue the case alone. The civil FCA provides for treble damages and a civil penalty for each false claim, such as an invoice or pharmacy claim for reimbursement, which can aggregate into tens and even hundreds of millions of dollars. For these reasons, since 2004, False Claims Act lawsuits against biopharmaceutical companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements, as much as $3.0 billion, regarding certain sales practices and promoting off label uses. Civil False Claims Act liability may further be imposed for known Medicare or Medicaid overpayments, for example, overpayments caused by understated rebate amounts, that are not refunded within 60 days of the identification the overpayment, even if the overpayment was not caused by a false or fraudulent act. In addition, civil judgment for violating the FCA may result in exclusion from federal healthcare programs, suspension and debarment from government procurement and non-procurement programs, and refusal of orders under existing government contracts. The majority of states also have statutes similar to the federal Anti-Kickback Statute and civil False Claims Act, which apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payer.

The government may further prosecute conduct constituting a false claim under the criminal False Claims Act. The criminal False Claims Act prohibits the making or presenting of a claim to the government knowing such claim to be false, fictitious, or fraudulent and, unlike the civil False Claims Act, requires proof of intent to submit a false claim.

The Civil Monetary Penalties Law is another potential statute under which biopharmaceutical companies may be subject to enforcement. Among other things, the civil monetary penalties statue imposes fines against any person who is determined to have knowingly presented, or caused to be presented, claims to a federal healthcare program that the person knows, or should know, is for an item or service that was not provided as claimed or is false or fraudulent.

Payment or reimbursement of prescription therapeutics by Medicaid or Medicare requires sponsors to submit certified pricing information to Centers of Medicare and Medicaid Services ("CMS"). The Medicaid Drug Rebate statute requires sponsors to calculate and report price points, which are used to determine Medicaid manufacturer rebate payments shared between the states and the federal government and Medicaid payment rates for certain therapeutics. For therapeutics paid under Medicare Part B, sponsors must also calculate and report their Average Sales Price, which is used to determine the Medicare Part B payment rate. In addition, therapeutics covered by Medicaid are subject to an additional inflation penalty which can substantially increase rebate payments. For certain products, including those approved under a BLA (including biosimilars), the Veterans Health Care Act (the "VHCA") requires sponsors to calculate and report to the Department of Veterans Affairs ("VA") a different price called the Non-Federal Average Manufacturer Price, which is used to determine the maximum price that can be charged to certain federal agencies, referred to as the Federal Ceiling Price ("FCP"). Like the Medicaid rebate amount, the FCP includes an inflation penalty. A Department of Defense regulation requires sponsors to provide this discount on therapeutics dispensed by retail pharmacies when paid by the TRICARE Program. All these price reporting requirements create risk of submitting false information to the government, potential FCA liability and exclusion from certain of these programs.

The VHCA also requires sponsors of covered therapeutics participating in the Medicaid program to enter into Federal Supply Schedule contracts with the VA through which their covered therapeutics must be sold to certain federal agencies at FCP. This necessitates compliance with applicable federal procurement laws and regulations, including submission of commercial sales and pricing information, and subjects companies to contractual remedies as well as administrative, civil, and criminal sanctions. In addition, the VHCA requires sponsors participating in Medicaid to agree to provide different mandatory discounts to certain Public Health Service grantees and other safety net hospitals and clinics under the 340B program based on the sponsor's reported Medicaid pricing information. The 340B program has its own regulatory authority to impose sanctions for non-compliance, adjudicate overcharge claims against sponsors by the purchasing entities, and impose civil monetary penalties for instances of overcharging.

The federal Health Insurance Portability and Accountability Act of 1996, ("HIPAA"), also created federal criminal statutes that prohibit, among other actions, knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any of the money or property owned by, or under the custody or control of, a healthcare benefit program, regardless of whether the payor is public or private, in connection with the delivery or payment for healthcare benefits, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense and knowingly and willfully falsifying, concealing, or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items, or services relating to healthcare matters. Additionally, the ACA amended the intent requirement of certain of these criminal statutes under HIPAA so that a person or entity no longer needs to have actual knowledge of the statute, or the specific intent to violate it, to have committed a violation.

In addition, as part of the ACA, the federal government enacted the Physician Payment Sunshine Act. Manufacturers of drugs, biologics and devices for which payment is available under Medicare, Medicaid, or the Children's Health Insurance Program (with certain exceptions) are required to annually report to CMS certain payments and other transfers of value made to or at the request of covered recipients, which are physicians (as defined under the Social Security Act), physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists and certified nurse midwifes licensed in the U.S. and U.S. teaching hospitals, as well as ownership and investment interests held by physicians and members of their immediate family. Payments made to principal investigators and research institutions at teaching hospitals for clinical trials are also included within this law. Reported information is made publicly available by CMS. Failure to submit required information may result in civil monetary penalties. If not preempted by this federal law, several states currently also require reporting of marketing and promotion expenses, as well as gifts and payments to healthcare professionals and organizations. State legislation may also prohibit gifts and various other marketing related activities or require the public posting of information. Certain states also require companies to implement compliance programs.

Further, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, ("HITECH Act"), and their respective implementing regulations impose certain requirements on covered entities relating to the privacy, security, and transmission of certain individually identifiable health information known as protected health information. Among other things, the HITECH Act, and its implementing regulations, made HIPAA's security standards and certain privacy standards directly applicable to business associates, defined as persons or organizations, other than members of a covered entity's workforce, that create, receive, maintain, or transmit protected health information on behalf of a covered entity for a function or activity regulated by HIPAA. The HITECH Act also strengthened the civil and criminal sanctions that may be imposed against covered entities, business associates, and individuals, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions. HIPAA privacy rules governing disclosures of protected health information by covered entities for research purposes may apply to gene therapy studies. In addition, other federal and state laws, such as the California Consumer Privacy Act and state security breach notification laws, may govern the privacy and security of health and other information in certain circumstances, many of which differ from each other in significant ways, thus complicating compliance efforts.

Many states have also adopted laws similar to each of the above federal laws, which may be broader in scope and apply to items or services reimbursed by any third-party payor, including commercial insurers. Certain state laws also regulate sponsors' use of prescriber-identifiable data. Certain states also require implementation of commercial compliance programs and compliance with the pharmaceutical industry's voluntary compliance guidelines and the applicable compliance program guidance promulgated by the federal government, or otherwise restrict payments or the provision of other items of value that may be made to healthcare providers and other potential referral sources; impose restrictions on marketing practices; or require sponsors to track and report information related to payments, gifts, and other items of value to physicians and other healthcare providers and entities. Recently, states have enacted or are considering legislation intended to make drug prices more transparent and deter significant price increases that impose reporting requirements on biopharmaceutical companies. These laws may affect our future sales, marketing, and other promotional activities by imposing administrative and compliance burdens. Such laws also typically impose significant civil monetary penalties for each instance of reporting noncompliance that can quickly aggregate into the tens of millions of dollars.

If our operations are found to be in violation of any of the laws or regulations described above or any other laws that apply to us, we may be subject to penalties or other enforcement actions, including significant civil monetary penalties, damages, criminal fines, disgorgement, imprisonment, exclusion from participation in government healthcare programs, corporate integrity agreements, suspension and debarment from government procurement and non-procurement programs, refusal of orders under existing government contracts, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations, any of which could adversely affect our business.

U.S. Foreign Corrupt Practices Act

The U.S. Foreign Corrupt Practices Act, to which we are subject, imposes certain recordkeeping requirements and prohibits corporations and individuals from engaging in certain activities to obtain or retain business or to influence a person working in an official capacity. It is illegal to pay, offer to pay or authorize the payment of anything of value to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity.

Coverage, Pricing and Reimbursement

The containment of healthcare costs has become a priority of federal, state, and foreign governments, and the prices of drugs have been a focus in this effort. Third-party payers and independent non-profit healthcare research organizations such as the Institute for Clinical and Economic Review are also increasingly challenging the prices charged for medical products and services and examining the medical necessity, budget-impact, and cost-effectiveness of medical products and services, in addition to their safety and efficacy. If these third-party payers do not consider a product to be cost-effective compared to other available therapies and/or the standard of care, they may not cover the product after approval as a benefit under their plans or, if they do, measures including prior authorization and step-throughs could be required, manufacturer rebates may be negotiated or required and/or the level of payment may not be sufficient to allow a company to sell its products at a profit. The U.S. federal and state governments and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products for branded prescription drugs. In this regard, for example, on November 27, 2020, CMS issued an interim final rule implementing a Most Favored Nation payment model under which reimbursement for certain Medicare Part B drugs and biologicals will be based on a price that reflects the lowest per capital Gross Domestic Product-adjusted ("GDP-adjusted") price of any non-U.S. member country of the Organization for Economic Co-operation and Development ("OECD") with a GDP per capita that is at least sixty percent of the U.S. GDP per capita. While this rule now has been rescinded, government negotiation of certain Medicare drug pricing continues to be the focus of recent proposed legislation. The Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. Failure of the Joint Select Committee on Deficit Reduction to reach required deficit reduction goals triggered the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year. While President Biden previously signed legislation to eliminate this reduction through the end of 2021, a 1% payment adjustment was implemented from April 1 – June 30, 2022, and a 2% payment adjustment took effect beginning July 1, 2022. Adoption of additional healthcare reform controls and measures and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals.

As a result, the marketability of any product which receives regulatory approval for commercial sale may suffer if the government and third-party payers choose to provide low coverage and reimbursement. In addition, an increasing emphasis on managed care in the U.S. has increased and will continue to increase the pressure on drug pricing. Decisions regarding whether to cover any of our products, the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. Further, no uniform policy for coverage and reimbursement exists in the U.S., and coverage and reimbursement can differ significantly from payor to payor. Coverage policies, third party reimbursement rates and drug pricing regulation may change at any time. In particular, the ACA contains provisions that may reduce the profitability of drug products, including, for example, increased rebates for drugs sold to Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal healthcare programs. Multiple other current and proposed legislative and regulatory efforts require and likely will in the future require payment of increased manufacturer rebates and implement mechanisms to reduce drug prices. Even if favorable coverage and reimbursement status is attained for one or more products that receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Regulation in the European Union

Product development, the regulatory approval process and safety monitoring of medicinal products and their manufacturers in the European Union proceed broadly in the same way as they do in the U.S. Therefore, many of the issues discussed above apply similarly in the context of the European Union. In addition, drugs are subject to the extensive price and reimbursement regulations of the various EU member states. The Clinical Trial Regulation EU 536/2014 ("CTR"), which replaced the Clinical Trials Directive 2001/20/EC, as amended ("CTD"), on January 31, 2022, provides a system for the approval of clinical trials in the European Union. The CTR is directly applicable in all member states without the need for national implementation. Whilst, for trials conducted in only one country, approval has to be obtained from the competent national authority of an EU member state in which the clinical trial is to be conducted before cross-border trials within the EU, it is possible to make a single harmonized electronic submission and have a single assessment process for clinical trials conducted in multiple member states. Furthermore, a clinical trial may only be started after a competent ethics committee has issued a favorable opinion on the Clinical Trial Application ("CTA"), which must be supported by an investigational medicinal product dossier with supporting information prescribed by the CTR and corresponding national laws of the member states and further detailed in applicable guidance documents. In the case of Advanced Therapy Investigational Medical Products ("ATIMPs") consisting of or containing Genetically Modified Organisms ("GMOs"), as is the case for our products, an additional approval for the environmental and biosafety aspects of the use and release of the GMO is required by the GMO competent authorities and GMO directives have been implemented in different ways by Member States; either following the directive for "Contained use" (Directive 2009/41/EC) or "deliberate release" (Directive 2001/18/EC). As a consequence, in some EU member states the GMO application must be approved before the CTA is submitted, in some after approval of the CTA, and in some, in parallel.

The sponsor of a clinical trial, or its legal representative, must be based in the European Economic Area ("EEA"). European regulators and ethics committees also require the submission of adverse event reports during a study and a copy of the final study report. Under the CTR, member states may dispense with the requirement for a legal representative for a non-EU resident sponsor provided there is a contact person based in the EEA.

Under the CTR, the introduction of a new databased called the Clinical Trial Information System ("CTIS"), requires sponsors to upload and submit all data, including initial clinical trial application data and documentation, to the CTIS, with such data being publicly available, with few exceptions. This means data transparency throughout the development process with the onus on sponsors to protect patient confidentiality at the point of submission.

Marketing approval

Marketing approvals under the European Union regulatory system may be obtained through a centralized or decentralized procedure. The centralized procedure results in the grant of a single marketing authorization that is valid for all 27 EU member states. Pursuant to Regulation (EC) No 726/2004, as amended, the centralized procedure is mandatory for drugs developed by means of specified biotechnological processes, and advanced therapy medicinal products as defined in Regulation (EC) No 1394/2007, as amended. Drugs for human use containing a new active substance for which the therapeutic indication is the treatment of specified diseases, including but not limited to acquired immune deficiency syndrome, neurodegenerative disorders, auto-immune diseases and other immune dysfunctions, as well as drugs designated as orphan drugs pursuant to Regulation (EC) No 141/2000, as amended, also fall within the mandatory scope of the centralized procedure. Because of our focus on gene therapies, which fall within the category of advanced therapy medicinal products ("ATMPs") and orphan indications, our products and product candidates will need to go through the centralized procedure.

In the marketing authorization application ("MAA") the applicant must properly and sufficiently demonstrate the quality, safety, and efficacy of the drug. Guidance on the factors that the EMA will consider in relation to the development and evaluation of ATMPs have been issued and include, among other things, the nonclinical studies required to characterize ATMPs; the manufacturing and control information that should be submitted in a MAA; and post-approval measures required to monitor patients and evaluate the long-term efficacy and potential adverse reactions of ATMPs. Although these guidelines are not legally binding, we believe that our compliance will effectively be necessary to gain and maintain approval for any of our product candidates. The maximum timeframe for the evaluation of an MAA under the centralized procedure is 210 days after receipt of a valid application subject to clock stops during which the applicant deals with EMA questions.

Market access can be expedited through the grant of conditional authorization for a medicine that may fulfil unmet needs which may be granted provided that the benefit-risk balance of the product is positive. The benefit-risk balance is likely to be positive if the applicant can provide comprehensive data and the benefit to public health of the medicinal product's immediate availability on the market outweighs the risks due to need for further data. Such authorizations are valid for one year and can be renewed annually. The holder will be required to complete specific obligations (ongoing or new studies, and in some cases additional activities) with a view to providing comprehensive data confirming that the benefit-risk balance is positive. Once comprehensive data on the product have been obtained, the marketing authorization may be converted into a standard marketing authorization (not subject to specific obligations). Initially, this is valid for 5 years, but can be renewed for unlimited validity. Applicants for conditional authorizations can benefit from early dialogue with EMA through scientific advice or protocol assistance and discuss their development plan well in advance of the submission of a marketing-authorization application. Other stakeholders (e.g., health technology assessment bodies) can be included.

In addition, the priority medicines ("PRIME") scheme for medicines that may offer a major therapeutic advantage over existing treatments, or benefit patients without treatment options based on early clinical data, is intended to support the development of medicines that target an unmet medical need. This voluntary scheme is based on enhanced interaction and early dialogue with developers of promising medicines, to optimize development plans and speed up evaluation so these medicines can reach patients earlier. Early dialogue and scientific advice also ensure that patients only participate in trials designed to provide the data necessary for an application, making the best use of limited resources.

The European Union also provides for a system of regulatory data and market exclusivity. According to Article 14(11) of Regulation (EC) No 726/2004, as amended, and Article 10 of Directive 2001/83/EC, as amended, upon receiving marketing authorization, new chemical entities approved on the basis of complete independent data package benefit from eight years of data exclusivity and an additional two years of market exclusivity. Data exclusivity prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic (abbreviated) application during the eight-year period from when the first placement of the product on the EEA market. During the additional two-year period of market exclusivity, a generic marketing authorization can be submitted, and the innovator's data may be referenced, but no generic medicinal product can be marketed until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of eleven 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 and the innovator can gain the period of data exclusivity, another company nevertheless could also market another version of the drug if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical test, preclinical tests, and clinical trials. The EMA has also issued guidelines for a comprehensive comparability exercise for biosimilars, and for specific classes of biological products. Under European Commission proposals for revisions to the EU's pharmaceutical legislation, the standard period of data protection may be reduced from eight to six years, but this may be extended by up to four years if particular criteria are fulfilled: i.e., two additional years if the new product is available in all EU Member States; an additional six months if the product addresses an unmet medical need; an additional six months for new chemical entities where the supporting clinical trials use an evidence-based comparator based on EMA scientific advice; and an additional year if, during the data protection period following authorization, the marketing authorization ("MA") holder receives an authorization for an additional therapeutic indication for which there is a significant clinical benefit in comparison with existing therapies (replacing the additional year of marketing protection available under the current regime). The additional period of marketing exclusivity protection (described above) will remain as two years following the expiry of the data protection period. These proposals will be subject to continuing discussion so it is not certain when and in what form the new legislation will be adopted.

Under Regulation (EC) No 141/2000 article 3 as amended (Orphan Drug Regulation, ("ODR")) a product can benefit from orphan drug status if it is intended for the diagnosis, prevention, or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 people in the European Community (EC) when the application is made. The principal benefit of such status is 10 years' market exclusivity once they are approved preventing the subsequent approval of similar medicines with similar indications although this may be reduced to six years under certain circumstances including if the product is sufficiently profitable not to justify maintenance of market exclusivity. Under the proposed new legislation, other than for orphan drugs addressing a high unmet medical need, the current 10-year period would be reduced to nine years. These periods may be extended by one year if either: the new product is available in all EU member states; or at least two years before the expiry of the orphan exclusivity period, the orphan MA holder obtains an MA for one or more further therapeutic indications for a different orphan condition.

Additional rules apply to medicinal products for pediatric use under Regulation (EC) No 1901/2006, as amended. Potential incentives include a six-month extension of any supplementary protection certificate granted pursuant to Regulation (EC) No 469/2009, however not in cases in which the relevant product is designated as an orphan medicinal product pursuant to the ODR. Instead, medicinal products designated as orphan medicinal product may enjoy an extension of the ten-year market exclusivity period granted under Regulation (EC) No 141/2000, as amended, to twelve years subject to the conditions applicable to orphan drugs. The proposed new legislation will retain the 6-month SPC extension but there would be an explicit obligation to place an authorized product with a pediatric indication on the market in every member state where the adult presentation is marketed. Additionally, the current separate reward of two years market exclusivity for pediatric indications of orphan products would no longer apply under the proposed legislation.

Manufacturing and promotion

Pursuant to European Commission Directive 2003/94/EC as transposed into the national laws of the member states, the manufacturing of investigational medicinal products and approved drugs is subject to a separate manufacturer's license and must be conducted in strict compliance with cGMP requirements, which mandate the methods, facilities, and controls used in manufacturing, processing, and packing of drugs to assure their safety and identity. Manufacturers must have at least one qualified person permanently and continuously at their disposal. The qualified person is ultimately responsible for certifying that each batch of finished product released onto the market has been manufactured in accordance with cGMP and the specifications set out in the marketing authorization or investigational medicinal product dossier. cGMP requirements are enforced through mandatory registration of facilities and inspections of those facilities. Failure to comply with these requirements could interrupt supply and result in delays, unanticipated costs, and lost revenues, and subject the applicant to potential legal or regulatory action, including but not limited to warning letters, suspension of manufacturing, seizure of product, injunctive action, or possible civil and criminal penalties.

Advertising

In the European Union, the promotion of prescription medicines is subject to intense regulation and control, including a prohibition on direct-to-consumer advertising. All medicines advertising must be consistent with the product's approved summary of products characteristics, factual, accurate, balanced and not misleading. Advertising of medicines pre-approval or off-label is prohibited. Some jurisdictions require that all promotional materials for prescription medicines be subjected to either prior internal or regulatory review & approval.

Other Regulatory Requirements

A holder of a marketing authorization for a medicinal product is legally obliged to fulfill several obligations by virtue of its status as a marketing authorization holder ("MAH"). The MAH can delegate the performance of related tasks to third parties, such as distributors or marketing collaborators, provided that this delegation is appropriately documented and the MAH maintains legal responsibility and liability.

The obligations of an MAH include:

- *Manufacturing and Batch Release.* MAHs should guarantee that all manufacturing operations comply with relevant laws and regulations, applicable good manufacturing practices, with the product specifications and manufacturing conditions set out in the marketing authorization and that each batch of product is subject to appropriate release formalities.
- *Pharmacovigilance.* MAHs are obliged to establish and maintain a pharmacovigilance system, including a qualified person responsible for oversight, to submit safety reports to the regulators and comply with the good pharmacovigilance practice guidelines adopted by the EMA.
- *Advertising and Promotion.* MAHs remain responsible for all advertising and promotion of their products, including promotional activities by other companies or individuals on their behalf and in some cases, must conduct internal or regulatory pre-approval of promotional materials.
- *Medical Affairs/Scientific Service.* MAHs are required to disseminate scientific and medical information on their medicinal products to healthcare professionals, regulators, and patients.
- *Legal Representation and Distributor Issues.* MAHs are responsible for regulatory actions or inactions of their distributors and agents.

- *Preparation, Filing and Maintenance of the Application and Subsequent Marketing Authorization.* MAHs must maintain appropriate records, comply with the marketing authorization's terms and conditions, fulfill reporting obligations to regulators, submit renewal applications and pay all appropriate fees to the authorities.

We may hold any future marketing authorizations granted for our product candidates in our own name or appoint an affiliate or a collaborator to hold marketing authorizations on our behalf. Any failure by an MAH to comply with these obligations may result in regulatory action against an MAH and ultimately threaten our ability to commercialize our products.

Reimbursement

In the European Union, the pricing and reimbursement mechanisms by private and public health insurers vary largely by country and even within countries. In respect of the public systems, reimbursement for standard drugs is determined by guidelines established by the legislature or responsible national authority. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. Other member states allow companies to determine the prices for their medicines but monitor and control company profits and may limit or restrict reimbursement and can include retrospective rebates to the government. The downward pressure on healthcare costs in general, particularly prescription drugs, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products and some of EU countries require the completion of studies that compare the cost-effectiveness of a particular product candidate to currently available therapies to obtain reimbursement or pricing approval. Special pricing and reimbursement rules may apply to orphan drugs.

Inclusion of orphan drugs in reimbursement systems tend to focus on the medical usefulness, need, quality and economic benefits to patients and the healthcare system as for any drug. Acceptance of any medicinal product for reimbursement may come with cost, use and often volume restrictions, which again can vary by country. In addition, results-based rules or agreements on reimbursement may apply. Recently, a process has been formalized that allows sponsors to receive parallel advice from EMA and relevant national health technology assessment ("HTA") bodies for pivotal clinical studies designed to support marketing approval. This process was followed for etranacogene dezaparvovec.

Orphan Drug Regulation

We have been granted orphan drug exclusivity for etranacogene dezaparvovec for the treatment of hemophilia B as well as for AMT-130 for the treatment of Huntington's disease subject to the conditions applicable to orphan drug exclusivity in the European Union. Regulation (EC) No 141/2000, as amended, states that a drug will be designated as an orphan drug if its sponsor can establish:

- that it is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in ten thousand persons in the community when the application is made, or that it is intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that the marketing of the drug in the European Union would generate sufficient return to justify the necessary investment; and
- that there exists no satisfactory method of diagnosis, prevention, or treatment of the condition in question that has been authorized in the European Union or, if such method exists, that the drug will be of significant benefit to those affected by that condition.

Regulation (EC) No 847/2000 sets out further provisions for implementation of the criteria for designation of a drug as an orphan drug. An application for the designation of a drug as an orphan drug must be submitted at any stage of development of the drug before filing of a marketing authorization application.

If an EU-wide community marketing authorization in respect of an orphan drug is granted pursuant to Regulation (EC) No 726/2004, as amended, the European Union and the member states will not, for a period of 10 years, accept another application for a marketing authorization, or grant a marketing authorization or accept an application to extend an existing marketing authorization, for the same therapeutic indication, in respect of a similar drug.

This period may however be reduced to six years if, at the end of the fifth year, it is established, in respect of the drug concerned, that the criteria for orphan drug designation are no longer met, in other words, when it is shown on the basis of available evidence that the product is sufficiently profitable not to justify maintenance of market exclusivity. Notwithstanding the foregoing, a marketing authorization may be granted, for the same therapeutic indication, to a similar drug if:

- the holder of the marketing authorization for the original orphan drug has given its consent to the second applicant;
- the holder of the marketing authorization for the original orphan drug is unable to supply sufficient quantities of the drug; or
- the second applicant can establish in the application that the second drug, although similar to the orphan drug already authorized, is safer, more effective, or otherwise clinically superior.

Regulation (EC) No 847/2000 lays down definitions of the concepts similar drug and clinical superiority, which concepts have been expanded upon in subsequent European Commission guidance. Other incentives available to orphan drugs in the European Union include financial incentives such as a reduction of fees or fee waivers and protocol assistance. Orphan drug designation does not shorten the duration of the regulatory review and approval process. Note the above proposed legislation would, if implemented, impact orphan protection in the future.

Human Capital Resources

As of December 31, 2023, we had a total of 480 employees, 239 of whom are based in The Netherlands, 221 in the U.S. and 20 in other European countries. The split of employees between operations, clinical development, pre-clinical and technology and general and administrative functions are included below:

	December 31, 2023	December 31, 2022
Operations	258	279
Clinical development	60	43
Pre-clinical development and technology	64	89
General and administrative	98	90
Total	**480**	**501**

As of December 31, 2023, 170 of our employees had an M.D. or Ph.D. degree, or the foreign equivalent. During 2017, we established a works council in the Netherlands. None of our employees are subject to collective bargaining agreements or other labor organizations. We believe that we have good relations with all our employees and with the works council in the Netherlands.

Our values are to:

- Be passionate about the patient;
- Act with integrity and respect;
- Take ownership and act with urgency;
- Collaborate for success;
- Innovate every day; and
- Focus relentlessly on quality.

Our people are a critical component in our continued success. We strive to maximize the potential of our human capital resources by creating a respectful, rewarding and inclusive work environment that enables our employees to further our values. Development of our culture is reflected as part of our annual corporate goals. We invest in numerous learning opportunities focused on individual, management and team development and other initiatives to support our employees and build our culture. In 2021 we initiated activities to coordinate our various ongoing activities and initiatives within an environmental, social and governance (“ESG”) framework.

Additional Information

uniQure B.V. (the "Company") was incorporated on January 9, 2012 as a private company with limited liability (besloten vennootschap met beperkte aansprakelijkheid) under the laws of the Netherlands. We are a leader in the field of gene therapy and seek to deliver to patients suffering from rare and other devastating diseases single treatments with potentially curative results. Our business was founded in 1998 and was initially operated through our predecessor company, Amsterdam Molecular Therapeutics Holding N.V ("AMT"). In 2012, AMT undertook a corporate reorganization, pursuant to which uniQure B.V. acquired the entire business and assets of AMT and completed a share-for-share exchange with the shareholders of AMT. Effective February 10, 2014, in connection with the initial public offering, we converted into a public company with limited liability (naamloze vennootschap) and changed its legal name from uniQure B.V. to uniQure N.V.

We are registered in the trade register of the Dutch Chamber of Commerce (Kamer van Koophandel) under number 54385229. Our headquarters are in Amsterdam, the Netherlands, and its registered office is located at Paasheuvelweg 25, Amsterdam 1105 BP, the Netherlands and its telephone number is +31 20 240 6000.

Our website address is www.uniqure.com. We make available free of charge through our investor website our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, proxy statements for our meetings of shareholders, and any amendments to these reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding uniQure and other issuers that file electronically with the SEC.

We currently announce material information to our investors and others using filings with the SEC, press releases, public conference calls, webcasts, or our investor relations website (uniqure.com/investors-media). Also available through our website's "Investors & Newsroom: Corporate Governance" page are charters for the Audit, Compensation and Nominating and Corporate Governance committees of our board of directors (the "Board"), along with a copy of our Code of Business Conduct and Ethics, available at uniqure.com/investors-media/corporate-governance. The information on our website is not part of, nor shall it be deemed to be incorporated by reference into, this Annual Report on Form 10-K or any other filings with the SEC.

Item 1A. Risk Factors.

An investment in our ordinary shares involves a high degree of risk. You should carefully consider the following information about these risks, together with the other information appearing elsewhere in this Annual Report on Form 10-K, including our financial statements and related notes thereto, before deciding to invest in our ordinary shares. We operate in a dynamic and rapidly changing industry that involves numerous risks and uncertainties. The risks and uncertainties described below are not the only ones we face. Other risks and uncertainties, including those that we do not currently consider material, may impair our business. If any of the risks discussed below actually occur, our business, financial condition, operating results, or cash flows could be materially adversely affected. This could cause the value of our securities to decline, and you may lose all or part of your investment.

Risks Related to the Development of Our Product Candidates

We are dependent on the success of our lead product candidate in clinical development, AMT-130 for the treatment of Huntington's disease. A failure of AMT-130 in clinical development, challenges associated with its regulatory pathway, or its inability to demonstrate sufficient efficacy to warrant further clinical development could adversely affect our business.

We have invested a significant portion of our development efforts and financial resources in the development of our lead clinical product candidate, AMT-130. In December 2023, we announced updated interim data from our ongoing Phase I/II clinical trials of AMT-130, including 30 months of follow-up data from the 39 patients then enrolled in our trials in the U.S. and in Europe. We also announced our plans to continue enrollment in a third cohort to investigate AMT-130 in combination with perioperative immune suppression to evaluate near-term safety, along with our plans to initiate regulatory interactions with the FDA and EMA to discuss the interim data and strategies for ongoing development of AMT-130.

There are numerous factors that could impede or otherwise negatively impact our further development of AMT-130, including, but not limited to, patient safety issues, our failure to demonstrate sufficient clinical efficacy or durability of response data to warrant further development, delays in our ability to enroll patients or challenges with regulatory authorities. Any one or combination of these factors could force us to halt or discontinue the ongoing clinical trials of AMT-130. Certain of these risk factors are heightened in the context of drug development for rare diseases like Huntington's disease in which non-traditional study designs are utilized to demonstrate efficacy and safety, including open-label studies, single arm studies, studies utilizing active comparators or natural history data, biomarkers or other forms of surrogate endpoints, which may be utilized due to the challenges inherent in designing and conducting clinical trials for severe diseases that progress slowly and that affect small patient populations. For example, in the course of our interactions with the FDA and EMA, the regulatory authorities may disagree with our interpretation of the interim safety and efficacy data we have received to date. Since AMT-130 is based on our novel gene therapy technology, we are unable predict how regulatory authorities will interpret our data or whether they will agree with our interim conclusions or trial design or whether those data may be utilized in later-stage or registrational trials. We may be required by such regulatory authorities to conduct additional randomized studies of AMT-130 beyond our existing clinical trials, which would be costly and would significantly delay the potential approval of AMT-130. We may not be able to commit sufficient capital to support additional clinical studies of AMT-130, in which case we may need to secure a development partner for AMT-130. Such partnerships may not be available, in which case we may not be able to fully fund the AMT-130 program.

If AMT-130 fails in development as a result of any underlying problem with our technology, then we may be required to discontinue development of other product candidates that are based on the same novel therapeutic approach. We cannot be certain that AMT-130, or any of our product candidates, will be successful in clinical trials or receive regulatory approval. If we were required to, or if we chose to, discontinue development of AMT-130 or any other future product candidates, or if any of them were to fail to receive regulatory approval or achieve sufficient market acceptance, we could be prevented from or significantly delayed in achieving profitability and our business would be adversely affected.

We have encountered and may encounter future delays in and impediments to the progress of our clinical trials or fail to demonstrate the safety and efficacy of our product candidates.

Drug development is expensive, time-consuming, and uncertain as to the outcome. Our product candidates are in different stages of clinical or preclinical development, and there is a significant risk of failure or delay in each of these programs. We are currently conducting Phase I/II clinical trials in the U.S. and Europe for AMT-130, our investigational gene therapy for the treatment of Huntington's disease. We are also advancing three other product candidates into clinical development – AMT-260 for the treatment of refractory mesial temporal lobe epilepsy, AMT-162 for the treatment of SOD1-ALS and AMT-191 for the treatment of Fabry disease.

We have experienced clinical setbacks in the past and may experience setbacks in the future. For example, we experienced an immaterial but unexpected delay when our clinical trials of HEMGENIX® were placed on clinical hold by the FDA from December 2020 to April 2021 following a preliminary diagnosis of hepatocellular carcinoma in one patient. Similarly, we experienced an unexpected delay in the enrollment of our Phase Ib/II clinical trial of AMT-130 for the treatment of Huntington's disease between July and October 2022 due to our voluntary postponement and comprehensive safety investigation into suspected unexpected serious adverse reactions in three patients.

A failure of one or more clinical trials can occur at any stage and for a variety of reasons that we cannot predict with accuracy and that are out of our control. Events that may prevent successful or timely completion of clinical development, as well as product candidate approval, include, but are not limited to:

- occurrence of serious adverse events associated with a product candidate that are viewed to outweigh its potential benefits;
- insufficient number of patients treated with the product candidate or study period for assessing the effectiveness of the product candidate insufficient in length to assess potential clinical development;
- failures or delays in reaching agreement with regulatory agencies on study design, particularly with respect to our novel gene therapies for which regulatory pathways remain untested;
- failures or delays in hiring sufficient personnel with the requisite expertise to execute multiple clinical programs simultaneously;
- failures or delays in reaching agreement on acceptable terms with clinical research organizations ("CROs") and clinical trial sites;
- failures or delays in patient recruiting into clinical trials or in the addition of new investigators;
- delays in receiving regulatory authorization to conduct our clinical trials or a regulatory authority decision that the clinical trial should not proceed;
- failures or delays in obtaining or failure to obtain required IRB and IBC approval at each clinical trial site;
- requirements of regulatory authorities, IRBs, or IBCs to modify a study in such a way that it makes the study impracticable to conduct;
- regulatory authority requirements to perform additional or unanticipated clinical trials or testing;
- changes in standards of care which may necessitate the modification of our clinical trials or the conduct of new trials;
- regulatory authority refusal to accept data from foreign clinical study sites;
- disagreements with regulatory authorities regarding our study design, including endpoints, our chosen indication, our chosen bases for comparison as it relates to clinical efficacy, our interpretation of data from preclinical studies and clinical trials or a finding that a product candidate's benefits do not outweigh its safety risks;
- recommendations from DSMBs to discontinue, pause, or modify the trial;
- imposition of a clinical hold by regulatory agencies after an inspection of our clinical trial operations or trial sites;
- suspension or termination of clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks, undesirable side effects, or other unexpected characteristics (alone or in combination with other products) of the product candidate, or due to findings of undesirable effects caused by a chemically or mechanistically similar therapeutic or therapeutic candidate;
- failure by CROs, other third parties or us to adhere to clinical trial requirements or otherwise properly manage the clinical trial process, including meeting applicable timelines, properly documenting case files, including the retention of proper case files, and properly monitoring and auditing clinical sites;
- failure of sites or clinical investigators to perform in accordance with Good Clinical Practice or applicable regulatory guidelines in other countries;
- failure of patients to abide by clinical trial requirements;

- delays or deviations in the testing, validation, manufacturing, and delivery of our product candidates to the clinical sites;
- delays in having patients complete participation in a study or return for post-treatment follow-up;
- clinical trial sites or patients dropping out of a study;
- the number of patients required for clinical trials of our product candidates being larger than we anticipate;
- clinical trials producing negative or inconclusive results, or our studies failing to reach the necessary level of statistical significance, requiring that we conduct additional clinical trials or abandon product development programs;
- interruptions in manufacturing clinical supply of our product candidates or issues with manufacturing product candidates that meet the necessary quality requirements;
- unanticipated clinical trial costs or insufficient funding, including paying substantial application user fees;
- emergence of new information about or impacting our product candidates or the field of gene therapy;
- with respect to the product candidates for which we manufacture drug product in-house, determinations that there are issues with our manufacturing facility or process; or
- changes in regulatory requirements and guidance, as well as new, revised, postponed, or frozen regulatory requirements (such as the EU Clinical Trials Regulation), that require amending or submitting new clinical protocols, undertaking additional new tests or analyses, or submitting new types or amounts of clinical data.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. Such trials and regulatory review and approval take many years. It is impossible to predict when or if any of our clinical trials will demonstrate that product candidates are effective or safe in humans.

If the results of our clinical trials are inconclusive, or fail to meet the level of statistical significance required for regulatory approval or if there are safety concerns, concerns around durability of response or other adverse events associated with our product candidates, we may:

- be delayed in or altogether prevented from obtaining marketing approval for our product candidates;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions, safety warnings, labeling statements or contraindications;
- be subject to changes in the way our products are administered;
- be required to perform additional clinical trials to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw their approval of the product or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy;
- be subject to legal action or other challenges; or
- experience damage to our reputation.

Because of the nature of the gene therapies we are developing, regulators may also require us to demonstrate long-term gene expression, clinical efficacy, and safety, which may require additional or longer clinical trials for which we may not be able to meet the regulatory authorities' standards.

Our ability to recruit patients for our clinical trials is heavily reliant on third parties, such as clinical trial sites. Clinical trial sites may not have the adequate infrastructure established to handle the administration of our gene therapy products, related surgeries or other means of product administration, or may have difficulty finding eligible patients to enroll into a clinical trial, which may delay or impede our planned trials. In addition, we or any of our collaborators may not be able to locate and enroll enough eligible patients to participate in these trials as required by the FDA, the EMA or similar regulatory authorities outside the U.S. and the European Union. This may result in our failure to initiate or continue clinical trials for our product candidates or may cause us to abandon one or more clinical trials altogether. Because our programs are focused on the treatment of patients with rare or orphan or ultra-orphan diseases, our ability to enroll eligible patients in these trials may be limited or slower than we anticipate considering the small patient populations involved and the specific age range required for treatment eligibility in some indications. In addition, our potential competitors, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions and governmental agencies and public and private research institutions, may seek to develop competing therapies, which would further limit the small patient pool available for our studies. Also, patients may be reluctant to enroll in gene therapy trials

where there are other therapeutic alternatives available or that may become available for various reasons, including, but not limited to, uncertainty about the safety or effectiveness of a new therapeutic such as a gene therapy and the possibility that treatment with a gene therapy therapeutic could preclude future gene therapy treatments due to the formation of antibodies following and in response to the treatment.

Any inability to successfully initiate or complete preclinical and clinical development could result in additional costs to us or impair our ability to receive marketing approval, to generate revenues from product sales or obtain regulatory and commercialization milestones and royalties. In addition, if we make manufacturing or formulation changes to our product candidates, including changes in the vector or manufacturing process used, we may need to conduct additional studies to bridge our modified product candidates to earlier versions. It is also possible that any such manufacturing or formulation changes may have an adverse impact on the performance of the product candidate. Clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize our product candidates and may materially harm our business, financial condition, and results of operations.

Our progress in early-stage clinical trials may not be predictive of long-term efficacy in late-stage clinical trials, and our progress in trials for one product candidate may not be predictive of progress in trials for other product candidates.

Our product candidates may fail to show the required level of safety and efficacy in later stages of clinical development despite having successfully advanced through initial clinical studies. For example, the results from early clinical trials of AMT-130, our product candidate targeting Huntington's disease, may not be predictive of the results of later-stage trials. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the clinical trial protocols and the rate of dropout among clinical trial participants. Moreover, should there be an issue with the design of any of our clinical trials, our results may be impacted. We may not discover such a flaw until the clinical trial is at an advanced stage. Changes to product candidates, whether as a result of regulatory feedback or changes in clinical trial procedures and protocols, may also impact their performance in subsequent studies.

A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in later-stage clinical trials even after achieving promising results in early-stage clinical trials. If a larger population of patients does not experience positive results during our clinical trials, if the results are not reproducible or if our products show diminishing activity over time, our product candidates may not receive approval from the FDA, EMA or comparable regulatory authorities. Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit, or prevent regulatory approval. In addition, we may encounter regulatory delays or rejections because of many factors, including changes in regulatory policy during the period of product development. Failure to confirm favorable results from earlier trials by demonstrating the safety and effectiveness of our products in later-stage clinical trials with larger patient populations could have a material adverse effect on our business, financial condition, and results of operations.

Interim or preliminary data from studies or trials announced or published from time to time may change as more data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we publicly disclose interim or preliminary data from preclinical studies and clinical trials, which are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data, the particular study, or trial. We also make assumptions, estimations, calculations, and conclusions as part of our preliminary or interim analyses of data, and we may not have received or had the opportunity to evaluate all data at that time. As a result, the interim or preliminary data that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results once additional data have been received and fully evaluated. Interim or preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, preliminary or interim data should be viewed with caution until the final data are available.

From time to time, we also disclose interim data from our preclinical studies and clinical trials. For example, in December 2023, we announced updated interim data from our ongoing Phase I/II clinical trial of AMT-130, along with our expectation that we will present additional clinical updates with respect to AMT-130 in the future. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Significant differences between interim data and final data could seriously harm our business.

Third parties, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions, or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. For example, we plan to initiate regulatory interactions in the first half of 2024 to discuss the U.S. and European data from our ongoing Phase I/II clinical trial of AMT-130 and potential strategies for ongoing development of AMT-130. These regulatory authorities may not agree with the assumptions, estimates, calculations, conclusions or analyses underlying the interim data from our ongoing clinical trial of AMT-130 or any of our future proposals regarding the ongoing development of AMT-130. Even if the data supporting such regulatory interactions are suggestive of clinical responses, the durability of response may not be sustained over time or may not be sufficient to support regulatory approval.

In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure. Any information we determine not to disclose may ultimately be deemed significant by you or others with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product candidate or our business. If the preliminary or interim data that we report differ from final results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, product candidates may be harmed, which could seriously harm our business.

We are making use of exploratory biomarkers and other data that are not scientifically validated, and our reliance on these data may lead us to direct our resources inefficiently.

We are making use of experimental biological markers, or biomarkers, in an effort to facilitate our drug development and to optimize our clinical trials. Biomarkers are proteins or other substances which can serve as an indicator of specific cell processes or as evidence of a patient's biological response to drug product administration. For example, with respect to our ongoing clinical trials of AMT-130, we are measuring NfL in cerebrospinal fluid ("CSF") as a potential indicator of neurodegeneration, as well as the pharmacodynamics of mHTT in CSF and changes in total brain volume of patients treated with AMT-130.

While we believe that these biomarkers and data may serve useful purposes for us, including in the evaluation of whether our product candidates are having their intended effects through their assumed mechanisms of action, improving patient selection and monitoring patient compliance with trial protocols, these biomarkers and data have not been scientifically validated and are considered experimental as used in our trials. If our understanding and use of biomarkers is inaccurate or flawed, or if our reliance on specific biomarkers such as NfL and mHTT is otherwise misplaced, then we may fail to realize any benefits from using these data and may also be led to invest time and financial resources inefficiently in attempting to develop inappropriate drug candidates.

We may not be successful in our efforts to use our gene therapy technology platform to build a pipeline of additional product candidates or otherwise leverage our research and technology to remain competitive.

An element of our strategy is to use our gene therapy technology platform to expand our product pipeline and to progress our product candidates through preclinical and clinical development ourselves or together with collaborators. To date, we have only been successful in obtaining regulatory approval for one product, HEMGENIX®, our gene therapy for the treatment of hemophilia B, which was approved for commercialization by the FDA and the EMA in November 2022 and February 2023, respectively. AMT-130 is our investigational gene therapy candidate for the treatment of Huntington's disease that utilizes our proprietary, gene-silencing miQURE platform and incorporates an AAV vector carrying a miRNA specifically designed to silence the huntingtin gene and the potentially highly toxic exon 1 protein fragment, which is currently in ongoing Phase I/II studies in the U.S. and Europe. In addition to AMT-130, we are also developing other investigational gene therapies, including AMT-260 for the treatment of MTLE, AMT-162 for the treatment of SOD1 ALS and AMT-191 for the treatment of Fabry's disease. Although we currently have a pipeline of programs at various stages of development, including an approved product, we may not be able to identify or develop product candidates that are safe and effective. Even if we are successful in continuing to build our pipeline, the potential product candidates that we identify may not be suitable for clinical development.

Research programs to identify new product candidates require substantial technical, financial, and human resources. Due to the significant resources required for the development of our product candidates, we must decide which product candidates to pursue and advance and the resources to allocate to each. For example, as a result of the Reorganization, we discontinued investments in certain of our prior research and development programs, including AMT-210 for the treatment of Parkinson's disease, and certain other technology projects, prioritizing instead our early clinical-stage programs, including AMT-130, AMT-260, AMT-162 and AMT-191.

Our decisions concerning the allocation of research, development, collaboration, management, and financial resources toward particular product candidates, including the decisions stemming from our Reorganization, may not lead to the development of any viable commercial product and may divert resources away from better opportunities. We or any collaborators may focus our efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful. If we do not continue to successfully develop and commercialize product candidates based upon our technology, we may face difficulty in obtaining product revenues in future periods, which could result in significant harm to our business, results of operations and financial position and materially adversely affect our share price.

Our business development strategy depends on our ability to obtain rights to key technologies through in-licenses and support the development of our product pipeline through out-licenses, and those efforts may not be successful.

We may expand our product pipeline from time to time through strategic transactions that involve in-licensing the rights to key technologies, including those related to gene delivery, genes, and gene cassettes. For example, in July 2021, we acquired uniQure France (formerly Corlieve Therapeutics SAS) and its lead program, now known as AMT-260, to treat refractory MTLE. AMT-260 is being developed based on exclusive licenses to certain patents uniQure France obtained from two French research institutions that continue to collaborate with us. uniQure France also obtained an exclusive license from Regenxbio, Inc. to use AAV9 in connection with the delivery of any sequence that affects the expression of the GRIK2 gene in humans. Notwithstanding efforts to expand our product pipeline, the cost of drug development is high as is the rate of failure in the drug development process. In order to fund the development of some of our existing product candidates, we may seek to out-license some of our product candidates or technologies to other pharmaceutical or biotechnology companies or other third parties. The aim of such out-licensing would be generate non-dilutive funds in the form of up-front or milestone payments or royalties. Such decisions will be taken on a case-by-case basis, as the opportunity arises or is required.

The future success of our business will depend in significant part on our business development efforts with respect to existing and future product candidates, including our ability to in-license or otherwise acquire the rights to additional product candidates or technologies, particularly through our collaborations with academic research institutions, and our ability to out-license product candidates and technologies for which collaboration with external parties forms a part of our business strategy. However, we may be unable to in-license or acquire the rights to any such product candidates or technologies from third parties on acceptable terms or at all. The in-licensing and acquisition of gene therapy technologies is a competitive area, and many more established companies are also pursuing strategies to license or acquire product candidates or technologies that we may consider attractive. These established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be competitors may be unwilling to license rights to us. Furthermore, we may be unable to identify suitable product candidates or technologies within our areas of focus. If we are unable to successfully obtain rights to suitable product candidates or technologies, our business, financial condition, and prospects could suffer.

Similarly, there is no guarantee that we will generate product candidates that are suitable for out licensing or attractive to potential collaborators, and even if we do, there is no guarantee that we will be successful in identifying potential licensees and successfully negotiating such collaborations on agreeable terms if and when required. Any failure with respect to our business development efforts may materially affect our ability to finance our business and support the development of our product pipeline.

Negative public opinion and increased regulatory scrutiny of gene therapy and genetic research may damage public perception of our product candidates or adversely affect our ability to conduct our business or obtain marketing approvals for our product candidates.

Gene therapy remains a novel technology. Our technology utilizes vectors derived from viruses, which may be perceived as unsafe or may result in unforeseen adverse events. Public perception may be influenced by claims that gene therapies are unsafe, and gene therapies may not ultimately gain the acceptance of the public or the medical community. The risk of cancer remains a concern for gene therapy, and we cannot guarantee that patients treated in any of our planned or future clinical studies will not develop cancer as a result of being treated with our product candidates. In addition, there is the potential risk of delayed adverse events following exposure to gene therapy products due to persistent biological activity of the genetic material or other components of products used to carry the genetic material.

Public and medical community adoption of any of our gene therapies will depend on other factors, including the ease of administration in comparison to other therapeutics and the extent to which our therapies are successful in slowing disease progression if not acting as a cure for the disease. For example, the need for lengthy and complex surgeries for the administration of a product candidate may impact the acceptance of a product. In particular, our success will depend upon physicians who specialize in the treatment of genetic diseases targeted by our products prescribing treatments that involve the use of our products in lieu of, or in addition to, existing treatments with which they are familiar and for which greater clinical data may be available.

More restrictive government regulation of gene therapies or negative public opinion may have an adverse effect on our business, financial condition, results of operations and prospects and may delay or impair the development and commercialization of our product candidates or demand for any products we may develop. For example, earlier gene therapy trials led to several well-publicized adverse events, including cases of leukemia and death seen in other trials using other vectors.

Serious adverse events in our clinical trials, or other clinical trials involving gene therapy products or our competitors' products, even if not ultimately attributable to the relevant product candidates, and the resulting publicity, could result in increased government regulation, unfavorable public perception, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for those product candidates that are approved and a decrease in demand for any products for which we obtain marketing approval. A small number of patients have experienced serious adverse events during our clinical trials of AMT-060 (HEMGENIX®), etranacogene dezaparvovec (AMT-061), and AMT-130. However, adverse events in our clinical trials or those conducted by third parties (even if not ultimately attributable to our product candidates), and the resulting publicity, could result in delay, a hold or termination of our clinical trials, increased governmental regulation, unfavorable public perception, failure of the medical community to accept and prescribe gene therapy treatments, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for those product candidates that are approved and a decrease in demand for any such product candidates. If any of these events should occur, it may have a material adverse effect on our business, financial condition, and results of operations.

Certain of our product candidates may require medical devices for product administration and/or diagnostics, resulting in our product candidates being deemed combination products or otherwise being dependent upon additional regulatory approvals. This may result in the need to comply with additional regulatory requirements. If we are unable to meet these regulatory requirements, we may be delayed or not be able to obtain product approval.

Certain of our product candidates require medical devices for administration, such as AMT-130 and AMT-260, each of which requires a stereotactic, magnetic resonance imaging guided catheter. Other of our product candidates may also require the use of a companion diagnostic device to confirm the presence of specific genetic or other biomarkers. In addition, certain of our product candidates, including AMT-130 and AMT-260, may require the use of immunosuppressive agents to reduce the inflammatory responses associated with administration.

It is possible that our product candidates would be deemed to be combination products, potentially necessitating compliance with the FDA's investigational device regulations, separate marketing application submissions for the medical device component, a demonstration that our product candidates are safe and effective when used in combination with the medical devices, cross-labeling with the medical device, and compliance with certain of the FDA's device regulations. If we are not able to comply with the FDA's device regulations, if we are not able to effectively partner with the applicable medical device manufacturers, if we or any partners are not able to obtain any required FDA clearances or approvals of the applicable medical devices, or if we are not able to demonstrate that our product candidates are safe and efficacious when used with the applicable medical devices, we may be delayed in or may never obtain FDA approval for our product candidates, which would materially harm our business.

Moreover, certain of our delivery modalities, such as direct delivery of product candidates to the brain, may require significant time and physician ability and skill. If physicians are not able to effectively deliver our product candidates to the applicable site of action or if delivery modalities are too difficult, or if there is reluctance to administer immunosuppressive agents that are outside of the standard of care to treat immune responses from the administration of our therapies, we may never be able to obtain approval for our product candidates, may be delayed in obtaining approval, or, following approval, physicians may not adopt our product candidates, any of which may materially harm our business.

Risks Related to Our Manufacturing

Our manufacturing facilities are subject to significant government regulations and approvals. If we fail to comply with these regulations or maintain these approvals, our business could be materially harmed.

With the exception of AMT-260 and AMT-162, we produce our gene therapies at our Lexington Facility using a proprietary baculovirus expression vector system. Our Lexington Facility, where we manufacture HEMGENIX®, is subject to ongoing regulation and periodic inspection by the FDA, EU member state, and other regulatory bodies to ensure compliance with cGMP and other requirements. Any failure to follow and document our adherence to such cGMP regulations or other regulatory requirements may lead to significant delays in the availability of products for commercial sale or clinical study, may result in the termination of or a hold on a clinical study, or may delay or prevent filing or approval of marketing applications for our products.

Failure to comply with applicable regulations could also result in the FDA, EU member state, or other applicable authorities taking various actions, including:

- levying fines and other civil penalties;
- imposing consent decrees or injunctions;
- requiring us to suspend or put on hold one or more of our clinical trials;
- suspending or withdrawing regulatory approvals;
- delaying or refusing to approve pending applications or supplements to approved applications;
- requiring us to suspend manufacturing activities or product sales, imports or exports;
- requiring us to communicate with physicians and other customers about concerns related to actual or potential safety, efficacy, and other issues involving our products;
- mandating or recommending product recalls or seizing products;
- imposing operating restrictions; or
- seeking criminal prosecutions, among other outcomes.

Poor control of production processes can also lead to the introduction of adventitious agents or other contaminants, or to inadvertent changes in the properties or stability of a product candidate that may not be detectable in final product testing and that could have an adverse effect on clinical studies, or patient safety or efficacy. Moreover, if our manufacturing facility is not able to meet regulatory requirements, we may need to implement costly and time-consuming remedial actions. Any of the foregoing could materially harm our business, financial condition, and results of operations.

Moreover, if we are not able to manufacture a sufficient amount of our product candidates for clinical studies or eventual commercialization, or if we are unable to manufacture sufficient supply of HEMGENIX® consistent with our manufacturing and supply obligations to CSL Behring, our development programs and commercial prospects will be harmed. If we cannot produce an adequate amount of our drug substance and product in compliance with the applicable regulatory requirements, we may need to contract with a third party to do so, in which case third party manufacturers may not be available to us on favorable terms or at all. The addition of a new manufacturer may also require FDA, EMA, EU, and other regulatory authority approvals, which we may not be able to obtain.

Gene therapies are complex, expensive and difficult to manufacture. We could experience capacity, production or technology transfer challenges that could result in delays in our development or commercialization schedules or otherwise adversely affect our business.

Our proprietary manufacturing process leveraging insect cells and baculoviruses to produce to AAV-based gene therapies is highly complex and is regularly subject to variation or production difficulties. Issues with any of our manufacturing processes, even minor deviations from our standard processes, could result in insufficient yield, product deficiencies or manufacturing failures that result in adverse patient reactions, lot failures, insufficient inventory, product recalls and product liability claims. Additionally, we may not be able to scale up some or all our manufacturing processes as necessary and on our desired timelines to meet the demands of our clinical product pipeline, which may result in delays in regulatory approvals, inability to produce sufficient amounts of clinical or commercial product, or otherwise adversely affect our business.

Factors common to the manufacturing process associated with most biologics and drugs could also cause production interruptions for us, including, without limitation, raw materials shortages and other supply chain challenges, raw material failures, limited control over pricing of raw materials, growth media failures, equipment malfunctions, costs associated with servicing real property lease and other contractual obligations, facility contamination, labor problems, natural disasters, disruption in utility services, public health crises, terrorist activities, war or cases of force majeure and acts of God that are beyond our control. We also may encounter problems in hiring and retaining the experienced and specialized personnel needed to operate our manufacturing facilities, processes and testing, which could result in delays in our production or difficulties in maintaining compliance with applicable regulatory requirements.

We manufacture HEMGENIX® at our Lexington Facility which is optimized to meet our commercial manufacturing and supply obligations pursuant to the CSL Behring collaboration. This optimization and dedicated capacity for HEMGENIX® could limit our ability to manufacture other product candidates or components thereof to support our development programs or those of third parties. The manufacturing of HEMGENIX® pursuant to our obligations under the CSL Behring Collaboration is expensive and requires the dedication of significant company resources. In September 2022, CSL Behring notified us of its intent to transfer manufacturing technology in the coming years related to HEMGENIX® to a third-party contract manufacturer to be designated by CSL Behring in the future. Until CSL Behring identifies and designates a new manufacturer capable of supporting the commercial requirements of HEMGENIX®, we will continue to incur significant costs associated with our manufacturing and supply obligations. Following such transfer, we may experience challenges in adapting our Lexington Facility to meet the manufacturing and supply needs for products other than HEMGENIX® as a result of excess capacity or our ability to adapt to new processes, among other challenges. Any problems or limitations with respect to our manufacturing processes or facilities, including our existing commercial supply and manufacturing obligations to CSL Behring, could make us a less attractive collaborator for academic research institutions and other parties, which could limit our access to additional attractive development programs or sources of capital, result in delays in our clinical development or marketing schedules and materially harm our business.

We currently rely and expect to continue to rely on third parties to conduct product manufacturing for certain of our product candidates, and these third parties may not perform satisfactorily.

We currently rely, and expect to continue to rely, on third parties for the production of some of our preclinical study and planned clinical trial materials and, therefore, we can control only certain aspects of their activities. The facilities used by us and our contract manufacturers to manufacture certain of our product candidates must be reviewed by the FDA pursuant to inspections that will be conducted after we submit a BLA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the cGMP for the manufacture of our products and product candidates that are not manufactured in house. If we or our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or other regulatory bodies, we will not be able to obtain and/or maintain regulatory approval for our products manufactured by third parties. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative third-party manufacturers, which may not be available and which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

Our use of viruses, chemicals and other potentially hazardous materials requires us to comply with regulatory requirements and exposes us to significant potential liabilities.

Our development and manufacturing processes involve the use of viruses, chemicals, other potentially hazardous materials and produce waste products. Accordingly, we are subject to national, federal, state, and local laws and regulations in the U.S. and the Netherlands governing the use, manufacture, distribution, storage, handling, treatment, and disposal of these materials. In addition to ensuring the safe handling of these materials, we are subject to increased safeguards and security measures for many of these agents, including controlling access and screening of entities and personnel who have access to them, and establishing a comprehensive national database of registered entities. In the event of an accident or failure to comply with environmental, occupational health and safety and export control laws and regulations, we could be held liable for damages that result, and any such liability could exceed our assets and resources, and could result in material harm to our business, financial condition, and results of operations.

Our resources might be adversely affected if we are unable to validate our manufacturing processes and methods or develop new processes and methods to meet our product supply needs and obligations.

The manufacture of our AAV gene therapies is complex and requires significant expertise. Even with the relevant experience and expertise, manufacturers of gene therapy products often encounter difficulties in production, particularly in scaling out and validating initial production and ensuring that the product meets required specifications. These problems include difficulties with production costs and yields, quality control, including stability and potency of the product, quality assurance testing, operator error, shortages of qualified personnel, as well as compliance with strictly enforced federal, state, and foreign regulations. In the past, we have manufactured certain batches of product candidates intended for nonclinical, clinical and process validation purposes that have not met all our pre-specified quality parameters. To meet our expected future production needs and our regulatory filing timelines for gene therapy product candidates, we will need to complete the validation of our manufacturing processes and methods for each program, and we may need to develop and validate new or larger scale manufacturing processes and methods. If we are unable to consistently manufacture our gene therapy product candidates or any approved products in accordance with our pre-specified quality parameters and applicable regulatory standards, it could adversely impact our ability to validate our manufacturing processes and methods, to meet our production needs, to file a BLA or other regulatory submissions, to develop our other proprietary programs, to conserve our cash, or to receive financial payments pursuant to our agreements with third parties.

Risks Related to Regulatory Approval of Our Products

We cannot predict when or if we will obtain marketing approval to commercialize our product candidates.

The development and commercialization of our product candidates, including their design, testing, manufacture, safety, efficacy, purity, recordkeeping, labeling, storage, approval, advertising, promotion, sale, and distribution, are subject to comprehensive regulation by the FDA and other regulatory agencies in the U.S., the EMA, and other regulatory agencies of the member states of the European Union, and similar regulatory authorities in other jurisdictions. Failure to obtain marketing approval for a product candidate in a specific jurisdiction will prevent us from commercializing the product candidate in that jurisdiction and our ability to generate revenue will be materially impaired.

The process of obtaining marketing approval for our product candidates in the U.S., the European Union, and other countries is expensive and may take many years, if approval is obtained at all. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. Regulatory authorities may also be delayed in completing their review of any marketing applications submitted by us or our partners. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application, may decide that our data are insufficient for approval, may require additional preclinical, clinical, or other studies and may not complete their review in a timely manner. Further, any marketing approval we ultimately obtain may be for only limited indications or be subject to stringent labeling or other restrictions or post-approval commitments that render the approved product not commercially viable.

The risks associated with the marketing approval process are heightened by the status of our products as gene therapies.

We believe that all our current product candidates will be viewed as gene therapy products by the applicable regulatory authorities. While there are several gene therapy product candidates under development in the U.S., the FDA has only approved a limited number of gene therapy products, to date. Accordingly, regulators like the FDA may have limited experience with the review and approval of marketing applications for gene therapy products, which may adversely affect the approval prospects for our product candidates.

Both the FDA and the EMA have demonstrated caution in their regulation of gene therapy treatments, and ethical and legal concerns about gene therapy and genetic testing may result in additional regulations or restrictions on the development and commercialization of our product candidates that are difficult to predict. The FDA and the EMA have issued various guidance documents pertaining to gene therapy products, which will likely be applicable to our product candidates prior to our obtaining regulatory approval in the U.S. or the EU. The close regulatory scrutiny of gene therapy products may result in delays and increased costs and may ultimately lead to the failure to obtain approval for any gene therapy product. Experiences with existing gene therapies, including any emergent adverse effects, could also impact how the FDA and the EMA view our products and product candidates, making it harder to obtain or maintain regulatory approvals.

Regulatory requirements affecting gene therapy have changed frequently and continue to evolve, and agencies at both the U.S. federal and state level, as well as congressional committees and foreign governments, have sometimes expressed interest in further regulating biotechnology. In the U.S., there have been a number of changes relating to gene therapy development. By example, FDA issued a number of guidance documents, and continues to issue guidance documents, on human gene therapy development, one of which was specific to human gene therapy for hemophilia, one that was specific to neurodegenerative diseases, and another of which was specific to rare diseases. Moreover, the European Commission conducted a public consultation in early 2013 on the application of EU legislation that governs advanced therapy medicinal products, including gene therapy products, which could result in changes in the data we need to submit to the EMA for our product candidates to gain regulatory approval or change the requirements for tracking, handling and distribution of the products which may be associated with increased costs. In addition, divergent scientific opinions among the various bodies involved in the review process may result in delays, require additional resources, and ultimately result in rejection.

The FDA, EMA, and other regulatory authorities will likely continue to revise and further update their approaches to gene therapies in the coming years. These regulatory agencies, committees and advisory groups and the new regulations and guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to generate sufficient product revenues to maintain our business.

We may use certain specialized pathways to develop our product candidates or to seek regulatory approval. We may not qualify for these pathways, or such pathways may not ultimately speed the time to approval or result in product candidate approval.

We have obtained and may in the future seek one or more fast-track designations, breakthrough therapy designation, RMAT designation, PRIME scheme access or priority review designation for our product candidates. A fast-track product designation is designed to facilitate the clinical development and expedite the review of drugs intended to treat a serious or life-threatening condition and which demonstrate the potential to address an unmet medical need. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, where preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. An RMAT designation is designed to accelerate approval for regenerative advanced therapies. Priority review designation is intended to accelerate the FDA marketing application review timeframe for drug products that treat a serious condition and that, if approved, would provide a significant improvement in safety or effectiveness. PRIME is a scheme provided by the EMA, similar to the FDA's breakthrough therapy designation, to enhance support for the development of medicines that target an unmet medical need.

For drugs and biologics that have been designated as fast track products, RMAT, or breakthrough therapies, or granted access to the PRIME scheme, interaction and communication between the regulatory agency and the sponsor of the trial can help to identify the most efficient path for clinical development. Sponsors of fast-track products, RMAT products, or breakthrough therapies may also be able to submit marketing applications on a rolling basis, meaning that the FDA may review portions of a marketing application before the sponsor submits the complete application to the FDA, if the sponsor pays the user fee upon submission of the first portion of the marketing application and the FDA approves a schedule for the submission of the remaining sections. For products that receive a priority review designation, the FDA's marketing application review goal is shortened to six months, as opposed to ten months under standard review.

Designation as a fast-track product, breakthrough therapy, RMAT, PRIME, or priority review product is within the discretion of the regulatory agency. Accordingly, even if we believe one of our product candidates meets the relevant criteria, the agency may disagree and instead determine not to make such a designation. In any event, the receipt of such a designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional regulatory procedures and does not assure ultimate marketing approval by the agency. In addition, the FDA may later decide that the products no longer meet the applicable conditions for qualification as either a fast-track product, RMAT, or a breakthrough therapy or, for priority review products, decide that the period for FDA review or approval will not be shortened. Moreover, in the U.S., the FDA expects that sponsors with products under these programs will be prepared for a more rapid pace of development, including with respect to manufacturing or any combination medical devices, such as companion diagnostics. If we are unable to meet these expectations, we may not be able to fully avail ourselves of certain advantages of these programs.

Biologics studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may receive accelerated approval by the FDA, meaning the agency may approve the product candidate based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit. Even if we do qualify for accelerated approval, we may be unsuccessful in meeting post-marketing compliance requirements, or fail to conduct required post-approval studies, or to confirm a clinical benefit during post-marketing studies, which could result in the FDA withdrawing our product from the market. In recent years, the accelerated approval pathway has come under significant FDA and public scrutiny. Accordingly, it is uncertain whether the FDA may be more conservative in granting accelerated approval or, if granted, more apt to withdraw approval if clinical benefit is not confirmed. There is no guarantee that regulatory interactions with FDA or comparable foreign authorities will result in our ability to avail ourselves of any specialized approval pathways for our product candidates.

Our failure to obtain or maintain orphan product exclusivity for any of our product candidates for which we seek this status could limit our commercial opportunity, and if our competitors are able to obtain orphan product exclusivity before we do, we may not be able to obtain approval for our competing products for a significant period.

Regulatory authorities in some jurisdictions, including the U.S. and the European Union, may designate drugs for relatively small patient populations as orphan drugs. While certain of our product candidates, including AMT-130 have received orphan drug designation, there is no guarantee that we will be able to receive such designations in the future. The FDA may grant orphan designation to multiple sponsors for the same compound or active molecule and for the same indication. If another sponsor receives FDA approval for such product before we do, we would be prevented from launching our product in the U.S. for the orphan indication for a period of at least seven years unless we can demonstrate clinical superiority.

Moreover, while orphan drug designation neither shortens the development or regulatory review time, nor gives the product candidate advantages in the regulatory review or approval process, generally, if a product with an orphan drug designation subsequently receives the first marketing approval for the relevant indication, the product is entitled to a period of market exclusivity, which precludes the FDA or the EMA from approving another marketing application for the same drug for the same indication for that period. The FDA and the EMA, however, may subsequently approve a similar drug or same drug, in the case of the U.S., for the same indication during the first product's market exclusivity period if the FDA or the EMA concludes that the later drug is clinically superior in that it is shown to be safer or more effective or makes a major contribution to patient care. Orphan exclusivity in the U.S. also does not prevent the FDA from approving another product that is considered to be the same as our product candidates for a different indication or a different product for the same orphan indication. If another product that is the same as ours is approved for a different indication, it is possible that third-party payors will reimburse for products off-label even if not indicated for the orphan condition. Moreover, in the U.S. the exact scope of orphan drug exclusivity is currently uncertain and evolving due to a recent court decision.

Orphan drug exclusivity may be lost if the FDA or the EMA determines that the request for designation was materially defective, or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition or if the incidence and prevalence of patients who are eligible to receive the drug in these markets materially increase. The inability to obtain or failure to maintain adequate product exclusivity for our product candidates could have a material adverse effect on our business prospects, results of operations and financial condition.

Our focus on developing gene therapies makes it difficult to determine the availability and utility of the orphan drug regime to our product candidates. Regulatory criteria with respect to orphan products are evolving, especially in gene therapy. By example, in the U.S., whether two gene therapies are considered to be the same for the purpose of determining clinical superiority was updated via a final guidance document specific to gene therapies, and depends on a number of factors, including the expressed transgene, the vector, and other product or product candidate features. Depending on the products, whether two products are ultimately considered to be the same may be determined by FDA on a case-by-case basis, making it difficult to make predictions regarding when the FDA might be able to make an approval of a product effective and whether periods of exclusivity will effectively block competitors seeking to market products that are the same or similar to ours for the same intended use. Accordingly, whether any of our gene therapies will be deemed to be the same as another product or product candidate is uncertain.

As appropriate, we intend to seek available periods of regulatory exclusivity for our product candidates. However, there is no guarantee that we will be granted these periods of regulatory exclusivity or that we will be able to maintain these periods of exclusivity.

The FDA grants product sponsors certain periods of regulatory exclusivity, during which the agency may not approve, and in certain instances, may not accept, certain marketing applications for competing drugs. For example, biologic product sponsors may be eligible for twelve years of exclusivity from the date of approval, seven years of exclusivity for drugs that are designated to be orphan drugs, and/or a six-month period of exclusivity added to any existing exclusivity period for the submission of FDA requested pediatric data. While we intend to apply for all periods of market exclusivity that we may be eligible for, there is no guarantee that we will be granted any such periods of market exclusivity. By example, regulatory authorities may determine that our product candidates are not eligible for periods of regulatory exclusivity for various reasons, including a determination by the FDA that a BLA approval does not constitute a first licensure of the product. Additionally, under certain circumstances, the FDA may revoke the period of market exclusivity. Thus, there is no guarantee that we will be able to maintain a period of market exclusivity, even if granted. In the case of orphan designation, other benefits, such as tax credits and exemption from user fees may be available. If we are not able to obtain or maintain orphan drug designation or any period of market exclusivity to which we may be entitled, we could be materially harmed, as we will potentially be subject to greater market competition and may lose the benefits associated with programs. It is also possible that periods of exclusivity will not adequately protect our product candidates from competition. For instance, even if we receive twelve years of exclusivity from the FDA, other applicants will still be able to submit and receive approvals for versions of our product candidates through a full BLA.

If we do not obtain or maintain periods of market exclusivity, we may face competition sooner than otherwise anticipated. For instance, in the U.S., this could mean that a competing biosimilar product may be able to apply to the FDA and obtain approval either as a biosimilar to one of our products or even as an interchangeable product. This may require that we undertake costly and time-consuming patent litigation, to the extent available, or defend actions brought by the biosimilar applicant for declaratory judgment. If a biosimilar product does enter the market, it is possible that it could be substituted for one of our product candidates, especially if it is available at a lower price.

It is also possible that, at the time we obtain approval of our product candidates, regulatory laws and policies around exclusivities may have changed. For instance, there have been efforts to decrease the U.S. period of exclusivity to a shorter timeframe. Future proposed budgets, international trade agreements and other arrangements or proposals may affect periods of exclusivity.

If any of our product candidates receive regulatory approval, we and/or our partners will be subject to extensive regulatory requirements. Failure to fulfill and comply with the applicable regulatory requirements could result in regulatory enforcement actions that would be detrimental to our business.

Following any regulatory approval, the FDA and the EMA may impose certain post-approval requirements related to a product. Specifically, any approved products will be subject to continuing and comprehensive regulation concerning the product's design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, and distribution. Regulatory authorities may also require post-marketing testing, known as Phase 4 testing, a risk evaluation and mitigation strategy, and surveillance to monitor the effects of an approved product or place conditions on an approval that could restrict the distribution or use of the product. Failure to comply with any of these requirements could result in regulatory, administrative, or other enforcement action, which would be detrimental to our business.

For instance, the FDA and other government agencies closely regulate the post-approval marketing and promotion of approved products, including off-label promotion, industry-sponsored scientific and educational activities, and on the Internet and social media. Approved products may be marketed only for the approved indications and in accordance with the provisions of the approved labeling. Failure to comply with regulatory promotional standards could result in actions being brought against us by these agencies.

Moreover, if a company obtains FDA approval for a product via the accelerated approval pathway, the company would be required to conduct a post-marketing confirmatory trial to verify and describe the clinical benefit in support of full approval. FDA can require that this confirmatory trial be commenced prior to FDA granting a product accelerated approval. An unsuccessful post-marketing study or failure to complete such a study could result in the expedited withdrawal of the FDA's marketing approval for a product using a statutorily defined streamlined process.

Changes to some of the conditions established in an approved application, including changes in labeling, indications, manufacturing processes or facilities, may require a submission to and approval by the FDA or the EMA, as applicable, before the change can be implemented. A New Drug Application ("NDA")/BLA or MAA supplement for a new indication typically requires clinical data similar to that in the original application. The applicable regulatory authorities would review such supplement using similar procedures and actions as in reviewing NDAs/BLAs and MAAs.

Adverse event reporting and submission of periodic reports is required following marketing approval. Regulatory authorities may withdraw product approvals or request product recalls, as well as impose other enforcement actions, if a company fails to comply with regulatory standards, if it encounters problems following initial marketing, or if previously unrecognized problems are subsequently discovered.

In addition, the manufacture, testing, packaging, labeling, and distribution of products after approval will need to continue to conform to cGMPs. Drug and biological product manufacturers, including us, and certain of their subcontractors are subject to periodic unannounced inspections by the FDA or the EMA for compliance with cGMPs. Accordingly, manufacturers must continue to expend time, money, and effort in the areas of production and quality control to maintain compliance with cGMPs. In addition, prescription drug manufacturers in the U.S. must comply with applicable provisions of the Drug Supply Chain Security Act and provide and receive product tracing information, maintain appropriate licenses, ensure they only work with other properly licensed entities and have procedures in place to identify and properly handle suspect and illegitimate products. If we or any of our contractors are unable to comply with the requirements that are applicable to drug manufacturers, we or they may be subject to regulatory enforcement, or may need to conduct a recall or take other corrective actions, which could result in material harm to us or our products.

Where we partner with third parties for the development, approval, and marketing of a product, such third parties will be subject to the same regulatory obligations as we will. However, as we will not control the actions of the applicable third parties, we will be reliant on them to meet their contractual and regulatory obligations. Accordingly, actions taken by any of our partners could materially and adversely impact our business.

Risks Related to Commercialization

If we, or our commercial partners, are unable to successfully commercialize our product candidates or experience significant delays in doing so, our business could be materially harmed.

Our ability to generate revenues from our product candidates will depend on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on many factors, including:

- successful completion of preclinical studies and clinical trials, and other work required by regulators;
- receipt and maintenance of marketing approvals from applicable regulatory authorities;
- obtaining and maintaining patent and trade secret protection and non-patent, exclusivities for our product candidates;
- maintaining regulatory approvals using our manufacturing facility in Lexington, Massachusetts;
- launch and commercialization of our products, if approved, whether alone or in collaboration with others;
- identifying and engaging effective distributors or resellers on acceptable terms in jurisdictions where we plan to utilize third parties for the marketing and sales of our product candidates;
- acceptance of our products, if approved, by patients, the medical community, and third-party payers;
- effectively competing with existing therapies and gene therapies based on safety and efficacy profiles;

- the strength of our marketing and distribution;
- the achievement optimal pricing based on durability of expression, safety, and efficacy;
- the ultimate content of the regulatory authority approved label, including the approved clinical indications, and any limitations or warnings;
- any distribution or use restrictions imposed by regulatory authorities;
- the interaction of our products with any other medicines that patients may be taking or the restriction on the use of our products with other medicines;
- the standard of care at the time of product approval;
- the relative convenience and ease of administration of our products;
- obtaining healthcare coverage and adequate reimbursement of our products;
- any price concessions, rebates, or discounts we may need to provide;
- complying with any applicable post-approval commitments and requirements, and maintaining a continued acceptable overall safety profile; and
- obtaining adequate reimbursement for the total patient population and each subgroup to sustain a viable commercial business model in U.S. and EU markets.

Even if our product candidates are approved, they may be subject to limitations that make commercialization difficult. There may be limitations on the indicated uses and populations for which the products may be marketed. They may also be subject to other conditions of approval, may contain significant safety warnings, including boxed warnings, contraindications, and precautions, may not be approved with label statements necessary or desirable for successful commercialization, or may contain requirements for costly post-market testing and surveillance, or other requirements, including the submission of a risk evaluation and mitigation strategy ("REMS") to monitor the safety or efficacy of the products. Failure to achieve or implement any of the above elements could result in significant delays or an inability to successfully commercialize our product candidates, which could materially harm our business.

The affected populations for our gene therapies may be smaller than we or third parties currently project, which may affect the size of our addressable markets.

Our projections of the number of people who have the diseases we are seeking to treat, as well as the subset of people with these diseases who have the potential to benefit from treatment with our therapies, are estimates based on our knowledge and understanding of these diseases and may change. The total addressable market opportunities for these therapies will depend upon many factors, including the diagnosis and treatment criteria included in the final label, if approved for sale in specified indications, acceptance by the medical community, patient consent, patient access and product pricing and reimbursement, among other factors.

Prevalence estimates are frequently based on information and assumptions that are not exact and may not be appropriate, and the methodology is forward-looking and speculative. For example, the addressable markets for certain of our AAV-based gene therapies may be impacted by the prevalence of neutralizing antibodies to the capsids, which are an integral component of our gene therapy constructs. Patients that have pre-existing antibodies to a particular capsid might not be eligible for administration of a gene therapy that includes this particular capsid. Moreover, neutralizing antibodies may be developed by a patient following administration of the product, which may render the patient ineligible for subsequent dosing. The use of such data to support addressable market estimates involves risks and uncertainties and is subject to change based on various factors. Our estimates may prove to be incorrect and new studies and information may change the estimated incidence or prevalence of the diseases we seek to address. The number of patients with the diseases we are targeting may turn out to be lower than expected or may not be otherwise amenable to treatment with our products, reimbursement may not be sufficient to sustain a viable business for all sub-populations being studied, or new patients may become increasingly difficult to identify or access, any of which could adversely affect our results of operations and our business.

Any approved gene therapy we seek to offer may fail to achieve the degree of market acceptance by physicians, patients, third party payers and others in the medical community necessary for commercial success.

Doctors may be reluctant to accept gene therapy as a treatment option or, where available, choose to continue to rely on existing treatments. The degree of market acceptance of any of our product candidates that receive marketing approval in the future will depend on many factors, including:

- the efficacy and potential advantages of our therapies compared with alternative treatments;

- our ability to convince payers of the long-term cost-effectiveness of our therapies and, consequently, the availability of third-party coverage and adequate reimbursement;
- the cost of treatment with gene therapies, including ours, in comparison to traditional chemical and small molecule treatments;
- the limitations on use and label requirements imposed by regulators;
- the convenience and ease of administration of our gene therapies compared with alternative treatments;
- the willingness of the target patient population to try new therapies, especially a gene therapy, and of physicians to administer these therapies;
- the strength of marketing and distribution support;
- the prevalence and severity of any side effects;
- limited access to site of service that can perform the product preparation and administer the infusion; and
- any restrictions by regulators on the use of our products.

A failure to gain market acceptance for any of the above reasons, or any reasons at all, by a gene therapy for which we receive regulatory approval would likely hinder our ability to recapture our substantial investments in that and other gene therapies and could have a material adverse effect on our business, financial condition, and results of operation.

If the market opportunities for our product candidates are smaller than we believe they are, our product revenues may be adversely affected, and our business may suffer.

We focus our research and product development on treatments for severe genetic and orphan diseases. Our understanding of both the number of people who have these diseases, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, are based on estimates. These estimates may prove to be incorrect and new studies may reduce the estimated incidence or prevalence of these diseases. The number of patients in the U.S., the EU and elsewhere may turn out to be lower than expected, may not be otherwise amenable to treatment with our products or patients may become increasingly difficult to identify and access, any of which could adversely affect our business, financial condition, results of operations and prospects.

Further, there are several factors that could contribute to making the actual number of patients who receive other potential products less than the potentially addressable market. These include the lack of widespread availability of, and limited reimbursement for, new therapies in many underdeveloped markets. Further, the severity of the progression of a disease up to the time of treatment, especially in certain degenerative conditions, could diminish the therapeutic benefit conferred by a gene therapy. Lastly, certain patients' immune systems might prohibit the successful delivery of certain gene therapy products to the target tissue, thereby limiting the treatment outcomes.

Ethical, legal, and social issues associated with genetic testing may reduce demand for any gene therapy products for which we obtain marketing approval.

Prior to receiving certain gene therapies, patients may be required to undergo genetic testing. Genetic testing has raised concerns regarding the appropriate utilization and the confidentiality of information provided by genetic testing. Genetic tests for assessing a person's likelihood of developing a chronic disease have focused public attention on the need to protect the privacy of patient's underlying genetic information. For example, concerns have been expressed that insurance carriers and employers may use these tests to discriminate based on genetic information, resulting in barriers to the acceptance of genetic tests by consumers. This could lead to governmental authorities restricting genetic testing or calling for limits on or regulating the use of genetic testing, particularly for diseases for which there is no known cure. Any of these scenarios could decrease demand for any products for which we obtain marketing approval.

If we, or our commercial partners, obtain approval to commercialize any of our product candidates outside of the U.S., a variety of risks associated with international operations could materially adversely affect our business.

We expect that we will be subject to additional risks in commercializing any of our product candidates outside the U.S., including:

- different regulatory requirements for approval of drugs and biologics in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements which may make it more difficult or expensive to export or import products and supplies to or from the U.S.;

- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration, and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the U.S.;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism or natural disasters including earthquakes, typhoons, floods, and fires.

We face substantial competition, and others may discover, develop, or commercialize competing products before or more successfully than we do.

The development and commercialization of new biotechnology and biopharmaceutical products, including gene therapies, is highly competitive. We may face intense competition with respect to our current and future product candidates from large and specialty pharmaceutical companies and biotechnology companies worldwide, who, like us, currently market and sell products or are pursuing the development of products for the treatment of rare diseases. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization. In recent years, there has been a significant increase in commercial and scientific interest and financial investment in gene therapy as a therapeutic approach, which has intensified the competition in this area.

We face worldwide competition from larger pharmaceutical companies, specialty pharmaceutical companies and biotechnology firms, universities and other research institutions and government agencies that are developing and commercializing pharmaceutical products. Our key competitors focused on developing therapies in various indications, include among others, Pfizer, Freeline Therapeutics, Intellia Therapeutics, Sangamo Biosciences, Voyager Therapeutics, Passage Bio, Roche, PTC Therapeutics, Prilenia Therapeutics, CombiGene, Caritas Therapeutics, Alnylam, Wave Life Sciences, Bayer AG (AskBio), Amicus Therapeutics, 4D Molecular Therapeutics, Sanofi, Idorsia, Amicus, Spark, Takeda, Chiesi, CANbridge, Abeona, Annexon, Vico, Alexion (AZ), Neurona, Combigene, NeuExcell, EpiBlok, Biogen, ionis, Eisai and Lexeo.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than the products that we develop. Our competitors also may obtain FDA, EMA, or other regulatory approval for their products more rapidly than we do, which could result in our competitors establishing a strong market position before we are able to enter the market. A competitor approval may also prevent us from entering the market if the competitor receives any regulatory exclusivities that block our product candidates. Because we expect that gene therapy patients may generally require only a single administration, we believe that the first gene therapy product to enter the market for a particular indication will likely enjoy a significant commercial advantage and may also obtain market exclusivity under applicable orphan drug regimes.

Many of the companies with which we are competing or may compete in the future have significantly greater financial resources and expertise than we do in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products. Moreover, actions taken in connection with the Reorganization to streamline our product portfolio may hamper our ability to remain competitive. Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in more resources being concentrated among a smaller number of our competitors. Smaller and other early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

Risks Related to Our Dependence on Third Parties

We rely, and expect to continue to rely, on third parties to conduct, supervise, and monitor our preclinical studies and clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines in the conduct and completion of such trials or failing to comply with regulatory requirements.

We rely on third parties, study sites, and others to conduct, supervise, and monitor our preclinical and clinical trials for our product candidates and do not currently plan to independently conduct clinical or preclinical trials of any other potential product candidates. We expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical and scientific institutions, and clinical and preclinical investigators, to conduct our preclinical studies and clinical trials.

While we have agreements governing the activities of such third parties, we have limited influence and control over their actual performance and activities. For instance, our third-party service providers are not our employees, and except for remedies available to us under our agreements with such third parties we cannot control whether or not they devote sufficient time and resources to our ongoing clinical, non-clinical, and preclinical programs. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our preclinical studies or clinical trials in accordance with regulatory requirements or our stated protocols, if they need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our protocols, regulatory requirements or for other reasons, our trials may be repeated, extended, delayed, or terminated, we may not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates, we may not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates, or we or they may be subject to regulatory enforcement actions. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed. To the extent we are unable to successfully identify and manage the performance of third-party service providers in the future, our business may be materially and adversely affected. Our third-party service providers may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting trials or other therapeutic development activities that could harm our competitive position.

Our reliance on these third parties for development activities reduces our control over these activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the applicable protocol, legal, regulatory, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. For example, we will remain responsible for ensuring that each of our trials is conducted in accordance with the general investigational plan and protocols for the trial. We must also ensure that our preclinical trials are conducted in accordance with GLPs, as appropriate. Moreover, the FDA and comparable foreign regulatory authorities require us to comply with GCPs for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these requirements through periodic inspections of trial sponsors, clinical and preclinical investigators, and trial sites. If we or any of our third-party service providers fail to comply with applicable GCPs or other regulatory requirements, we or they may be subject to enforcement or other legal actions, the data generated in our trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional studies.

In addition, we will be required to report on certain financial interests of our third-party investigators if these relationships exceed certain financial thresholds or meet other criteria. The FDA or comparable foreign regulatory authorities may question the integrity of the data from those clinical trials conducted by investigators who may have conflicts of interest.

We cannot assure that, upon inspection by a given regulatory authority, such regulatory authority will determine that any of our trials complies with the applicable regulatory requirements. In addition, our clinical trials must be conducted with product candidates that were produced under GMP conditions. Failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process. We also are required to register certain clinical trials and post the results of certain completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within specified timeframes. Failure to do so can result in enforcement actions and adverse publicity.

Agreements with third parties conducting or otherwise assisting with our clinical or preclinical studies might terminate for a variety of reasons, including a failure to perform by the third parties. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative providers or to do so on commercially reasonable terms. Switching or adding additional third parties involves additional costs and requires management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, if we need to enter into alternative arrangements, it could delay our product development activities and adversely affect our business. Though we carefully manage our relationships with our third parties, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects, and results of operations.

We also rely on other third parties to store and distribute our products for the clinical and preclinical trials that we conduct. Any performance failure on the part of our distributors could delay the development, marketing approval, or commercialization of our product candidates, producing additional losses and depriving us of potential product revenue.

We rely on third parties for important aspects of our development programs. If these parties do not perform successfully or if we are unable to enter into or maintain key collaborations or other contractual arrangements, our business could be adversely affected.

We have in the past entered into, and expect in the future to enter into, collaborations with other companies and academic research institutions with respect to important elements of our development programs. Any collaboration we enter into may pose several risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- we may have limited or no control over the design or conduct of clinical trials sponsored by collaborators;
- we may be hampered from entering into collaboration arrangements if we are unable to obtain consent from our licensors to enter into sublicensing arrangements of technology we have in-licensed;
- if any collaborator does not conduct the clinical trials they sponsor in accordance with regulatory requirements or stated protocols, we will not be able to rely on the data produced in such trials in our further development efforts;
- collaborators may not perform their obligations as expected;
- collaborators may also have relationships with other entities, some of which may be our competitors;
- collaborators may not pursue development and commercialization of any product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could develop, independently or with third parties, products that compete directly or indirectly with our products or product candidates, if, for instance, the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- our collaboration arrangements may impose restrictions on our ability to undertake other development efforts that may appear to be attractive to us;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- a collaborator with marketing and distribution rights that achieves regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including over proprietary rights, contract interpretation or the preferred course of development, could cause delays or termination of the research, development or commercialization of product candidates, lead to additional responsibilities for us, delay or impede reimbursement of certain expenses or result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our rights or expose us to potential litigation;

- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may in some cases be terminated for the convenience of the collaborator and, if terminated, we could be required to expend additional funds to pursue further development or commercialization of the applicable product or product candidates.

If any collaboration does not result in the successful development and commercialization of products or if a collaborator were to terminate an agreement with us, we may not receive future research funding or milestone or royalty payments under that collaboration, and we may lose access to important technologies and capabilities of the collaboration. All the risks relating to product development, regulatory approval and commercialization described herein also apply to the activities of any development collaborators.

Risks Related to Our Intellectual Property

We rely on licenses of intellectual property from third parties, and such licenses may not provide adequate rights, may be open to multiple interpretations or may not be available in the future on commercially reasonable terms or at all, and our licensors may be unable to obtain and maintain patent protection for the technology or products that we license from them.

We currently are heavily reliant upon licenses of proprietary technology from third parties that are important or necessary to the development of our technology and products, including technology related to our manufacturing process, our vector platform, our gene cassettes, and the therapeutic genes of interest we are using. These and other licenses may not provide adequate rights to use such technology in all relevant fields of use. Licenses to additional third-party technology that may be required for our development programs may not be available in the future or may not be available on commercially reasonable terms, which could have a material adverse effect on our business and financial condition.

In some circumstances, we may not have the right, or have otherwise given up the right, to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we own or license from third parties. In addition, some of our agreements with our licensors require us to obtain consent from the licensor before we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of our business which may materially impact any revenue that may be due to us in connection with such patents. In addition, if third parties who license patents to us fail to maintain such patents, or lose rights to those patents, the rights we have licensed may be reduced or eliminated.

Our intellectual property licenses with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors. The agreements under which we license intellectual property or technology from third parties 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, either of which could have a material adverse effect on our business and financial condition.

If we fail to comply with our obligations in our intellectual property licenses with third parties, we could lose rights that are important to our business.

Our licensing arrangements with third parties may impose diligence, development and commercialization timelines, milestone payment, royalty, insurance, and other obligations on us. If we fail to comply with these obligations, our counterparties may have the right to terminate these agreements either in part or in whole, in which case we might not be able to develop, manufacture or market any product that is covered by these agreements or may face other penalties under the agreements. Such an occurrence could materially adversely affect the value of the product candidate being developed under any such agreement or may otherwise result in reputational damage to our business. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or amended agreements with less favorable terms or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

If we are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection is not sufficiently broad, our ability to successfully commercialize our products may be impaired.

We rely, in part, upon a combination of forms of intellectual property, including in-licensed and owned patents to protect our intellectual property. Our success depends in large part on our ability to obtain and maintain this protection in the U.S., the European Union, and other countries, in part by filing patent applications related to our novel technologies and product candidates. Our patents may not provide us with any meaningful commercial protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. The patents we own currently are and may become subject to future patent opposition or similar proceedings. Additionally, the patent prosecution process is expensive, time-consuming, and uncertain, and in certain instances we have chosen, and in the future we may choose, not to file and prosecute all necessary or desirable patent applications. For example, our defense of certain patent cases in each of Canada, the United Kingdom, the Netherlands and the U.S. pertaining to licensed rights of etranacogene dezaparvovec was assumed by CSL Behring on October 11, 2023. These oppositions and future patent oppositions may result in loss of scope of some claims or the entire patent and, with respect to our rights under the CSL Agreement, could affect CSL's successful commercialization of HEMGENIX® and, in turn, could negatively impact our financial position. Additionally, our competitors may be able to circumvent our owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner.

Successful challenges to our patents may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated, or held unenforceable, in whole or in part, which could limit our ability or the ability of our licensees 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 products.

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. Additionally, 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. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

The patent position of biotechnology and pharmaceutical 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 laws of foreign countries may not protect our rights to the same extent as the laws of the U.S. For example, EU patent law with respect to the patentability of methods of treatment of the human body is more limited than U.S. law. Publications of discoveries in the scientific literature often lag the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until 18 months after their priority date, or in some cases at all. Therefore, we cannot know with certainty whether we were the first to make the inventions or that we were the first to file for patent protection of the inventions claimed in our owned or licensed patents or pending patent applications. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued that protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the European Union, the U.S. or other countries may diminish the value of our patents or narrow the scope of our patent protection. Our inability to obtain and maintain appropriate patent protection for any one of our products could have a material adverse effect on our business, financial condition, and results of operations.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, or third parties may assert their intellectual property rights against us, which could be expensive, time consuming and unsuccessful.

Competitors may infringe on our owned or licensed patents or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, maintained in a more narrowly amended form or interpreted narrowly.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, increase our operating losses, reduce available resources, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, which could have an adverse effect on the price of our ordinary shares.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business. For example, outside of the U.S. two of the patents we own are subject to patent opposition. If these or future oppositions are successful or if we are found to otherwise infringe a third party's intellectual property rights, we could be required to obtain a license from such third party to continue developing and marketing our products and technology. We may not be able to obtain the required license on commercially reasonable terms or at all. Even if we could obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. We could be forced, including by court order, to cease commercializing the infringing technology or product or otherwise to cease using the relevant intellectual property. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease or materially modify some of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business.

In addition, legal proceedings relating to intellectual property claims, with or without merit, are unpredictable and generally expensive and time-consuming and is likely to divert significant resources from our core business, including distracting our technical and management personnel from their normal responsibilities. 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 could be compromised by disclosure during this type of litigation.

For example, we are aware of patents or patent applications owned by third parties that relate to some aspects of our programs that are still in development. In some cases, because we have not determined the final methods of manufacture, the method of administration or the therapeutic compositions for these programs, we cannot determine whether rights under such third-party positions will be needed. In addition, in some cases, we believe that the claims of these patents are invalid or not infringed or will expire before commercialization. However, if such patents are needed and found to be valid and infringed, we could be required to obtain licenses, which might not be available on commercially reasonable terms, or to cease or delay commercializing certain product candidates, or to change our programs to avoid infringement.

If we are unable to protect the confidentiality of our proprietary information and know-how, the value of our technology and products could be adversely affected.

In addition to seeking patent protection, we also rely on other proprietary rights, including protection of trade secrets, know-how and confidential and proprietary information. To maintain the confidentiality of our trade secrets and proprietary information, we enter into confidentiality agreements with our employees, consultants, collaborators and other third parties who have access to our trade secrets. Our agreements with employees also provide that any inventions conceived by the individual while rendering services to us will be our exclusive property. However, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. In addition, in the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information. To the extent that our employees, consultants, or contractors use technology or know-how owned by third parties in their work for us, disputes may arise between us and those third parties as to the rights in related inventions.

Adequate remedies may not exist in the event of unauthorized use or disclosure of our confidential information including a breach of our confidentiality agreements. 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 in and outside of the U.S. 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 from using that technology or information to compete with us. The disclosure of our trade secrets or the independent development of our trade secrets by a competitor or other third party would impair our competitive position and may materially harm our business, financial condition, results of operations, stock price and prospects.

Our reliance on third parties may require us to share our trade secrets, which could increase the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we collaborate from time to time with various organizations and academic research institutions on the advancement of our gene therapy platform, we must, at times, share trade secrets with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, materials transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, such as trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business.

In addition, these agreements typically restrict the ability of our collaborators, advisors, and consultants to publish data potentially relating to our trade secrets. Our academic collaborators typically have rights to publish data, if we are notified in advance and may delay publication for a specified time to secure our intellectual property rights arising from the collaboration. In other cases, publication rights are controlled exclusively by us, although in some cases we may share these rights with other parties. We also conduct joint research and development programs that may require us to share trade secrets under the terms of our research and development partnerships or similar agreements. Some courts inside and outside the U.S. 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, we would have no right to prevent them, or those with whom they communicate, from using that technology or information to compete with us.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain a competitive advantage. For example:

- others may be able to make gene therapy products that are similar to our product candidates or utilize similar gene therapy technology but that are not covered by the claims of the patents that we own or have licensed;
- we or our licensors or future collaborators might not have been the first to make the inventions covered issued patents or pending patent applications that we own or have licensed;
- we or our licensors or future collaborators might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or have licensed may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

The occurrence of any of these events could seriously harm our business.

Risks Related to Pricing and Reimbursement

We and our commercial partner face uncertainty related to insurance coverage of, and pricing and reimbursement for, HEMGENIX® and other product candidates for which we may receive marketing approval.

We anticipate that the cost of treatment using our product candidates will be significant. We expect that most patients and their families will not be capable of paying for our products themselves. There will be no commercially viable market for our product candidates without reimbursement from third party payers, such as government health administration authorities, private health insurers and other organizations. Even if there is a commercially viable market, if the level of third-party reimbursement is below our expectations, most patients may not be able to afford treatment with our products and our revenues and gross margins will be adversely affected, and our business will be harmed.

Government authorities and other third-party payers, such as private health insurers and health maintenance organizations, decide for which medications they will pay and, subsequently, establish reimbursement levels. Reimbursement systems vary significantly by country and by region, and reimbursement approvals must be obtained on a country-by-country basis. Government authorities and third-party payers have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications and procedures and negotiating or requiring payment of manufacturer rebates. Increasingly, third party payers require drug companies to provide them with predetermined discounts from list prices, are exerting influence on decisions regarding the use of particular treatments and are limiting covered indications.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, the Center for Medicare & Medicaid Innovation at the Centers for Medicare & Medicaid Services ("CMS") may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under government payor programs, and review the relationship between pricing and manufacturer patient assistance programs. Most recently, on August 16, 2022, the Inflation Reduction Act of 2022, or IRA, was signed into law. Among other things, the IRA requires manufacturers of certain drugs to engage in price negotiations with Medicare (with the maximum fair prices for the first year of the negotiation program being initially applicable in 2026), with prices that can be negotiated subject to a cap; imposes rebates for certain drugs under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation (first due in 2023); and replaces the Part D coverage gap discount program with a new discounting program (beginning in 2025). We expect that additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures and could seriously harm our business.

Individual states in the U.S. have also increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally mandated price controls on payment amounts by third-party payors or other restrictions could seriously harm our business. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug healthcare programs. This could reduce the ultimate demand for our product candidates or put pressure on our product pricing. Furthermore, there has been increased interest by third-party payors and governmental authorities in reference pricing systems and publication of discounts and list prices. Prescription drugs and biological products that are in violation of these requirements will be included on a public list. These reforms could reduce the ultimate demand for our product candidates or put pressure on our product pricing and could seriously harm our business.

In the EU, similar political, economic, and regulatory developments may affect our ability to profitably commercialize our product candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or member state level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize our product candidates, if approved. In markets outside of the U.S. and EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or judicial action in the U.S., the EU, or any other jurisdiction. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

The pricing review period and pricing negotiations for new medicines take considerable time and have uncertain results. Pricing review and negotiation usually begin only after the receipt of regulatory marketing approval, and some authorities require approval of the sale price of a product before it can be marketed. In some markets, particularly the countries of the European Union, prescription pharmaceutical pricing remains subject to continuing direct governmental control and to drug reimbursement programs even after initial approval is granted and price reductions may be imposed. Prices of medical products may also be subject to varying price control mechanisms or limitations as part of national health systems if products are considered not cost-effective or where a drug company's profits are deemed excessive. In addition, pricing and reimbursement decisions in certain countries can lead to mandatory price reductions or additional reimbursement restrictions in other countries. Because of these restrictions, any product candidates for which we may obtain marketing approval may be subject to price regulations that delay or prohibit our or our partners' commercial launch of the product in a particular jurisdiction. In addition, we or any collaborator may elect to reduce the price of our products to increase the likelihood of obtaining reimbursement approvals. If countries impose prices which are not sufficient to allow us or any collaborator to generate a profit, we or any collaborator may refuse to launch the product in such countries or withdraw the product from the market. If pricing is set at unsatisfactory levels, or if the price decreases, our business could be harmed, possibly materially. If we fail to obtain and sustain an adequate level of coverage and reimbursement for our products by third party payers, our ability to market and sell our products could be adversely affected and our business could be harmed.

Due to the generally limited addressable market for our target orphan indications and the potential for our therapies to offer therapeutic benefit in a single administration, we face uncertainty related to our product candidates.

The relatively small market size for orphan indications and the potential for long-term therapeutic benefit from a single administration present challenges to pricing review and negotiation of our product candidates for which we may obtain marketing authorization. Most of our product candidates target rare diseases with relatively small patient populations. If we are unable to obtain adequate levels of reimbursement relative to these small markets, our ability to support our development and commercial infrastructure and to successfully market and sell our product candidates for which we may obtain marketing approval could be adversely affected.

We also anticipate that many or all our gene therapy product candidates may provide long-term, and potentially curative benefit, with a single administration. This is a different paradigm than that of many other pharmaceutical therapies, which often require an extended course of treatment or frequent administration. As a result, governments and other payers may be reluctant to provide the significant level of reimbursement that we seek at the time of administration of our gene therapies or may seek to tie reimbursement to clinical evidence of continuing therapeutic benefit over time. Additionally, there may be situations in which our product candidates will need to be administered more than once, which may further complicate the pricing and reimbursement for these treatments. In addition, considering the anticipated cost of these therapies, governments and other payers may be particularly restrictive in making coverage decisions. These factors could limit our commercial success and materially harm our business.

Risks Related to Our Financial Position and Need for Additional Capital

We had net losses in the years ended December 31, 2023 and 2022, have incurred significant losses in previous years and expect to incur losses during the current and over the next several years and may never achieve or maintain profitability.

We had a net loss of $308.5 million in the year ended December 31, 2023, and a net loss of $126.8 million in the year ended December 31, 2022. We incurred a gain of 329.6 million in year ended December 31, 2021; however, such gain was primarily attributable to one-time license revenue from CSL Behring. We have incurred significant losses in the years prior to 2021. As of December 31, 2023, we had an accumulated deficit of $890.4 million. In the past, we have financed our operations primarily through the sale of equity securities and convertible debt, venture loans, upfront payments from our collaboration partners and, to a lesser extent, subsidies and grants from governmental agencies and fees for services. We expect to finance our operations in 2024 and into the second quarter of 2027 primarily from our existing cash, cash equivalents, and cash resources. We have devoted substantially all our financial resources and efforts to research and development, including preclinical studies and clinical trials. We expect to continue to incur significant expenses and losses over the next several years, and our net losses may fluctuate significantly from quarter to quarter and year to year. We anticipate that we will continue to incur net losses for the foreseeable future as we:

- continue to fund AMT-130 in its ongoing clinical trials and advance our other product candidates into clinical development;
- incur the costs associated with the manufacturing of preclinical, clinical and commercial supplies of our product candidates;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- maintain, expand and protect our intellectual property portfolio;
- hire additional personnel to support our business;
- enhance our operational, financial and management information systems and personnel; and
- incur legal, accounting and other expenses operating as a public company.

While we expect that, as a result of the Reorganization, we will realize some cost savings and reduce our operating expenses, we may never succeed in materially reducing our operating expenses and, even if we do, may never generate revenues that are sufficient to achieve or sustain profitability. Even if we do 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, diversify our product offerings, or even continue our operations.

We will need to raise additional funding in order to advance the development of our product candidates, which may not be available on acceptable terms, or at all. Failure to obtain capital when needed may force us to delay, limit or terminate our product development efforts or other operations which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We expect to incur significant expenses in connection with our ongoing activities and we will need to obtain substantial additional funding in order to fund the development of our product pipeline and support our continuing operations. In addition, we have based our estimate of our financing requirements on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect.

Adequate capital may not be available to us when needed or may not be available on acceptable terms. Our ability to obtain additional debt financing may be limited by covenants we have made under our 2023 Amended Facility with Hercules and our pledge to Hercules of substantially all our assets as collateral. Our ability to obtain additional equity financing may be limited by our shareholders' willingness to approve the issuance of additional share capital. If we raise additional capital through the sale of equity or convertible debt securities, our shareholders' ownership interest could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of holders of our ordinary shares.

If we raise additional funds through collaborations, strategic alliances, marketing, distribution, or licensing arrangements with third parties, we may have to issue additional equity, relinquish valuable rights to our technologies, future revenue streams, products, or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce, or further eliminate our research and development programs or any future commercialization efforts, which would have a negative impact on our financial condition, results of operations and cash flows.

Our existing and any future indebtedness could adversely affect our ability to operate our business.

As of December 31, 2023, we had $100.0 million of outstanding principal of borrowings under the 2023 Amended Facility, which we are required to repay in full in January 2027. We might not be able to finance our operations into the second quarter of 2027 from our existing cash, cash equivalents, and cash resources if we are not able to refinance the 2023 Amended Facility prior to the January 2027 maturity date. We could in the future incur additional debt obligations beyond our borrowings from Hercules. Our existing loan obligations, together with other similar obligations that we may incur in the future, could have significant adverse consequences, including:

- requiring us to dedicate a portion of our cash resources to the payment of interest and principal, reducing money available to fund working capital, capital expenditures, research and development and other general corporate purposes;
- increasing our vulnerability to adverse changes in general economic, industry and market conditions;
- subjecting us to restrictive covenants that may reduce our ability to take certain corporate actions or obtain further debt or equity financing;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we compete; and
- placing us at a disadvantage compared to our competitors that have less debt or better debt servicing options.

We may not have sufficient funds and may be unable to arrange for additional financing to pay the amounts due under our existing loan obligations. Failure to make payments or comply with other covenants under 2023 Amended Facility could result in an event of default and acceleration of amounts due. Under the 2023 Amended Facility, the occurrence of an event that would reasonably be expected to have a material adverse effect on our business, operations, assets, or condition is an event of default. If an event of default occurs and the lender accelerates the amounts due, we may not be able to make accelerated payments, and the lender could seek to enforce security interests in the collateral securing such indebtedness, which includes substantially all our assets.

Our 2023 Amended Facility bears a variable interest rate with a fixed floor. The U.S. Federal Reserve has raised, and may in the future further raise, interest rates to combat the effects of recent high inflation. An increase in interest rates by the Federal Reserve has and could in the future cause the prime rate to increase, which has and could in the future increase our debt service obligations. Significant increases in such obligations could have a negative impact on our financial position or operating results, including cash available for servicing our indebtedness, or result in increased borrowing costs in the future

Our business development strategy may not produce the cash flows expected or could result in additional costs and challenges.

In July 2021, we acquired uniQure France and its lead program, now known as AMT-260, targeting refractory MTLE, and may, from time to time, enter into strategic transactions consistent with our business development objectives. Any acquisition or strategic transaction could expose us to unknown liabilities and risks, and we may incur additional costs and expenses necessary to address an acquired company's failure to comply with laws and governmental rules and regulations. We could incur additional costs related to resources necessary to align our business practices and operations with that of the acquired company. Moreover, we cannot be sure that the anticipated or intended benefits of any acquisition or strategic transaction would be realized in a timely manner, if at all.

Risks Related to Other Legal Compliance Matters

Our relationships with employees, customers and third parties are subject to applicable laws and regulations, the non-compliance of any of which could have a material adverse effect on our business, financial condition, and results of operations.

Healthcare providers, physicians, other practitioners, and third-party payers will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with third party payers and customers may expose us to broadly applicable anti-bribery laws, including the Foreign Corrupt Practices Act, as well as fraud and abuse and other U.S. and international healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we would be able to market, sell and distribute any products for which we obtain marketing approval.

Efforts to ensure that our business arrangements with third parties will comply with applicable laws and regulations could involve substantial costs. If our operations, or the activities of our collaborators, distributors or other third-party agents are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal, and administrative penalties, damages, fines, imprisonment, exclusion from participation in government funded healthcare programs and the curtailment or restructuring of our operations.

Additionally, we are subject to various labor and employment laws and regulations. These laws and regulations relate to matters such as employment discrimination, wage and hour laws, requirements to provide meal and rest periods or other benefits, family leave mandates, employee and independent contractor classification rules, requirements regarding working conditions and accommodations to certain employees, citizenship or work authorization and related requirements, insurance and workers' compensation rules, healthcare laws, scheduling notification requirements and anti-discrimination and anti-harassment laws. Complying with these laws and regulations, including ongoing changes thereto, subjects us to substantial expense and non-compliance could expose us to significant liabilities. In particular, we are subject to allegations of Sarbanes-Oxley whistleblower retaliation and employment discrimination and retaliation, and we may in the future be subject to additional claims of non-compliance with similar or other laws and regulations.

The costs associated with an alleged or actual violation of any of the foregoing could be substantial and could cause irreparable harm to our reputation or otherwise have a material adverse effect on our business, financial condition, and results of operations.

We are subject to laws governing data protection in the different jurisdictions in which we operate. The implementation of such data protection regimes is complex, and should we fail to fully comply, we may be subject to penalties that may have an adverse effect on our business, financial condition, and results of operations.

Many national, international, and state laws govern the privacy and security of health information and other personal and private information. They often differ from each other in significant ways. For instance, the EU has adopted a comprehensive data protection law called the EU General Data Protection Regulation that took effect in May 2018. The UK has, following its exit from the EU, substantially adopted the EU General Data Protection Regulation into its domestic law through the UK General Data Protection Regulation (collectively with the EU General Data Protection Regulation, and related EU and UK e-Privacy laws, the "GDPR"). The GDPR, together with the national legislation of the UK (including the Data Protection Act 2018) and EU member states governing the processing of personal data, impose strict obligations and restrictions on the ability to collect, use, analyze and transfer personal information, including health data from clinical trials and adverse event reporting.

GDPR obligations applicable to us may include, in many circumstances, obtaining the (opt-in) consent of the individuals to whom the personal data relates; providing GDPR-prescribed data processing notices to individuals; complying with restrictions regarding the transfer of personal data out of the EU or the UK (as applicable) (including to the US); implementing and maintaining data protection policies and procedures; restrictions regarding the use of certain innovative technologies; providing data security breach notifications to supervisory authorities and affected individuals under tight timescales; and implementing security and confidentiality measures. Supervisory authorities in the different EU member states and the UK may interpret the GDPR and national laws differently and impose additional requirements. Guidance on implementation and compliance practices are often updated or otherwise revised. All of this adds to the complexity of processing personal information and remaining compliant with the GDPR.

The GDPR allows EU and UK supervisory authorities to impose penalties for non-compliance of up to the greater of EUR 20.0 million and 4% of annual worldwide gross revenue of the corporate group in question. (There are similar caps in GBP under the UK GDPR.). Supervisory authorities in the EU and UK may potentially levy such fines directly upon on the non-compliant entity and/or on the parent company of the non-compliant entity. Supervisory authorities also possess other wide-ranging powers, including conducting unannounced inspections of our facilities and system (so-called "dawn raids"), and issuing "stop processing" orders to us. Separate from regulatory enforcement actions, individuals may bring private actions (including potentially group or representative actions) against us. There is no statutory cap in the GDPR on the amount of compensation or the damages which individuals may recover.

Overall, the significant costs of GDPR compliance, risk of regulatory enforcement actions and private litigation under, and other burdens imposed by the GDPR as well as under other regulatory schemes throughout the world related to privacy and security of health information and other personal and private data could have an adverse impact on our business, financial condition, and results of operations.

Product liability lawsuits could cause us to incur substantial liabilities and to limit commercialization of our therapies.

We face an inherent risk of product liability related to the testing of our product candidates in human clinical trials and in connection with product sales. If we cannot successfully defend ourselves against claims that our product candidates or products or the procedures used to administer them to patients caused injuries, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that we develop or sell;
- injury to our reputation and significant negative media attention;
- negative publicity or public opinion surrounding gene therapy;
- withdrawal of clinical trial participants or sites, or discontinuation of development programs;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue;
- initiation of investigations, and enforcement actions by regulators; and product recalls, withdrawals, revocation of approvals, or labeling, marketing, or promotional restrictions;
- reduced resources of our management to pursue our business strategy; and
- the inability to further develop or commercialize any products that we develop.

Depending upon the country where the clinical trial is conducted, we currently hold coverages ranging from EUR 500,000 to EUR 10,000,000 per occurrence. Such coverage may not be adequate to cover all liabilities that we may incur. We may need to increase our insurance coverage as we expand our clinical trials. In addition, insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. In the event insurance coverage is insufficient to cover liabilities that we may incur, it could have a material adverse effect on our business, financial condition, and results of operations.

Healthcare legislative and regulatory reform measures may have a material adverse effect on our financial operations.

Our industry is highly regulated and changes in law may adversely impact our business, operations, or financial results. The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or the PPACA, is a sweeping measure intended to, among other things, expand healthcare coverage within the U.S., primarily through the imposition of health insurance mandates on employers and individuals and expansion of the Medicaid program. Several provisions of the law may affect us and increase certain of our costs.

In addition, other legislative changes have been adopted since the PPACA was enacted. These changes include aggregate reductions in Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013, Congress subsequently has extended the period over which these reductions are in effect. While President Biden previously signed legislation temporarily to eliminate this reduction through the end of 2021, a 1% payment adjustment was implemented from April 1 – June 30, 2022, and a 2% payment adjustment took effect beginning July 1, 2022. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several types of providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and, accordingly, our financial operations.

We anticipate that the PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and additional downward pressure on pricing and the reimbursement our customers may receive for our products, and increased manufacturer rebates. Further, there have been, and there may continue to be, judicial and Congressional challenges to certain aspects of the PPACA. For example, the U.S. Tax Cuts and Jobs Act of 2017 includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the Affordable Care Act on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate". Additional legislative and regulatory changes to the PPACA, its implementing regulations and guidance and its policies, remain possible in the 118th U.S. Congress and under the Biden Administration. However, it remains unclear how any new legislation or regulation might affect the prices we may obtain for any of our product candidates for which regulatory approval is obtained. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payers. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our products.

Our future growth may depend, in part, on our ability to penetrate markets outside of the U.S. and Europe where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future profitability may depend, in part, on our ability to commercialize current or future drug candidates in foreign markets for which we may rely on collaborations with third parties. We are not permitted to market or promote any of our drug candidates before we receive regulatory approval from the applicable regulatory authority in that foreign market. To obtain separate regulatory approval in many other jurisdictions we must comply with numerous and varying regulatory requirements of such jurisdictions regarding safety and efficacy and governing, among other things, clinical trials, manufacturing, commercial sales, pricing and distribution of our drug candidates, and we cannot predict success in these jurisdictions.

Our internal computer systems, or those of our collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs.

Our internal computer systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. The size and complexity of our information technology systems, and those of our collaborators, contractors and consultants, and the large amounts of confidential information stored on those systems, make such systems vulnerable to service interruptions or to security breaches from inadvertent or intentional actions by our employees, third-party vendors and/or business partners, or from cyber-attacks by malicious third parties. Cyber-attacks are increasing in their frequency, sophistication, and intensity, and have become increasingly difficult to detect. Cyber-attacks could include 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. Cyber-attacks also could include phishing attempts or e-mail fraud to cause payments or information to be transmitted to an unintended recipient. Our hybrid remote work policy may increase our vulnerability to such risks.

While we have experienced and addressed system failures, cyber-attacks, and security breaches in the past, we have not experienced a system failure, accident, cyber-attack, or security breach that has resulted in a material interruption in our operations to date. In the future, such events could result in a material disruption of our development programs and our business operations, whether due to a loss of our trade secrets, data, or other proprietary information or other similar disruptions. Additionally, any such event that leads to unauthorized access, use or disclosure of personal information, including personal information regarding our patients or employees, could harm our reputation, cause us not to comply with federal and/or state breach notification laws and foreign law equivalents and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information. Security breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. We may need to devote significant resources to protect against security breaches or to address problems caused by a cyber-attack or security breach. While we have implemented security measures to protect our information technology systems and infrastructure, there can be no assurance that such measures will prevent service interruptions or security breaches that could adversely affect our business and the further development and commercialization of our product and product candidates could be delayed.

See Part I, Item 1C, *Cybersecurity*, in this Annual Report on Form 10-K for more information regarding our cybersecurity risk management, strategy and governance.

Climate change as well as corporate responsibility initiatives, including environmental, social and governance (ESG) matters, may impose additional costs on our business and expose us to new risks.

Greenhouse gases may have an adverse effect on global temperatures, weather patterns, and the frequency and severity of extreme weather and natural disasters. Such events could have a negative effect on our business. Concern over the impact of climate change may result in new or additional legislative and regulatory requirements to reduce or mitigate the effects of climate change on the environment, which could result in increases in taxes, transportation costs and utilities, among other expenses. Moreover, natural disasters and extreme weather conditions may impact the productivity of our facilities, the ability of the patients in our clinical trials to maintain compliance with trial protocols or access clinical trial sites, the operation of our supply chain, or consumer buying patterns. The occurrence of any of these events could have a material adverse effect on our business.

ESG and sustainability initiatives continue to attract political and social attention have resulted in both existing and pending international agreements and national, regional, and local legislation, regulatory measures, reporting obligations and policy changes. There is increasing societal pressure in some of the countries in which we operate to limit greenhouse gas emissions as well as other global initiatives focused on climate change. These agreements and measures, including the Paris Climate Accord, may require, or could result in future legislation, regulatory measures or policy changes that would require operational changes, taxes, or purchases of emission credits to reduce emission of greenhouse gases from our operations, which may require the that we dedicate additional resources toward compliance with these measures and result in substantial capital expenditures. Furthermore, increasing attention on ESG matters has resulted in governmental investigations, and public and private litigation, which could increase our costs or otherwise adversely affect our business or results of operations.

In addition, organizations that provide information to investors on corporate governance and related matters have developed ratings processes for evaluating companies and investment funds based on ESG and sustainability metrics. Such ratings are used by investors to inform their investment and voting decisions. Unfavorable ESG ratings may lead to increased negative investor sentiment toward us, which could have a negative impact on the price of our securities and our access to and costs of capital. In addition, investors, particularly institutional investors, use these scores to benchmark companies against their peers and if a company is perceived as lagging, take actions to hold these companies and their boards of directors accountable. Board diversity is an ESG topic that is, in particular, receiving heightened attention by investors, stockholders, lawmakers and listing exchanges. Certain states have passed laws requiring companies to meet certain gender and ethnic diversity requirements on their boards of directors. We may face reputational damage in the event our corporate responsibility initiatives or objectives, do not meet the standards set by our investors, stockholders, lawmakers, listing exchanges or other constituencies, or if we are unable to achieve an acceptable ESG or sustainability rating from third-party rating services.

The effects of climate change or any or all of these ESG and sustainability initiatives may result in significant operational changes and expenditures, reduced demand for our products, cause us reputational harm, and could materially adversely affect our business, financial condition, and results of operations.

Risks Related to Employee Matters and Managing Our Growth

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

Our future growth and success will depend in large part on our continued ability to attract, retain, manage, and motivate our employees. The loss of the services of any member of our senior management or the inability to hire or retain experienced management personnel could adversely affect our ability to execute our business plan and harm our operating results. We are highly dependent on hiring, training, retaining, and motivating key personnel to lead our research and development, clinical operations, and manufacturing efforts. Although we have entered into employment agreements with our key personnel, each of them may terminate their employment on short notice. We do not maintain key person insurance for any of our senior management or employees.

The loss of the services of our key employees could impede the achievement of our research and development objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing senior management and key employees may be difficult and may take an extended period because of the limited number of individuals in our industry with the breadth and depth of skills and experience required to successfully develop gene therapy products.

The competition for qualified personnel in the pharmaceutical field is intense, and there is a limited pool of qualified potential employees to recruit. Due to this intense competition, we may be unable to continue to attract and retain the qualified personnel necessary for the development of our business or to recruit suitable replacement personnel. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our business may be harmed and our growth strategy may be limited.

Additionally, we are reliant on our employees, contractors, consultants, vendors, and other parties with whom we have relationships to behave ethically and within the requirements of the law. The failure of any employee or other such third parties to act within the bounds of the applicable laws, regulations, agreements, codes and other requirements, or any misconduct or illegal actions or omissions by such persons, could materially damage our business.

Actions that we have taken to restructure our business in alignment with our strategic priorities may not be as effective as anticipated, may not result in cost savings to us and could disrupt our business.

In October 2023, we commenced the Reorganization to reprioritize our portfolio of development candidates, conserve financial resources and better align our workforce with current business needs. We may encounter challenges in the execution of these efforts, and these challenges could impact our financial results.

Although we believe that these actions will reduce operating costs, we cannot guarantee that the Reorganization will achieve or sustain the targeted benefits, or that the benefits, even if achieved, will be adequate to meet our long-term expectations. As a result of the Reorganization, we will incur additional costs in the near term, including cash expenditures for employee transition, notice period and severance payments, employee benefits, and related facilitation costs. Additional risks associated with the continuing impact of the Reorganization include employee attrition beyond our intended reduction in force and adverse effects on employee morale (which may also be further exacerbated by actual or perceived declining value of equity awards), diversion of management attention, adverse effects to our reputation as an employer (which could make it more difficult for us to hire and retain new employees in the future), potential understaffing and potential failure or delays to meet development targets due to the loss of qualified employees or other operational challenges. If we do not realize the expected benefits of our restructuring efforts on a timely basis or at all, our business, results of operations and financial condition could be adversely affected.

Risks Related to Our Ordinary Shares

The price of our ordinary shares has been and may in the future be volatile and fluctuate substantially.

Our share price has been and may in the future be volatile. From the start of trading of our ordinary shares on the Nasdaq Global Select Market on February 4, 2014 through February 23, 2024 the sale price of our ordinary shares ranged from a high of $82.49 to a low of $4.72. The closing price on February 23, 2024, was $6.32 per ordinary share.

In recent years, the stock market in general and the market for shares of smaller biopharmaceutical companies in particular have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. The market price for our ordinary shares may be influenced by many factors, including:

- the success of competitive products or technologies;
- results of clinical trials of our product candidates or those of our competitors;
- public perception and market reaction to our interim data from clinical trials;
- public perception of gene therapy;
- interactions with the FDA on the design of our clinical trials and regulatory endpoints;
- regulatory delays and greater government regulation of potential products due to adverse events;
- regulatory or legal developments in the EU, the U.S., and other countries;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- changes to our business, including pipeline reprioritizations and restructurings;
- the level of expenses related to any of our product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- mergers, acquisitions, licensing, and collaboration activity among our peer companies in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions; and
- the other factors described in this “Risk Factors” section.

Following periods of such volatility in the market price of a company’s securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future. In addition, notwithstanding protective provisions in our articles of association and available to us under Dutch corporate law, market volatility may lead to increased shareholder activism if we experience a market valuation that activist investors believe is not reflective of the intrinsic value of our ordinary shares. Activist campaigns that contest or conflict with our strategic direction or seek changes in the composition of our board of directors could have an adverse effect on our operating results and financial condition. Securities litigation or shareholder activism could result in substantial costs and divert management’s attention and resources from our business.

Our directors, executive officers, and major shareholders, if they choose to act together, will continue to have a significant degree of control with respect to matters submitted to shareholders for approval.

Our directors, executive officers and major shareholders holding more than 5% of our outstanding ordinary shares, in the aggregate, beneficially own approximately 26.6% of our issued shares (including such shares to be issued in relation to exercisable options to purchase ordinary shares) as of December 31, 2023. As a result, if these shareholders were to choose to act together, they may be able, as a practical matter, to control many matters submitted to our shareholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, could control the election of the board of directors and the approval of any merger, consolidation, or sale of all or substantially all our assets. These shareholders may have interests that differ from those of other of our shareholders and conflicts of interest may arise.

Provisions of our articles of association or Dutch corporate law might deter acquisition bids for us that might be considered favorable and prevent or frustrate any attempt to replace our board.

Under Dutch law, various protective measures are possible and permissible within the boundaries set by Dutch statutory and case law. Certain provisions of our articles of association may make it more difficult for a third party to acquire control of us or effect a change in our board. These provisions include:

- the staggered three-year terms of our non-executive directors as a result of which only approximately one-third of our non-executive directors may be subject to election or re-election in any one year;

- a provision that our directors may only be dismissed or suspected at a general meeting of shareholders by a two-thirds majority of votes cast representing more than half of our outstanding ordinary shares;
- a provision that our executive directors may only be appointed upon binding nomination of the non-executive directors, which can only be overruled by the general meeting of shareholders with a two-thirds majority of votes cast representing at least 50% of our outstanding ordinary shares; and
- a requirement that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our board.

Moreover, according to Dutch corporate law, our board can invoke a cooling-off period of up to 250 days in the event of an unsolicited takeover bid or certain shareholder activism. During a cooling-off period, our general meeting of shareholders would not be able to dismiss, suspend or appoint directors (or amend the provisions in our articles of association dealing with those matters) except at the proposal of our board.

We do not expect to pay dividends in the foreseeable future.

We have not paid any dividends since our incorporation. Even if future operations lead to significant levels of distributable profits, we currently intend those earnings, if any, will be reinvested in our business and that dividends will not be paid until we have an established revenue stream to support continuing dividends. Accordingly, shareholders cannot rely on dividend income from our ordinary shares and any returns on an investment in our ordinary shares will likely depend entirely upon any future appreciation in the price of our ordinary shares.

If we fail to maintain an effective system of internal controls, we may be unable to accurately report our results of operations or prevent fraud or fail to meet our reporting obligations, and investor confidence and the market price of our ordinary shares may be materially and adversely affected.

If we fail to maintain the adequacy of our internal control over financial reporting, we may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting. If we fail to maintain effective internal control over financial reporting, we could experience material misstatements in our financial statements and fail to meet our reporting obligations, which would likely cause investors to lose confidence in our reported financial information. This could in turn limit our access to capital markets, harm our results of operations, and lead to a decline in the trading price of our ordinary shares. Additionally, ineffective internal control over financial reporting could expose us to increased risk of fraud or misuse of corporate assets and subject us to potential delisting from The Nasdaq Global Select Market, regulatory investigations and civil or criminal sanctions. Our reporting and compliance obligations may place a significant strain on our management, operational and financial resources, and systems for the foreseeable future.

We have in the past qualified and in the future may qualify as a passive foreign investment company, which may result in adverse U.S. federal income tax consequences to U.S. holders.

A corporation organized outside the U.S. generally will be classified as a passive foreign investment company ("PFIC") for U.S. federal income tax purposes in any taxable year in which at least 75% of its gross income is passive income or on average at least 50% of the gross value of its assets is attributable to assets that produce passive income or are held to produce passive income. Passive income for this purpose generally includes dividends, interest, royalties, rents and gains from commodities and securities transactions. Based on our average value of our gross assets, our cash and cash equivalents as well as the price of our ordinary shares, we expect to be classified as a PFIC for U.S. federal income tax for 2023. Our status in any taxable year will depend on our assets and activities in each year, and because this is a factual determination made annually after the end of each taxable year, there can be no assurance that we will continue to qualify as a PFIC in future taxable years. The market value of our assets may be determined in large part by reference to the market price of our ordinary shares, which is likely to fluctuate, and may fluctuate considerably given that market prices of biotechnology companies have been especially volatile. If we were considered a PFIC for the current taxable year or any future taxable year, a U.S. holder would be required to file annual information returns for such year, whether the U.S. holder disposed of any ordinary shares or received any distributions in respect of ordinary shares during such year. In certain circumstances a U.S. holder may be able to make certain tax elections that would lessen the adverse impact of PFIC status; however, to make such elections the U.S. holder will usually have to have been provided information about the company by us, and we do not intend to provide such information.

The U.S. federal income tax rules relating to PFICs are complex. U.S. holders are urged to consult their tax advisors with respect to the purchase, ownership and disposition of our shares, the possible implications to them of us being treated as a PFIC (including the availability of applicable election, whether making any such election would be advisable in their particular circumstances) as well as the federal, state, local and foreign tax considerations applicable to such holders in connection with the purchase, ownership, and disposition of our shares.

Any U.S. or other foreign judgments may be difficult to enforce against us in the Netherlands.

Although we report as a U.S. domestic filer for SEC reporting purposes, we are organized and existing under the laws of the Netherlands. Some of the members of our board and senior management reside outside the U.S. In addition, a significant portion of our assets are located outside the U.S. As a result, it may not be possible for shareholders to effect service of process within the U.S. upon such persons or to enforce judgments against them or us in U.S. courts, including judgments predicated upon the civil liability provisions of the federal securities laws of the U.S. In addition, it is not clear whether a Dutch court would impose civil liability on us or any of our Board members in an original action based solely upon the federal securities laws of the U.S. brought in a court of competent jurisdiction in the Netherlands.

The U.S. and the Netherlands currently do not have a treaty providing for the reciprocal recognition and enforcement of judgments, other than arbitration awards, in civil and commercial matters. Consequently, a final judgment for payment given by a court in the U.S., whether or not predicated solely upon U.S. securities laws, would not automatically be recognized or enforceable in the Netherlands. To obtain a judgment which is enforceable in the Netherlands, the party in whose favor a final and conclusive judgment of the U.S. court has been rendered will be required to file its claim with a court of competent jurisdiction in the Netherlands. Such party may submit to the Dutch court the final judgment rendered by the U.S. court. If and to the extent that the Dutch court finds that the jurisdiction of the U.S. court has been based on grounds which are internationally acceptable and that proper legal procedures have been observed, the Dutch court will, in principle, give binding effect to the judgment of the U.S. court, unless such judgment contravenes principles of public policy of the Netherlands. Dutch courts may deny the recognition and enforcement of punitive damages or other awards. Moreover, a Dutch court may reduce the amount of damages granted by a U.S. court and recognize damages only to the extent that they are necessary to compensate actual losses or damages. Enforcement and recognition of judgments of U.S. courts in the Netherlands are solely governed by the provisions of the Dutch Civil Procedure Code.

Therefore U.S. shareholders may not be able to enforce against us or our board members or senior management who are residents of the Netherlands or countries other than the U.S. any judgments obtained in U.S. courts in civil and commercial matters, including judgments under the U.S. federal securities laws.

The rights and responsibilities of our shareholders and directors are governed by Dutch law and differ in some important respects from the rights and responsibilities of shareholders under U.S. law.

We are a public company (*naamloze vennootschap*) organized under the laws of the Netherlands and our corporate affairs are governed by our articles of association and by the laws governing companies incorporated in the Netherlands. The rights of our shareholders and the responsibilities of members of our board under Dutch law are different than under the laws of some U.S. jurisdictions. In the performance of their duties, our board members are required by Dutch law to consider the interests of uniQure, its shareholders, its employees, and other stakeholders and not only those of our shareholders (as would be required under the law of most U.S. jurisdictions). As a result of these considerations, it is possible that some of these parties will have interests that are different from, or in addition to, your interests as a shareholder, and our directors may take actions that would be different than those that would be taken by a company organized under the law of some U.S. jurisdictions.

In addition, in accordance with our articles of association, approval of our shareholders is required before our board of directors can authorize the issuance of our ordinary shares in an equity financing. Our shareholders' reluctance to approve such further issuances of ordinary shares could adversely affect our ability to raise capital and fund development programs and continued operations. There can be no assurance that Dutch law will not change in the future or that it will serve to protect investors in a similar fashion afforded under corporate law principles in the U.S., which could adversely affect the rights of investors.

We may be adversely affected by unstable market and economic conditions, such as inflation, which may negatively impact our business, financial condition and stock price.

Market conditions such as inflation, volatile energy costs, geopolitical issues, war, unstable global credit markets and financial conditions could lead to periods of significant economic instability, diminished liquidity and credit availability, diminished expectations for the global economy and expectations of slower global economic growth going forward. Our business and operations may be adversely affected by such instability, including any such inflationary fluctuations, economic downturns, volatile business environments and continued unstable or unpredictable economic and market conditions. Inflation in particular has the potential to adversely affect our liquidity, business, financial condition, and results of operations by increasing our overall cost structure. The existence of inflation in the economy has resulted in, and may continue to result in, higher interest rates and capital costs, shipping costs, supply shortages, increased costs of labor, weakening exchange rates and other similar effects. As a result of inflation, we have experienced, and may continue to experience, cost increases across our business. Although we may take measures to mitigate the impact of this inflation, if these measures are not effective our business, financial condition, results of operations and liquidity could be materially adversely affected. Even if such measures are effective, there could be a difference between the timing of when these beneficial actions impact our results of operations and when cost inflation is incurred.

Any such volatility and disruptions may have adverse consequences on us or the third parties on whom we rely. If economic and market conditions deteriorate or do not improve, it may make any future financing efforts more difficult to complete, more costly and more dilutive to our shareholders. Additionally, due to our volatile industry and industry-wide declining stock values, investors may seek to pursue non-biotech investments with steadier returns. Failure to secure any necessary financing in a timely manner or on favorable terms could have a material adverse effect on our operations, financial condition or stock price or could require us to delay or abandon development or commercialization plans.

If securities or industry analysts cease to publish or publish inaccurate or unfavorable research about our business, our share price and trading volume could decline.

The trading market for our common shares depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who cover us downgrades our common shares or publishes inaccurate or unfavorable research about our business, our share price may decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our shares could decrease, which might cause our share price and trading volume to decline.

If we do not achieve our projected development and financial goals in the timeframes we announce and expect, the commercialization of our product candidates may be delayed and, as a result, our stock price may decline.

We estimate the timing of the accomplishment of various scientific, clinical, regulatory, and other product development goals, along with financial and other business-related milestones. From time to time, we publicly announce the expected timing of some of these milestones along with guidance as to our cash runway. These milestones may include the commencement or completion of scientific studies, clinical trials, the submission of regulatory filings and interactions with regulatory authorities, and approval timelines for commercial sales. All these milestones are based on a variety of assumptions that may prove to be untrue. The timing of our actual achievement of these milestones can vary dramatically compared to our estimates, in many cases for reasons beyond our control. If we do not meet these milestones, including those that are publicly announced, the development and commercialization of our products may be delayed, our business could suffer reputational harm and, as a result, our stock price may decline.

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Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

Cybersecurity Risk Management and Strategy

We recognize the importance of assessing, identifying, and managing material risks associated with cybersecurity threats, as such term is defined in Item 106(a) of Regulation S-K. These risks include, among other things, operational risks, the risk of intellectual property theft, fraud, harm to employees or third parties with which we conduct business and violation of data privacy or security laws.

Identifying and assessing cybersecurity risk is integrated into our overall risk management systems and processes. Cybersecurity risks related to our business are identified and addressed through a multi-faceted approach that consists of third-party assessments, testing of our information systems and information technology security. To defend against, detect and respond to cybersecurity incidents, we, among other things: have enabled regular monitoring of our environment by a combination of external partners and internal security tools, conduct employee trainings, monitor emerging laws and regulations related to data protection and information security and implement appropriate changes.

Consistent with our cybersecurity risk management policies and controls, we have prepared an incident response plan with several components, including: (i) engagement of a third party security operations center for regular vulnerability scanning and technical monitoring of our systems, (ii) detection and analysis of cybersecurity incidents that present risk of unauthorized access to company assets, including the escalation and triaging of incidents that present acute risks to our business, (iii) containment, eradication and data recovery, and (iv) post-incident analysis. Such incident responses are overseen by leaders from our information technology, finance, legal and compliance teams.

Cybersecurity events and data incidents are evaluated, assessed based on severity and prioritized for response and remediation. Under our incident response plan and related policies, incidents are evaluated to determine materiality as well as operational and business impact and reviewed for privacy impact. Our team of cybersecurity professionals then collaborate with technical and business stakeholders to further analyze the risk to the company, and form detection, mitigation and remediation strategies. As part of the above processes, we regularly engage external consultants to assess our internal cybersecurity programs and compliance with applicable practices and standards.

Cybersecurity Governance

Cybersecurity is an important part of our risk management processes and an area of focus for our board of directors and management team. Our board of directors has delegated responsibility to the Audit Committee for the oversight of risks from cybersecurity threats. Members of the Audit Committee receive regular updates from senior management, including leaders from our information technology, legal and compliance teams regarding matters of cybersecurity. This includes existing and new cybersecurity risks, information on how management is addressing and/or mitigating those risks, cybersecurity incidents (if any) and status on key information security initiatives.

Despite our cybersecurity efforts, we may not be successful in preventing or mitigating a cybersecurity incident that could have a material adverse effect on our business. For a discussion of cybersecurity risks applicable to us, see Part I, Item 1A, *Risk Factors*, under the heading “Our internal computer systems, or those of our collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a material disruption of our product development programs” in this Annual Report on Form 10-K.

Item 2. Properties.

We operate an approximately 100,000 square foot GMP qualified manufacturing facility that we lease in Lexington, Massachusetts, U.S. The lease for the Lexington manufacturing facility, as amended to date, terminates in June 2029 and may be renewed for two subsequent five-year terms. In addition, we also operate approximately 12,000 square feet of multi-use office space in Lexington, Massachusetts, which is subject to a lease that expires in 2030 and may be renewed for one subsequent five-year term.

We operate approximately 111,000 square feet (seven floors) of multi-use space in Amsterdam, The Netherlands, which is subject to a lease that, as amended to date, terminates in 2032 with an option to extend the lease in five-year increments. To date we have entered into subleases with respect to two of the seven floors in the Amsterdam facility. We sublease an additional approximately 12,000 square feet of space in the Amsterdam facility, which is subject to a lease that expires in October 2028.

We believe that our facilities are adequate to meet current needs and that suitable alternative spaces will be available in the future on commercially reasonable terms.

Item 3. Legal Proceedings.

None.

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

Our ordinary shares are listed on the Nasdaq Global Select Market under the symbol "QURE". We have never paid any cash dividends on our ordinary shares, and we do not anticipate paying cash dividends in the foreseeable future. We anticipate that we will retain all earnings, if any, to support operations and to finance the growth and development of our business for the foreseeable future.

Unregistered Sales of Equity Securities

During the period covered by this Annual Report on Form 10-K, we have not issued any securities that were not registered under the Securities Act of 1933, as amended (the "Securities Act").

Issuer Share Repurchases

We did not make any purchases of our ordinary shares during the period covered by this Annual Report on Form 10-K.

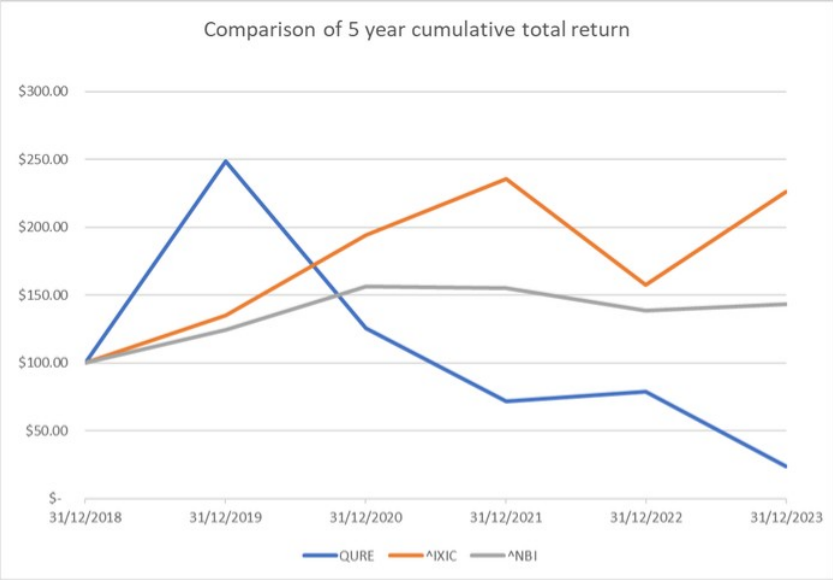
Holders

As of February 23, 2024, there were approximately six holders of record of our ordinary shares. The actual number of shareholders is greater than this number of record holders, and includes shareholders 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 shareholders whose shares may be held in trust by other entities.

Share Performance Graph

The following graph compares the performance of our ordinary shares ("QURE") for the periods indicated with the performance of the NASDAQ Composite Index ("^IXIC") and the Nasdaq biotechnology index ("^NBI"). This graph assumes an investment of $100 after market close on December 31, 2018 in each of our ordinary shares, the NASDAQ Composite Index, and the NASDAQ Biotechnology Index. Pursuant to the applicable SEC rules, all values assume reinvestment of the full amount of all dividends; however, no dividends have been declared on our ordinary shares to date. The performance of our ordinary shares shown on the graph below is not necessarily indicative of the future performance of our ordinary shares.

This graph and related information is not "soliciting material," is not deemed "filed" with the SEC and, except to the extent incorporated by reference, is not to be incorporated by reference into any of our filings under the Securities Act, or the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), whether made before or after the date hereof and irrespective of any general incorporation language in any such filing.



Item 6. Reserved

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand our results of operations and financial condition. This MD&A is provided as a supplement to, and should be read in conjunction with, our audited consolidated financial statements and the accompanying notes thereto and other disclosures included in this Annual Report on Form 10-K, including the disclosures under "Risk Factors." Our consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the U.S. ("U.S. GAAP") and unless otherwise indicated are presented in U.S. dollars.

Except for the historical information contained herein, the matters discussed in this MD&A may be deemed to be forward-looking statements. Forward-looking statement are only predictions based on management's current views and assumptions and involve risks and uncertainties, and actual results could differ materially from those projected or implied. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. Words such as "may," "expect," "anticipate," "estimate," "intend," and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances) are intended to identify forward-looking statements.

Overview

We are a leader in the field of gene therapy, seeking to deliver to patients suffering from rare and other devasting diseases single treatments with potentially curative results. We are advancing a focused pipeline of innovative gene therapies, including our clinical candidates for the treatment of Huntington's disease, ALS, refractory MTLE and Fabry disease. Our internally developed HEMGENIX®, a gene therapy for the treatment of hemophilia B, was approved for commercialization by the FDA in November 2022 and by the EMA in February 2023. In June 2020, we entered into the Commercialization and License Agreement to license HEMGENIX® to CSL Behring, which is responsible for its commercialization. We are manufacturing HEMGENIX® for CSL Behring and are entitled to specific milestone payments and royalties on net sales under the Commercialization and License Agreement. In May 2023, we entered into the Royalty Purchase Agreement for the sale of a portion of the royalty rights due to us from CSL Behring under the Commercialization and License Agreement. On October 5, 2023, we announced a Reorganization (see definition below) of our research and technology programs.

Business Developments

Below is a summary of our recent significant business developments:

Huntington's disease program (AMT-130)

We are currently conducting a multi-center randomized, controlled, and blinded Phase I/II clinical trial for AMT-130 in the U.S. in which 26 patients with early-manifest Huntington's disease have been enrolled. The low-dose cohort of this trial includes 10 patients, of which six patients received treatment with AMT-130 and four patients received imitation surgery. The high-dose cohort includes 16 patients, of which 10 patients received treatment with AMT-130 and six patients received imitation surgery. Patients in the high-dose cohort that received imitation surgery had the option to cross over after 12 months if they met the inclusion criteria for the study. In July 2022, we began crossing over patients in the high-dose cohort who received the imitation surgical procedure. Four of the six control patients in the high-dose cohort have been crossed over to treatment (three patients received the high dose and one patient received the low dose). The remaining two control patients in the high-dose cohort did not meet all the inclusion criteria for the study and were not eligible for crossover. All four crossover patients received a short course of immunosuppression therapy concurrent with the administration of AMT-130.

We are also conducting an open-label Phase Ib/II study in the EU and the United Kingdom, which has enrolled 13 patients with the same early-manifest criteria for Huntington's disease as the U.S. study. Six patients were treated with AMT-130 in the initial low-dose cohort and seven patients were treated in the subsequent high-dose cohort.

In November 2023, we began enrolling patients in a third cohort to further investigate both doses in combination with perioperative immune suppression with a focus on evaluating near-term safety. Up to 12 patients will be treated in this cohort, all of whom will receive AMT-130 using the current, established stereotactic neurosurgical delivery procedure.

In June 2023, we announced interim data, including up to 24-month follow-up, from 26 patients enrolled in the ongoing U.S. Phase I/II clinical trial of AMT-130. In December 2023 we announced updated interim data, including up to 30-month follow-up from the 26 patients enrolled in the ongoing U.S. Phase I/II clinical trial of AMT-130 as well as the 13 patients enrolled in the European Phase Ib/II trial. See "*Business —Our Development of AMT-130 for Huntington's Disease*" for further information on these interim data and the ongoing clinical trials of AMT-130.

Amyotrophic lateral sclerosis program (AMT-162)

On January 31, 2023, we announced that we had entered into a global licensing agreement with Apic Bio for a one-time, intrathecally administered investigational gene therapy for ALS caused by mutations in SOD1.

We made an initial cash payment in February 2023 of $10.0 million to Apic Bio that was recognized as a research and development expense. We owe up to $43.0 million in milestone payments to Apic Bio if AMT-162 is approved for commercialization in the U.S. and Europe.

Temporal lobe epilepsy program (AMT-260)

AMT-260 is our gene therapy candidate for refractory MTLE. We acquired AMT-260 through our acquisition of uniQure France SAS in July 2021. In September 2023, following the clearance of an IND for AMT-260 in August 2023, we paid EUR 10.0 million ($10.6 million) to the former shareholders of uniQure France SAS, to settle a milestone payment owed in relation to our 2021 acquisition.

Reorganization

On October 5, 2023, we announced that we are implementing a Reorganization. As a result of the Reorganization, we discontinued investments in more than half of our research programs, including AMT-210 for the treatment of Parkinson's disease and certain technology projects. Following the Reorganization, we are prioritizing advancing our clinical-stage programs to clinical proof of concept.

As a result of the Reorganization, we eliminated approximately 20% of our total workforce and closed our research laboratory in Lexington, Massachusetts. We completed the Reorganization by the end of fiscal year 2023 and incurred costs of approximately $2.5 million for cash expenditures related to employee severance costs. We also incurred costs associated with the closure of a research laboratory in Lexington and associated fixed assets of which the carrying values were determined to not be recoverable as of the cease-use date in November 2023. As part of the Reorganization, we also consolidated all GMP manufacturing into our Lexington manufacturing facility and consolidated process and analytical development into our Amsterdam, Netherlands facility.

As a result of the significant reduction in research activities, Ricardo Dolmetsch, Ph.D., departed as Chief Scientific Officer, effective October 4, 2023. Dr. Dolmetsch served as a scientific consultant through the end of the year. In connection with Dr. Dolmetsch's transition, the Board of Directors of the Company have appointed Richard Porter, Ph.D., our current Chief Business Officer, to serve as the Company's Chief Business and Scientific Officer, effective as of October 5, 2023.

Financing

Royalty Financing Agreement

On May 12, 2023, we entered into the Royalty Financing Agreement with the Purchaser. Under the terms of the Royalty Financing Agreement, we received an upfront payment of $375.0 million in exchange for the Purchaser's rights to the lowest royalty tier on CSL Behring's worldwide net sales of HEMGENIX® for certain current and future royalties due to us. We are also eligible to receive an additional $25.0 million milestone payment under the Royalty Financing Agreement if 2024 net sales of HEMGENIX® exceed a pre-specified threshold. The Purchaser will receive 1.85 times the upfront payment (or $693.8 million) and 1.85 times the $25.0 million milestone payment (if paid) prior to the First Hard Cap Date or, if such cap is not met, up to 2.25 times the upfront and milestone payment (if paid) through December 31, 2038. If 2024 net sales do not exceed a pre-specified threshold, we will be obligated to pay $25.0 million to the Purchaser but only to the extent that we achieve a future sales milestone under the CSL Behring Agreement. If such milestone payment is not due from CSL Behring, we are not obligated to pay any amounts to the Purchaser.

We retained the rights to all other royalties, as well as contractual milestones totaling up to $1.3 billion, under the terms of the CSL Behring Agreement.

Hercules amendment

Upon entering into the Royalty Financing Agreement, we and Hercules amended the 2021 Restated Facility on May 12, 2023. The 2023 Amended Facility extends the maturity date and interest-only period from December 1, 2025 to January 5, 2027.

Investment in debt securities

In July and September 2023, we invested $272.0 million and EUR 87.0 million (or a total of $366.4 million as of the investment dates) of our cash and cash equivalents into short-term U.S. and European government bonds that are U.S. dollar and euro denominated, respectively. Our investment policy requires us to invest in bonds with the highest investment grade credit rating. As of December 31, 2023, the bonds have remaining maturities ranging from less than one month to seven months. We classify these bonds as held-to-maturity.

CSL Behring collaboration

In June 2023, the first sale of HEMGENIX® in the U.S. occurred, and in July 2023 we collected the $100.0 million owed to us under the CSL Behring Agreement.

Financial Highlights

Key components of our results of operations include the following:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Total revenues	$ 15,843	$ 106,483	$ 524,002
Cost of license revenues	(65)	(1,254)	(24,976)
Cost of contract manufacturing revenues	(13,563)	(2,089)	—
Research and development expenses	(214,864)	(197,591)	(143,548)
Selling, general and administrative expenses	(74,591)	(55,059)	(56,290)
Net (loss) / income	(308,478)	(126,789)	329,589

As of December 31, 2023, we had $617.9 million in cash and cash equivalents and investment securities (December 31, 2022: $392.8 million cash and cash equivalents and investment securities). We had a net loss of $308.5 million in 2023, a net loss of $126.8 million in 2022 and net income of $329.6 million in 2021. As of December 31, 2023, we had an accumulated deficit of $890.4 million (December 31, 2022: $581.9 million).

Compared to the year ended December 31, 2023, we expect that our research and development expenses will decline following the Reorganization, until such time we decide to advance one of our gene therapy product candidates into late-stage clinical development.

See “Results of Operations” below for a discussion of the detailed components and analysis of the amounts above.

Critical Accounting Policies and Estimates

In preparing our consolidated financial statements in accordance with U.S. GAAP and pursuant to the rules and regulations promulgated by the SEC we make assumptions, judgments and estimates that can have a significant impact on our net loss/income and affect the reported amounts of certain assets, liabilities, revenue and expenses, and related disclosures. On an ongoing basis, we evaluate our assumptions, estimates and judgments, including those related to what we believe to be our critical accounting policies. Refer to Note 2 *“Summary of significant accounting policies”* for a summary of our significant accounting policies.

We base our assumptions, judgments and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not clear from other sources. Actual results may differ from these estimates under different assumptions, judgments or estimates. We also discuss our critical accounting estimates with the Audit Committee of our Board of Directors.

We consider the following to be our critical accounting estimate:

- Contingent consideration recorded in relation to the uniQure France SAS business combination;

Contingent consideration

On the Acquisition Date of uniQure France SAS we recorded contingent consideration related to amounts potentially payable to uniQure France SAS’s former shareholders. The amounts payable in accordance with the SPA are contingent upon realization of certain milestones associated with the TLE research program. Contingent consideration was measured at fair value at the Acquisition Date with changes in fair value recognized in the consolidated statements of operations in research and development expenses.

Changes in contingent consideration can result from changes in the assumed achievement and timing of estimated milestones and the discount rate used to estimate the fair value of the liability:

- We had used discount rates ranging from 14.0% to 14.4% to calculate the contingent consideration as of December 31, 2022. As of December 31, 2023 we increased the interest rates to a range of 15.3% to 15.6% to reflect increases in market interest rates. An increase in the discount rate reduces the fair value of the contingent consideration liability whereas a decrease in the discount rate increases the fair market value of the contingent consideration liability.

- We need to develop an estimate of when a milestone is expected to be achieved. An achievement of a milestone at a later than currently expected date reduces the fair value of the contingent consideration liability whereas an achievement at an earlier than currently expected date increases the fair value of the contingent consideration liability.

- We initially recorded the contingent consideration liability on the Acquisition Date assuming a 40% probability of advancing the TLE research program into clinical development. We developed this estimate using data from an external study regarding the average likelihood of advancing into clinical development at a certain stage or preclinical development. For the year ended December 31, 2022, we had increased the probability to 66.0% following the commencement of toxicology studies for the TLE program. During the year ended December 31, 2023 we increased the probability to 100.0% following the clearance of the IND application for AMT-260 in August 2023. The increase in probabilities resulted in a $14.2 million expense in the year ended December 31, 2023 and a $4.4 million expense in the year ended December 31, 2022. This also resulted in an increase of the probability that AMT-260 may advance to late-stage development and commercialization.

The fair value of the contingent consideration liability as of December 31, 2023 was $43.0 million and as of December 31, 2022 was $35.3 million. The increase was primarily driven by the increase in the probability of TLE advancing into clinical development to 100% following the clearance of the IND application for AMT-260 in August 2023. If as of December 31, 2023 we had assumed TLE was certain (i.e., 100% probability) to advance into late-stage development and commercialization, then the fair value of the contingent consideration liability would have increased from $43.0 million to $75.9 million. If as of December 31, 2023 we had assumed that we would discontinue development of the TLE program, then we could have released the contingent consideration liability to income.

In prior periods, we have considered the following to be critical accounting estimates but have determined that these are no longer considered critical for the current year:

- Valuation allowance related to Dutch deferred tax assets; and
- Revenue recognition related to CSL Behring milestones

Valuation allowance related to Dutch deferred tax assets

We are subject to corporate taxes in the Netherlands. We have been incurring net operating losses in accordance with the corporate tax laws in almost all years since we founded our business.

As of December 31, 2022, the total amount of net operating losses carried forward under the Dutch tax regime was $264.0 million (December 31, 2021: $228.5 million). We have historically recorded a full valuation allowance. We evaluate all positive and negative evidence including future income from the CSL Behring Agreement in assessing the need for such a full valuation allowance. We concluded that as of December 31, 2022 it is more likely than not that the remaining deferred tax assets will not be realized. If we would have released the full valuation allowance as of December 31, 2022, then we would have recorded up to $74.5 million of deferred tax income during the year ended December 31, 2022. This is no longer considered a critical accounting estimate as future income from the CSL Behring Agreement is not expected to result in a taxable profit.

Revenue recognition related to CSL Behring milestones

On June 24, 2020 (“ Signing Date”), we entered into the CSL Behring Agreement. The transaction became effective on Closing.

As of Closing, we identified two material performance obligations related to the CSL Behring Agreement:

(i) Sale of the exclusive global rights to the Product ("License Sale"); and

(ii) Generate information to support the regulatory approval of the current and next generation manufacturing process of Product and to provide any such information generated to CSL Behring ("Manufacturing Development").

We determined that the fixed upfront payment of $450.0 million and the $12.4 million that we received in relation to the certain reimbursable activities to fulfill the transfer of global rights ("Additional Covenants") in the year ended December 31, 2021 should be allocated to the License Sale. In addition, we concluded that $255.0 million of variable milestone payments, sales milestone payments and royalties should be allocated to the License Sale performance obligation as well. We determined that the License Sale was completed on May 6, 2021, when we transferred the license and CSL Behring assumed full responsibility for the development and commercialization of the Product. Upon the Closing, we evaluated the amounts of potential payments and the likelihood that the payments will be received. We utilized the most likely amount method to estimate the variable consideration to be included in the transaction price. Since we cannot control the achievement of regulatory and first commercial sales milestones, we concluded that all potential payments were constrained as of Closing. We determined that we would recognize revenue related to these payments, only to the extent that it becomes probable that no significant reversal of recognized cumulative revenue will occur thereafter. We will include payments related to sales milestones in the transaction price when their achievement becomes probable, and we will include royalties on the sale of Product once these have been earned.

In March and April 2022, we collected the $55.0 million of variable milestone payments related to the submissions of a BLA and MAA which we had recorded as license revenue in the year ended December 31, 2021. During the year ended December 31, 2022, we recorded $100.0 million of variable milestone revenue related to a first sale of HEMGENIX™ and collected this payment in July 2023. We no longer consider this a critical accounting estimate because we currently do not expect to recognize any regulatory milestone payments within the next two years. The recognition of license revenue related to sales milestone payments and royalties does not require significant judgement as we recognize these as sales of HEMGENIX™ occur.

Recently Adopted Accounting Pronouncements

None.

Results of Operations

The following table presents a comparison of the years ended December 31, 2023, 2022 and 2021.

	Year ended December 31,				
	2023	2022	2021	2023 vs 2022	2022 vs 2021
	(in thousands)				
Total revenues	$ 15,843	$ 106,483	$ 524,002	$ (90,640)	$ (417,519)
Operating expenses:					
Cost of revenues	(13,628)	(3,343)	(24,976)	(10,285)	21,633
Research and development expenses	(214,864)	(197,591)	(143,548)	(17,273)	(54,043)
Selling, general and administrative expenses	(74,591)	(55,059)	(56,290)	(19,532)	1,231
Total operating expenses	**(303,083)**	**(255,993)**	**(224,814)**	**(47,090)**	**(31,179)**
Other income	6,059	7,171	12,306	(1,112)	(5,135)
Other expense	(1,690)	(820)	(876)	(870)	56
(Loss) / income from operations	**(282,871)**	**(143,159)**	**310,618**	**(139,712)**	**(453,777)**
Non-operating (expense) / income, net	(23,686)	14,900	22,188	(38,586)	(7,288)
(Loss) / income before income tax benefit	$ **(306,557)**	$ **(128,259)**	$ **332,806**	**(178,298)**	**(461,065)**
Income tax (expense) / benefit	(1,921)	1,470	(3,217)	(3,391)	4,687
Net (loss) / income	**$ (308,478)**	**$ (126,789)**	**$ 329,589**	**$ (181,689)**	**$ (456,378)**

Revenues and cost of revenues

Our revenues and associated costs for the years ended December 31, 2023, 2022 and 2021 were as follows:

	Year ended December 31,				
	2023	2022	2021	2023 vs 2022	2022 vs 2021
	(in thousands)				
License revenues	$ 2,758	$100,000	$517,400	$ (97,242)	$(417,400)
Contract manufacturing revenues	10,835	1,717	—	9,118	1,717
Collaboration revenues	2,250	4,766	6,602	(2,516)	(1,836)
Total revenues	**$ 15,843**	**$106,483**	**$524,002**	**$ (90,640)**	**$(417,519)**
Cost of license revenues	(65)	(1,254)	(24,976)	1,189	23,722
Cost of contract manufacturing revenues	(13,563)	(2,089)	—	(11,474)	(2,089)
Total cost	**$(13,628)**	**$ (3,343)**	**$ (24,976)**	**$ (10,285)**	**$ 21,633**

CSL Behring

Effective on Closing of the CSL Behring Agreement we sold the exclusive global rights to the Product ("License Sale"). We recognize license revenue in relation to the License Sale when it becomes probable that regulatory and sales milestone events will be achieved as well as when royalties on sales of Product have been earned. We recognized $2.8 million, $100.0 million and $517.4 million of license revenue for the years ended December 31, 2023, 2022 and 2021, respectively. We recognized $2.8 million of license revenue in 2023 related to royalty payments owed on HEMGENIX® sales, when earned. We recognized $100.0 million of license revenue in 2022 related to a milestone payment following the first sale of HEMGENIX® in the U.S. in 2023, which we considered probable as of December 31, 2022. We recognized $517.4 million license revenue in 2021 related to the fixed upfront payment of $450.0 million and an additional payment of $12.4 million we received after the Closing as well as a total of $55.0 million of payments related to milestone payments owed on submission of the MAA in March 2022 and the BLA in April 2022, which we had considered probable as of December 31, 2021.

We expense contract fulfillment costs associated with license revenue we receive from CSL Behring, which are recognized as costs of license revenues. These expenses primarily consist of payments we owe to our licensors in relation to license payments we receive from CSL Behring. We incurred $0.1 million, $1.3 million and $25.0 million of such cost in the years ended December 31, 2023, 2022 and 2021, respectively.

We recognize collaboration revenues associated with services to CSL Behring in accordance with the CSL Behring Agreement. Collaboration revenue related to these contracted services is recognized when the performance obligations are satisfied. We recognized $2.3 million, $3.0 million and $2.4 million of collaboration revenue for the years ended December 31, 2023, 2022 and 2021, respectively. The decrease in collaboration revenue in 2023 of $0.7 million compared to 2022 was primarily related to a reduction in services requested by CSL Behring following the submissions of the BLA and MAA for HEMGENIX®. The increase in collaboration revenue in 2022 of $0.6 million compared to 2021 was primarily related to revenues related to full-time-employee ("FTE") recharges of $3.0 million recognized from the CSL Behring Agreement as a result of additional development services that CSL Behring requested from us.

We recognize contract manufacturing revenues related to contract manufacturing HEMGENIX® for CSL Behring. Contract manufacturing revenues are realized when earned upon sales of HEMGENIX® to CSL Behring. We recognized $10.8 million and $1.7 million contract manufacturing revenues in the year ended December 31, 2023 and 2022, respectively. We did not recognize such revenues in 2021 as we started contract manufacturing activities to supply CSL Behring with HEMGENIX® following their submission of a BLA and MAA in the spring of 2022.

We incurred $13.6 million and $2.1 million of cost of contract manufacturing revenues related to the manufacture of HEMGENIX® in the years ended December 31, 2023 and 2022 respectively, compared to nil cost of contract manufacturing revenues in the year ended December 31, 2021. Costs of contract manufacturing revenues has increased in the year ended December 31, 2023 compared to the year ended December 31, 2022 due to the increase in sales of HEMGENIX® and a write-down of inventory that has a cost basis in excess of its expected net realizable value.

BMS

We recognized collaboration revenues associated with certain pre-clinical analytical development and process development activities that were reimbursable to us by Bristol-Myers Squibb ("BMS") under the initial collaboration, research and license agreements ("BMS CLA") and the amended agreements ("amended BMS CLA") as well as other related agreements. Collaboration revenue related to these contracted services were recognized when performance obligations were satisfied. We recognized nil, $1.8 million and $4.2 million of collaboration revenue for the years ended December 31, 2023, 2022 and 2021, respectively.

Following the termination of the amended BMS CLA on February 22, 2023 we did not recognize any further revenue for services rendered in accordance with the BMS CLA.

Research and development expenses

We expense research and development ("R&D") expenses as incurred. R&D expenses include costs which relate to our primary activities of biopharmaceutical research and development. Our R&D expenses generally consist of costs incurred for the development of our target candidates, which include:

- employee-related expenses, including salaries, benefits, travel and share-based compensation expense;
- costs incurred for laboratory research, preclinical and nonclinical studies, clinical trials, statistical analysis and report writing, and regulatory compliance costs incurred with clinical research organizations and other third-party vendors;
- costs incurred to conduct consistency and comparability studies;
- costs incurred for the development and improvement of our manufacturing processes and methods;
- costs associated with research activities for enabling technology platforms, such as next-generation vectors, promoters and re-administration of gene therapies;
- costs associated with the rendering of collaboration services;
- payments related to identifiable intangible assets without an alternative future use;
- payments to our licensors for milestones that have been achieved related to our product candidates, including approval of the MAA and BLA for HEMGENIX®;
- facilities, depreciation, and other expenses, which include direct and allocated expenses for rent and maintenance of facilities, insurance, and other supplies; and
- changes in the fair value of liabilities recorded in relation to our acquisition of uniQure France SAS.

Our research and development expenses primarily consist of costs incurred for the research and development of our product candidates, which include:

- *AMT-130 (Huntington's disease).* We have incurred costs related to preclinical and nonclinical studies of AMT-130 and have been incurring costs related to our U.S. Phase I/II clinical trial since February 2019. Since 2021, we have also incurred costs related to our Phase Ib/II clinical trial in Europe;
- AMT-260 *(Temporal lobe epilepsy)*. We have incurred costs related to the preclinical development of AMT-260. We acquired this program on July 30, 2021;
- AMT-191 *(Fabry disease)*. We have incurred costs related to the preclinical development of AMT-191 for the treatment of Fabry disease;
- AMT-162 (*Amyotrophic Lateral Sclerosis caused by mutations in SOD1*) We have incurred costs related to the acquisition in addition to costs incurred to initiate a Phase I/II clinical trial;

- *Etranacogene dezaparvovec (hemophilia B)*. We have incurred costs related to the research, development, and production of etranacogene dezaparvovec for the treatment of hemophilia B. Up to the Closing of the CSL Behring Agreement, we incurred costs related to the preparation of a BLA and MAA and for commercialization of the Product. We also incurred costs for manufacturing development. After the Closing, CSL Behring is responsible for the clinical and regulatory development and commercialization of the Product;
- *Preclinical research programs*. We incurred costs related to the research of multiple preclinical gene therapy product candidates with the potential to treat certain rare and other serious medical conditions; and
- *Technology platform development and other related research*. We incurred significant research and development costs related to manufacturing and other enabling technologies that are applicable across all our programs.

Our R&D expenses may vary substantially from period to period based on the timing of our research and development activities, including manufacturing campaigns, regulatory submissions, and enrollment of patients in clinical trials. The successful development of our product candidates is highly uncertain. Estimating the nature, timing, or cost of the development of any of our product candidates involves considerable judgement due to numerous risks and uncertainties associated with developing gene therapies, including the uncertainty of:

- the scope, rate of progress and expense of our research and development activities;
- our ability to successfully manufacture and scale-up production;
- clinical trial protocols, speed of enrollment and resulting data;
- the effectiveness and safety of our product candidates; and
- the timing of regulatory approvals.

A change in the outcome of any of these variables with respect to our product candidates that we may develop could mean a significant change in the expenses and timing associated with the development of such product candidate.

Research and development expenses for the year ended December 31, 2023 were $214.9 million, compared to $197.6 million and $143.5 million for the years ended December 31, 2022 and 2021, respectively. Other research and development expenses are separately classified in the table below. These are not allocated as they are deployed across multiple projects under development.

	Year ended December 31,				
	2023	2022	2021	2023 vs 2022	2022 vs 2021
			(in thousands)		
Amyotrophic lateral sclerosis (AMT-162)	$ 16,039	$ —	$ —	$ 16,039	$ —
Temporal lobe epilepsy (AMT-260)	13,037	16,199	913	(3,162)	15,286
Huntington's disease (AMT-130)	12,991	19,846	10,529	(6,855)	9,317
Fabry disease (AMT-191)	2,659	2,862	859	(203)	2,003
Etranacogene dezaparvovec (AMT-060/061)	(1,336)	2,474	8,738	(3,810)	(6,264)
Programs in preclinical development and platform related expenses	11,005	7,157	7,986	3,848	(829)
Total direct research and development expenses	**$ 54,395**	**$ 48,538**	**$ 29,025**	**$ 5,857**	**$ 19,513**
Employee and contractor-related expenses	76,702	64,935	55,725	11,767	9,210
Facility expenses	29,490	23,582	18,796	5,908	4,786
Disposables	13,232	17,830	14,679	(4,598)	3,151
Share-based compensation expense	16,881	18,402	12,822	(1,521)	5,580
Fair value changes related to contingent consideration	15,895	7,081	6,683	8,814	398
Other expenses	6,831	17,223	5,818	(10,392)	11,405
Impairment related to the Reorganization	1,438	—	—	1,438	—
Total other research and development expenses	**$ 160,469**	**$ 149,053**	**$ 114,523**	**$ 11,416**	**$ 34,530**
Total research and development expenses	**$ 214,864**	**$ 197,591**	**$ 143,548**	**$ 17,273**	**$ 54,043**

Direct research and development expenses

Amyotrophic Lateral Sclerosis caused by mutations in SOD1 (AMT-162)

On January 31, 2023, we entered into a global licensing agreement with Apic Bio for AMT-162. We have incurred $10.0 million of expenses related to the acquisition. In addition, we have incurred $6.0 million of costs to initiate a Phase I/II clinical trial in 2024.

Temporal lobe epilepsy (AMT-260)

In the years ended December 31, 2023, December 31, 2022 and December 31, 2021, we incurred $13.0 million, $16.2 million and $0.9 million, respectively, expenses for the preclinical development of AMT-260, which we acquired on July 30, 2021. In August 2023, the FDA cleared our IND application, and we started incurring costs for the preparation of a Phase I clinical trial. The decrease in development costs in the year ended December 31, 2023 compared to 2022, results from completing the IND enabling studies, initiated during the year ended December 31, 2022, in the first half of 2023. The increase in development cost in the year ended December 31, 2022, compared to 2021, related to costs incurred in relation to the toxicology study we initiated during the year as well as the manufacturing of supplies for clinical development.

Huntington disease (AMT-130)

We incurred $13.0 million, $19.8 million and $10.5 million expenses in the years ended December 31, 2023, 2022 and 2021 respectively. Our external costs for the development of AMT-130 were primarily related to the execution of our Phase I/II(b) clinical trials in the U.S. and in Europe. We enrolled 26 patients into our U.S. clinical trial between June 19, 2020 and March 21, 2022 and enrolled 13 patients into our European clinical trial between June 23, 2022 and June 21, 2023. The decrease of $6.8 million in external cost in the year ended December 31, 2023 compared to 2022 is a result of enrolling less patients into the clinical trial during 2023, following completion of U.S. enrollment in March 2022. The increase of $9.3 million in external cost in the year ended December 31, 2022 compared to 2021 is a result of increased enrolling activities in 2022, including cross-over patients from our U.S. trial and starting to enroll patients into our European trial in 2022, as well as follow-up activities related to patients enrolled in prior periods.

Fabry disease (AMT-191)

In the years ended December 31, 2023, December 31, 2022 and December 31, 2021, we incurred $2.7 million, $2.9 million and $0.9 million expenses, respectively, primarily related to our preclinical activities. In November 2023, the FDA cleared the IND application, and we started incurring additional costs for Phase I/II clinical trial preparation. The decrease of $0.2 million in external costs in the year ended December 31, 2023 compared to 2022 is a result of completing the IND enabling studies by November 2023. The increase of $2.0 million external costs in the year ended December 31, 2022 compared to 2021 is a result of initiating IND-enabling toxicology studies in August 2022.

Etranacogene dezaparvovec (AMT-060/061)

In the years ended December 31, 2023, December 31, 2022 and December 31, 2021, we incurred $1.4 million income, $2.5 million expenses and $8.7 million expenses, respectively which were primarily related to the Phase II development of the hemophilia B program. After the Closing of the CSL Behring Agreement in May 2021, CSL Behring was responsible for the clinical and regulatory activities and commercialization of the Product. We managed the existing trials on behalf of CSL Behring until such responsibilities were transitioned to CSL Behring in December 2022. Direct research and development expenses related to clinical development incurred in the year ended December 31, 2022 and 2021 are presented net of reimbursements due from CSL Behring. In the same periods, we also incurred costs related to the long-term follow-up of patients in our Phase I/II clinical trial of AMT-060 and our Phase IIb clinical trial of etranacogene dezaparvovec. These costs are also presented net of reimbursements due from CSL Behring.

The decrease of $3.8 million in externals cost in the year ended December 31, 2023 compared to 2022 is a result of transitioning the activities to CSL Behring in December 2022 and winding down the support in early 2023. The decrease of $6.3 million external cost in the year ended December 31, 2022 compared to 2021 is a result of CSL Behring being responsible from May 2021 onwards.

Preclinical programs & platform development

In the years ended December 31, 2023, 2022 and 2021 we incurred $11.0 million, $7.2 million and $8.0 million, respectively, of costs related to our preclinical activities associated with product candidates for various other research programs and technology innovation projects.

Other research & development expenses

- We incurred $76.7 million in employee and contractor expenses in the year ended December 31, 2023 compared to $64.9 million in 2022 and $55.7 million in 2021. The increase in 2023 of $11.8 million, compared to 2022, primarily related to the hiring of new personnel and contractors to support our clinical-stage programs and manufacturing operations as well as incurring $2.2 million in severance costs related to the Reorganization with no such cost incurred in 2022. Our cost increased in 2022 by $9.2 million compared to 2021 primarily as a result of an increase in personnel and contractor related expenses to support the preclinical and clinical trial development of our product candidates;
- We incurred $29.4 million in operating expenses and depreciation expenses related to our rented facilities in the year ended December 31, 2023 compared to $23.6 million in 2022 and $18.8 million in 2021. Our costs increased by $5.9 million in 2023 compared to 2022 as a result of incurring additional operating and depreciation expenses in both our Lexington and Amsterdam facilities. The increase in 2022 compared to 2021 of $4.8 million primarily related to operating expenses and depreciation expense incurred from additional sites in Lexington and increased depreciation expense related to the expansion of the Amsterdam facility in 2021;
- We incurred $13.2 million in disposables costs in the year ended December 31, 2023 compared to $17.8 million in the year ended December 31, 2022 and $14.7 million in the year ended December 31, 2021. The decrease in 2023 related to the reduction in activities in the second half of 2023 due to our Reorganization. The increase in 2022 related to the expansion of our activities to support the development of our product candidates;
- We incurred $16.9 million in share-based compensation expenses in the year ended December 31, 2023 compared to $18.4 million in 2022 and $12.8 million in 2021. The decrease in 2023 of $1.5 million, compared to 2022, is primarily due to forfeitures as a result of the Reorganization and other severance, and a decrease in the fair value of awards granted. This was partially offset by recognizing compensation cost related to performance share units granted in 2021, for which achievement of related performance conditions was deemed probable during the year ended December 31, 2023. The increase in 2022 compared to 2021 of $5.6 million was primarily driven by the increase in awards granted, including those to newly recruited personnel as well as an increase in expense related to performance share units that were deemed probable;
- We incurred $15.9 million of expenses for the year ended December 31, 2023 related to an increase in the fair value of contingent consideration associated with the acquisition of uniQure France SAS, compared to $7.1 million and $6.7 million for the same periods in 2022 and 2021. The increase in 2023 was primarily due to an increase in the probability of making future milestone payments following the dosing of the first patient in Phase I/II clinical trial of AMT-260 after receiving IND acceptance in August 2023;
- We incurred $1.4 million of costs related to the impairment of the Lexington, MA facility right-of-use asset and related leasehold improvements for the year ended December 31, 2023 compared to nil in prior periods; and
- We incurred $6.8 million in other expenses in the year ended December 31, 2023 compared to $17.2 million in 2022 and $5.8 million in 2021. The decrease in costs in 2023 of $10.4 million, compared to 2022, is due to a decrease in contractual license expenses and a reduction in consultant-related expenses. For the year ended December 31, 2023 we incurred $3.1 million in contractual license expenses upon the EMA approval of HEMGENIX® in February 2023 while for the year ended December 31, 2022, we incurred $7.0 million of contractual license expense upon FDA approval of HEMGENIX® and $1.1 million contractual license expense for a valid patent claim granted within the EU. The increase in 2022 compared to 2021 is primarily related to the contractual license expenses incurred in 2022.

Selling, general and administrative expenses

Our general and administrative expenses consist principally of employee, office, consulting, legal and other professional and administrative expenses. We incurred expenses associated with operating as a public company, including expenses for personnel, legal, accounting and audit fees, board of directors' costs, directors' and officers' liability insurance premiums, Nasdaq listing fees, expenses related to investor relations and fees related to business development and maintaining our patent and license portfolio. Our selling costs include employee expenses as well as professional fees related to the preparation of a commercial launch of HEMGENIX® and advisory fees related to obtaining the CSL Behring Agreement.

Selling, general and administrative expenses for the year ended December 31, 2023 were $74.6 million, compared to $55.1 million and $56.3 million for the years ended December 31, 2022 and 2021, respectively.

- We incurred $24.8 million in personnel and contractor expenses in 2023 compared to $21.1 million in 2022 and $16.0 million in 2021. The increase in 2023 of $3.7 million, compared to 2022, and the increase in 2022 of $5.1 million, compared to 2021 was primarily related to the hiring of personnel and contractors to support our business operations. In 2023, we also incurred $0.4 million in severance expense related to the Reorganization;
- We incurred $17.4 million of share-based compensation expenses in 2023 compared to $15.5 million in 2022 and $12.8 million in 2021. The increase in 2023 compared to 2022 of $1.8 million was primarily related to an increase in awards granted and from recognizing compensation cost for performance share units granted in December 2021 that were deemed probable in the year ended December 31, 2023 offset by a decrease in expense related to a decrease in the fair value of awards granted. The increase in 2022 compared to 2021 of $2.7 million was primarily related to the increase in awards granted, including those to newly recruited personnel as well as an increase in expense related to performance share units that were deemed probable;
- We incurred $11.7 million in professional fees in 2023 compared to $7.1 million in 2022 and $9.4 million in 2021. We regularly incur accounting, audit and legal fees associated with operating as a public company. In the year ended December 31, 2023, we incurred additional costs in professional fees related to our global licensing agreement with Apic Bio, entering into the Royalty Purchase Agreement, and other corporate initiatives. Additionally, in the year ended December 31, 2021 we incurred professional fees in relation to our licensing transaction with CSL Behring and our acquisition of uniQure France SAS;
- We incurred $3.8 million, $1.0 million and $5.1 million in financial advisory fees in relation to our licensing transaction with CSL Behring in the years ended December 31, 2023, December 31, 2022 and December 31, 2021;
- We incurred $3.8 million in intellectual property fees including registration and professional fees in the year ended December 31, 2023 compared to $1.5 million in 2022 and $2.4 million in 2021. The increase in 2023 compared to 2022 of $2.3 million is mainly related to an increase in professional fees. The decrease in 2022 compared to 2021 of $0.9 million related to a decrease in intellectual property license fees and registration costs; and
- We incurred $11.6 million in other operating expenses in 2023 compared to $7.9 million in 2022 and $8.2 million in 2021. The increase in 2023 compared 2022 of $3.7 million was primarily a result of an increase in information technology expenses.

Other items, net

In the year ended December 31, 2023, we recognized $0.8 million in other expense in relation to a reduction in the fair market value of our equity stake in VectorY B.V. following an October 2023 financing round. We recognized other income of $0.3 million and $3.0 million related to the equity stake for the years ended December 31, 2022 and 2021, respectively. We received the equity stake in VectorY B.V. in conjunction with a settlement agreement that the Company and VectorY B.V. entered into in April 2021.

We recognized nil in other income of employee retention credit under the U.S. CARES Act in the year ended December 31, 2023, compared to nil and $2.6 million of such income for the same periods in 2022 and 2021, respectively.

In 2023, we recognized $5.0 million in income related to payments received from European authorities to subsidize our research and development efforts in the Netherlands compared to $5.6 million in 2022 and $5.3 million in 2021.

Other income for the years ended December 31, 2023, 2022, and 2021 also includes income from the subleasing of a portion of our Amsterdam facility. We present expenses related to such income as other expense.

Other non-operating items, net

Our non-operating items, net, for the years ended December 31, 2023, 2022 and 2021 were as follows:

	Year ended December 31,				
	2023	2022	2021	2023 vs 2022	2022 vs 2021
	(in thousands)				
Interest income	$ 19,562	$ 609	$ 162	$ 18,953	$ 447
Interest expense	(41,557)	(11,704)	(7,474)	(29,853)	(4,230)
Foreign currency (losses) / gains, net	(1,691)	23,235	29,660	(24,926)	(6,425)
Other non-operating gains / (losses)	—	2,760	(160)	(2,760)	2,920
Total non-operating (expense) / income, net	**$ (23,686)**	**$ 14,900**	**$ 22,188**	**$ (38,586)**	**$ (7,288)**

We recognize interest income associated with our cash and cash equivalents and investment securities. We recognized $19.6 million interest income in 2023, $0.6 million in 2022 and $0.2 million in 2021. Interest income increased by $19.0 million in 2023 compared to 2022 as a result of earning interest income from investing the proceeds of our May 2023 Royalty Financing Agreement as well as the $100.0 million milestone payment collected from CSL Behring in July 2023 into debt securities. In addition, our interest income in 2023 and 2022 compared to 2021 benefited from an increase in interest rates on cash on hand. Our interest income increased in 2022 by $0.4 million compared to 2021 primarily due to the interest income earned on investment securities.

We recognized $41.6 million interest expense in 2023, $11.7 million in 2022 and $7.5 million in 2021. Interest expense increased by $29.9 million in 2023 compared to 2022 due to an increase in market interest rates related to the Hercules debt as well as the recognition of $26.9 million of accrued interest expense related to the Royalty Financing Agreement that we entered into in May 2023. Our interest expense in 2022 primarily increased by $4.2 million compared to 2021 due to an increase in market interest rates in 2022.

We hold monetary items and enter into transactions in foreign currencies, predominantly in euros and U.S. dollars. We recognize foreign exchange results related to changes in these foreign currencies. In 2023, we recognized a net foreign currency loss of $1.7 million related to our borrowings from Hercules, the Royalty Financing Agreement and our cash and cash equivalents and investment securities as well as loans between entities within the uniQure group, compared to a net gain of $23.2 million in 2022 and a net gain of $29.7 million in 2021.

In 2023, we recognized nil within Other non-operating gains /(losses). In 2022, we recognized a $2.8 million net gain within Other non-operating gains / (losses) related to a decrease in the fair value market value of a derivative financial liability related to the change of control payment (“CoC-payment”) compared to a net loss of $0.2 million in 2021. We recorded a net gain in 2022 as no change of control event had occurred as of the February 22, 2023 Termination Date of the amended BMS CLA. We had recorded a net loss of $0.2 million in 2021 for the increase in the fair market value of the derivative financial liability related to the CoC-payment.

Income tax

We recognized $1.9 million of deferred tax expense in 2023, compared to $1.5 million of deferred tax income in 2022 and $3.2 million of deferred tax expense in 2021. In 2023, deferred tax expense recorded in the U.S., related to the consumption of net operating losses, more than offset the deferred tax income recorded as a result of the buildup of net operating losses by the French entity.

Deferred tax income recorded in 2022 results from deferred tax benefits recorded related to the buildup of net operating losses by the French entity which are partially offset by deferred tax expense recorded in the U.S. as a result of the consumption of net operating losses. In addition, we recorded deferred tax expense resulting from the release of valuation allowance for the tax benefit of share issuance costs within the Netherlands in 2022.

Deferred tax expense recorded in 2021 results from the consumption of net operating tax losses by our U.S. entity as well as deferred tax expense resulting from the release of valuation allowance for the tax benefit of share issuance costs within the Netherlands.

Financial Position, Liquidity and Capital Resources

As of December 31, 2023, we had cash and cash equivalents, restricted cash and investment securities of $621.1 million. Until such time, if ever, as we can generate substantial cash flows from successfully commercializing our proprietary product candidates, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution, and licensing arrangements. Based on our current operating plan, research and development plans and our timing expectations related to the progress of our programs and following the Reorganization, we believe that our cash and cash equivalents and investment securities will fund our operations into second quarter of 2027. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. We expect that we will require additional funding if we decide to advance AMT-130 for our Huntington's disease gene therapy program or any of our other product candidates into late-stage clinical development. Our material cash requirements include the following contractual and other obligations:

Debt

As of December 31, 2023, we had an outstanding loan amount owed to Hercules for an aggregate principal amount of $100.0 million. Future interest payments and financing fees associated with the loan total $47.6 million, with $13.4 million payable within 12 months. We are contractually required to repay the $100.0 million in full in January 2027.

Leases

We entered into lease arrangements for facilities, including corporate, manufacturing and office space. As of December 31, 2023, we had fixed lease payment obligations of $53.1 million, with $8.3 million payable within 12 months.

Commitments related to acquisition of uniQure France SAS (nominal amounts)

In relation to our acquisition of uniQure France SAS, we entered into commitments to make payments to the former shareholders upon the achievement of certain contractual milestones. The commitments include payments related to post-acquisition services that we agreed to as part of the transaction. In September 2023, we made a payment of EUR 10.0 million ($10.6 million) to the former shareholders of uniQure France SAS following the FDA's clearance of the IND application for AMT-260. As of December 31, 2023, our remaining commitment amounts include a EUR 30.0 million ($33.1 million) milestone payment due upon treating the first patient in a Phase I/II clinical trial for AMT-260 and EUR 160.0 million ($176.6 million) in potential milestone payments associated with Phase III development and the approvals of AMT-260 in the U.S. and European Union. The timing of achieving these milestones and consequently the timing of payments, as well as whether the milestone will be achieved at all, is generally uncertain. These payments are owed in euro and have been translated at the foreign exchange rate as of December 31, 2023, of $1.10/€1.00. As of December 31, 2023, we expect these obligations will become payable between the first half of 2024 and 2031. If and when due, up to 25% of the milestone payments can be settled with our ordinary shares.

Commitments related to licensors and financial advisors

We have obligations to make future payments to third parties that become due and payable on the achievement of certain development, regulatory and commercial milestones (such as the start of a clinical trial, filing of a BLA, approval by the FDA or product launch) or as a result of collecting payments related to our License Sale to CSL Behring. We also owe payments to a financial advisor related to certain payments we will collect under the CSL Behring Agreement.

The table below summarizes our consolidated cash flow data for the years ended December 31:

	Year ended December 31,		
	2023	**2022**	**2021**
	(in thousands)		
Cash, cash equivalents and restricted cash at the beginning of the period	$ 231,173	$ 559,353	$ 247,680
Net cash used in operating activities	(145,929)	(145,060)	287,959
Net cash used in investing activities	(205,686)	(182,734)	(67,387)
Net cash generated from financing activities	362,721	1,445	94,858
Foreign exchange impact	2,265	(1,831)	(3,757)
Cash, cash equivalents and restricted cash at the end of period	**$ 244,544**	**$ 231,173**	**$ 559,353**

We had previously incurred losses and cumulative negative cash flows from operations since our business was founded by our predecessor entity AMT Holding N.V. in 1998, with the exception of generating income in 2021 after receiving the upfront payment upon Closing of the CSL Behring Agreement. We continue to incur losses in the current period. We recorded a net loss of $308.5 million for the year ended December 31, 2023, and net loss of $126.8 million in 2022, and a net income of $329.6 million in 2021. As of December 31, 2023, we had an accumulated deficit of $890.4 million.

Sources of liquidity

From our first institutional venture capital financing in 2006 through the current period, we funded our operations primarily through private and public placements of equity securities, debt securities, payments from our collaboration partners as well as from selling a portion of royalties due from our collaboration partner CSL Behring. In May 2021, we received a $462.4 million cash payment due from CSL Behring. We have collected $55.0 million related to CSL Behring's global regulatory submissions for etranacogene dezaparvovec in March and April 2022, and $100.0 million in July 2023 related to the first sale milestone of HEMGENIX® in the U.S., and are eligible to receive additional milestone payments, as well as royalties (to the extent not owed to settle the liability from the Royalty Financing Transaction) on net sales of HEMGENIX®.

On March 1, 2021, we entered into a Sales Agreement with SVB Leerink LLC ("SVB Leerink") with respect to an at-the-market ("ATM") offering program, under which we, from time to time in our sole discretion, could offer and sell through SVB Leerink, acting as agent, our ordinary shares, up to an aggregate offering price of $200.0 million. In the year ended December 31, 2021, we received net proceeds of $29.6 million from the issuance of 921,730 ordinary shares under the Sales Agreement that took place during March and April of that year. We paid SVB Leerink a commission equal to 3% of the gross proceeds of the sales price of all ordinary shares sold through it as a sales agent under the Sales Agreement. We did not issue any ordinary shares under the Sales Agreement for the 12-month periods ended December 31, 2023 and December 31, 2022.

On January 29, 2021, we drew down $35 million under a facility agreement with Hercules. We drew down a further $30 million under our 2021 Restated Facility with Hercules in December 2021.

We and Hercules amended the 2021 Restated Facility on May 12, 2023. The 2023 Amended Facility extends the maturity date and interest-only period from December 1, 2025 to January 5, 2027.

We are required to repay the entire principal balance of $100.0 million on the maturity date. The interest rate is adjustable and is the greater of (i) 7.95% and (ii) 7.95% plus the prime rate less 3.25% per annum. Under the 2023 Amended Facility, we owe a back-end fee of $4.9 million on December 1, 2025 and a back-end fee of $1.3 million on January 5, 2027.

We are subject to certain covenants under the 2023 Amended Facility and may become subject to covenants under any future indebtedness that could limit our ability to take specific actions, such as incurring additional debt, making capital expenditures, or declaring dividends, which could adversely impact our ability to conduct our business. In addition, our pledge of assets as collateral to secure our obligations under the 2023 Amended Facility may limit our ability to obtain debt financing. The 2023 Amended Facility permits us to issue up to $500.0 million of convertible debt.

To the extent we need to finance our cash needs through equity offerings or debt financings, such financing may be subject to unfavorable terms including without limitation, the negotiation and execution of definitive documentation, as well as credit and debt market conditions, and we may not be able to obtain such financing on terms acceptable to us or at all. If financing is not available when needed, including through debt or equity financings, or is available only on unfavorable terms, we may be unable to meet our cash needs. 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 or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves, which could have a material adverse effect on our business, financial conditions, results of operations and cash flows.

Net Cash used in / generated from operating activities

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Cash flows from operating activities			
Net (loss) / income	$ (308,478)	$ (126,789)	$ 329,589
Adjustments to reconcile net (loss) /income to net cash (used in) / generated from operating activities:			
Depreciation, amortization and impairment	11,900	8,537	7,299
Amortization of premium/discount on investment securities	(10,917)	—	—
Share-based compensation expense	35,093	34,204	25,635
Royalty financing agreement interest expense	26,933	—	
Deferred tax expense / (income)	1,921	(1,470)	3,210
Change in fair value of contingent consideration and derivative financial instrument, net	15,895	4,320	6,843
Unrealized foreign exchange (gains) / losses, net	(2,206)	(22,083)	(31,335)
Other items, net	4,721	1,605	(2,800)
Changes in operating assets and liabilities:			
Accounts receivable, prepaid expenses, and other current assets and receivables	(1,323)	(4,083)	(3,959)
Contract asset related to CSL Behring milestone payments	100,000	(45,000)	(55,000)
Inventories	(6,740)	(6,924)	-
Accounts payable	(4,169)	9,238	(727)
Accrued expenses, other liabilities, and operating leases	(6,645)	3,385	9,204
Contingent consideration milestone payment	(1,914)	—	-
Net cash (used in) / generated from operating activities	**$ (145,929)**	**$ (145,060)**	**$ 287,959**

Net cash used in operating activities was $145.9 million for the year ended December 31, 2023, and consisted of a net loss of $308.5 million adjusted for non-cash items, including depreciation, amortization and impairment expense of $11.9 million, amortization of the premium/discount on investment securities of $10.9 million, share-based compensation expense of $35.1 million, $26.9 million of interest expense related to the royalty financing agreement, a change in deferred taxes of $1.9 million, $15.9 million change in the fair value of contingent consideration and unrealized foreign exchange gains of $2.2 million. Net cash generated from operating activities also included favorable changes in operating assets and liabilities of $81.1 million. There was a net increase in accounts receivable, prepaid expenses, and other current assets and receivables of $1.3 million. There was a net decrease in contract assets of $100.0 million related to the collection of the $100.0 million milestone due from CSL Behring in July 2023. There was an increase in inventory balances of $6.7 million. There was a net decrease in accounts payable, accrued expenses, other liabilities, and operating leases of $10.8 million, primarily related to a decrease of $4.2 million in accounts payable and a decrease of $6.6 million related to various accruals. Net cash used in operating activities also includes a payment for a contingent consideration milestone of $1.9 million.

Net cash used in operating activities was $145.1 million for the year ended December 31, 2022, and consisted of a net loss of $126.8 million adjusted for non-cash items, including depreciation and amortization expense of $8.5 million, share-based compensation expense of $34.2 million, changes in the fair value of contingent consideration and the derivative financial liability of $4.3 million, unrealized foreign exchange gains of $22.1 million and a change in deferred taxes of $1.5 million. Net cash generated from operating activities also included unfavorable changes in operating assets and liabilities of $43.4 million. There was a net increase in accounts receivable, prepaid expenses, and other current assets and receivables of $4.1 million. There was a net increase in contract assets related to CSL Behring milestone payments of $45.0 million. The net increase related to $100.0 million recognized as a contract asset in the current period and collection of $55.0 million of the contract asset related to the CSL milestones of $55.0 million in March 2022 and April 2022. There was an increase in inventories of $6.9 million related to the production of HEMGENIX® under the CSL Behring Agreement. These changes also relate to a net increase in accounts payable, accrued expenses, other liabilities, and operating leases of $12.6 million, primarily related to an increase in accounts payable.

Net cash generated from operating activities was $288.0 million for the year ended December 31, 2021, and consisted of net income of $329.6 million adjusted for non-cash items, including depreciation and amortization expense of $7.3 million, share-based compensation expense of $25.6 million, a change in fair value of contingent consideration of $6.8 million, unrealized foreign exchange gains of $31.3 million, a change in deferred taxes of $3.2 million and other non-cash items, net, of $2.8 million. Net cash generated from operating activities also included unfavorable changes in operating assets and liabilities of $50.3 million, which includes $55.0 million recognized as a contract asset related to probable CSL Behring milestone payments. Additionally, these changes also related to a net increase in accounts receivable, prepaid expenses, and other current assets and receivables of $4.0 million primarily related to an increase in various prepaids, including those related to clinical trials, partially offset by decrease in receivables as a result of collection of the BMS milestone that was recorded as of December 31, 2020 and collection of the CSL Behring receivables recorded as of December 31, 2020 for expenses for which we had a right of reimbursement and a net increase in accounts payable, accrued expenses, other liabilities, and operating leases of $8.5 million primarily related to an increase in various accruals for goods received from and services provided by vendors and an increase in personnel accruals. Net income primarily consisted of $462.4 million license revenue recognized on Closing and $55.0 million license revenue related to CSL Behring's global regulatory submissions for etranacogene dezaparvovec that occurred in March and April 2022 and were considered probable on December 31, 2021.

Net cash used in investing activities

In 2023, we used $205.7 million in our investing activities compared to $182.7 million in 2022 and $67.4 million in 2021.

	Year ended December 31,		
	2023	2022	2021
	(in thousands)		
Investment in investment securities	$ (366,439)	$ (163,146)	$ —
Proceeds from maturity of investment securities	167,907	—	—
Build out of Amsterdam site	(3,389)	(11,904)	(12,412)
Build out of Lexington site	(3,765)	(5,784)	(5,026)
Acquisition of uniQure France SAS, net of cash acquired	—	(1,900)	(49,949)
Net cash used in investing activities	**$ (205,686)**	**$ (182,734)**	**$ (67,387)**

In the years ended December 31, 2023 and 2022, we invested $366.4 million and $163.1 million, respectively, of our cash on hand into euro and dollar denominated government bonds. We made no such investments in 2021. In the year ended December 31, 2023 we received $167.9 million in proceeds from the maturing of investments securities.

In 2023, we invested $3.4 million in the build out of our Amsterdam site compared to $11.9 million in 2022 and $12.4 million in 2021. Our investments in 2023 and 2022 related to investments into equipment while in 2021 investments primarily related to the construction of additional laboratories to support the expansion of our research and development activities as well as the construction of a cleanroom designed to be capable of manufacturing cGMP materials at a 500-liter scale.

In 2023, we invested $3.8 million in our facility in Lexington compared to $5.8 million in 2022 and $5.0 million in 2021. Our investments in 2023 are a result of improvements made to the lease facility and investment in office and laboratory equipment.

We paid EUR 1.8 million ($1.9 million) to acquire the remaining outstanding shares of uniQure France SAS in February, July and September 2022. We paid EUR 42.1 million ($49.9 million), net of EUR 2.8 million ($3.3 million) of cash acquired, during the year ended December 31, 2021 to acquire 97.7% of the outstanding ordinary shares of uniQure France SAS on July 30, 2021.

Net cash generated from financing activities

	Year ended December 31,		
	2023	2022	2021
	(in thousands)		
Cash flows from financing activities			
Proceeds from Royalty Financing Agreement, net of debt issuance costs	$ 370,062	$ -	$ -
Contingent consideration milestone payment	(7,649)	-	-
Proceeds from issuance of shares related to employee stock option and purchase plans	308	1,445	2,798
Proceeds from loan increment, net of debt issuance costs	-	-	64,067
Proceeds from issuance of ordinary shares, net of issuance costs	-	-	29,565
Repayment of debt assumed through the acquisition of uniQure France SAS	-	-	(1,572)
Net cash generated from financing activities	**$ 362,721**	**$ 1,445**	**$ 94,858**

In June 2023, we received $370.1 million net proceeds from the Royalty Financing Agreement.

In September 2023, following the FDA's clearance of the IND application for AMT-260, we made a payment of $10.6 million to the former shareholders of uniQure France SAS based on contractually defined milestones. $9.6 million of this payment related to a contingent consideration of which $7.6 million was classified as cash flows from financing activities and $1.9 million was classified as a net cash flow used in operating activities.

In 2023, we received $0.3 million from the exercise of options to purchase ordinary shares issued in accordance with our share incentive plans, compared to $1.4 million in 2022 and $2.8 million in 2021.

In January 2021, we received $34.6 million net proceeds from the 2021 Amended Facility and in December 2021 we received $29.5 million net proceeds from the 2021 Restated Facility for combined net proceeds of $64.1 million (nil in 2023 and 2022).

We received net proceeds of $29.6 million associated with our ATM offering in March and April 2021. No such proceeds were received in 2023 or 2022.

Upon the acquisition of uniQure France SAS, uniQure France SAS held loans with an outstanding amount equal to EUR 1.4 million ($1.6 million). During the year ended December 31, 2021, the loans were repaid in their entirety.

Funding requirements

Our future capital requirements will depend on many factors, including but not limited to:

- contractual milestone payments and royalties we might be owed in accordance with the CSL Behring Agreement;
- earnout payments we might owe the former shareholders of uniQure France SAS, which are subject to the achievement of specific development and regulatory milestones;
- the scope, timing, results, and costs of our current and planned clinical trials, including those for AMT-130 in Huntington's disease;
- the scope, obligations and restrictions on our business related to our existing equity, debt or royalty monetization financings and underlying agreements;
- the extent to which we acquire or in-license other businesses, products, product candidates or technologies;
- the amount and timing of revenue, if any, we receive from manufacturing products for CSL Behring;
- the scope, timing, results and costs of preclinical development and laboratory testing of our additional product candidates;
- the need for additional resources and related recruitment costs to support the preclinical and clinical development of our product candidates;
- the need for any additional tests, studies, or trials beyond those originally anticipated to confirm the safety or efficacy of our product candidates and technologies;
- the cost, timing and outcome of regulatory reviews associated with our product candidates;

- our ability to enter into collaboration arrangements in the future;
- the costs and timing of preparing, filing, expanding, acquiring, licensing, maintaining, enforcing, and prosecuting patents and patent applications, as well as defending any intellectual property-related claims; and
- the costs associated with maintaining quality compliance and optimizing our manufacturing processes, including the operating costs associated with our Lexington, Massachusetts manufacturing facility.

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

We are exposed to a variety of financial risks in the normal course of our business, including market risk (including currency, price, and interest rate risk), credit risk and liquidity risk. Our overall risk management program focuses on preservation of capital and the unpredictability of financial markets and has sought to minimize potential adverse effects on our financial performance and position.

Market Risk

Currency risk

We are exposed to foreign exchange risk arising from various currencies, primarily with respect to the U.S. dollar and euro and to a lesser extent to the British pound and the Swiss Franc. As our U.S. operating entity primarily conducts its operations in U.S. dollars, its exposure to changes in foreign currency is insignificant. Similarly, the exposure to changes in foreign currencies of our Swiss and French entities are insignificant as well.

Our Dutch entities hold significant amounts of U.S. dollars in cash and cash equivalents and investment securities, have debt and interest obligations to Hercules denominated in U.S. dollars, generate collaboration revenue denominated in U.S. dollars, receive services from vendors denominated in U.S. dollars and occasionally British Pounds and fund the operations of our U.S. operating entity in U.S. dollars. Foreign currency denominated account receivables and account payables are short-term in nature (generally 30 to 45 days).

Variations in exchange rates will impact earnings and other comprehensive income or loss. On December 31, 2023, if the euro had weakened 10% against the U.S. dollar with all other variables held constant, pre-tax loss for the year would have been $6.0 million higher (December 31, 2022: pre-tax loss $20.4 million lower), and other comprehensive loss would have been $0.3 million higher (December 31, 2022: $24.4 million higher). Conversely, if the euro had strengthened 10% against the U.S. dollar with all other variables held constant, pre-tax loss for the year would have been $6.0 million lower (December 31, 2022: pre-tax loss $20.4 million higher), and other comprehensive loss would have been $2.6 million lower (December 31, 2022: $32.1 million lower).

We strive to mitigate foreign exchange risk through holding sufficient funds in euro and dollars to finance budgeted cash flows for generally 18 months.

The sensitivity in other comprehensive income to fluctuations in exchange rates primarily relates to the translation of the net assets of our Dutch entities from their functional currency euro into our reporting currency U.S. dollar.

Price risk

The market prices for the provision of preclinical and clinical materials and services, as well as external contracted research, may vary over time.

The commercial prices of any of our products or product candidates are currently uncertain.

We are not exposed to commodity price risk.

We do not hold investments classified as available-for-sale or at fair value through profit or loss; therefore, we are not exposed to equity securities price risk.

Interest rate risk

Our interest rate risk arises from short- and long-term debt and investment securities.

In June 2013, we entered into the Hercules Agreement, which was last amended in May 2023, under which our borrowings bear interest at a variable rate with a fixed floor. Long-term debt issued at fixed rates expose us to fair value interest rate risk. As of December 31, 2023, the loan bore an interest rate of 13.2%.

As of December 31, 2023, if interest rates on borrowings had been 1.0% higher with all other variables held constant, pre-tax earnings for the year would have been $1.0 million lower (2022: $1.0 million lower; 2021: $0.7 million lower.)

We invest in government debt in accordance with our investment policy. We are exposed to interest rate risk as market interest rates could differ from the interest rates that we fix at the time of acquiring these investment securities. As we intend to hold these to maturity, we do not recognize changes in the fair value of our investment which are caused by changes in market interest rates.

This means that a change in prevailing interest rates may cause the fair value of the investment to fluctuate. For example, if we hold a security that was issued at a fixed interest rate at the then-prevailing rate and the prevailing interest rate later rises, the fair value of our investment will probably decline.

The duration of all of our investment securities held as of December 31, 2023, was between one to seven months. Due to the relatively short-term nature of these financial instruments and our ability and intention to hold these investments to maturity, we believe there is no material exposure to interest rate risk.

Credit Risk

Credit risk is managed on a consolidated basis. Credit risk arises from cash and cash equivalents and deposits with banks and financial institutions, outstanding receivables and committed transactions with collaboration partners and security deposits paid to landlords. We currently have no wholesale debtors other than CSL Behring.

We deposited funds as security to our landlord related to our facility in Amsterdam. We also deposited funds to the provider of our U.S. corporate credit cards. The deposits are neither impaired nor past due.

Our cash and cash equivalents include bank balances, demand deposits and other short-term highly liquid investments (with maturities of less than three months at the time of purchase) that are readily convertible into a known amount of cash and are subject to an insignificant risk of fluctuation in value. Restricted cash includes deposits made in relation to facility leases. We also have short-term investment securities in U.S. and European government bonds maturing within one to seven months. Our investment policy requires us to invest in U.S. and European government bonds with the highest investment credit rating. Due to the high credit quality of our counterparties, we believe there is no material exposure to credit risk in our portfolio of investment securities.

Liquidity Risk

Based on our current operating plan, research and development plans and our timing expectations related to the progress of our programs and following the Reorganization, we believe that our cash and cash equivalents and investment securities will fund our operations into the second quarter of 2027. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our available capital resources sooner than we expect. We expect that we will require additional funding if we decide to advance AMT-130 for our Huntington’s disease gene therapy program or any of our other product candidates into late-stage clinical development. The table below analyzes our financial liabilities in relevant maturity groupings based on the length of time until the contractual maturity date, as of the balance sheet date. Disclosed in the table below are the contractual undiscounted cash flows. Balances due within 12 months equal their carrying value as the impact of discounting is not significant.

	Undefined	Less than 1 year	Between 1 - 3 years	Between 3 - 5 years	Over 5 years
			(in thousands)		
At December 31, 2023					
Long-term debt	$ —	$ 13,420	$ 134,150	$ —	$ —
Accounts payable, accrued expenses and other current liabilities	—	37,120	—	—	—
Commitments related to acquisition of uniQure France SAS (maximum nominal amounts)[1]	209,707	—	—	—	—
Total	**$ 209,707**	**$ 50,540**	**$ 134,150**	**$ —**	**$ —**
At December 31, 2022					
Long-term debt	$	14,870	129,622		
Accounts payable, accrued expenses and other current liabilities		41,555			
Commitments related to acquisition of uniQure France SAS (maximum nominal amounts)[1]	214,070				
Total	**$ 214,070**	**$ 56,425**	**$ 129,622**	**$ —**	**$ —**

(1) Payments are due in EUR and have been translated at the foreign exchange rate as of December 31, 2023, of $1.10 / €1.00

In relation to our acquisition of uniQure France SAS, we entered into commitments to make payments to the former shareholders upon the achievement of certain contractual milestones. The commitments include payments related to post-acquisition services that we agreed to as part of the transaction. The timing of achieving these milestones, as well as whether the milestone will be achieved at all, and consequently the timing of payments is generally uncertain. We expect these obligations will become payable between 2024 and 2031, with the next milestone expected to be settled within the next year. If and when due, up to 25% of the milestone payments can be settled with our ordinary shares.

Item 8. Financial Statements and Supplementary Data.

The information required by this Item 8 is included in Part IV, Item 15, and is incorporated by reference.

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 chief executive officer ("CEO", our principal executive officer) and chief financial officer ("CFO", our principal financial officer), evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31, 2023. Based on such evaluation, our CEO and CFO have concluded that as of December 31, 2023, our disclosure controls and procedures were effective.

Management's Annual Report on Internal Control Over Financial Reporting

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. This rule defines internal control over financial reporting as a process designed by, or under the supervision of, a company's chief executive officer and chief financial officer and effected by our board of directors, management and other personnel, 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 and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of our assets that could have a material effect on the financial statements.

We assessed the effectiveness of our internal control over financial reporting as of December 31, 2023. This assessment was performed under the direction and supervision of our CEO and CFO and based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Our management's assessment of the effectiveness of our internal control over financial reporting included testing and evaluating the design and operating effectiveness of our internal controls. In our management's opinion, we have maintained effective internal control over financial reporting as of December 31, 2023, based on criteria established in the COSO 2013 framework.

Our independent registered public accounting firm, which has audited the consolidated financial statements included in this Annual Report on Form 10-K, has also issued an audit report on the effectiveness of our internal control over financial reporting as of December 31, 2023. Their report is filed within this Annual Report on Form 10-K.

Inherent Limitations of Internal Controls

Our management, including our CEO and CFO, does not expect that our disclosure controls and procedures or our internal controls 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. 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, within the Company 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 control. The design of any system of controls also is 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 the policies or procedures may deteriorate. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements due to error or fraud.

Changes in internal control over financial reporting

During the fourth quarter of 2023, there were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

Trading Arrangements

During the three months ended December 31, 2023, none of our directors or officers informed us of the adoption, modification or termination of a "Rule 10b5-1 trading arrangement" or "non-Rule 10b5-1 trading arrangement," as each term is defined in Item 408(a) of Regulation S-K.

Amendments to Code of Ethics

On February 27, 2024, our Board approved certain amendments to our Code of Business Conduct and Ethics (as amended, the "Code") upon the recommendation of the Audit Committee of the Board. The Code was approved and adopted by the Board as part of its ordinary course and recurring review of our corporate codes and policies and applies to our employees, directors and officers. The amendments to the Code did not relate to or result in any waiver, explicit or implicit, of any provision of the Code in effect prior to the amendment.

The amendments to the Code update, clarify and, in certain cases, enhance provisions of the Code including, but not limited to, the reporting of actual or possible violations of the Code, the scope of matters that are reportable under the Code, the scope of the Audit Committee's oversight regarding concerns and complaints involving allegations of fraud or violations of applicable law or regulation, and enforcement and compliance procedures with respect to alleged violations of the Code.

The above description of the Code does not purport to be complete and is qualified in its entirety by reference to the full text of the Code, a copy of which is filed as Exhibit 14.1 to this Annual Report on Form 10-K and available on the Investors & Media subpage of our website at www.uniqure.com under the "Corporate Governance" link. Information on our website shall not be deemed incorporated by reference into, or to be a part of, this Annual Report on Form 10-K.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference from our Proxy Statement for our 2024 annual meeting of shareholders, which we will file within 120 days of December 31, 2023, or will be included in an amendment to this Annual Report on Form 10-K.

Item 11. Executive Compensation

The information required by this item is incorporated by reference from our Proxy Statement for our 2024 annual meeting of shareholders, which we will file within 120 days of December 31, 2023, or will be included in an amendment to this Annual Report on Form 10-K.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference from our Proxy Statement for our 2024 annual meeting of shareholders, which we will file within 120 days of December 31, 2023, or will be included in an amendment to this Annual Report on Form 10-K.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference from our Proxy Statement for our 2024 annual meeting of shareholders, which we will file within 120 days of December 31, 2023, or will be included in an amendment to this Annual Report on Form 10-K.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference from our Proxy Statement for our 2024 annual meeting of shareholders, which we will file within 120 days of December 31, 2023, or will be included in an amendment to this Annual Report on Form 10-K.

Part IV

Item 15. Exhibits, Financial Statements Schedules

Exhibits, Financial Statements Schedules

(a) *Financial Statements*. The following consolidated financial statements of uniQure N.V. are filed as part of this report:

(b) *Financial Statements Schedules*. Financial Statement Schedules have been omitted because of the absence of conditions under which they are required or because the required information, where material, is shown in the financial statements or notes.

(c) *Other Exhibits*. The Exhibit Index immediately preceding the signature page of this Annual Report on Form 10-K is incorporated herein by reference.

Item 16. Form 10-K Summary

Not applicable.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2023, 2022 AND 2021

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
uniQure N.V.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of uniQure N.V. and subsidiaries (the Company) as of December 31, 2023 and 2022, the related consolidated statements of operations and comprehensive loss, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2023, and the related notes (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the years in the three year-period ended December 31, 2023, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting 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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

Critical audit matters are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. We determined that there are no critical audit matters.

/s/ KPMG Accountants N.V.

We have served as the Company's auditor since 2019.

Amstelveen, the Netherlands
February 28, 2024

uniQure N.V.

CONSOLIDATED BALANCE SHEETS

	December 31, 2023	December 31, 2022
	(in thousands, except share and per share amounts)	
Current assets		
Cash and cash equivalents	$ 241,360	$ 228,012
Current investment securities	376,532	124,831
Accounts receivable and contract asset	4,193	102,376
Inventories, net	12,024	6,924
Prepaid expenses	15,089	11,817
Other current assets and receivables	2,655	2,814
Total current assets	**651,853**	**476,774**
Non-current assets		
Property, plant and equipment, net	46,548	50,532
Non-current investment securities	—	39,984
Operating lease right-of-use assets	28,789	32,726
Intangible assets, net	60,481	58,778
Goodwill	26,379	25,581
Deferred tax assets, net	12,276	14,528
Other non-current assets	5,363	6,061
Total non-current assets	**179,836**	**228,190**
Total assets	**$ 831,689**	**$ 704,964**
Current liabilities		
Accounts payable	$ 6,586	$ 10,984
Accrued expenses and other current liabilities	30,534	30,571
Current portion of contingent consideration	28,211	25,982
Current portion of operating lease liabilities	8,344	8,382
Total current liabilities	**73,675**	**75,919**
Non-current liabilities		
Long-term debt	101,749	102,791
Liability from royalty financing agreement	394,241	—
Operating lease liabilities, net of current portion	28,316	31,719
Contingent consideration, net of current portion	14,795	9,334
Deferred tax liability, net	7,543	8,257
Other non-current liabilities	3,700	935
Total non-current liabilities	**550,344**	**153,036**
Total liabilities	**624,019**	**228,955**
Commitments and contingencies		
Shareholders' equity		
Ordinary shares, €0.05 par value: 80,000,000 shares authorized as of December 31, 2023 and December 31, 2022 and 47,833,830 and 46,968,032 ordinary shares issued and outstanding as of December 31, 2023 and December 31, 2022, respectively	2,883	2,838
Additional paid-in-capital	1,148,749	1,113,393
Accumulated other comprehensive loss	(53,553)	(58,291)
Accumulated deficit	(890,409)	(581,931)
Total shareholders' equity	**207,670**	**476,009**
Total liabilities and shareholders' equity	**$ 831,689**	**$ 704,964**

The accompanying notes are an integral part of these consolidated financial statements.

uniQure N.V.

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS AND INCOME

	Year ended December 31,		
	2023	2022	2021
	(in thousands, except share and per share amounts)		
License revenues	$ 2,758	$ 100,000	$ 517,400
Contract manufacturing revenues	10,835	1,717	—
Collaboration revenues	2,250	4,766	6,602
Total revenues	**15,843**	**106,483**	**524,002**
Operating expenses:			
Cost of license revenues	(65)	(1,254)	(24,976)
Cost of contract manufacturing revenues	(13,563)	(2,089)	—
Research and development expenses	(214,864)	(197,591)	(143,548)
Selling, general and administrative expenses	(74,591)	(55,059)	(56,290)
Total operating expenses	**(303,083)**	**(255,993)**	**(224,814)**
Other income	6,059	7,171	12,306
Other expense	(1,690)	(820)	(876)
(Loss) / income from operations	**(282,871)**	**(143,159)**	**310,618**
Interest income	19,562	609	162
Interest expense	(41,557)	(11,704)	(7,474)
Foreign currency (losses) / gains, net	(1,691)	23,235	29,660
Other non-operating gains / (losses), net	—	2,760	(160)
(Loss) / income before income tax (expense) / benefit	**$ (306,557)**	**$ (128,259)**	**$ 332,806**
Income tax (expense) / benefit	(1,921)	1,470	(3,217)
Net (loss) / income	**$ (308,478)**	**$ (126,789)**	**$ 329,589**
Other comprehensive income / (loss):			
Foreign currency translation gains / (losses), net	6,874	(29,435)	(38,763)
Defined benefit pension loss, net of taxes	(2,136)	—	—
Total comprehensive (loss) / income	**$ (303,740)**	**$ (156,224)**	**$ 290,826**
Earnings per ordinary share - basic			
Basic net (loss) / income per ordinary share	$ (6.47)	$ (2.71)	$ 7.17
Earnings per ordinary share - diluted			
Diluted net (loss) / income per ordinary share	$ (6.47)	$ (2.71)	$ 7.04
Weighted average shares - basic	47,670,986	46,735,045	45,986,467
Weighted average shares - diluted	47,670,986	46,735,045	46,840,972

The accompanying notes are an integral part of these consolidated financial statements.

uniQure N.V.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

	Ordinary shares		Additional paid-in capital	Accumulated other comprehensive income / (loss)	Accumulated deficit	Total shareholders' equity
	No. of shares	Amount				
	(in thousands, except share and per share amounts)					
Balance at December 31, 2020	**44,777,799**	**$ 2,711**	**$ 1,016,018**	**$ 9,907**	**$ (784,731)**	**$ 243,905**
Income for the period	—	—	—	—	329,589	329,589
Other comprehensive loss	—	—	—	(38,763)	—	(38,763)
Issuance of ordinary shares	921,730	55	29,509			29,564
Income tax benefit of past share issuance cost			3,047			3,047
Exercises of share options	241,496	15	2,638	—	—	2,653
Restricted and performance share units distributed during the period	352,886	21	(21)	—	—	—
Share-based compensation expense	—	—	25,635	—	—	25,635
Issuance of ordinary shares relating to employee stock purchase plan	4,724	—	146	—	—	146
Balance at December 31, 2021	**46,298,635**	**$ 2,802**	**$ 1,076,972**	**$ (28,856)**	**$ (455,142)**	**$ 595,776**
Loss for the period	—	—	—	—	(126,789)	(126,789)
Other comprehensive loss	—	—	—	(29,435)	—	(29,435)
Income tax benefit of past share issuance cost	—	—	808	—	—	808
Exercises of share options	152,356	8	1,272	—	—	1,280
Restricted and performance share units distributed during the period	505,799	27	(27)	—	—	—
Share-based compensation expense	—	—	34,204	—	—	34,204
Issuance of ordinary shares relating to employee stock purchase plan	11,242	1	164	—	—	165
Balance at December 31, 2022	**46,968,032**	**$ 2,838**	**$ 1,113,393**	**$ (58,291)**	**$ (581,931)**	**$ 476,009**
Loss for the period	—	—	—	—	(308,478)	(308,478)
Other comprehensive income, net	—	—	—	4,738	—	4,738
Exercises of share options	14,070	1	129	—	—	130
Restricted and performance share units distributed during the period	832,530	43	(43)	—	—	—
Share-based compensation expense	—	—	35,093	—	—	35,093
Issuance of ordinary shares relating to employee stock purchase plan	19,198	1	177	—	—	178
Balance at December 31, 2023	**47,833,830**	**$ 2,883**	**$ 1,148,749**	**$ (53,553)**	**$ (890,409)**	**$ 207,670**

The accompanying notes are an integral part of these consolidated financial statements

uniQure N.V.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Cash flows from operating activities			
Net (loss) / income	$ (308,478)	$ (126,789)	$ 329,589
Adjustments to reconcile net (loss) / income to net cash (used in) / generated from operating activities:			
Depreciation, amortization and impairment	11,900	8,537	7,299
Amortization of premium/discount on investment securities	(10,917)	-	-
Share-based compensation expense	35,093	34,204	25,635
Royalty financing agreement interest expense	26,933	-	-
Deferred tax expense / (income)	1,921	(1,470)	3,210
Changes in fair value of contingent consideration and derivative financial instrument, net	15,895	4,320	6,843
Unrealized foreign exchange gains, net	(2,206)	(22,083)	(31,335)
Other items, net	4,721	1,605	(2,800)
Changes in operating assets and liabilities:			
Accounts receivable, prepaid expenses, and other current assets and receivables	(1,323)	(4,083)	(3,959)
Contract asset related to CSL Behring milestone payments	100,000	(45,000)	(55,000)
Inventories	(6,740)	(6,924)	-
Accounts payable	(4,169)	9,238	(727)
Accrued expenses, other liabilities, and operating leases	(6,645)	3,385	9,204
Contingent consideration milestone payment	(1,914)	-	-
Net cash (used in) / generated from operating activities	(145,929)	(145,060)	287,959
Cash flows from investing activities			
Investment in debt securities	(366,439)	(163,146)	-
Proceeds on maturity of debt securities	167,907	-	-
Purchases of property, plant, and equipment	(7,154)	(17,688)	(17,438)
Acquisition of uniQure France SAS, net of cash acquired	-	(1,900)	(49,949)
Net cash used in investing activities	(205,686)	(182,734)	(67,387)
Cash flows from financing activities			
Proceeds from issuance of ordinary shares	-	-	30,899
Share issuance costs from issuance of ordinary shares	-	-	(1,334)
Proceeds from royalty financing agreement	374,350	-	-
Payment of debt issuance costs	(4,288)	-	-
Repayment of debt acquired through acquisition of uniQure France SAS	-	-	(1,572)
Proceeds from loan increment, net of debt issuance costs	-	-	64,067
Proceeds from issuance of ordinary shares related to employee stock option and purchase plans	308	1,445	2,798
Contingent consideration milestone payment	(7,649)	-	-
Net cash generated from financing activities	362,721	1,445	94,858
Currency effect on cash, cash equivalents and restricted cash	2,265	(1,831)	(3,757)
Net increase / (decrease) in cash, cash equivalents and restricted cash	13,371	(328,180)	311,673
Cash, cash equivalents and restricted cash at beginning of period	231,173	559,353	247,680
Cash, cash equivalents and restricted cash at the end of period	**$ 244,544**	**$ 231,173**	**$ 559,353**
Cash and cash equivalents	$ 241,360	$ 228,012	$ 556,256
Restricted cash related to leasehold and other deposits	3,184	3,161	3,097
Total cash, cash equivalents and restricted cash	**$ 244,544**	**$ 231,173**	**$ 559,353**
Supplemental cash flow disclosures:			
Cash paid for interest	$ (16,878)	$ (9,247)	$ (6,539)
Non-cash decrease in accounts payables and accrued expenses and other current liabilities related to purchases of property, plant, and equipment	$ (513)	$ (964)	$ 1,488

The accompanying notes are an integral part of these consolidated financial statements.

uniQure N.V.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. General business information

uniQure (the "Company") was incorporated on January 9, 2012 as a private company with limited liability (*besloten vennootschap met beperkte aansprakelijkheid*) under the laws of the Netherlands. The Company is a leader in the field of gene therapy and seeks to deliver to patients suffering from rare and other devastating diseases single treatments with potentially curative results. The Company's business was founded in 1998 and was initially operated through its predecessor company, Amsterdam Molecular Therapeutics Holding N.V ("AMT"). In 2012, AMT undertook a corporate reorganization, pursuant to which uniQure B.V. acquired the entire business and assets of AMT and completed a share-for-share exchange with the shareholders of AMT. Effective February 10, 2014, in connection with its initial public offering, the Company converted into a public company with limited liability (*naamloze vennootschap*) and changed its legal name from uniQure B.V. to uniQure N.V.

The Company is registered in the trade register of the Dutch Chamber of Commerce (*Kamer van Koophandel*) in Amsterdam, the Netherlands under number 54385229. The Company's headquarters are in Amsterdam, the Netherlands, and its registered office is located at Paasheuvelweg 25, Amsterdam 1105 BP, the Netherlands and its telephone number is +31 20 240 6000. The Company's website address is www.uniqure.com.

The Company's ordinary shares are listed on the Nasdaq Global Select Market and trade under the symbol "QURE."

2. Summary of significant accounting policies

2.1 Basis of preparation

The Company prepared its consolidated financial statements in compliance with generally accepted accounting principles in the United States ("U.S. GAAP"). Any reference in these notes to applicable guidance is meant to refer to authoritative U.S. GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

The consolidated financial statements have been prepared under the historical cost convention, except for derivative financial instruments and contingent consideration, which are recorded at fair value through profit or loss.

The consolidated financial statements are presented in United States ("U.S.") dollars ($), except where otherwise indicated. Transactions denominated in currencies other than U.S. dollars are presented in the transaction currency with the U.S. dollar amount included in parenthesis, converted at the foreign exchange rate as of the transaction date.

The consolidated financial statements presented have been prepared on a going concern basis based on the Company's cash and cash equivalents as of December 31, 2023 and the Company's budgeted cash flows for the twelve months following the issuance date.

2.2 Use of estimates

The preparation of consolidated financial statements, in conformity with U.S. GAAP and Securities and Exchange Commission ("SEC") rules and regulations, 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 reported amounts of revenues and expenses during the reporting period. Estimates and assumptions are primarily made in relation to contingent consideration related to the acquisition of uniQure France SAS, the treatment of revenue to be recognized under the commercialization and license agreement entered into ("CSL Behring Agreement") between the Company and CSL Behring LLC ("CSL Behring"), and the assessment of a valuation allowance on the Company's deferred tax assets in the Netherlands. If actual results differ from the Company's estimates, or to the extent these estimates are adjusted in future periods, the Company's results of operations could either benefit from, or be adversely affected by, any such change in estimate.

2.3 Accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.3.1 Consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries. Subsidiaries are all entities over which the Company has a controlling financial interest either through variable interest or through voting interest. Currently, the Company has no involvement with variable interest entities.

Inter-company transactions, balances, income, and expenses on transactions between uniQure entities are eliminated in consolidation. Profits and losses resulting from inter-company transactions that are recognized in assets are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Company.

2.3.2 Current versus non-current classification

The Company presents assets and liabilities in the consolidated balance sheets based on current and non-current classification.

The term current assets is used to designate cash and other assets, or resources commonly identified as those that are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business. The Company's normal operating cycle is twelve months. All other assets are classified as non-current.

The term current liabilities is used principally to designate obligations whose liquidation is reasonably expected to require the use of existing resources properly classifiable as current assets, or the creation of other current liabilities. Current liabilities are expected to be settled in the normal operating cycle. The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities, if any.

2.3.3 Foreign currency translation

The functional currency of the Company and each of its entities (except for uniQure Inc. and Corlieve AG) is the euro (€). This represents the currency of the primary economic environment in which the entities operate. The functional currency of uniQure Inc. is the U.S. dollar ($) and the functional currency of Corlieve AG is the Swiss Franc (CHF). The consolidated financial statements are presented in U.S. dollars.

Foreign currency transactions are measured and recorded in the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the re-measurement of monetary assets and liabilities denominated in foreign currencies at exchange rates prevailing at balance sheet date are recognized in profit and loss.

Upon consolidation, the assets and liabilities of foreign operations are translated into the functional currency of the shareholding entity at the exchange rates prevailing at the balance sheet date; items of income and expense are translated at monthly average exchange rates. The consolidated assets and liabilities are translated from uniQure N.V.'s functional currency, euro, into the reporting currency U.S. dollar at the exchange rates prevailing at the balance sheet date; items of income and expense are translated at monthly average exchange rates. Issued capital and additional paid-in capital are translated at historical rates with differences to the balance sheet date rate recorded as translation adjustments in other comprehensive income / loss. The exchange differences arising on translation for consolidation are recognized in "accumulated other comprehensive income / loss". On disposal of a foreign operation, the component of other comprehensive income / loss relating to that foreign operation is recognized in profit or loss.

2.3.4 Fair value measurement

The Company measures certain assets and liabilities at fair value, either upon initial recognition or for subsequent accounting or reporting. *ASC 820, Fair Value Measurements and Disclosures* requires disclosure of methodologies used in determining the reported fair values and establishes a hierarchy of inputs used when available. The three levels of the fair value hierarchy are described below:

- Level 1 - Valuations based on unadjusted quoted prices in active markets for identical assets or liabilities that the Company can access at the measurement date.

- Level 2 - Valuations based on quoted prices for similar assets or liabilities in markets that are not active or models for which the inputs are observable, either directly or indirectly.

- Level 3 - Valuations that require inputs that reflect the Company's own assumptions that are both significant to the fair value measurement and are unobservable.

To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized as Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Items measured at fair value on a recurring basis include financial instruments and contingent consideration (Note 7, "*Fair value measurement*"). The carrying amount of cash and cash equivalents, accounts receivable from licensing and collaboration partners, other assets, accounts payable, accrued expenses and other current liabilities reflected in the consolidated balance sheets approximate their fair values due to their short-term maturities.

2.3.5 uniQure France SAS transaction

On June 21, 2021, we entered into a share and purchase agreement ("SPA") to acquire all of the outstanding ordinary shares of uniQure France SAS (formerly Corlieve Therapeutics SAS), a privately held French gene therapy company ("uniQure France SAS Transaction"). On July 30, 2021 ("Acquisition Date"), the Company acquired uniQure France SAS. The Company evaluated the uniQure France SAS transaction as to whether or not the transaction should be accounted for as a business combination or asset acquisition. Refer to Note 3 "*uniQure France SAS transaction*" for further detail.

a. Goodwill

Goodwill represents the excess of the fair value of the consideration transferred over the fair value of the net assets assumed in a business combination. Goodwill is not amortized but is evaluated for impairment on an annual basis and between annual tests if the Company becomes aware of any events occurring or changes in circumstances that would more likely than not reduce the fair value of the reporting unit below its carrying amount. As of December 31, 2023, 2022 and 2021, the Company has not recognized any impairment charges related to goodwill.

Refer to Note 3 "*uniQure France SAS transaction*" for further detail.

b. Acquired research and development

The Company identified various licenses that combined with the results of the research and development activities conducted in relation to its target candidate for the treatment of temporal lobe epilepsy ("AMT-260") since incorporation of uniQure France SAS in 2019 constitute an In-process research and development intangible asset ("IPR&D Intangible Asset"). The IPR&D Intangible Asset is considered to be indefinite-lived until the completion or abandonment of the associated research and development efforts and is not amortized. If and when development is completed, which generally occurs when regulatory approval to market a product is obtained, the associated asset would be deemed finite-lived and would then be amortized based on its respective useful life at that point in time. For the years ended December 31, 2023, 2022 and 2021, the Company has not recognized any impairment charges related to the IPR&D Intangible Asset.

In case of abandonment, the IPR&D Intangible Asset will be written-off. In accordance with ASC 350, Intangibles – Goodwill and Other, the Company tests indefinite-lived intangible assets for impairment on an annual basis and between annual tests if the Company becomes aware of any events occurring or changes in circumstances that would indicate the fair value of the IPR&D Intangible Asset is below its carrying amount.

Refer to Note 3 "*uniQure France SAS transaction*" for further detail.

c. Contingent consideration

Each reporting period, the Company revalues the contingent consideration obligations associated with the uniQure France SAS transaction to their fair value and records changes in the fair value within research and development expenses. Changes in contingent consideration obligations result from changes in assumptions regarding the probabilities of achieving the relevant milestones, or probability of success ("POS"), the estimated timing of achieving such milestones, and the interest rate to discount the payments. Payments of portions of contingent consideration initially recorded as of the acquisition date are recorded as cash flows from financing activities, and payments, or the portion of the milestone payments representing changes in the fair value of contingent consideration subsequent to the initial recognition are recorded as cash flows from operating activities.

Refer to Note 3 "*uniQure France SAS transaction*" for further detail.

2.3.6 Notes to the consolidated statements of cash flows

The consolidated statements of cash flows have been prepared using the indirect method. The cash disclosed in the consolidated statements of cash flows is comprised of cash and cash equivalents and restricted cash. Cash and cash equivalents include bank balances, demand deposits and other short-term highly liquid investments (with maturities of less than three months at the time of purchase) that are readily convertible into a known amount of cash and are subject to an insignificant risk of fluctuation in value.

Cash flows denominated in foreign currencies have been translated at the average exchange rates. Exchange differences, if any, affecting cash and cash equivalents are shown separately in the consolidated statements of cash flows. Interest paid and received, and income taxes are included in net cash (used in) provided by operating activities.

2.3.7 Segment information

Operating segments are identified as a component of an enterprise for which separate discrete financial information is available for evaluation by the chief operating decision maker, or decision-making group, in making decisions on how to allocate resources and assess performance. The Company views its operations and manages its business as one operating segment, which comprises the discovery, development, and commercialization of innovative gene therapies.

2.3.8 Net (loss) / income per share

The Company follows the provisions of *ASC 260, Earnings Per Share*. In accordance with these provisions, net (loss) / income per share is calculated by dividing net (loss) / income by the weighted average number of ordinary shares outstanding during the period.

Diluted net (loss) / income per share reflects the dilution that would occur if share options or warrants to issue ordinary shares were exercised, performance or restricted share units were distributed, or shares under the employee share purchase plan were issued. However, potential ordinary shares are excluded if their effect is anti-dilutive.

Refer to Note 21 "*Basic and diluted earnings per share*" for further information.

2.3.9 Impairment of long-lived assets

Long-lived assets, which include property, plant, and equipment and finite-lived intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of an asset or asset group may not be recoverable. Right-of-use assets are also reviewed for impairment in accordance with *ASC 360, Property, Plant, and Equipment*. The recoverability of the carrying value of an asset or asset group depends on the successful execution of the Company's business initiatives and its ability to earn sufficient returns on approved products and product candidates. When such events or changes in circumstances occur, the Company assesses recoverability by determining whether the carrying value of such assets will be recovered through the undiscounted expected future cash flows. If the future undiscounted cash flows are less than the carrying amount of these assets, the Company recognizes an impairment loss based on the excess of the carrying value over the fair value of the assets. Fair value is determined through various valuation techniques, including discounted cash flow models, quoted market values, and third-party independent appraisals, as considered necessary.

Refer to Note 2.3.5 "*uniQure France SAS transaction*" for information on impairment testing related to goodwill and acquired research and development intangible assets.

2.3.10 Investment securities

Investment securities consist of sovereign debt with residual maturities of less than 12 months (presented as current) and beyond (presented as non-current). The Company classifies these securities as held-to-maturity. Held-to-maturity securities are those securities in which the Company has the ability and intent to hold the security until maturity. Held-to-maturity securities are recorded at amortized cost, adjusted for applicable accrued interest and the amortization or accretion of premiums or discounts. Premiums and discounts are amortized or accreted over the term of the related held-to-maturity security as an adjustment to yield using the effective interest rate method.

Investments securities with original maturities of less than three months when purchased are presented within cash and cash equivalents (December 31, 2023: nil, December 31, 2022: $21.2 million).

A decline in the market value of any investment security below cost that is deemed to be other than temporary results in a reduction in the carrying amount to fair value. The impairment is charged to operations and a new cost base for the security is established. Other-than-temporary impairment charges are included in interest and other income (expense), net. Interest income is recognized when earned.

Refer to Note 6 "*Investment securities*" for further information.

2.3.11 Accounts receivable

Accounts receivables include amounts due from services provided to the Company's licensing and collaboration partners as well as unconditional rights to consideration from its licensing and collaboration partners.

2.3.12 Inventories

The Company started producing commercial materials in April 2022 to supply CSL Behring in accordance with the June 2020 Development and Commercial Supply Agreement between the Company and CSL Behring. From this date onwards, the Company presents the costs associated with the aforementioned activities as cost of contract manufacturing. Refer to Note 5 *"Collaboration arrangements and concentration of credit risk"* for further detail.

Per ASC 330, Inventory, inventory is stated at the lower of cost or estimated net realizable value, on a first-in, first-out basis. The Company capitalizes raw materials to the extent these can be used in contract manufacturing for CSL Behring. The Company uses standard costs, approximating average costs to determine its cost basis for work in progress and finished goods. The Company's assessment of recoverability value requires the use of estimates regarding the net realizable value of its inventory balances, including an assessment of excess or obsolete inventory. As applicable, write-downs resulting from adjustments to net realizable value will be recorded to cost of contract manufacturing.

2.3.13 Prepaid expenses

Prepaid expenses are amounts paid in the period, for which the benefit has not been realized, and include payments made for insurance and research and clinical contracts. The related expense will be recognized in the subsequent period as incurred.

2.3.14 Other (non) current assets

Deposits paid are either presented as other current assets or as other non-current assets based on duration of the underlying contractual arrangement. Deposits are classified as restricted cash and primarily relate to facility leases.

Contract assets are presented in current assets or as non-current assets based on the timing of the right to consideration.

2.3.15 Property, plant, and equipment

Property, plant, and equipment is comprised mainly of laboratory equipment, leasehold improvements, construction-in-progress ("CIP") and office equipment. All property, plant and equipment is stated at cost less accumulated depreciation. CIP consists of capitalized expenses associated with construction of assets not yet placed into service. Depreciation commences on CIP once the asset is placed into service based on its useful life determined at that time.

Maintenance and repairs that do not improve or extend the lives of the respective assets are expensed as incurred. Upon disposal, the related cost and accumulated depreciation is removed from the accounts and any resulting gain or loss on the transaction is recognized in the consolidated statements of operations and comprehensive loss.

Depreciation is calculated using the straight-line method over the estimated useful lives of the assets (or in the case of leasehold improvements a shorter lease term), which are as follows:

· Leasehold improvements	Between 10 – 15 years
· Laboratory equipment	5 years
· Office equipment	Between 3 – 5 years

2.3.16 Leases

The Company records leases in accordance with *ASC 842, Leases* and determines if an arrangement is a lease at inception. Operating lease right-of-use assets and lease liabilities are initially recognized based on the present value of future minimum lease payments over the lease term at commencement date calculated using an incremental borrowing rate applicable to the lease asset unless the implicit rate is readily available. Lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Leases with a term of twelve months or less are not recognized on the consolidated balance sheets.

The Company recognizes lease cost on a straight-line basis and presents these costs as operating expenses within the Consolidated statements of operations and comprehensive income / (loss). The Company presents lease payments within cash flows from operations within the Consolidated statements of cash flows.

2.3.17 Accounts payable and accrued expenses

Accounts payables are invoiced amounts related to obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Accounts payables are recognized at the amounts invoiced by suppliers.

Accrued expenses are recognized for goods or services that have been acquired in the ordinary course of business.

Contract liabilities, if any, are presented in accrued expenses.

2.3.18 Long-term debt

Long-term debt is initially recognized at cost and presented net of original issue discount or premium and debt issuance costs on the consolidated balance sheets. Amortization of debt discount and debt issuance costs is recognized as interest expense in profit and loss over the period of the debt, using the effective interest rate method.

2.3.19 Pensions and other post-retirement benefit plans

The Company has a defined contribution pension plan for all employees at its Amsterdam facility in the Netherlands, which is funded by the Company through payments to an insurance company, with individual accounts for each participants' assets. The Company has no legal or constructive obligation to pay further contributions if the plan does not hold sufficient assets to pay all employees the benefits relating to services rendered in the current and prior periods. The contributions are expensed as incurred. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

In 2016, the Company adopted a qualified 401(k) Plan for all employees located in the United States. The 401(k) Plan offers both a pre-tax and post-tax (Roth) component. Employees may contribute up to the IRS statutory limit each calendar year. The Company matches $0.50 for every $1.00 contributed to the plan by participants up to 6% of base compensation. Employer contributions are recognized as they are contributed, as long as the employee is rendering services in that period. If employer contributions are made in periods after an individual retires or terminates, the estimated cost is accrued during the employee's service period.

The Company maintains defined benefit plans for its Swiss employees, including retirement benefit plans required by applicable local law. The Company accounts for pension assets and liabilities in accordance with ASC 715, Compensation - Retirement Benefits, which requires the recognition of the funded status of pension plans in the Company's consolidated balance sheet. The liability in respect to defined benefit pension plans is the projected benefit obligation calculated annually by independent actuaries using the projected unit credit method.

The projected benefit obligation as of December 31, 2023 represents the actuarial present value of the estimated future payments required to settle the obligation that is attributable to employee services rendered before that date. Service cost is reported in research and development and general and administrative expenses. All other components of net period costs are reported in interest expense in the consolidated statement of operations and comprehensive loss. Plan assets are recorded at their fair value. Gains or losses arising from plan curtailments or settlements are accounted for at the time they occur. Actuarial gains and losses arising from differences between the actual and the expected return on plan assets are recognized in accumulated other comprehensive income (loss).

2.3.20 Share-based compensation

The Company accounts for its share-based compensation awards in accordance with *ASC 718, Compensation-Stock Compensation.*

All the Company's share-based compensation plans for employees are equity-classified. ASC 718 requires all share-based compensation to employees, including grants of employee options, restricted share units, performance share units and modifications to existing instruments, to be recognized in the consolidated statements of operations and comprehensive loss based on their grant-date fair values, net of an estimated forfeiture rate, over the requisite service period. Forfeitures of employee options are recognized as they occur. Compensation expense related to Performance Share Units is recognized when the Company considers achievement of the milestones to be probable. The requirements of ASC 718 are also applied to nonemployee share-based payment transactions except for specific guidance on certain inputs to an option-pricing model and the attribution of cost.

The Company uses a Hull & White option model to determine the fair value of option awards. The model captures early exercises by assuming that the likelihood of exercises will increase when the share-price reaches defined multiples of the strike price. This analysis is performed over the full contractual term.

2.3.21 Revenue recognition

The Company primarily generates revenue from its commercialization and license agreement with CSL Behring. The Company generated revenue from services provided to Bristol-Myers Squibb ("BMS") until February 21, 2023 ("Termination Date").

CSL Behring collaboration

On June 24, 2020 ("Signing Date"), the Company entered into a commercialization and license agreement pursuant to which CSL Behring received exclusive global rights to etranacogene dezaparvovec ("Product"). On May 6, 2021, the CSL Behring Agreement became fully effective ("Closing"). The Company concluded that CSL Behring is a customer in accordance with *ASC 606, Revenue from Contracts with Customers* and identified two material performance obligations related to the CSL Behring Agreement:

(i) Sale of the exclusive global rights to etranacogene dezaparvovec, a gene therapy for patients with hemophilia B (the "Product") ("License Sale"); and

(ii) Generate information to support the regulatory approval of the current and next generation manufacturing process of the Product and to provide any such information generated to CSL Behring ("Manufacturing Development").

These performance obligations were considered distinct from one another, as CSL Behring can benefit from the identified service either on its own or together with other resources that are readily available to CSL Behring, and as the performance obligations are separately identifiable from other performance obligations in the CSL Behring Agreement. The Company continued to develop the Product between the Signing Date and Closing and performed certain reimbursable activities to fulfill the transfer of the global rights ("Additional Covenants" and together with the License the "License Sale"). The Additional Covenants are not considered distinct from the performance obligation to sell the license to CSL Behring as CSL Behring could not benefit from the Additional Covenants on their own, or have these activities be performed with readily available resources.

Refer to Note 5 "*Collaboration arrangements and concentration of credit risk*" for further detail.

Bristol-Myers Squib collaboration

The Company initially entered into collaboration, research, and license agreements with BMS in 2015 ("BMS CLA") and amended them in 2020 ("amended BMS CLA"). The agreement terminated on February 21, 2023.

The Company provided pre-clinical research activities ("Collaboration Revenue") under the amended BMS CLA.

2.3.22 Other income, other expense

The Company receives certain government and regional grants, which support its research efforts in defined projects, and include contributions towards the cost of research and development. These grants generally provide for reimbursement of approved costs incurred as defined in the respective grants and are deferred and recognized in the statements of operations and comprehensive loss over the period necessary to match them with the costs they are intended to compensate, when it is probable that the Company has complied with any conditions attached to the grant and will receive the reimbursement.

The Company's other income also consists of employee retention credits received under the U.S. Coronavirus Aid, Relief, and Economic Security Act, income related to a settlement agreement that the Company and VectorY B.V. entered into in April 2021, as well as income from subleasing part of the Company's Amsterdam facility. Other expense consists of expenses incurred in relation to the subleasing income.

2.3.23 Research and development expenses

Research and development costs are expensed as incurred. Research and development expenses generally consist of laboratory research, clinical trials, statistical analysis, and report writing, regulatory compliance costs incurred with clinical research organizations and other third-party vendors (including post-approval commitments to conduct consistency and comparability studies). In addition, research and development expenses consist of start-up and validation costs related to the Company's Lexington facility and the development and improvement of the Company's manufacturing processes and methods. Furthermore, research and development costs include costs of materials and costs of intangible assets purchased from others for use in research and development activities. The costs of intangibles that are purchased from others for a particular research and development project and that have no alternative future uses (in other research and development projects or otherwise) are expensed as research and development costs at the time the costs are incurred or at the time when no alternative future use is identified.

2.3.24 Income taxes

Income taxes are recorded in accordance with *ASC 740, Income Taxes*, which provides for deferred taxes using an asset and liability approach. The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amount and the tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are provided, if based upon the weight of available evidence, it is more-likely-than-not that some or all the deferred tax assets will not be realized.

The benefits of tax positions are recognized only if those positions are more likely than not, based on the technical merits, to be sustained upon examination. Recognized tax positions are measured at the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. The determination as to whether the tax benefit will more-likely-than-not be realized is based upon the technical merits of the tax position as well as consideration of the available facts and circumstances. As of December 31, 2023, and 2022, the Company did not have any significant unrecognized tax benefits.

2.3.25 Royalty Financing Agreement

In May 2023, uniQure biopharma B.V. ("uniQure biopharma"), a wholly-owned subsidiary of the Company entered into an agreement (the "Royalty Financing Agreement") with the HemB SPV, L.P. (the "Purchaser") to sell certain current and future royalties due to uniQure biopharma from CSL Behring under the CSL Behring Agreement by and between uniQure biopharma and CSL Behring from the net sales of HEMGENIX®. Refer to Note 14 *"Royalty Financing Agreement"* for further details of the Royalty Financing Agreement. The Company determined that the Royalty Financing Agreement should be accounted for as debt in accordance with topic ASC 470, Debt. The Company initially recognized the debt at fair value. The Company subsequently records the debt at amortized cost and determines the effective interest rate based on its projection of contractual cash flows. Interest expense (presented as "Interest Expense" in the consolidated statements of operations and comprehensive (loss) / income) is recorded over the projected repayment period using the effective interest method. The Company periodically assesses and adjusts the effective interest rate to reflect changes in projected cash flows. The Company prospectively applies the adjusted effective interest rate following the date of change.

In accordance with topic ASC 835, Interest, debt issuance costs incurred in relation to the Royalty Financing Agreement are presented as a reduction of carrying amount of the debt. Debt issuance cost is amortized together with the interest expense recorded.

2.3.26 Restructuring expenses

Restructuring charges principally consist of one-time termination benefits. The Company records one-time termination benefits in accordance with ASC 420, Exit or Disposal Cost Obligations. One-time termination benefits are expensed at the date the Company notifies the employee, unless the employee must provide future service, in which case the benefits are expensed ratably over the future service period.

Other costs relate to the impairment of the Lexington facility that was closed as a result of a reorganization plan (the "Reorganization"). The Company has recognized an impairment loss of the right-of-use asset and corresponding leasehold improvements in accordance with ASC 360, Property, Plant and Equipment.

2.3.27 Recently Adopted Accounting Pronouncements

None.

Recent Accounting Pronouncements Not Yet Effective

None.

3. uniQure France SAS transaction

At the Acquisition Date, the Company acquired uniQure France SAS (formerly Corlieve Therapeutics SAS). Following uniQure France SAS's formation in November 2019, uniQure France SAS obtained exclusive licenses to certain patents from two French research institutions that continue to collaborate with the Company. uniQure France SAS also obtained an exclusive license from Regenxbio Inc. ("Regenxbio"). uniQure France SAS and Regenxbio simultaneously entered into a collaboration plan related to agreed joint preclinical research and development activities. At the Acquisition Date, uniQure France SAS and its Swiss subsidiary, Corlieve Therapeutics AG, employed seven employees.

The Company evaluated the uniQure France SAS transaction as to whether or not the transaction should be accounted for as a business combination or asset acquisition by first applying a screen test to determine if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. Based on the fair values of the gross assets acquired, the Company determined the screen test was not met. The Company further analyzed whether or not the acquired inputs and processes that have the ability to create outputs would meet the definition of a business. Significant judgment is required in the application of the screen test to determine whether an acquisition is a business combination or an acquisition of assets.

Identifiable assets and liabilities of uniQure France SAS, including identifiable intangible assets, were recorded at their fair values as of the Acquisition Date, when the Company obtained control. The excess of the fair value of the consideration transferred over the fair value of the net assets acquired was recorded as goodwill.

Consideration

On the Acquisition Date, the Company acquired 97.7% of the outstanding ordinary shares of uniQure France SAS in return for EUR 44.9 million ($53.3 million as of the Acquisition Date). The Company acquired the remaining outstanding ordinary shares in February, July and September 2022 for a total of EUR 1.8 million ($1.9 million).

In addition to the payments to acquire 100% of the outstanding ordinary shares, uniQure France SAS's former shareholders are eligible to receive up to EUR 40.0 million ($44.1 million as of December 31, 2023) upon achievement of certain development milestones through Phase I/II, of which EUR 10.0 million ($10.6 million) was paid in September 2023, and EUR 160.0 million ($176.6 million as of December 31, 2023) upon achievement of certain milestones associated with Phase III development and obtaining approval to commercialize uniQure France SAS's target candidate for the treatment of mesial temporal lobe epilepsy ("AMT-260" or "MTLE") in the United States of America and the European Union. The Company may elect to pay up to 25% of such milestone payments through the issuance of the Company's ordinary shares.

As of the Acquisition Date, the Company recorded EUR 20.2 million ($24.0 million) as a contingent liability (presented as "Non-current liability") for the fair value of these milestone payments.

Identified intangible assets

The Company identified various licenses that combined with the results of the research and development activities conducted in relation to AMT-260 since incorporation of uniQure France SAS in 2019 constitute an IPR&D Intangible Asset.

The Company determined the fair value of the IPR&D Intangible Asset using a present value model based on expected cash flows. Estimating the amounts and timing of cash flows required to complete the development of AMT-260 as well as net sales, cost of goods sold, and sales and marketing costs involved considerable judgment and uncertainty. The expected cash flows are materially impacted by the probability of successfully completing the various stages of development (i.e., dosing of first patient in clinical trial, advancing into late-stage clinical development and obtaining approval to commercialize a product candidate) as well as the weighted average cost of capital of 10.4% used to discount the expected cash flows. Based on all such information and its judgment the Company estimated the fair value of the IPR&D Intangible Asset at EUR 53.6 million ($63.6 million) as of the Acquisition Date.

Deferred tax liability, net

uniQure France SAS's deferred tax assets at the time of acquisition amounted to EUR 1.5 million ($1.7 million). Recognition of the IPR&D Intangible Asset gave rise to a deferred tax liability of EUR 13.4 million ($15.9 million) at the enacted French corporate income tax rate of 25.0%. The Company consequently recorded a net deferred tax liability of EUR 11.9 million ($14.2 million as of the Acquisition Date). Changes in the net deferred tax liability after the Acquisition Date will be recorded in income tax expense in the Consolidated statements of operations and comprehensive income / (loss).

Goodwill

Goodwill represents the excess of total consideration over the estimated fair value of net assets acquired. The Company recorded EUR 23.9 million ($28.4 million) of goodwill in the consolidated balance sheet as of the Acquisition Date. The goodwill primarily relates to the recognition of a deferred tax liability recognized in association with the IPR&D Intangible asset of EUR 13.4 million ($15.9 million as of Acquisition Date) as well as the fair market value of the experienced workforce and potential synergies from the acquisition. The Company allocated the goodwill to its reporting unit. The Company does not expect any portion of this goodwill to be deductible for income tax purposes.

Debt

As of the Acquisition Date, uniQure France SAS held a loan with outstanding amount equal to EUR 1.0 million ($1.2 million), which loan was repaid in its entirety in September 2021. As of the Acquisition Date, uniQure France SAS also held a loan with outstanding amount equal to EUR 0.4 million ($0.4 million), which was repaid in its entirety in December 2021.

Other

As of the Acquisition Date, the Company also acquired other assets and assumed other liabilities, which included among others, EUR 2.9 million ($3.4 million) of current assets, which consisted of EUR 2.8 million ($3.3 million) of cash, and EUR 1.1 million ($1.3 million) of current liabilities.

4. Reorganization

On October 5, 2023, the Company announced the Reorganization. As a result, the Company recorded severance and other personnel related expenses for the impacted employees.

In 2023, as a part of the Reorganization, the Company decided to sublease one of its laboratories in Lexington. The carrying amount of the right-of-use asset was determined not to be recoverable. As a result, the Company recorded impairment charges for the related operating lease right-of-use assets and leasehold improvements.

A summary of the restructuring charges for the year ended December 31, 2023 by major activity type is as follows:

	Severance and Other Personnel Costs	Impairment Charges	Total
		(in thousands)	
Research and development	$ 2,188	1,438	3,626
General and administrative	361	—	361
Total	**$ 2,549**	**1,438**	**3,987**

A summary of the changes in the severance and other personnel liabilities, included within accrued expenses and other current liabilities on the consolidated balance sheets, related to the workforce reduction is as follows:

	Amount of liability
	(in thousands)
Balance as of January 1, 2023	$ —
Severance and other personnel costs	2,549
Cash payments during the period	(1,522)
Balance as of December 31, 2023	**$ 1,027**

5. Collaboration arrangements and concentration of credit risk

CSL Behring collaboration

License Sale

The Company determined that the fixed upfront payment of $450.0 million and the $12.4 million that the Company received in May 2021 in relation to the Additional Covenants should be allocated to the License Sale. In addition, the Company concluded that variable milestone payments, sales milestone payments and royalties should be allocated to the License Sale performance obligation as well. The Company determined that the License Sale was completed on May 6, 2021, when it transferred the license and CSL Behring assumed full responsibility for the development and commercialization of the Product. At Closing, the Company evaluated the amounts of potential payments and the likelihood that the payments will be received. The Company utilized the most likely amount method to estimate the variable consideration to be included in the transaction price. Since the Company cannot control the achievement of regulatory and first commercial sales milestones, the Company concluded that the potential payments were constrained as of Closing. The Company determined that it would recognize revenue related to these payments only to the extent that it becomes probable that no significant reversal of recognized cumulative revenue will occur thereafter.

The Company determined that achievement of a total of $55.0 million of milestone payments related to the submissions of a biologics license application (“BLA”) and market authorization application (“MAA”) was probable as of February 25, 2022, the time of filing the 2021 financial statements, and hence recorded these as license revenue in the year ended December 31, 2021. In March and April 2022, the global regulatory submissions were submitted, and the Company received the $55.0 million owed to it from CSL Behring.

The Company recorded $100.0 million in variable milestone revenue related to a first sale of HEMGENIX® in the U.S. during the year ended December 31, 2022 as the Company considered the occurrence of this event to be probable following the November 2022 BLA approval of HEMGENIX®. The Company collected the $100.0 million payment from CSL Behring in July 2023 following the first sale of the Product in the U.S in June 2023.

The Company is also eligible to receive up to $1.3 billion in additional payments based on the achievement of commercial milestones, which are not subject to the Royalty Financing Agreement. Royalties on the sale of HEMGENIX® are recorded once earned and are presented as license revenue.

The Company recognized $2.8 million (of which all related to royalty revenue), $100.0 million (nil related to royalty revenue) and $517.4 million (nil related to royalty revenue) of revenues related to the License Sale in the years ended December 31, 2023, 2022 and 2021, respectively.

The Company recorded expenses related to its existing license and other agreements as well as its financial advisor for a high single digit percentage of any such revenue recognized associated to meeting a milestone.

Manufacturing Development

The Company determined that a $50.0 million variable milestone payment related to Manufacturing Development should be allocated to the Manufacturing Development performance obligation. The Company concluded that this milestone payment represents the stand-alone selling price ("SSP") of the services based on the estimated cost of providing the services including a reasonable margin. Manufacturing Development includes providing information regarding a next generation manufacturing process of the Product to CSL Behring. CSL Behring did not request such services during the year ended December 31, 2023.

The variable consideration will be reduced based on a formula linked to quantities supplied using the currently approved manufacturing process following the one year anniversaries of the BLA and MAA approvals. In conjunction with the ongoing technology transfer (see below), the Company is not actively generating information with respect to a next generation manufacturing process of the Product. The Company utilized the most likely amount method to estimate the variable consideration to be included in the transaction price. As of December 31, 2023, the Company has not recognized any revenue related to the Manufacturing Development milestone.

Contract manufacturing

On the Signing Date, the Company and CSL Behring entered into a development and commercial supply agreement, pursuant to which, among other things, the Company will supply HEMGENIX® to CSL Behring at an agreed-upon price commensurate with the SSP. The Company will be responsible for supplying development and commercial Product until such time that these capabilities may be transferred to CSL Behring or a designated contract manufacturing organization. On September 6, 2022, CSL Behring notified the Company of its intent to transfer manufacturing technology related to the Product in the coming years to a third-party contract manufacturer designated by CSL Behring.

The Company generated $10.8 million, $1.7 million and nil contract manufacturing revenue from sales to CSL Behring during the years ended December 31, 2023, 2022 and 2021. The Company recognizes contract manufacturing revenue when CSL Behring obtains control of HEMGENIX®. The Company incurred $13.6 million, $2.1 million and nil of cost in relation to its contract manufacturing activities during the years ended December 31, 2023, 2022 and 2021.

Collaboration services

Following Closing, the Company was facilitating the completion of the HOPE-B clinical trial on behalf of CSL Behring until CSL Behring took over the execution of the clinical trials in December 2022. Activities related to on-demand development services and other services in accordance with the CSL Behring Agreement as well as activities related to the completing the HOPE-B clinical trial are reimbursed by CSL Behring at an agreed full-time-employee rate ("FTE-rate") and CSL Behring also reimbursed agreed third-party expenses incurred in relation to performing these activities. The Company concluded that these rights at Closing did not represent material rights.

The Company recognized $2.3 million of collaboration revenue in the year ended December 31, 2023, compared to $3.0 million and $2.4 million in the same periods in 2022 and 2021.

Accounts receivable and contract asset

As of December 31, 2023, the Company recorded accounts receivable of $4.0 million from CSL Behring related to collaboration services, contract manufacturing revenue and royalty revenue.

As of December 31, 2022, the Company recorded accounts receivable of $2.2 million from CSL Behring related to collaboration services as well as a contract asset of $100.0 million for a milestone due from CSL Behring following the first sale of HEMGENIX® in the U.S., which was collected in July 2023.

As of December 31, 2021, the Company recorded accounts receivable of $2.9 million from CSL Behring related to collaboration services as well as a contract asset of $55.0 million associated with milestone payments due upon CSL Behring's global regulatory submissions for HEMGENIX™ which were collected in March and April 2022.

Bristol-Myers Squibb collaboration

On November 21, 2022, the Company received written notice that BMS is terminating the BMS CLA as amended effective February 21, 2023.

The Company recognized collaboration revenues associated with Collaboration Target-specific pre-clinical analytical development and process development activities that were reimbursable by BMS under the amended BMS CLA as well as other related agreements. Collaboration revenue related to these contracted services was recognized when performance obligations were satisfied. Total collaboration revenue generated with BMS are as follows:

	Years ended December 31,		
	2023	2022	2021
		(in thousands)	
Bristol Myers Squibb	$ —	$ 1,752	$ 4,176
	$ —	**$ 1,752**	$ **4,176**

Amounts owed by BMS in relation to the collaboration revenue are as follows (presented as "Accounts receivable") as of December 31, 2023:

	December 31, 2023	December 31, 2022
	(in thousands)	
Bristol Myers Squibb	$ —	$ 136
Total	**$ —**	**$ 136**

6. Investments securities

The following table summarizes the Company's investments into sovereign debt as of December 31, 2023 and 2022:

	At December 31, 2023			
	Amortized cost	Gross unrealized holding gains	Gross unrealized holding losses	Estimated fair value
		(in thousands)		
Current investments:				
Government debt securities (held-to-maturity)	$ 376,532	$ 139	$ —	$ 376,671
Total	**$ 376,532**	**$ 139**	**$ —**	**$ 376,671**

	At December 31, 2022			
	Amortized cost	Gross unrealized holding gains	Gross unrealized holding losses	Estimated fair value
		(in thousands)		
Current investments:				
Government debt securities (held-to-maturity)	$ 124,831	$ —	$ (283)	$ 124,548
Non-current investments:				
Government debt securities (held-to-maturity)	39,984	—	(43)	39,941
Total	**$ 164,815**	**$ —**	**$ (326)**	**$ 164,489**

The Company invests in short-term U.S. and European government bonds with the highest investment credit rating. The U.S. and European government bonds are U.S. dollar and euro denominated, respectively.

Inputs to the fair value of the investments are considered Level 2 inputs.

7. Inventories

The following table summarizes the inventory balances, net of reserves, as of December 31, 2023:

	December 31, 2023	December 31, 2022
	(in thousands)	
Raw materials	$ 7,157	$ 3,584
Work in progress	4,109	1,874
Finished goods	758	1,466
Inventories	**$ 12,024**	**$ 6,924**

The Company recorded write downs of $1.6 million and nil for the years ended December 31, 2023 and December 31, 2022. The costs are recognized as Cost of Contract Manufacturing Revenues.

8. Fair value measurement and Other non-operating (losses) / gains

The Company measures certain financial assets and liabilities at fair value, either upon initial recognition or for subsequent accounting or reporting.

The carrying amount of cash and cash equivalents, accounts receivable from licensing and collaboration partners, other assets, accounts payable, accrued expenses and other current liabilities reflected in the consolidated balance sheets approximate their fair values due to their short-term maturities.

The Company's material financial assets include cash and cash equivalents, restricted cash and investment securities. Cash and cash equivalents and restricted cash are measured at fair value using Level 1 inputs. Restricted cash is included within "Other non-current assets" within the consolidated balance sheets. Investment securities are measured at amortized cost.

The following table sets forth the balances and changes in fair values of liabilities that are measured at fair value using Level 3 inputs:

	Contingent consideration	Derivative financial instruments	Total
		(in thousands)	
Balance at December 31, 2020	**$ —**	**$ 2,645**	**$ 2,645**
Amount recorded for contingent consideration on Acquisition Date of uniQure France SAS	23,950	—	23,950
Net losses recognized in profit or loss	6,683	160	6,843
Currency translation effects	(1,091)	—	(1,091)
Balance at December 31, 2021	**$ 29,542**	**$ 2,805**	**$ 32,347**
Net losses / (gains) recognized in profit or loss	7,080	(2,760)	4,320
Currency translation effects	(1,306)	(45)	(1,351)
Balance at December 31, 2022	**$ 35,316**	**$ —**	**$ 35,316**
Net losses recognized in profit or loss	15,895	—	15,895
Contingent consideration milestone payment	(9,563)	—	(9,563)
Currency translation effects	1,358	—	1,358
Balance at December 31, 2023	**$ 43,006**	**$ —**	**$ 43,006**

Contingent consideration

The Company is required to pay up to EUR 178.8 million ($197.3 million at the December 31, 2023 foreign exchange rate) to the former shareholders of uniQure France SAS (formerly Corlieve Therapeutics SAS) upon the achievement of contractually defined milestones in connection with the Company's acquisition of uniQure France (refer to Note 3 *"uniQure France SAS transaction"*). The Company recorded a liability for the fair market value of the contingent consideration of EUR 20.2 million ($24.0 million) at the Acquisition Date. The fair market value was determined using unobservable initial inputs with respect to (i) the probability of achieving the relevant milestones, or POS, (ii) the estimated timing of achieving such milestones, and (iii) the interest rate used to discount the payments. The Company determined the fair market value of the contingent consideration by calculating the probability-adjusted payments based on each milestone's probability of achievement. The probability-adjusted payments were then discounted to present value using a discount rate representing the Company's credit risk. This discount rate was determined using the effective interest rate of the Company's existing debt facility adjusted for difference in maturity dates based on market data on effective yields for U.S. bonds with a CCC credit rating. In September 2023, a milestone payment of EUR 10.0 million ($10.6 million) was paid, of which EUR 8.9 million ($9.6 million) related to contingent consideration.

The fair value of the contingent consideration as of December 31, 2023 was $43.0 million (December 31, 2022: $35.3 million) using discount rates of approximately 15.3% to 15.6% (December 31, 2022: 14.0% to 14.4%). Following the clearance of an Investigational New Drug ("IND") application for AMT-260 in August 2023, the Company increased the probability of achieving a EUR 30.0 million ($33.1 million) milestone payment following the dosing of the first patient in Phase I/II clinical trial from 66.0% to 100.0%. This also resulted in an increase of the probability that AMT-260 may advance to late-stage development and commercialization.

If as of December 31, 2023 the Company had assumed a 100% likelihood of AMT-260 advancing into a Phase III clinical study, then the fair value of the contingent consideration would have increased to $75.9 million. If as of December 31, 2023 the Company had assumed that it would discontinue development of the AMT-260 program, then the contingent consideration would have been released to income.

As of December 31, 2023, the Company classified $28.2 million of the total contingent consideration of $43.0 million as current liabilities. The balance sheet classification between current and non-current liabilities is based upon the Company's best estimate of the timing of settlement of the remaining relevant milestones.

Derivative financial instruments

The Company recorded the following results in other non-operating (losses) / gains related to the changes in the fair value of derivative financial instruments.

	Years ended December 31,		
	2023	2022	2021
		(in thousands)	
Other non-operating gains:			
Derivative gains	$ —	$ 2,760	$ —
Total other non-operating gains:	—	2,760	—
Other non-operating losses:			
Derivative losses	—	—	(160)
Other non-operating gains / (losses), net	**$ —**	**$ 2,760**	**$ (160)**

Derivative financial instruments BMS

On December 1, 2020, as part of the amended BMS CLA, the Company and BMS agreed that upon the consummation of a change of control transaction of uniQure that occurs prior to December 1, 2026 or BMS' delivery of a target cessation notice for all four Collaboration Targets, the Company (or its third party acquirer) shall pay to BMS a one-time, non-refundable, non-creditable cash payment of $70.0 million, provided that (x) if $70.0 million is greater than five percent (5.0%) of the net proceeds (as contractually defined) from such change of control transaction, the payment shall be an amount equal to five percent of such net proceeds, and (y) if $70.0 million is less than one percent of such net proceeds, the change of control payment shall be an amount equal to one percent of such net proceeds ("CoC-payment"). The amended BMS CLA was terminated on February 21, 2023.

The Company had previously determined that the CoC-payment should be recorded as a derivative financial liability as of the December 1, 2020 initial recognition and that subsequent changes in the fair market value of this derivative financial liability should be recorded in profit and loss.

The Company determined the fair market value of the derivative financial liability to be nil as of December 31, 2022 as no change of control transaction had been consummated prior to the termination of the amended BMS CLA on February 21, 2023. This resulted in the derecognition of the derivative financial liability for the year ended December 31, 2022.

Accordingly, the Company recorded a $2.8 million gain within "Other non-operating (losses) / gains" in the year ended December 31, 2022 and no such gains or losses were recorded in the year ended December 31, 2023.

Other

As of December 31, 2023, the Company recorded $0.5 million liability related to consideration for post-acquisition services, presented within Other non-current liabilities in connection with the Company's acquisition of uniQure France SAS (December 31, 2022: $0.3 million).

Investment securities

Refer to Note 6 "*Investment securities*" for the fair value of the investment securities as of December 31, 2023.

Pension plan assets

Refer to Note 15 "*Retirement benefits*" for the fair value of the plan assets as of December 31, 2023.

9. Property, plant, and equipment, net

The following table presents the Company's property, plant, and equipment as of December 31:

	December 31, 2023	December 31, 2022
	(in thousands)	
Leasehold improvements	$ 46,512	$ 44,871
Laboratory equipment	43,657	39,393
Office equipment	6,383	4,985
Construction-in-progress	5,668	5,409
Total property, plant, and equipment	102,220	94,658
Less accumulated depreciation	(55,672)	(44,126)
Property, plant and equipment, net	**$ 46,548**	**$ 50,532**

Total depreciation expense was $10.3 million for the year ended December 31, 2023 (December 31, 2022: $8.2 million, December 31, 2021: $6.1 million). Depreciation expense is allocated to research and development expenses and cost of contract manufacturing to the extent it relates to the Company's manufacturing facility and equipment and laboratory equipment. All other depreciation expenses are allocated to selling, general and administrative expense.

The following table summarizes property, plant, and equipment by geographic region.

	December 31, 2023	December 31, 2022
	(in thousands)	
Lexington, Massachusetts (United States of America)	$ 19,437	$ 20,258
Amsterdam (the Netherlands)	27,095	30,252
Other	16	22
Total	**$ 46,548**	**$ 50,532**

10. Right-of-use asset and lease liabilities

The Company's most significant leases relate to office and laboratory space under the following operating lease agreements:

Lexington, Massachusetts / United States

In July 2013, the Company entered into a lease for a facility in Lexington, Massachusetts, United States. The term of the lease commenced in November 2013, was set for 10 years starting from the 2014 rent commencement date and is non-cancellable. Originally, the lease for this facility had a termination date of 2024. In November 2018, the term was expanded by five years to June 2029. The lease continues to be renewable for two subsequent five-year terms. Additionally, the lease was expanded to include an additional 30,655 square feet within the same facility and for the same term. The lease of the expansion space commenced on June 1, 2019.

The contractually fixed annual increase of lease payments through 2029 for both the extension and expansion lease have been included in the lease payments.

In December 2021, the Company entered into a new lease for an additional facility in Lexington, Massachusetts, United States of approximately 13,501 square feet of space. The lease commenced in May 2022. Following the Company's announcement of the Reorganization, the Company incurred costs amounting to $1.4 million associated with the impairment of the right-of-use asset and its associated leasehold improvements' carrying value that was determined not be recoverable as of the cease-use date in late 2023. This facility is intended to be subleased in 2024.

In February 2022, the Company also entered into a new lease for an additional facility in Lexington, Massachusetts, United States of approximately 12,716 square feet. The lease commenced in November 2022 and is set for a non-cancellable period of seven years and four months. The lease is renewable for one five-year term.

Amsterdam / The Netherlands

In March 2016, the Company entered into a 16-year lease for a facility in Amsterdam, the Netherlands and amended this agreement in June 2016. The lease for the facility terminates in 2032, with an option to extend in increments of five-year periods. The lease contract includes variable lease payments related to annual increases in payments based on a consumer price index.

On December 1, 2017, the Company entered into an agreement to sub-lease three of the seven floors of its Amsterdam facility for a ten-year term ending on December 31, 2027, with an option for the sub-lessee to extend until December 31, 2031. In February 2020, the Company amended the agreement to sub-lease to take back one of the three floors effective March 1, 2020. The fixed lease payments to be received during the remaining term under the agreement to sub-lease amount to EUR 3.6 million ($4.0 million) as of December 31, 2023.

In May 2021, the Company entered into a sublease agreement to let an additional approximately 1,080 square meters of office space to accommodate the hiring of additional full-time employees. The lease expires in October 2028.

Operating lease liabilities

The components of lease cost were as follows:

	Year ended December 31,		
	2023	2022	2021
	(in thousands)		
Operating lease cost	$ 7,018	$ 5,932	$ 5,306
Variable lease cost	1,238	785	698
Sublease income	(957)	(849)	(907)
Total lease cost	**$ 7,299**	**$ 5,868**	**$ 5,097**

The table below presents the lease-related assets and liabilities recorded on the Consolidated balance sheets.

	December 31, 2023	December 31, 2022
	(in thousands)	
Assets		
Operating lease right-of-use assets	**$ 28,789**	**32,726**
Liabilities		
Current		
Current operating lease liabilities	8,344	8,382
Non-current		
Non-current operating lease liabilities	28,316	31,719
Total lease liabilities	**$ 36,660**	**40,101**

Other information

The weighted-average remaining lease term as of December 31, 2023, is 6.1 years, compared to 7.2 years as of December 31, 2022, and the weighted-average discount rate as of December 31, 2023 is 11.2%, compared to 11.2% as of December 31, 2022. The Company uses an incremental borrowing rate applicable to the lease asset.

The table below presents supplemental cash flow and non-cash information related to leases.

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Cash paid for amounts included in the measurement of lease liabilities			
Operating cash flows for operating leases	$ 7,921	$ 7,532	$ 5,738
Right-of-use asset obtained in exchange for lease obligation			
Operating lease	$ 561	$ 9,824	$ 1,699

Undiscounted cash flows

The table below reconciles the undiscounted cash flows as of December 31, 2023, for each of the first five years and the total of the remaining years to the operating lease liabilities recorded on the Consolidated balance sheet as of December 31, 2023.

	Lexington	Amsterdam[1]	Other	Total
		(in thousands)		
2024	$ 5,504	$ 2,569	$ 295	$ 8,368
2025	5,859	2,056	295	8,210
2026	6,031	2,056	246	8,333
2027	6,207	2,060	—	8,267
2028	6,388	1,984	—	8,372
Thereafter	2,956	5,430	—	8,386
Total lease payments	$ 32,945	$ 16,155	$ 836	$ 49,936
Less: amount of lease payments representing interest payments	(7,920)	(5,211)	(145)	(13,276)
Present value of lease payments	25,025	10,944	691	36,660
Less: current operating lease liabilities	(5,504)	(2,569)	(271)	(8,344)
Non-current operating lease liabilities	**$ 19,521**	**$ 8,375**	**$ 420**	**$ 28,316**

(1) Payments are due in EUR and have been translated at the foreign exchange rate as of December 31, 2023, of $1.10 / €1.00

11. Intangible assets, net and Goodwill

The following table presents the Company's acquired licenses and acquired IPR&D as of December 31:

	December 31, 2023	December 31, 2022
	(in thousands)	
Acquired licenses	$ 2,419	$ 2,346
Less accumulated amortization	(1,057)	(900)
Acquired licenses, net	**$ 1,362**	**$ 1,446**
Acquired IPR&D Intangible Asset	59,119	57,332
Intangibles, net	**$ 60,481**	**$ 58,778**

a. Acquired licenses

All acquired licenses are owned by uniQure biopharma B.V, a subsidiary of the Company. The remaining weighted average life is 10.5 years as of December 31, 2023 (December 31, 2022 11.5 years).

As of December 31, 2023, the estimated future amortization expense for each of the five succeeding years and the period thereafter is as follows:

Years	Amount
	(in thousands)
2024	$ 130
2025	130
2026	130
2027	130
2028	130
Thereafter	712
Total	**$ 1,362**

The amortization expense related to licenses for the year ended December 31, 2023 was $0.1 million (December 31, 2022: $0.4 million; December 31, 2021: $1.2 million).

b. Acquired in-process research and development

As part of its acquisition of uniQure France SAS as of July 30, 2021, the Company identified certain intangible assets related to an IPR&D Intangible Asset. Refer to Note 3 *"uniQure France SAS transaction"*.

c. Goodwill

As part of its acquisition of uniQure France SAS as of July 30, 2021, the Company recorded goodwill. Refer to Note 3 *"uniQure France SAS transaction"*.

12. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities include the following items:

	December 31, 2023	December 31, 2022
	(in thousands)	
Personnel related accruals and liabilities	$ 16,263	$ 17,201
Accruals for goods received from and services provided by vendors-not yet billed	12,834	11,120
Liability owed to the Purchaser pursuant to the Royalty Financing Agreement	1,437	—
Accrued contract fulfillment costs and costs to obtain a contract	—	2,250
Total	**$ 30,534**	**$ 30,571**

13. Long-term debt

On June 14, 2013, the Company entered into a venture debt loan facility with Hercules Capital, Inc. (formerly known as Hercules Technology Growth Capital, Inc.) ("Hercules"), which was amended and restated on June 26, 2014, on May 6, 2016 ("2016 Amended Facility") and on December 6, 2018 ("2018 Amended Facility").

On January 29, 2021, the Company and Hercules amended the 2018 Amended Facility ("2021 Amended Facility"). Pursuant to the 2021 Amended Facility, Hercules agreed to an additional Facility of $100.0 million ("Tranche B") increasing the aggregate principal amount of the term loan facilities from $35.0 million to up to $135.0 million. On January 29, 2021, the Company drew down $35.0 million of the Tranche B. Advances under Tranche B bore interest at a rate equal to the greater of (i) 8.25% or (ii) 8.25% plus the prime rate, less 3.25% per annum. The principal balance of $70.0 million and all accrued but unpaid interest on advances under Tranche B was due on June 1, 2023, which date could have been extended by the Company by up to two twelve-month periods. In addition to Tranche B, the 2021 Amended Facility had also extended the interest only payment period of the previously funded $35.0 million term loan ("Tranche A") from January 1, 2022 to June l, 2023.

On December 15, 2021, the Company and Hercules amended and restated the 2021 Amended Facility ("2021 Restated Facility"). Pursuant to the 2021 Restated Facility, Tranche A and Tranche B of the 2021 Amended Facility with a total outstanding balance of $70.0 million were consolidated into one tranche with a total commitment of $100.0 million. The Company drew down an additional $30.0 million, resulting in total principal outstanding as of December 31, 2021 of $100.0 million. The 2021 Restated Facility extended the loan's maturity date from June 1, 2023 until December 1, 2025. The interest-only period was extended from January 1, 2023 to December 1, 2024, or December 1, 2025 if, prior to June 30, 2024, either (a) the BLA for AMT-061 had been approved by the U.S. Food and Drug Administration ("FDA") or (b) AMT-130 had advanced into a pivotal trial. On November 22, 2022, the FDA approved the BLA for AMT-061 resulting in the extension of the interest-only period to December 1, 2025.

On May 12, 2023 the Company and Hercules amended the 2021 Restated Facility (the "2023 Amended Facility"). The total principal outstanding under the 2023 Amended Facility remained $100.0 million. The 2023 Amended Facility extended the maturity date and interest only period from December 1, 2025 to January 5, 2027 (the "Maturity Date").

The Company is required to repay the entire principal balance on the Maturity Date. The interest rate is adjustable and is the greater of (i) 7.95% and (ii) 7.95% plus the prime rate less 3.25% per annum. The Company paid a $2.5 million back-end fee in June 2023. Under the 2023 Amended Facility, the Company owes a back-end fee of $4.9 million on December 1, 2025 and a back-end fee of $1.3 million on the Maturity Date.

The amortized cost (including interest due presented as part of accrued expenses and other current liabilities) of the 2023 Amended Facility was $102.9 million as of December 31, 2023, compared to an amortized cost of $103.8 million as of December 31, 2022, and is recorded net of discount and debt issuance costs. The foreign currency gain on the loan was $3.0 million in 2023 (2022: loss of $5.8 million; 2021: loss of $5.3 million). The fair value of the loan approximates its carrying amount. Inputs to the fair value of the loan are considered Level 3 inputs.

Interest expense recorded during the years ended December 31 was as follows:

Years	Amount (in millions)
2023	$ 14.6
2022	11.5
2021	7.2

Under the 2023 Amended Facility the Company must remain current in its periodic reporting requirements and is required to keep a minimum cash balance deposited in bank accounts in the United States, equivalent to the lesser of (i) 65% of the outstanding balance of principal due or (ii) 100% of worldwide cash and cash equivalents. This restriction on cash and cash equivalents only relates to the location of the cash and cash equivalents, and such cash and cash equivalents can be used at the discretion of the Company. Beginning on April 1, 2024, the Company is required to keep a minimum of unrestricted cash of at least 30% of the loan amount outstanding. In combination with other covenants, the 2023 Amended Facility restricts the Company's ability to, among other things, incur future indebtedness and obtain additional debt financing, to make investments in securities or in other companies, to transfer assets, to perform certain corporate changes, to make loans to employees, officers, and directors, and to make dividend payments and other distributions to its shareholders. The Company secured the facilities by directly or indirectly pledging its total assets of $831.7 million, less $9.3 million of cash and cash equivalents and other current assets held by the Company and $90.4 million of other current assets and investment held by uniQure France SAS as well as receivables sold to the Purchaser.

Under the 2023 Amended Facility, the occurrence of a material adverse effect, as defined therein, would entitle Hercules to declare all principal, interest and other amounts owed by the Company immediately due and payable. As of December 31, 2023, the Company was in material compliance with all covenants and provisions.

The aggregate maturities of the loans, including $47.6 million of coupon interest payments and financing fees, for each of the 37 months after December 31, 2023, are as follows:

Years	Amount (in thousands)
2024	$ 13,420
2025	18,233
2026	13,383
2027	102,533
Total	**$ 147,569**

14. Royalty Financing Agreement

On May 12, 2023, the Company entered into the Royalty Financing Agreement with the Purchaser. Under the terms of the Royalty Financing Agreement the Company received an upfront payment of $375.0 million in exchange for its rights to the lowest royalty tier on CSL Behring's worldwide net sales of HEMGENIX® for certain current and future royalties due to the Company. The Company is also eligible to receive an additional $25.0 million milestone payment under the Royalty Financing Agreement if 2024 net sales of HEMGENIX® exceed a pre-specified threshold, as set forth in the Royalty Financing Agreement. The Purchaser will receive 1.85 times the upfront payment (or $693.8 million) and 1.85 times the $25.0 million milestone payment (if paid) until June 30, 2032 ("First Hard Cap Date") if such thresholds are met or, if such cap is not met by June 30, 2032, up to 2.25 times of the upfront and milestone payment (if paid) through December 31, 2038. If 2024 net sales do not exceed a pre-specified threshold, the Company will be obligated to pay $25.0 million to the Purchaser but only to the extent that the Company achieves a future sales milestone under the CSL Behring Agreement. If such milestone payment is not due from CSL Behring, the Company is not obligated to pay any amounts to the Purchaser.

The Company has retained the rights to all other royalties, as well as commercial milestones totaling up to $1.3 billion, under the terms of the CSL Behring Agreement.

Net proceeds from the Royalty Financing Agreement, after deducting professional and financial advisory fees related to the transaction of $4.9 million, were $370.1 million. The Company initially recorded these net proceeds as "Liability from royalty financing agreement" at their fair market value on its balance sheet as of closing of the transaction on June 5, 2023. Following the initial recognition, the Company records the debt at amortized cost.

The Company expects to satisfy its commitment to the Purchaser prior to the First Hard Cap Date. The Company will record the difference of $323.7 million between the total expected payments of $693.8 million to the Purchaser and the $370.1 million net proceeds as interest expense using the effective interest rate method. The Company determined the effective interest rate based on the projected cash flows up to the First Hard Cap Date. Based on the Company's projections the effective interest rate is expected to be within a range of 12.0% to 13.5% per annum. The Company would have recorded between $26.5 million and $29.9 million of interest expense during the year ended December 31, 2023 (nil for the year ended December 31, 2022 and 2021) if it had used effective interest rates of 12.0% or 13.5%, instead of the $26.9 million recorded in the during the year ended December 31, 2023 (nil for the year ended December 31, 2022 and 2021). The Company will prospectively update the effective interest rate at each reporting date based on updated projections.

The liability was initially recognized at fair value and inputs were considered Level 3 inputs.

The following table presents the movement in the liability related to the Royalty Financing Agreement between the closing of the transaction on June 5, 2023 and December 31, 2023:

	Amount of liability (in thousands)
Gross proceeds from royalty financing agreement on June 5, 2023	$ 375,000
Debt issuance costs paid	(4,938)
Royalty payments to Purchaser	(1,317)
Liability owed to the Purchaser (presented as "Accrued expense and other current liabilities")	(1,437)
Interest expense for the period June 5, 2023 to December 31, 2023	26,933
Liability related to the royalty financing agreement	**$ 394,241**

15. Retirement benefits

Defined benefit pension plan

The Company operates a defined benefit pension plan for its Swiss employees (the "Swiss Plan") in accordance with local regulations and practices. The normal retirement age under the Swiss Plan is 65 for men and women. All benefits are immediately vested. Under the Swiss Plan, a percentage of pensionable salary is contributed as a retirement credit with additional contributions being made for death and disability benefits. Under Swiss pension law, participants who are covered by the pension plan of another employer are required to transfer the termination benefit of that pension plan into the plan of the Company. When employment at the Company ends before reaching retirement, the termination benefit is transferred out of the defined benefit pension plan. At time of retirement the accumulated retirement credit can be converted into a life-long annuity or be paid-out as a lump-sum. Participants are also permitted to withdraw a part of the accumulated termination benefit in special circumstances before reaching retirement age for example for payments related to obtain home ownership.

The Company recognized its net projected benefit obligation as of December 31, 2023 at a carrying amount of $2.5 million, presented within other non-current liabilities in the consolidated balance sheets.

The funded status of the Swiss Plan as of December 31, 2023 is as follows:

	December 31, 2023
	(in thousands)
Fair value of plan assets	$ 8,946
Present value of projected benefit obligation	(11,499)
Funded status: (net liability)	**$ (2,553)**
Accumulated benefit obligation as of December 31, 2023	**$ 10,739**

Actuarial losses of $2.1 million, net of $0.4 million deferred tax income, were recorded in other comprehensive income, net, during the year ended December 31, 2023.

The assumptions related to the Swiss Plan are as follows:

Actuarial assumptions (% p.a.)	December 31, 2023
Discount rate	1.50%
Expected return on plan assets	2.60%
Expected inflation rate	1.60%
Interest credit rate	1.25%
Long-term expected rate of salary increases	1.60%
Pension increase	0.00%

Future benefits expected to be paid are as follows:

	December 31, 2023
Year 1	$ 533
Year 2	610
Year 3	528
Year 4	529
Year 5	540
Next 5 years	4,992
Other disclosure items:	
Next year's expected employer contribution	**$ 552**

The Company's investment strategy for its pension plan is to optimize the long-term investment return on plan assets in relation to the liability structure to maintain an acceptable level of risk while minimizing the cost of providing pension benefits and maintaining adequate funding levels in accordance with the applicable rules in each jurisdiction. The Company does not manage any assets internally. The plan assets relate to assets being held by the Swiss pension foundations in which the Company's pension plan is set-up.

The allocation of plan assets is presented below:

	December 31, 2023
Bonds	61%
Equities	25%
Real estate	10%
Others	4%

The fair value of the plan assets is determined based on Level 2 inputs.

16. Shareholders' equity

As of December 31, 2023, the Company's authorized share capital is €4.0 million (or $4.4 million when translated at an exchange rate as of December 31, 2023, of $1.10/ €1.00), divided into 80,000,000 ordinary shares, each with a nominal value of €0.05. The Company's shareholders, at the 2021 Annual General Meeting of Stockholders held on June 16, 2021, approved an increase in the number of authorized ordinary shares by 20,000,000 to 80,000,000.

All ordinary shares issued by the Company were fully paid. Besides the minimum amount of share capital to be held under Dutch law, there are no distribution restrictions applicable to the equity of the Company.

As of December 31, 2023, and 2022 and 2021 the Company's other comprehensive result was restricted for payment of dividends for an accumulated other comprehensive loss of $53.6 million in 2023, an accumulated other comprehensive loss of $58.3 million in 2022, and an accumulated other comprehensive loss of $28.9 million in 2021.

On March 1, 2021, the Company entered into a Sales Agreement with SVB Leerink LLC ("SVB Leerink") with respect to an at-the-market ("ATM") offering program, under which the Company may, from time to time in its sole discretion, offer and sell through SVB Leerink, acting as agent, its ordinary shares, up to an aggregate offering price of $200.0 million. The Company will pay SVB Leerink a commission equal to 3% of the gross proceeds of the sales price of all ordinary shares sold through it as sales agent under the Sales Agreement. In March and April 2021, the Company issued an aggregate of 921,730 ordinary shares at a weighted average price of $33.52 per ordinary share, with net proceeds of $29.6 million, after deducting underwriting discounts and net of offering expenses. The Company defers direct, incremental costs associated to this offering, except for the commission costs to SVB Leerink, which are a reduction to additional paid-in capital and will deduct these costs from additional paid-in capital in the consolidated balance sheets proportionately to the amount of proceeds raised. During the year ended December 31, 2021, $1.3 million of direct, incremental costs were deducted from additional paid-in capital (nil for the years ended December 31, 2022 and 2023).

Following the Closing of the CSL Behring transaction, the Company consumed its tax net operating loss carryforwards from the years 2011 to 2018. The Company allocated the tax benefit from the release of the valuation allowance related to net operating loss carryforwards generated by share issuance costs incurred in 2014, 2015, 2017 and 2018 to additional paid-in capital. This resulted is an increase of additional paid-in capital of $3.0 million in the year ended December 31, 2021.

The Company recorded a $0.8 million increase of additional paid-in capital in the year ended December 31, 2022 resulting from the release of valuation allowance for the tax benefit of share issuance costs incurred in 2018, 2019 and 2021 within the Netherlands.

17. Share-based compensation

Share-based compensation expense recognized by classification included in the consolidated statements of operations and comprehensive (loss) / income was as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Cost of manufacturing services revenue	$ 826	$ 323	$ —
Research and development	16,881	18,402	12,834
Selling, general and administrative	17,386	15,479	12,801
Total	**$ 35,093**	**$ 34,204**	**$ 25,635**

Share-based compensation expense recognized by award type was as follows:

	Year ended December 31,		
	2023	2022	2021
		(in thousands)	
Award type/ESPP			
Share options	$ 13,302	$ 13,425	$ 12,477
Restricted share units	18,524	15,486	11,347
Performance share units	3,234	5,267	1,783
Employee share purchase plan	33	26	28
Total	**$ 35,093**	**$ 34,204**	**$ 25,635**

As of December 31, 2023, the unrecognized compensation cost related to unvested awards under the various share-based compensation plans were:

	Unrecognized share-based compensation expense	Weighted average remaining period for recognition
	(in thousands)	(in years)
Award type		
Share options	$ 21,708	2.47
Restricted share units	27,015	1.89
Performance share units	738	0.95
Total	**$ 49,461**	**2.13**

The Company satisfies the exercise of share options and vesting of Restricted Share Units ("RSUs") and Performance Share Units ("PSUs") through newly issued ordinary shares.

The Company's share-based compensation plans include the 2014 Amended and Restated Share Option Plan (the "2014 Plan") and inducement grants under Rule 5653(c)(4) of The Nasdaq Global Select Market with terms similar to the 2014 Plan (together the "2014 Plans"). The Company previously had a 2012 Equity Incentive Plan (the "2012 Plan"). As of December 31, 2023, no fully vested share options are outstanding (December 31, 2022: nil) under the 2012 Plan.

At the general meeting of shareholders on January 9, 2014, the Company's shareholders approved the adoption of the 2014 Plan. At the annual general meetings of shareholders in June 2015, 2016, 2018 and 2021, uniQure shareholders approved amendments of the 2014 Plan, increasing the shares authorized for issuance by 1,070,000 shares in 2015, 3,000,000 in 2016, 3,000,000 shares in 2018, 4,000,000 shares in 2021. At an extraordinary general meeting of shareholders in November 2023, an additional 1,750,000 shares were authorized for issuance, increasing the total to 14,351,471 shares.

Share options

Share options are priced on the date of grant and, except for certain grants made to non-executive directors, vest over a period of four years. The first 25% vests after one year from the initial grant date and the remainder vests in equal quarterly installments over years two, three and four. Certain grants to non-executive directors vest in full after one year. Any options that vest must be exercised by the tenth anniversary of the initial grant date.

2014 Plans

The following tables summarize option activity under the Company's 2014 Plans for the year ended December 31, 2023:

	Options			
	Number of ordinary shares	Weighted average exercise price	Weighted average remaining contractual life	Aggregate intrinsic value
			in years	(in thousands)
Outstanding at December 31, 2022	**4,237,917**	**$ 26.13**	**7.14**	**$ 17,848**
Granted	1,650,030	$ 18.16		
Forfeited	(543,481)	$ 22.04		
Expired	(356,366)	$ 36.26		
Exercised	(14,070)	$ 9.24		
Outstanding at December 31, 2023	**4,974,030**	**$ 23.25**	**6.71**	**182**
Thereof, fully vested, and exercisable on December 31, 2023	2,738,595	$ 26.08	5.15	182
Thereof, outstanding and expected to vest after December 31, 2023	2,235,435	$ 19.78	8.77	—
Outstanding and expected to vest after December 31, 2022	2,098,557	$ 23.38		

Total weighted average grant date fair value of options issued during the period (in $ millions)		$	17.4
Granted to directors and officers during the period (options, grant date fair value $ in millions)	786,580	$	9.0
Proceeds from option sales during the period (in $ millions)		$	0.1

The following table summarizes information about the weighted average grant-date fair value of options during the years ended December 31:

	Options	Weighted average grant-date fair value
Granted, 2023	1,650,030	$ 10.57
Granted, 2022	1,426,966	9.04
Granted, 2021	1,174,893	20.95
Vested, 2023	873,658	13.50
Forfeited, 2023	(543,481)	12.78

The following table summarizes information about the weighted average grant-date fair value of options at December 31:

	Options	Weighted average grant-date fair value
Outstanding and expected to vest, 2023	2,235,435	$ 11.50
Outstanding and expected to vest, 2022	2,098,557	13.46

The fair value of each option issued is estimated at the respective grant date using the Hull & White option pricing model with the following weighted-average assumptions:

	Year ended December 31,		
Assumptions	**2023**	**2022**	**2021**
Expected volatility	70%	70%	75%
Expected terms	10 years	10 years	10 years
Risk free interest rate	3.7% - 4.8%	2.1% - 4.2%	1.2 - 1.9%
Expected dividend yield	0%	0%	0%

The Hull & White option model captures early exercises by assuming that the likelihood of exercises will increase when the share price reaches defined multiples of the strike price. This analysis is performed over the full contractual term.

The following table summarizes information about options exercised during the years ended December 31:

	Exercised during the year	Intrinsic value (in thousands)
2023	14,070	$ 154
2022	138,356	1,848
2021	241,496	5,046

Restricted Share Units

The following table summarizes the RSU activity for the year ended December 31, 2023:

	RSUs	
	Number of ordinary shares	Weighted average grant-date fair value
Non-vested at December 31, 2022	**1,818,774**	**$ 20.46**
Granted	1,770,025	$ 17.88
Vested	(738,447)	$ 22.65
Forfeited	(585,983)	$ 19.12
Non-vested at December 31, 2023	**2,264,369**	**$ 18.07**
Total weighted average grant date fair value of RSUs granted during the period (in $ millions)		$ 31.6
Granted to directors and officers during the period (shares, $ in millions)	419,200	$ 8.3

The following table summarizes information about the weighted average grant-date fair value of RSUs granted during the years ended December 31:

	Granted during the year	Weighted average grant-date fair value
2023	1,770,025	$ 17.88
2022	1,604,533	16.10
2021	574,921	36.14

The following table summarizes information about the total fair value of RSUs that vested during the years ended December 31:

	Total fair value (in thousands)
2023	$ 13,729
2022	5,104
2021	8,063

RSUs generally vest over one to three years. RSUs granted to non-executive directors will vest one year from the date of grant.

Performance Share Units

The following table summarizes the PSU activity for the year ended December 31, 2023:

	PSUs	
	Number of ordinary shares	Weighted average grant-date fair value
Non-vested at December 31, 2022	**400,690**	**$ 28.82**
Vested	(94,510)	$ 30.65
Forfeited	(83,630)	$ 28.22
Non-vested at December 31, 2023	**222,550**	**$ 28.09**
Total weighted average grant date fair value of PSUs granted during the period (in $ millions)		$ -

The Company granted shares to certain employees in September and December 2021 and various dates during the year ended December 31, 2022 that will be earned upon achievement of defined milestones. Earned shares will vest upon the later of a minimum service period of three years, or the achievement of defined milestones, subject to the grantee's continued employment. In addition, portions of the December 2021 granted to executives and other members of senior management are subject to achieving a minimum total shareholder return relative to the Nasdaq biotechnology index. The Company recognizes the compensation cost related to these grants to the extent it considers achievement of the milestones to be probable. As of December 31, 2023, two milestones had been achieved and vested in either 2022 or 2023. Additionally, another two milestones are considered probable as of December 31, 2023.

In January 2018 and January and February 2019, the Company awarded PSUs to its executives and other members of senior management. These PSUs were earned in January 2019 and January 2020, based on the Board of Directors' (the "Board") assessment of the level of achievement of agreed upon performance targets through December 31, 2018, and December 31, 2019, respectively. The PSUs awarded for the year ended December 31, 2018 vested in February 2021 and the PSUs awarded for the year ended December 31, 2019 vested in January 2022.

The following table summarizes information about the weighted average grant-date fair value of the PSUs determined as of the date of the grant for the 2021 and 2022 PSUs:

	Granted during the year	Weighted average grant-date fair value
2023	—	$ —
2022	34,700	$ 15.11
2021	555,600	$ 30.19

The following table summarizes information about the total fair value of PSUs that vested during the years ended December 31:

	Total fair value (in thousands)
2023	$ 1,474
2022	4,450
2021	5,074

Employee Share Purchase Plan ("ESPP")

In June 2018, the Company's shareholders adopted and approved an ESPP allowing the Company to issue up to 150,000 ordinary shares. The ESPP is intended to qualify under Section 423 of the Internal Revenue Code of 1986. Under the ESPP, employees are eligible to purchase ordinary shares through payroll deductions, subject to any plan limitations. The purchase price of the shares on each purchase date is equal to 85% of the lower of the closing market price on the offering date or the closing market price on the purchase date of each three-month offering period. During the year ended December 31, 2023, 19,198 ordinary shares have been issued (December 31, 2022: 11,242 and December 31, 2021: 4,724). As of December 31, 2023, a total of 96,862 ordinary shares remain available for issuance under the ESPP plan.

18. Expenses by nature

Operating expenses excluding expenses presented in other expenses included the following expenses by nature:

	Years ended December 31,		
	2023	2022	2021
		(in thousands)	
Employee-related expenses	$ 135,728	$ 119,903	$ 96,161
Laboratory and development expenses	63,065	65,964	36,014
Office and housing expenses	22,960	17,612	14,638
Legal and advisory expenses	21,975	15,782	24,767
Fair value loss - uniQure France SAS contingent consideration	15,895	7,081	6,683
Other operating expenses	11,236	8,510	10,528
Depreciation and amortization expenses	10,046	8,250	7,299
Patent and license expenses	7,112	9,548	3,748
Impairment related to the Reorganization	1,438	—	—
Total	**$ 289,455**	**$ 252,650**	**$ 199,838**

Details of employee-related expenses for the years ended December 31 are as follows:

	Years ended December 31,		
	2023	2022	2021
		(in thousands)	
Wages and salaries	$ 71,852	$ 63,704	$ 53,078
Share-based compensation expenses	34,267	33,881	25,635
Contractor expenses	6,141	3,959	3,170
Social security costs	5,900	5,179	4,496
Health insurance	4,216	4,148	3,161
Costs related to pension plans	3,611	2,667	2,051
Severance costs related to the Reorganization (refer to Note 4 "*Reorganization*")	2,549	—	—
Other employee expenses	7,192	6,365	4,570
Total	**$ 135,728**	**$ 119,903**	**$ 96,161**

19. Other income

Other income during the year ended December 31, 2023 was $6.1 million compared to $7.2 million and $12.3 million during the same periods in 2022 and 2021, respectively.

Other income in 2023, 2022 and 2021 includes income from payments received from European authorities to subsidize the Company's research and development efforts in the Netherlands. The amount recognized in the year ended December 31, 2023 was $5.0 million compared to $5.6 million in 2022 and $5.3 million in 2021.

In addition, other income included $2.6 million of employee retention credits received under the U.S. Coronavirus Aid, Relief, and Economic Security Act, during the year ended December 31, 2021. No such income was received in the years ended December 31, 2023 or December 31, 2022.

An additional $3.0 million of other income was recorded in the year ended December 31, 2021, related to the receipt by the Company of 69,899 shares of VectorY B.V. in conjunction with a settlement agreement that the Company and VectorY B.V. entered into in April 2021. In the year ended December 31, 2023 and 2022, the Company recognized nil and $0.3 million, respectively, of other income related to the equity stake received in VectorY.

In 2023, 2022 and 2021 the Company's other income also consisted of income from the subleasing of a portion of the Amsterdam facility while other expense consists of expenses incurred in relation to the subleasing income.

20. Income taxes

a. Income tax (benefit) / expense

Due to the uncertainty surrounding the realization of favorable tax attributes in future tax returns, the Company has recorded a valuation allowance against the Company's net deferred tax assets in the Netherlands and a partial valuation allowance against the Company's net deferred tax assets in France.

In connection with the acquisition of uniQure France SAS, the Company recognized a deferred tax liability related to acquired identifiable intangible assets and a deferred tax asset for net operating tax loss carryforwards for a net of EUR 11.9 million ($14.2 million) as of the Acquisition Date.

There are no significant unrecognized tax benefits as of December 31, 2023 and 2022.

For the years ended December 31, 2023, 2022 and 2021, (loss) / income before income tax benefit / (expense) consists of the following:

	Years ended December 31,		
	2023	2022	2021
	(in thousands)		
Dutch operations	$ (282,530)	$ (96,872)	$ 348,400
U.S. operations	(6,903)	(14,934)	(12,737)
Other	(17,124)	(16,453)	(2,857)
Total	**$ (306,557)**	**$ (128,259)**	**$ 332,806**

The income tax (expense) / benefit for the years ended December 31, 2023, 2022 and 2021, consists of the following:

	Years ended December 31,		
	2023	2022	2021
	(in thousands)		
Current tax expense			
Other	$ (110)	$ (24)	$ (7)
Total current income tax expense	$ (110)	$ (24)	$ (7)
Deferred tax (expense) / benefit			
Dutch operations	$ —	$ (808)	$ (3,047)
U.S. operations	(2,708)	(1,075)	(771)
Other	897	3,377	608
Total deferred tax (expense) / benefit	$ (1,811)	$ 1,494	$ (3,210)
Total income tax (expense) / benefit	**$ (1,921)**	**$ 1,470**	**$ (3,217)**

b. Tax benefit recognized in other comprehensive income

The reconciliation of the amount of income tax benefit recognized in other comprehensive income for the year ended December 31, 2023 is as follows:

	Year ended December 31, 2023		
	Before tax	Tax benefit	Net of tax
		(in thousands)	
Unrecognized gain related to defined benefit pension plan liability	$ (2,553)	$ 417	$ (2,136)
Total	**$ (2,553)**	**$ 417**	**$ (2,136)**

No income tax benefit or expense has been recognized in Other Comprehensive Income for the years ended December 31, 2022 and 2021.

c. Tax rate reconciliation

The reconciliation of the amount of income tax (expense) / benefit that would result from applying the Dutch statutory income tax rate to the Company's reported amount of (loss) / income before income tax (expense) / benefit for the years ended December 31, 2023, 2022 and 2021, is as follows:

	Years ended December 31,		
	2023	2022	2021
		(in thousands)	
(Loss) / income before income tax (expense) / benefit for the period	$ (306,557)	$ (128,259)	$ 332,806
Expected income tax benefit / (expense) at the tax rate enacted in the Netherlands (2023: 25.8%, 2022: 25.8%, 2021: 25.0%)	79,092	33,091	(83,201)
Difference in tax rates between the Netherlands and the U.S. as well as other foreign countries	(124)	99	309
Other net change in valuation allowance	(67,004)	(20,591)	88,857
Non-deductible expenses	(13,885)	(11,129)	(9,182)
Income tax (expense) / benefit	**$ (1,921)**	**$ 1,470**	**$ (3,217)**

Non-deductible expenses predominantly relate to share-based compensation expenses. These expenses affected the effective tax rate by an amount of $9.0 million in 2023 (2022: $8.5 million; 2021: $6.7 million). The fair value loss on contingent consideration affected the effective tax rate by an amount of $4.1 million in 2023 ($1.9 million and $2.0 million in 2022 and 2021, respectively).

d. Significant components of deferred taxes

The tax effects of temporary differences and carryforwards that give rise to significant portions of deferred tax assets and deferred tax liabilities as of December 31, 2023 and 2022 are as follows:

	Years ended December 31,	
	2023	2022
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 145,826	$ 84,633
Operating lease liabilities	9,790	10,612
Intangible assets	6,417	3,826
Liability from Royalty Financing Agreement	6,155	—
Interest carryforwards	3,711	3,697
Accrued expenses and other current liabilities	1,435	1,862
Inventory	497	—
Defined benefit pension plan liability	406	—
Property, plant and equipment	—	510
Research and development tax credit carryforwards	—	144
Total deferred tax assets	**$ 174,237**	**$ 105,284**
Less valuation allowance	(145,191)	(74,547)
Deferred tax assets, net of valuation allowance	**$ 29,046**	**$ 30,737**
Acquired IPR&D intangible asset	(15,242)	(15,033)
Operating lease right-of-use assets	(8,159)	(9,323)
Property, plant and equipment	(719)	—
Other current assets and receivables	(193)	(110)
Deferred tax liability	**$ (24,313)**	**$ (24,466)**
Net deferred tax asset	**$ 4,733**	**$ 6,271**

Changes in the valuation allowance were as follows:

	Years ended December 31,		
	2023	2022	2021
		(in thousands)	
January 1,	$ 74,547	$ 60,289	$ 150,113
Changes recorded in the statement of operations	67,004	20,593	(88,858)
Changes recorded in equity	—	(972)	—
Increase related to 2021 Dutch tax reforms	—	—	1,897
Valuation allowance assumed in uniQure France SAS acquisition	—	—	545
Other changes including currency translation adjustments	3,640	(5,363)	(3,408)
December 31,	**$ 145,191**	**$ 74,547**	**$ 60,289**

The valuation allowance as of December 31, of $145.2 million as of December 31,2023 is primarily related to $142.4 million deferred tax assets in the Netherlands resulting from net operating loss carryforwards of $127.1 million, intangibles assets of $5.5 million, liability from Royalty Financing Agreement of $6.2 million and interest carryforwards of $3.7 million.

Netherlands

As of December 31, 2023, the total amount of net operating losses carried forward under the Dutch tax regime was $492.7 million (December 31, 2022: $264.0 million, 2021: $228.5 million). The Company has historically recorded a full valuation allowance. The Company evaluates all positive and negative evidence in assessing the need for a full valuation allowance. Management considers reversing taxable temporary differences, projected future taxable income and tax-planning strategies in making this assessment. The Company concluded that as of December 31, 2023, December 31, 2022 and December 31, 2021 it is more likely than not that the remaining deferred tax assets will not be realized.

As of December 31, 2023, the tax treatment of the Royalty Agreement has not yet been agreed with the Dutch tax authorities. A different tax treatment could result in a different categorization of temporary differences and an offsetting deferred tax asset.

The Company recorded $462.4 million of license revenue in May 2021 after the Closing of the CSL Behring transaction. The Company recorded such revenue in its Dutch tax return related to the 12-month period ended December 31, 2020, which it filed on February 10, 2022. As such, the Company filed a return showing a taxable profit in the Netherlands in 2020, which resulted in the consumption of substantially all of its Dutch net operating losses for the years 2011 to 2018. The Company's remaining Dutch net operating tax losses carried forward relate to 2019, 2022 and 2023. The Company allocated the tax benefit from the release of the valuation allowance related to net operating loss carryforwards generated by share issuance cost incurred in 2014, 2015, 2017 and 2018 to additional paid-in capital. This resulted in an increase of additional paid-in capital as well as deferred tax expenses of $3.0 million during the year ended December 31, 2021.

The Company recorded $0.8 million increase of additional paid-in capital in the year ended December 31, 2022 resulting from the release of valuation allowance for the tax benefit of share issuance costs incurred in 2018, 2019 and 2021.

A portion of the valuation allowance for deferred tax assets recorded as of December 31, 2023 continues to relate to follow-on offering costs incurred in 2019. Any subsequently recognized tax benefits will be credited directly to contributed capital. As of December 31, 2023, that amount was $3.4 million ($3.3 million as of December 31, 2022).

The Dutch corporate tax rate for fiscal year 2021 was 25.0%. In December 2021, changes were enacted that raised the corporate income tax rate from 25.0% to 25.8% from 2022 onwards.

In June 2021 legislation was enacted allowing for an indefinite carryforward from fiscal year 2022 onwards of existing and future net operating loss carryforwards subject to a limit of offsetting taxable profit in excess of EUR 1.0 million to 50% of the taxable profit.

The fiscal periods from 2022 onwards are still open for inspection by the Dutch tax authorities.

United States of America

The federal corporate tax rate in the U.S. is 21.0%. In addition, the Company is subject to state income taxes resulting in a combined tax rate of 27.3% for its U.S. operation. As of December 31, 2023, an estimated $31.1 million of net operating losses remain to be carried forward. These net operating losses carried forward will expire in 2036 and 2037 except for $0.7 million which can be carried forward indefinitely with a deduction limited to 80% of taxable income in a given year.

The Company's U.S. operations generated taxable income in the fiscal years 2018 to 2021 and 2023. The Company expects to continue to generate taxable income in the U.S. during the foreseeable future.

Under the provision of the Internal Revenue Code, the U.S. net operating losses carried forward may become subject to an annual limitation in the event of certain cumulative exchange in the ownership interest of significant shareholders over a three-year period in excess of 50 percent, as defined under Section 382 and 383 of the Internal Revenue Code. This could limit the amount of tax attributes that can be utilized annually to offset future taxable income or tax liabilities. The amount of the annual limitation is determined based on the value of the Company immediately prior to the ownership change. Subsequent ownership changes may further affect the limitation.

The fiscal periods from 2020 are still open for inspection by the Internal Revenue Service ("IRS"). To the extent the Company has tax attribute carryforwards, the tax years in which the attribute was generated may still be adjusted upon examination by the IRS or Massachusetts Department of Revenue to the extent utilized in a future period. The Company is currently not under examination by the IRS for any tax years.

France

The French corporate tax rate for fiscal year 2023 was 25.0%. In addition, the Company is subject to a surcharge of 3.3% of the 25.0% standard corporate tax rate resulting in a combined rate of 25.8%.

The Company's French operations have incurred losses since incorporation and are expected to continue incurring tax losses for the foreseeable future. The French operations as of December 31, 2023 have an estimated $39.6 million ($23.3 million as of December 31, 2022) of net operating losses that are available for carry forward indefinitely. The Company recorded a partial valuation allowance during the year ended December 31, 2023. No such valuation allowance was recorded in the years ended December 31, 2022 and 2021. The Company evaluates all positive and negative evidence including future income from reversing taxable temporary differences (particularly from reversing the deferred tax liability related to the acquired IPR&D intangible asset), projected future taxable income and tax-planning strategies in making this assessment.

21. Basic and diluted earnings per share

Basic net (loss) / income per ordinary share is computed by dividing net (loss) / income for the period by the weighted average number of ordinary shares outstanding during the period. Diluted earnings per ordinary share are calculated by adjusting the weighted average number of ordinary shares outstanding, assuming conversion of all potentially dilutive ordinary shares. For the year ended December 31, 2021, dilutive net income / (loss) per ordinary share is computed using the treasury method. As the Company has incurred a loss in the years ended December 31, 2023 and December 31, 2022, all potentially dilutive ordinary shares for these years would have an antidilutive effect, if converted, and thus have been excluded from the computation of loss per share for the years ended December 31, 2023 and December 31, 2022.

	Year ended December 31,		
	2023	2022	2021
	(in thousands, except share amounts)		
Numerator:			
Net (loss) / income attributable to ordinary shares	$ (308,478)	$ (126,789)	$ 329,589
	(308,478)	**(126,789)**	**329,589**
Denominator:			
Weighted-average number of ordinary shares outstanding - basic	47,670,986	46,735,045	45,986,467
Stock options under 2014 Plans and previous plan	—	—	746,044
Non-vested RSUs and PSUs	—	—	107,162
Employee share purchase plan	—	—	1,299
Weighted-average number of ordinary shares outstanding - diluted	**47,670,986**	**46,735,045**	**46,840,972**

The following table presents ordinary share equivalents that were excluded from the calculation of diluted net income / (loss) per ordinary share for the years ended December 31, 2023, 2022 and 2021 as the effect of their inclusion would have been anti-dilutive:

	Year ended December 31,		
	2023	2022	2021
Anti-dilutive ordinary share equivalents			
Stock options under 2014 Plans and previous plan	4,974,030	4,237,917	2,576,281
Non-vested RSUs and PSUs	2,486,919	2,219,464	1,236,385
ESPP	3,640	1,048	1,842
Total anti-dilutive ordinary share equivalents	**7,464,589**	**6,458,429**	**3,814,508**

The anti-dilutive ordinary shares are presented without giving effect to the application of the treasury method or exercise prices that exceeded the price of the Company's ordinary shares as of December 31, 2023 and December 31, 2022.

22. Commitments and contingencies

In the course of its business, the Company enters as a licensee into contracts with other parties regarding the development and marketing of its pipeline products. Among other payment obligations, the Company is obligated to pay royalties to the licensors based on future sales levels and milestone payments whenever specified development, regulatory and commercial milestones are met. As both future sales levels and the timing and achievement of milestones are uncertain, the financial effect of these agreements cannot be estimated reliably. The Company also has obligations to make future payments that become due and payable upon the collection of milestone payments from CSL Behring. The achievement and timing of these milestones is not fixed and determinable. Relevant commitments and contingencies are further discussed in other sections of this form 10-K, such as, Note 3 "*uniQure France SAS transaction*" and Note 5 "*Collaboration arrangements and concentration of credit risk*", amongst others.

23. Related party transaction

None.

24. Subsequent events

None.

EXHIBIT INDEX

Exhibit No.	Description
2.1†	Sale and Purchase Agreement, executed June 21, 2021, by and between uniQure N.V. and Corlieve Therapeutics SAS (incorporated by reference to Exhibit 2.1 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2021 filed with the SEC on July 26, 2021).
3.1	Amended Articles of Association of the Company (incorporated by reference to Exhibit 3.1 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2021 filed with the SEC on July 26, 2021).
4.1*	Description of the Registrant's Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934.
10.1t	2014 Share Incentive Plan (incorporated by reference to Exhibit 4.3 of the Company's registration statement on Form S-8 (file no. 333-225629) filed with the SEC on June 14, 2018).
10.6t	Employment Agreement dated December 9, 2014 between uniQure, Inc. and Matthew Kapusta (incorporated by reference to Exhibit 10.6 of the Company's annual report on Form 10-K (file no. 001-36294) for the year ended December 31, 2016 filed with the SEC on March 15, 2017).
10.7t	Amendment to the Employment Agreement between uniQure, Inc. and Matthew Kapusta, dated March 14, 2017 (incorporated by reference to Exhibit 10.7 of the Company's annual report on Form 10-K (file no. 001-36294) for the year ended December 31, 2016 filed with the SEC on March 15, 2017).
10.8t	Amendment to the Employment Agreement between uniQure, Inc. and Matthew Kapusta, dated October 26, 2017 (incorporated by reference to Exhibit 10.1 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended September 30, 2017 filed with the SEC on November 1, 2017).
10.18	Lease relating to 113 Hartwell Avenue, Lexington, Massachusetts, dated as of July 24, 2013, by and between uniQure Inc. and King 113 Hartwell LLC (incorporated by reference to Exhibit 10.28 of the Company's registration statement on Form F-1 (file no. 333-193158) filed with the SEC on January 2, 2014).
10.19	Business Acquisition Agreement, dated as of February 16, 2012, by and among Amsterdam Molecular Therapeutics (AMT) Holding N.V., the Company and the other Parties listed therein (incorporated by reference to Exhibit 10.29 of the Company's registration statement on Form F-1 (file no. 333-193158) filed with the SEC on January 2, 2014).
10.20	Deed of Assignment of Certain Assets and Liabilities of Amsterdam Molecular Therapeutics (AMT) Holding N.V., dated as of April 5, 2012, by and among Amsterdam Molecular Therapeutics (AMT) Holding B.V., Amsterdam Molecular Therapeutics (AMT) Holding IP B.V. and Amsterdam Molecular Therapeutics (AMT) Holding N.V. (incorporated by reference to Exhibit 10.30 of the Company's registration statement on Form F-1 (file no. 333-193158) filed with the SEC on January 2, 2014).
10.21	Agreement for Transfer of Certain Assets and Liabilities of Amsterdam Molecular Therapeutics (AMT) Holding N.V., dated as of February 16, 2012, by and among Amsterdam Molecular Therapeutics (AMT) Holding B.V., Amsterdam Molecular Therapeutics (AMT) Holding IP B.V. and Amsterdam Molecular Therapeutics (AMT) Holding N.V. (incorporated by reference to Exhibit 10.31 of the Company's registration statement on Form F-1 (file no. 333-193158) filed with the SEC on January 2, 2014).
10.29†	Investor Agreement by and between uniQure Biopharma B.V. and Bristol-Myers Squibb Company dated April 6, 2015 (incorporated by reference to Exhibit 4.32 of the Company's annual report on Form 20-F for the year ended December 31, 2014 (file no. 001-36294) filed with the SEC on April 7, 2015).
10.32	Lease relating to Paasheuvelweg 25, dated as of March 7, 2016, by and between 52 IFH GmbH & Co. KG and uniQure biopharma B.V. (incorporated by reference to Exhibit 10.36 of the Company's annual report on Form 10-K (file no. 001-36294) for the year ended December 31, 2016 filed with the SEC on March 15, 2017).

10.37†	Assignment and License Agreement dated April 17, 2017 between Professor Paolo Simioni and uniQure biopharma B.V. (incorporated by reference to Exhibit 10.1 of the Company's current report on Form 8-K (file no. 001-36294) filed with the SEC on October 19, 2017).
10.40	First Amendment Lease relating to 113 Hartwell Avenue, Lexington, Massachusetts, dated as of July 24, 2013, by and between the Company and King113 Hartwell LLC (incorporated by reference to Exhibit 10.1 of the Company's current report on form 8-K (file no. 001-36294) filed with the SEC on November 15, 2018).
10.41t	Employee Share Purchase Plan (incorporated by reference to Exhibit 4.2 of the Company's registration statement on Form S-8 (file no. 333-225629) filed with the SEC on June 14, 2018).
10.42	Second Amendment Lease relating to 113 Hartwell Avenue, Lexington Massachusetts, dated as of June 17, 2019, by and between the Company and King 113 Hartwell LLC (incorporated by reference to Exhibit 10.42 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2019 filed with the SEC on July 29, 2019).
10.53†	Commercialization and License Agreement by and between uniQure biopharma B.V. and CSL Behring LLC dated June 24, 2020 (incorporated by reference to Exhibit 10.1 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2020 filed with the SEC on July 30, 2020).
10.56t	Employment Agreement, executed September 14, 2020, by and between uniQure Inc. and Ricardo Dolmetsch (incorporated by reference to Exhibit 10.3 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended September 30, 2020 filed with the SEC on October 27, 2020).
10.60t	Amended and Restated 2014 Share Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's current report on Form 8-K (file no. 001-36294) filed with the SEC on November 17, 2023).
10.61t	Employment Agreement, effective May 17, 2021, by and between uniQure biopharma B.V. and Pierre Caloz (incorporated by reference to Exhibit 10.1 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2021 filed with the SEC on July 26, 2021).
10.62t	Equity Side Letter, effective May 17, 2021, by and between uniQure N.V. and Pierre Caloz (incorporated by reference to Exhibit 10.2 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2021 filed with the SEC on July 26, 2021).
10.63t	Amended and Restated Employment Agreement, effective June 15, 2021, by and between uniQure biopharma B.V. and Christian Klemt (incorporated by reference to Exhibit 10.3 of the Company's quarterly report on Form 10-Q (file no. 001-36294) for the period ended June 30, 2021 filed with the SEC on July 26, 2021).
10.65t	Form of Share Option Agreement, effective December 8, 2021, under the 2014 Share Incentive Plan (incorporated by reference to Exhibit 10.65 of the Company's annual report on Form 10-K for the year ended December 31, 2021 (file no. 001-36294) filed with the SEC on February 25, 2022).
10.66t	Form of Restricted Stock Unit Award, effective December 8, 2021, under the 2014 Share Incentive Plan (incorporated by reference to Exhibit 10.66 of the Company's annual report on Form 10-K for the year ended December 31, 2021 (file no. 001-36294) filed with the SEC on February 25, 2022).
10.67†t	Form of Performance Stock Unit Award, effective December 8, 2021 under the 2014 Share Incentive Plan (incorporated by reference to Exhibit 10.67 of the Company's annual report on Form 10-K for the year ended December 31, 2021 (file no. 001-36294) filed with the SEC on February 25, 2022).
10.68†	Third Amended and Restated Loan and Security Agreement as of December 15, 2021, by and among uniQure biopharma B.V., uniQure Inc., uniQure IP B.V., the Company and Hercules Capital Inc (incorporated by reference to Exhibit 10.68 of the Company's annual report on Form 10-K for the year ended December 31, 2021 (file no. 001-36294) filed with the SEC on February 25, 2022).
10.69†	Lease Agreement relating to 20 Maguire Road, Lexington, Massachusetts, dated as of December 22, 2021, by and between uniQure Inc. and G&I IX/GP4 20 Maguire LLC (incorporated by reference to Exhibit 10.69 of the Company's annual report on Form 10-K for the year ended December 31, 2021 (file no. 001-36294) filed with the SEC on February 25, 2022).

10.70†	Lease Agreement relating to 91 Hartwell Avenue, Lexington, Massachusetts, dated as of February 1, 2022, by and between uniQure Inc. and NRL 91 Hartwell LLC (incorporated by reference to Exhibit 10.70 of the Company's annual report on Form 10-K for the year ended December 31, 2021 (file no. 001-36294) filed with the SEC on February 25, 2022).
10.71†	Amendment No. 1 to Third Amended and Restated Loan and Security Agreement, dated of May 12, 2023, by and among uniQure biopharma, B.V., uniQure, Inc., uniQure IP B.V., the Company and Hercules Capital, Inc. (incorporated by reference to Exhibit 10.1 of the Company's quarterly report on Form 10-Q for the period ended June 30, 2023 (file no. 001-36294) filed with the SEC on August 1, 2023).
10.72†	Royalty Purchase Agreement, dated May 12, 2023, by and between uniQure biopharma B.V. and HemB SPV, L.P. (incorporated by reference to Exhibit 10.2 of the Company's quarterly report on Form 10-Q for the period ended June 30, 2023 (file no. 001-36294) filed with the SEC on August 1, 2023).
10.73t	Termination and Consulting Agreement, effective October 4, 2023, by and between uniQure Inc. and Ricardo Dolmetsch, Ph.D. (incorporated by reference to Exhibit 10.1 of the Company's quarterly report on Form 10-Q for the period ended September 30, 2023 (file no. 001-36294) filed with the SEC on November 7, 2023).
10.74t*	Employment Agreement dated July 30, 2021 between Corlieve Therapeutics AG and Richard Porter.
10.75t*	First Amended Employment Agreement dated April 1, 2022 between Corlieve Therapeutics AG and Richard Porter.
10.76t*	Letter Agreement dated October 5, 2023, by and between Richard Porter and Corlieve Therapeutics AG.
10.77t*	Employment Agreement dated June 13, 2023 between uniQure, Inc. and Jeannette Potts.
14.1*	Code of Ethics.
21.1*	Subsidiaries of the Company.
23.1*	Consent of Independent Registered Public Accounting Firm – KPMG Accountants N.V.
24.1*	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).
31.1*	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer.
31.2*	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer.
32.1*	Certification of Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
97.1*	uniQure N.V. Compensation Clawback Policy.
101*	The following materials from the Company's Annual Report on Form 10-K for the year ended December 31, 2023, formatted in Inline XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations and Comprehensive Income (Loss), (iii) Consolidated Statements of Shareholders' Equity, (iv) Consolidated Statements of Cash Flows and (v) Notes to Consolidated Financial Statements.
104*	The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2023, has been formatted in Inline XBRL.

† Confidential treatment requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission

* Filed herewith

t Indicates a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

UNIQURE N.V.

Date: February 28, 2024

By: /s/ MATTHEW KAPUSTA
Matthew Kapusta
Chief Executive Officer (Principal Executive Officer)

Date: February 28, 2024

By: /s/ CHRISTIAN KLEMT
Christian Klemt
Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Matthew Kapusta and Christian Klemt, jointly and severally, his or her attorney-in-fact, with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signatures	Title	Date
/s/ MATTHEW KAPUSTA Matthew Kapusta	Chief Executive Officer and Director (Principal Executive Officer)	February 28, 2024
/s/ CHRISTIAN KLEMT Christian Klemt	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 28, 2024
/s/ MADHAVAN BALACHANDRAN Madhavan Balachandran	Director	February 28, 2024
/s/ ROBERT GUT Robert Gut	Director	February 28, 2024
/s/ RACHELLE JACQUES Rachelle Jacques	Director	February 28, 2024
/s/ JACK KAYE Jack Kaye	Director	February 28, 2024
/s/ DAVID MEEK David Meek	Director	February 28, 2024
/s/ LEONARD POST Leonard Post	Director	February 28, 2024
/s/ PAULA SOTEROPOULOS Paula Soteropoulos	Director	February 28, 2024
/s/ JEREMY P. SPRINGHORN Jeremy P. Springhorn	Director	February 28, 2024

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

The following description sets forth certain material terms and provisions of uniQure N.V.'s ("uniQure N.V.", "we," "us," and "our") securities that are registered under Section 12 of the Securities Exchange Act of 1934, as amended. The description below of our ordinary shares and provisions of our articles of association are summaries and are qualified by reference to our articles of association and the applicable provisions of Dutch law.

DESCRIPTION OF CAPITAL STOCK

The following description of the general terms and provisions of our ordinary shares is a summary only and therefore is not complete and is subject to, and qualified in its entirety by reference to, the terms and provisions of our articles of association. Our articles of association have been filed with the SEC as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.1 is a part and you should read the articles for provisions that may be important to you.

Authorized Ordinary Shares

Our articles of association provide an authorized share capital of 80,000,000 ordinary shares, each with a nominal value per share of €0.05.

Form of Ordinary Shares

We issue our ordinary shares in registered book-entry form and such shares are not certificated.

NASDAQ Global Market Listing

Our ordinary shares are listed on The NASDAQ Global Market under the symbol "QURE."

Comparison of Dutch corporate law and our Articles of Association and Delaware corporate law

The following comparison between Dutch corporate law, which applies to us, and Delaware corporate law, the law under which many publicly listed companies in the United States are incorporated, discusses additional matters not otherwise described in this exhibit. This summary is subject to Dutch law, including Book 2 of the Dutch Civil Code and Delaware corporation law, including the Delaware General Corporation Law.

Corporate governance

Duties of directors

The Netherlands. We have a one tier board structure consisting of our executive directors and non-executive directors. Under the one-tier board structure, both the executive and non-executive directors will be collectively responsible for the management performed by the one-tier board and for the general policy and strategy of a company. The executive directors are responsible for the day-to-day management of a company. The non-executive directors are responsible for supervising the conduct of, and providing advice to, the executive directors and for providing supervision with respect to the company's general state of affairs. Each executive director and non-executive director has a duty to act in the corporate interest of the company. Under Dutch law, the corporate interest extends to the interests of all corporate stakeholders, such as shareholders, creditors, employees, customers and suppliers. The duty to act in the corporate interest of the company also applies in the event of a proposed sale or split-up of a company, whereby the circumstances generally dictate how such duty is to be applied. Any resolution of the board regarding a significant change in the identity or character of a company requires shareholders' approval.

Delaware. The board of directors bears the ultimate responsibility for managing the business and affairs of a corporation. In discharging this function, directors of a Delaware corporation owe fiduciary duties of care and loyalty to the corporation and to its stockholders. Delaware courts have decided that the directors of a Delaware corporation are required to exercise informed business judgment in the performance of their duties. Informed business judgment means that the directors have informed themselves of all material information reasonably available to them. Delaware courts have also imposed a heightened standard of conduct upon directors of a Delaware corporation who take any action designed to defeat a threatened change in control of the corporation. In addition, under Delaware law, when the board of directors of a Delaware corporation approves the sale or break-up of a corporation, the board of directors may, in certain circumstances, have a duty to obtain the highest value reasonably available to the stockholders.

Director terms

The Netherlands. Under Dutch law, executive directors of a listed company are generally appointed for a term of a maximum of four years and reappointed for a term of a maximum of four years at a time. Non-executive directors of a listed company are generally appointed for a term of a maximum of four years and reappointed once for another term of a maximum of four years. Non-executive directors of a listed company subsequently are typically reappointed for a term of a maximum of two years, which reappointment may be extended by two years. Our executive and non-executive directors are, in principle, appointed by the general meeting of shareholders upon the binding nomination of the non-executive directors.

The general meeting of shareholders is entitled at all times to suspend or dismiss a director. The general meeting of shareholders may only adopt a resolution to suspend or dismiss such director by at least a two-thirds majority of the votes cast, if such majority represents more than half of the issued share capital of the company.

Delaware. The Delaware General Corporation Law generally provides for a one-year term for directors, but permits directorships to be divided into up to three classes with up to three-year terms, with the years for each class expiring in different years, if permitted by a company's certificate of incorporation, an initial bylaw or a bylaw adopted by the stockholders. A director elected to serve a term on such a classified board may not be removed by stockholders without cause. There is no limit in the number of terms a director may serve.

Director vacancies

The Netherlands. Under Dutch law, directors are appointed by the general meeting of shareholders. Under our articles of association, directors are, in principle, appointed by the general meeting of shareholders upon the binding nomination by the non-executive directors. However, the general meeting of shareholders may at all times overrule such binding nomination by a resolution adopted by at least a two-thirds majority of the votes cast, provided such majority represents more than half of the issued share capital of our company. If the general meeting of shareholders overrules the binding nomination, the non-executive directors must make a new nomination.

Delaware. The Delaware General Corporation Law provides that vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) unless (1) otherwise provided in the certificate of incorporation or bylaws of the corporation or (2) the certificate of incorporation directs that a particular class of stock is to elect such director, in which case any other directors elected by such class, or a sole remaining director elected by such class, will fill such vacancy.

Conflict-of-interest transactions

The Netherlands. Pursuant to Dutch law and our articles of association, directors may not take part in any discussion or decision-making that involves a subject or transaction in relation to which they have a personal direct or indirect conflict of interest with us. Our articles of association provide that if as a result thereof, the board is unable to act the resolution will be adopted by the general meeting of shareholders.

Delaware. The Delaware General Corporation Law generally permits transactions involving a Delaware corporation and an interested director of that corporation if:

- the material facts as to the director's relationship or interest are disclosed and a majority of disinterested directors consent;
- the material facts are disclosed as to the director's relationship or interest and a majority of shares entitled to vote thereon consent; or
- the transaction is fair to the corporation at the time it is authorized by the board of directors, a committee of the board of directors or the stockholders.

Shareholder rights

Voting rights

The Netherlands. In accordance with Dutch law and our articles of association, each issued ordinary share confers the right to cast one vote at the general meeting of shareholders. Each holder of ordinary shares may cast as many votes as it holds shares. Shares that are held by us or our direct or indirect subsidiaries do not confer the right to vote. Dutch law does not permit cumulative voting for the election of executive directors and non-executive directors.

For each general meeting of shareholders, a record date will be applied with respect to ordinary shares in order to establish which shareholders are entitled to attend and vote at a specific general meeting of shareholders. Such record date is set by the board. The record date and the manner in which shareholders can register and exercise their rights will be set out in the convocation notice of the meeting.

Delaware. Under the Delaware General Corporation Law, each stockholder is entitled to one vote per share of stock, unless the certificate of incorporation provides otherwise. In addition, the certificate of incorporation may provide for cumulative voting at all elections of directors of the corporation, or at elections held under specified circumstances. Either the certificate of incorporation or the bylaws may specify the number of shares and/or the amount of other securities that must be represented at a meeting in order to constitute a quorum, but in no event will a quorum consist of less than one third of the shares entitled to vote at a meeting.

Stockholders as of the record date for the meeting are entitled to vote at the meeting, and the board of directors may fix a record date that is no more than 60 nor less than ten days before the date of the meeting, and if no record date is set then the record date is the close of business on the day next preceding the day on which notice is given, or if notice is waived then the record date is the close of business on the day next preceding the day on which the meeting is held. The determination of the stockholders of record entitled to notice or to vote at a meeting of stockholders shall apply to any adjournment of the meeting, but the board of directors may fix a new record date for the adjourned meeting.

Shareholder proposals

The Netherlands. Pursuant to our articles of association, extraordinary general meetings of shareholders will be convened by the board or by those who are authorized by law or pursuant to our articles of association to do so. Pursuant to Dutch law, one or more shareholders representing at least one-tenth of the issued share capital of the company may request the Dutch courts to order that they be authorized by the court to convene a general meeting of shareholders. The court shall disallow the request if it does not appear that the applicants have previously requested the board to convene a general meeting of shareholders and the board has taken the necessary steps so that the general meeting of shareholders could be held within six weeks after the request.

The agenda for a general meeting of shareholders must include such items requested by one or more shareholders representing at least 3% of the issued share capital of a company or such lower percentage as the articles of association may provide. Our articles of association do not state such lower percentage.

Delaware. Delaware law does not specifically grant stockholders the right to bring business before an annual or special meeting. However, if a Delaware corporation is subject to the SEC's proxy rules, a stockholder who owns at least $2,000 in market value, or 1% of the corporation's securities entitled to vote, may propose a matter for a vote at an annual or special meeting in accordance with those rules.

Action by written consent

The Netherlands. Under Dutch law, the articles of association of a company may provide that shareholders' resolutions may be adopted in writing without holding a general meeting of shareholders, provided that the resolution is adopted unanimously by all shareholders that are entitled to vote. For a listed company, this method of adopting resolutions is not feasible.

Delaware. Although permitted by Delaware law, publicly listed companies do not typically permit stockholders of a corporation to take action by written consent.

Appraisal rights

The Netherlands. The concept of appraisal rights does not exist under Dutch law. However, pursuant to Dutch law a shareholder who for its own account contributes at least 95% of our issued share capital may initiate proceedings against our minority shareholders jointly for the transfer of their shares to it. The proceedings are held before the Enterprise Chamber (*Ondernemingskamer*). The Enterprise Chamber may grant the claim for squeeze-out in relation to all minority shareholders and will determine the price to be paid for the shares, if necessary after appointment of one or three experts who will offer an opinion to the Enterprise Chamber on the value to be paid for the shares of the minority shareholders.

Furthermore, in accordance with Directive 2005/56/EC of the European Parliament and the Council of October 26, 2005 on cross-border mergers of limited liability companies, Dutch law provides that, to the extent the acquiring company in a cross-border merger is organized under the laws of another EU member state, a shareholder of a Dutch disappearing company who has voted against the cross-border merger may file a claim with the Dutch company for compensation. The compensation is to be determined by one or more independent experts.

Delaware. The Delaware General Corporation Law provides for stockholder appraisal rights, or the right to demand payment in cash of the judicially determined fair value of the stockholder's shares, in connection with certain mergers and consolidations.

Shareholder suits

The Netherlands. In the event a third party is liable to a Dutch company, only a company itself can bring a civil action against that third party. An individual shareholder does not have the right to bring an action on behalf of a company. This individual shareholder may, in its own name, have an individual right to take action against such third party in the event that the cause for the liability of that third party also constitutes a tortious act directly against that individual shareholder. The Dutch Civil Code provides for the possibility to initiate such action collectively. A collective action can be instituted by a foundation or an association whose objective is to protect the rights of a group of persons having similar interests. The collective action itself cannot result in an order for payment of monetary damages but may only result in a declaratory judgment (*verklaring voor recht*) regarding liability. In order to obtain montetary damages, the foundation or association and the defendant may reach—often on the basis of such declaratory judgment—a collective settlement agreement. A Dutch court may declare the collective settlement agreement binding upon the members of the class with an opt-out right for an individual injured party. An individual injured party may also itself—outside the collective action—reach an individual settlement agreement (and have it declared binding by the Dutch court) or institute an action for monetary damages. Since January 1, 2020, a collective action relating to an event on or after November 15, 2016 can, however, also result in an order for payment of monetary damages. As a general rule, a court decision granting or dismissing the collective action is binding on all members of the class who reside in the Netherlands and did not use their right to opt out of the collective action (earlier on in the collective action, as soon as the class was defined and the scope of the collective action was determined by the Dutch court) as well as to members of the class residing abroad who joined the collective action by opting in.

Delaware. Under the Delaware General Corporation Law, a stockholder may bring a derivative action on behalf of the corporation to enforce the rights of the corporation. An individual also may commence a class action suit on behalf of himself and other similarly situated stockholders where the requirements for maintaining a class action under Delaware law have been met. A person may institute and maintain such a suit only if that person was a stockholder at the time of the transaction which is the subject of the suit. In addition, under Delaware case law, the plaintiff normally must be a stockholder at the time of the transaction that is the subject of the suit and throughout the duration of the derivative suit. Delaware law also requires that the derivative plaintiff make a demand on the directors of the corporation to assert the corporate claim before the suit may be prosecuted by the derivative plaintiff in court, unless such a demand would be futile.

Repurchase of shares

The Netherlands. Under Dutch law, a company such as ours may not subscribe for newly issued shares in its own share capital. Such company may, however, subject to certain restrictions under Dutch law and its articles of association, acquire shares in its own share capital. We may acquire fully paid-up shares in our own share capital at any time for no valuable consideration. Furthermore, subject to certain provisions of Dutch law and our articles of association, we may repurchase fully paid-up shares in our own share capital if (1) such repurchase would not cause our shareholders' equity to fall below an amount equal to the sum of the paid-up and called-up part of the issued share capital and the reserves we are required to maintain pursuant to applicable law and (2) we would not as a result of such repurchase hold more than 50% of our own issued share capital.

Other than shares acquired for no valuable consideration, ordinary shares may only be acquired following a resolution of our board, acting pursuant to an authorization for the repurchase of shares granted by the general meeting of shareholders. An authorization by the general meeting of shareholders for the repurchase of shares can be granted for a maximum period of 18 months. Such authorization must specify the number of shares that may be acquired, the manner in which these shares may be acquired and the price range within which the shares may be acquired. Our board has been authorized, for a period of 18 months to be calculated from the date of the annual general meeting of shareholders held on June 13, 2023, to cause the repurchase of ordinary shares by us of up to 10% of our issued share capital, for a price per share between the nominal value of the ordinary shares and an amount of 110% of the highest price of the ordinary shares officially quoted on any of the official stock markets we are listed on during any of 30 banking days preceding the date the repurchase is effected or proposed.

No authorization of the general meeting of shareholders is required if fully paid-up ordinary shares are acquired by us with the intention of transferring such ordinary shares to our employees under an applicable employee stock purchase plan, provided such ordinary shares are officially quoted on any of the official stock markets.

Delaware. Under the Delaware General Corporation Law, a corporation may purchase or redeem its own shares unless the capital of the corporation is impaired or the purchase or redemption would cause an impairment of the capital of the corporation. A Delaware corporation may, however, purchase or redeem out of capital any of its preferred shares or, if no preferred shares are outstanding, any of its own shares if such shares will be retired upon acquisition and the capital of the corporation will be reduced in accordance with specified limitations.

Anti-takeover provisions

The Netherlands. Under Dutch law, various protective measures are possible and permissible within the boundaries set by Dutch statutory law and Dutch case law. We have adopted several provisions that may have the effect of making a takeover of our company more difficult or less attractive, including:

- the staggered three-year terms of our directors, as a result of which only approximately one-third of our directors will be subject to election in any one year;
- a provision that our directors may only be dismissed or suspended at the general meeting of shareholders by a two-thirds majority of votes cast representing more than half of our issued share capital;
- a provision that our directors may only be appointed upon binding nomination of the non-executive directors, which can only be overruled by the general meeting of shareholders with a two-thirds majority of votes cast representing at least 50% of our issued share capital; and
- requirements that certain matters, including an amendment of our articles of association, may only be brought to our shareholders for a vote upon a proposal by our board.

Moreover, according to Dutch corporate law, our board can invoke a cooling-off period of up to 250 days in the event of an unsolicited takeover bid or certain shareholder activism. During a cooling-off period, our general meeting of shareholders would not be able to dismiss, suspend or appoint directors (or amend the provisions in our articles of association dealing with those matters) except at the proposal of our board.

Delaware. In addition to other aspects of Delaware law governing fiduciary duties of directors during a potential takeover, the Delaware General Corporation Law also contains a business combination statute that protects Delaware companies from hostile takeovers and from actions following the takeover by prohibiting some transactions once an acquirer has gained a significant holding in the corporation.

- Section 203 of the Delaware General Corporation Law prohibits "business combinations," including mergers, sales and leases of assets, issuances of securities and similar transactions by a corporation or a subsidiary with an interested stockholder that beneficially owns 15% or more of a corporation's voting stock, within three years after the person becomes an interested stockholder, unless: the transaction that will cause the person to become an interested stockholder is approved by the board of directors of the target prior to the transactions;
- after the completion of the transaction in which the person becomes an interested stockholder, the interested stockholder holds at least 85% of the voting stock of the corporation not including shares owned by persons who are directors and representatives of interested stockholders and shares owned by specified employee benefit plans; or
- after the person becomes an interested stockholder, the business combination is approved by the board of directors of the corporation and holders of at least 66.67% of the outstanding voting stock, excluding shares held by the interested stockholder.

A Delaware corporation may elect not to be governed by Section 203 by a provision contained in the original certificate of incorporation of the corporation or an amendment to the original certificate of incorporation or to the bylaws of the company, which amendment must be approved by a majority of the shares entitled to vote and may not be further amended by the board of directors of the corporation. Such an amendment is not effective until twelve months following its adoption.

Inspection of books and records

The Netherlands. Our board provides the shareholders, at the general meeting of shareholders, with all information that the shareholders require for the exercise of their powers, unless doing so would be contrary to an overriding interest of ours. Our board must give reason for electing not to provide such information on the basis of an overriding interest.

Delaware. Under the Delaware General Corporation Law, any stockholder may inspect certain of the corporation's books and records, for any proper purpose, during the corporation's usual hours of business.

Removal of directors

The Netherlands. Under our articles of association, the general meeting of shareholders is at all times entitled to suspend or dismiss a director. The general meeting of shareholders may only adopt a resolution to suspend or dismiss such a member by at least a two-thirds majority of the votes cast, provided such majority represents more than half of the issued share capital of our company.

Delaware. Under the Delaware General Corporation Law, any director or the entire board of directors may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors, except (1) unless the certificate of incorporation provides otherwise, in the case of a corporation whose board is classified, stockholders may effect such removal only for cause, or (2) in the case of a corporation having cumulative voting, if less than the entire board is to be removed, no director may be removed without cause if the votes cast against his removal would be sufficient to elect him if then cumulatively voted at an election of the entire board of directors, or, if there are classes of directors, at an election of the class of directors of which he is a part.

Preemptive rights

The Netherlands. Under Dutch law, in the event of an issuance of ordinary shares, each shareholder will have a pro rata preemptive right in proportion to the aggregate nominal value of the ordinary shares held by such holder (with the exception of ordinary shares to be issued to employees or ordinary shares issued against a contribution other than in cash). Under our articles of association, the preemptive rights in respect of newly issued ordinary shares may be restricted or excluded by a resolution of the general meeting of shareholders upon proposal of our board. The general meeting of shareholders may designate our board to restrict or exclude the preemptive rights in respect of newly issued ordinary shares. Such designation can be granted for a period not exceeding five years. A resolution of the general meeting of shareholders to restrict or exclude the preemptive rights or to designate the board as the authorized body to do so requires a two-thirds majority of the votes cast, if less than one half of our issued share capital is represented at the meeting. The same applies to the granting of rights to subscribe for our ordinary shares but does not apply to the issuance of our ordinary shares pursuant to the exercise of a previously acquired right to subscribe for our ordinary shares.

At our annual general meeting of shareholders held on June 14, 2022, the general meeting of shareholders resolved to authorize our board for a period of 18 months with effect from the date of the meeting to restrict or exclude preemptive rights accruing to shareholders in connection with the issue of ordinary shares or rights to subscribe for ordinary shares. This authorization expired on December 14, 2023, and thus, as of the date of this report, our board does not have the authority to restrict or exclude preemptive rights of shareholders in connection with the issuance of ordinary shares or rights to subscribe for ordinary shares. Without this authorization, only the general meeting of shareholders has the power to restrict or exclude preemptive rights upon the proposal of the board.

Delaware. Under the Delaware General Corporation Law, stockholders have no preemptive rights to subscribe for additional issues of stock or to any security convertible into such stock unless, and to the extent that, such rights are expressly provided for in the certificate of incorporation.

Dividends

The Netherlands. Dutch law provides that dividends may be distributed after adoption of the annual accounts by the general meeting of shareholders from which it appears that such dividend distribution is allowed. Moreover, dividends may be distributed only to the extent that the shareholders' equity exceeds the amount of the paid-up and called-up part of the issued share capital of the company and the reserves that must be maintained under the law or the articles of association. Interim dividends may be declared as provided in the articles of association and may be distributed to the extent that the shareholders' equity exceeds the amount of the paid-up and called-up part of the issued share capital of the company and the reserves that must be maintained under the law or the articles of association, as apparent from an interim statement of assets and liabilities.

Under our articles of association, any amount of profit may be carried to a reserve as our board determines. After reservation by our board of any profit, the remaining profit will be at the disposal of the shareholders. Our corporate policy is to only make a distribution of dividends to our shareholders after the adoption of our annual accounts demonstrating that such distribution is legally permitted. However, our board is permitted to declare interim dividends without the approval of the general meeting of shareholders.

Dividends will be made payable not later than thirty days after the date they were declared unless the body declaring the dividend determines a different date. Claims to dividends not made within five years and one day from the date that such dividends became payable will lapse and any such amounts will be considered to have been forfeited to us (*verjaring*).

Delaware. Under the Delaware General Corporation Law, a Delaware corporation may pay dividends out of its surplus (the excess of net assets over capital), or in case there is no surplus, out of its net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year (provided that the amount of the capital of the corporation is not less than the aggregate amount of the capital represented by the issued and outstanding stock of all classes having a preference upon the distribution of assets). In determining the amount of surplus of a Delaware corporation, the assets of the corporation, including stock of subsidiaries owned by the corporation, must be valued at their fair market value as determined by the board of directors, without regard to their historical book value. Dividends may be paid in the form of shares, property or cash.

Shareholder vote on certain reorganizations

The Netherlands. Under Dutch law, the general meeting of shareholders must approve resolutions of the board relating to a significant change in the identity or the character of the company or the business of the company, which includes:

- a transfer of the business or virtually the entire business to a third party;
- the entry into or termination of a long-term cooperation of the company or a subsidiary with another legal entity or company or as a fully liable partner in a limited partnership or general partnership, if such cooperation or termination is of a far-reaching significance for the company; and
- the acquisition or divestment by the company or a subsidiary of a participating interest in the capital of a company having a value of at least one third of the amount of its assets according to its balance sheet and explanatory notes or, if the company prepares a consolidated balance sheet, according to its consolidated balance sheet and explanatory notes, according to the last adopted annual accounts of the company.

Delaware. Under the Delaware General Corporation Law, the vote of a majority of the outstanding shares of capital stock entitled to vote thereon generally is necessary to approve a merger or consolidation or the sale of all or substantially all of the assets of a corporation. The Delaware General Corporation Law permits a corporation to include in its certificate of incorporation a provision requiring for any corporate action the vote of a larger portion of the stock or of any class or series of stock than would otherwise be required.

Under the Delaware General Corporation Law, no vote of the stockholders of a surviving corporation to a merger is needed, however, unless required by the certificate of incorporation, if (1) the agreement of merger does not amend in any respect the certificate of incorporation of the surviving corporation, (2) the shares of stock of the surviving corporation are not changed in the merger and (3) the number of shares of common stock of the surviving corporation into which any other shares, securities or obligations to be issued in the merger may be converted does not exceed 20% of the surviving corporation's common stock outstanding immediately prior to the effective date of the merger. In addition, stockholders may not be entitled to vote in certain mergers with other corporations that own 90% or more of the outstanding shares of each class of stock of such corporation, but the stockholders will be entitled to appraisal rights.

Remuneration of directors

The Netherlands. Under Dutch law and our articles of association, we must adopt a remuneration policy for our directors. Such remuneration policy shall be adopted by the general meeting of shareholders upon the proposal of our non-executive directors. The remuneration of our executive directors will be determined by our non-executive directors with due observance of our remuneration policy; the remuneration of our non-executive directors will be determined by the board with due observance of our remuneration policy.

Delaware. Under the Delaware General Corporation Law, the stockholders do not generally have the right to approve the compensation policy for directors or the senior management of the corporation, although certain aspects of executive compensation may be subject to binding or advisory stockholder votes due to the provisions of U.S. federal securities and tax law, as well as stock exchange requirements.

Transfer Agent and Registrar

Computershare Trust Company, N.A. serves as transfer agent and registrar for our ordinary shares.

Employment Agreement

dated 30 July 2021 (the **Effective Date**)

by and between

Corlieve Therapeutics AG, (the **Company**)
Switzerland Innovation Park
Basel Area AG
Gewerbestrasse 24
4123 Allschwil, Switzerland

and

Richard Porter (the **Employee**)
A British citizen born [***] in [***], England, and
currently residing at [***]

(The Company and the Employee are also referred to as **Party** or **Parties;** this employment agreement referred to as the **Employment Agreement** and the **Agreement**.)

1. Condition Precedent

The terms of the Employment Agreement are contingent upon the Executive's agreement to amend the terms of the free share allocations dated July 24, 2020 and September 29, 2020 from Corlieve Therepeutics SAS (the AGAs) such that vesting will occur on the earlier of (i) the six-month anniversary of the closing of the transaction if the Executive remains employed by Corlieve (or other subsidiary of the Company as may be reasonably agreed by the parties), (ii) the termination without good cause of Executive's employment by the employer and (iii) a Change of Control of the Company.

2. Commencement Date

This Employment shall start on 30 July 2021 (the **Commencement Date**). It shall be concluded for an indefinite period.

The spirit of this Employment Agreement is a transfer of the existing employment contract (Mandate dated October 29, 2019), subject to certain changes that have been negotiated, from Corlieve Therapeutics SAS to uniQure. For purposes of calculating length of employment and any benefits and security related to the length of employment, the transition should not result in a loss of security or benefit for the employee due to the transition and the Employee's employment shall be considered continuous beginning as of October 29, 2019.

3. Function and Job Title

The Employee shall assume the title as General Manager, Corlieve and the function of lead of the Company's research & development for therapies to treat epilepsy and other CNS disorders on a full-time basis as provided in Article 15 of this Agreement. The function and/or the job title may be adjusted by the Company at any time to reflect current circumstances. Employee will report to the President, Research & Development of uniQure N.V.

If requested, the Executive will serve as a director of the Company and Corlieve Therapeutics SAS, subject to the discretion of uniQure, N.V. to appoint and remove directors of those companies.

The detailed duties of the Employee are s the customary role of a General Manager or other role or title that may be agreed to following commencement of Employment. Following the commencement date of this Agreement, the Employee and Employer agree to develop a reasonable job description describing the duties and responsibilities of Employee in more detail and reflecting the integration of the Employee into the uniQure Group Companies.

4. Group Structure

The Employee acknowledges that the Company is part of a group of companies ultimately controlled by uniQure N.V. (each such company including the holding company a **Group Company**, together the **Group**). The Employee acknowledges that the Employee will need

to work with and/or report to other employees and/or officers of other Group Companies. The Employee acknowledges that this does not create separate employment relationships with other Group Companies.

5. Duties and Responsibilities

It is understood that the duties and responsibilities arising out of the above function include all tasks customarily or reasonably incidental to such function.

The Company may assign to the Employee any other, additional or new duties or responsibilities as deemed reasonable or appropriate by the Company in the course and fulfilment of its business.

The Employee undertakes to use the Employee's entire working ability to fulfill the Employee's contractual obligations and to loyally safeguard and foster the business and the interests of the Company. The Employee shall carefully perform all work and tasks assigned to the Employee.

6. Work for Third Parties

The Employee is not entitled to work for any third party or to engage in any gainful or unpaid employment, whether full-time or part-time, for the duration of the Employment Agreement without the prior written approval of the Company.

Membership of the boards of directors of other companies and other institutions that are related to the business purpose of the Company or otherwise affect the interests of the Company or a Group Company also requires the prior consent of the Company. Consent will not be unreasonably withheld if there is no conflict of interest with regard to the Company.

7. Officer Position

In fulfilment of the Employee's duties, the Employee may have to act as officer, director or in any other corporate function within the Company or any Group Company. The Company may decide at its full discretion when such function shall end, and the Employee will retire from such functions and sign the necessary documentation upon first request.

The base salary as defined in Section 11.1 includes any and all remuneration for such functions and positions. In case the law provides for a mandatory remuneration the Company will decide whether such compensation shall be forwarded to the Company or be set off against the base salary as defined in Section 11.1 paid to the Employee by the Company.

8. Conflict of Interests

The Employee shall avoid any conflict of interest and inform the Company immediately if any potential conflict of interest arises.

A conflict of interest arises especially in case of a participation in suppliers or clients of the Company or in a Group Company.

9. Gifts

In connection with the performance of his duties, the Employee is prohibited from accepting or stipulating, either directly or indirectly, any commission, reimbursement or payment, in whatever form, or gifts from third parties. The foregoing does not apply to standard promotional gifts having little monetary value.

10. Place of Work

The Employees primary place of work shall be at the offices of the Company.

The Employee understands and agrees that the Employee may, in the course of the Employment and where reasonably requested by the Company, be required to travel to and work in other places and countries in order to perform the Employee's obligations and duties under the Employment Agreement. In particular, the Employee will need to be present from time to time in the head offices of the Company in the Netherlands.

The Employee is obliged to track any days not worked in Switzerland, including place of work, and submit such schedule regularly to the Company upon request.

The Company will work with you to determine a reasonable budget for costs associated with travel between your home in Switzerland, and Company facilities in Amsterdam, Netherlands and Lexington, Massachusetts to include airfare, lodging and associated expenses while doing business on behalf of the Company.

11. Compensation

11.1. Base Salary

The Employee shall receive an annual base salary of Three Hundred Fifty Thousand CHF (CHF 350,000) per year gross (the **Base Salary**), payable in 12 monthly instalments at the end of the month to a bank or postal account to be specified by the Employee. Alternatively, you may be paid in instalments in accordance with the regular payroll practices of the Group Companies.

11.2. Bonus

The Employee may, if applicable, participate in a bonus program of the Company or a Group Company, which the Company or the issuing Group Company shall determine at its full discretion. If no bonus program is issued, any bonus shall be determined at the discretion of the Company.

The Company may set targets for the bonus, according to which the amount of the bonus is determined. However, the Company is free to deviate at its own discretion upwards or

downwards from the targets set in its final determination of the bonus. If no targets are set, any bonus shall be determined at the discretion of the Company.

Initially, the target bonus ("Target Bonus") shall correspond to 40% of the Base Salary for a full financial year.

The Target Bonus (as well as any merit increase or other compensation for which you may be eligible) will be prorated in the first calendar year of employment based on the total number of days worked during the calendar year.

In the event of termination of the Employment, the Employee has no entitlement to a bonus, not even on a pro rata basis. To be eligible for any bonus pursuant to this Agreement or otherwise pursuant to Employee's employment with Employer, Employee must be in service of Employer on the date any bonus is paid.

11.3. Participation Plan

The Employee may be given the opportunity by uniQure N.V. to participate in the growth of the Group pursuant to a participation plan such as, for instance, an employee share option plan or a share plan, and as amended from time to time (the **Participation Plan**). It is in the full discretion of uniQure N.V. to issue and/or to unilaterally amend such Participation Plan at any time.

The Employee expressly acknowledges that the Employee does not have any right or claim under the Participation Plan against the Company, but only against uniQure N.V. or the Group Company issuing the Participation Plan. The Employee also confirms that any participation in the Participation Plan does not constitute an employment relationship with uniQure N.V. or the issuing Group Company.

11.4. Acknowledgements of the Employee

The Employee acknowledges and agrees that any entitlements granted, and payments made in addition to the Base Salary, including, but not limited to any bonuses, participations, or gratuities of the Company or any Group Company (the **Additional Payments**) are not part of the salary legally or contractually owed by the Company and are made at full discretion of the Company or the Group Company granting such bonus, participation or gratuity. Any Additional Payments shall not create any obligation of the Company or any Group Company to make such Additional Payments in the future and shall not create any right or claim of the Employee to such Additional Payments in the future even if paid over consecutive years and without express reservation.

11.5. No other Compensation

The Employee acknowledges and agrees that the Employee shall not be entitled to receive any other compensation or benefit of any nature from the Company except as expressly provided for in this Employment Agreement.

11.6. Social security, tax and deductions

Until retirement age and while this Agreement is effective, the Employee is insured according to the Federal Laws on old age (AHVG), disability (IVG), compensation for the loss of earnings (EOG), unemployment insurance (AVIG), accident insurance (UVG), sickness benefits insurance and pension plan (BVG). The Corlieve insurance and pension provisions in existence as of the commencement date of employment will be carried forward unless and until modifications are legally required or a new scheme is adopted by the Employer. From any and all gross compensation hereunder – if provided by law, regulations or policies – any portions of the Employee's contributions to the sickness benefits insurance, if any, and withholding taxes, if any, will be deducted and withheld by the Company from the payments made to the Employee.

Any portions of the Employee's social security contributions in accordance with the AHVG, IVG, EOG, AVIG, UVG and premiums to pension schemes (BVG) must be paid by the Employee to the respective insurance institutions in Switzerland in accordance with the separately signed agreement according to art. 21 para. 2 of Regulation (EC) No. 987/09 as per Annex B to this Employment Agreement. In accordance with said agreement is the Employee further obliged to pay the Company's social security contributions portions in accordance with the AHVG, IVG, EOG, AVIG, UVG and premiums to pension schemes (BVG). Therefore, the Company transfers any and all compensation hereunder after having deducted any portions of the Employee's contributions to the sickness benefits insurance, if any, and withholding taxes, if any. In addition, the Company transfers the Company's social security contributions portions in accordance with the AHVG, IVG, EOG, AVIG, UVG and premiums to pension schemes (BVG) as provided by law, regulations or policies, to the Employee.

The Company reserves the right to unilaterally terminate this agreement according to art. 21 para. 2 of Regulation (EC) No. 987/09 at any time, to register as a different company and to pay any social security contributions due (employee and employer contributions). In case of such unilateral termination of said agreement, the Employee shall be notified by the Company in due time. In this case, from any and all gross compensation hereunder – if provided by law, regulations or policies – any portions of the Employee's social security contributions in accordance with the AHVG, IVG, EOG, AVIG, UVG, sickness benefits insurance, if any, premiums to pension schemes and withholding taxes, if any, will be deducted and withheld by the Company from the payments made to the Employee.

Where it will not be possible anymore to remain in the Swiss social security system, the Employee will be insured according to the applicable social security system in accordance with the respective applicable legislation, Company policies, as well as insurance policies and regulations.

12. Expenses

The Employee shall be entitled to reimbursement by the Company of out-of-pocket business expenses reasonably incurred by the Employee during the Employment in the performance of the Employee's duties under this Employment Agreement. The provisions

in Section 10 shall be reserved. However, the reimbursement is subject to (i) the submission of relevant vouchers and receipts indicating the amount and purpose of the expenses, and (ii) the compliance with the reimbursement policies of the Company issued and unilaterally amended from time to time.

13. Termination

13.1. Reserved.

13.2. Termination

After expiration of the probation period, the Employment may be terminated by either Party with a notice period of 4 (four) months (the "Notice Period").

Upon observance of the notice period, termination shall be effective as of the end of a calendar day and not the end of a calendar month.

The Employment is being terminated automatically at the end of the month in which the Employee reaches the retirement age according to the Federal Law on Old-age and Survivors' Insurance (*AHVG*). In case of a permanent disability to work the same applies. In case of a partial permanent disability the Employment ends to the same extent as the Employee is declared disabled.

13.3. Severance Generally

lf the Employment is terminated by the Company, except

(i) in case of a summary dismissal for good cause by the Company (in accordance with Article 337 CO);

(ii) in case the Employee having given the Company good cause to do so (in accordance with Article 340c(2) CO);

(iii) in case the Employee the Employee is in breach of any duties and failed to remedy such breach within 30 days after having been asked in writing to do so;

(iv) in case the Employee is terminated after an illness lasting for at least 6 months; or

(v) in case of poor performance after having been put on a performance improvement plan for at least 90 days and having failed to meet the set targets,

then the Company shall grant the Employee severance pay (**Severance**) equal to

(vi) 100% of the annual Base Salary (less any pay received during the Notice Period);

(vii) 100% an amount corresponding to the target Bonus (i.e., 40% of Base Salary) amount of the Target Bonus; plus

(viii) an amount corresponding to a prorated target Bonus amount for the year of termination as provided. The pro-rata Bonus shall be the product of the formula B x D/365 where B represents the target Bonus (i.e., 40% of the Base Salary), and D represents the number of days elapsed in the calendar year through the date of notice to the Employee),

Any severance payment is subject to the condition that the Employee signs a termination agreement with the Company including a full waiver of any other claims and the reinstatement of all restrictive covenants. For the avoidance of any doubt, no other bonus or severance shall become payable in such case.Except as expressly provided in this clause, bonus payments, if any, will not be taken into account for the calculation of any possible severance payment upon termination of the Agreement.

13.4. Severance on a Change of Control

lf the Employment is terminated by the Company within the period beginning ninety (90) days before and continuing until twelve (12) months after a Change of Control (as defined below), and subject to the conditions for Severance as per Section 13.3 above being fulfilled and in lieu of the severance provided in Section 13.3, the Company shall grant the Employee a severance pay (**Change of Control Severance**) equal to

(i) 150% of the annual Base Salary (less any pay received during the Notice Period);

(ii) 150% an amount corresponding to the Target Bonus (i.e., 40% of Base Salary) amount of the Target Bonus; plus

(iii) an amount corresponding to a prorated Target Bonus amount for the year of termination as provided. The pro-rata Bonus shall be the product of the formula B x D/365 where B represents the Target Bonus (i.e., 40% of the Base Salary), and D represents the number of days elapsed in the calendar year through the date of notice to the Employee).

The Change of Control Severance is subject to the condition that the Employee signs a termination agreement with the Company including a full waiver of any other claims and the reinstatement of all restrictive covenants. For the avoidance of any doubt, no other bonus or severance shall become payable in such case.Except as expressly provided in this clause, bonus payments, if any, will not be taken into account for the calculation of any possible severance payment upon termination of the Agreement.

In the event of a Change of Control of uniQure N.V. as defined below and provided that the Company is directly or indirectly a subsidiary or affiliate of uniQure N.V. upon such Change of Control event, the vesting conditions that may apply to any stock options, restricted shares, restricted stock units, performance stock units or other grants of equity held by Employee pursuant to this Agreement and the Company's Amended and Restated 2014 Share Incentive Plan will be automatically waived and shall be deemed fully vested immediately prior to the Change of Control event. All Stock Options will be deemed to be fully exercisable commencing on the date of and immediately prior to the Change of Control and ending on the

eighteen (18) month anniversary of the Change of Control or, if earlier, the expiration of the term of such Stock Options

For the purposes of this Employment Agreement, **Change of Control** shall mean with respect to uniQure N.V. the date on which any of the following events occurs:

a) any "person," as such term is used in Sections 13(d) and 14(d) of the United States Securities Exchange Act of 1934, as amended (the **Act**) (other than uniQure N.V., any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of uniQure N.V. or any of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of uniQure N.V. representing forty (40) percent or more of the combined voting power of uniQure N.V.'s then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the uniQure N.V.); or

b) a majority of the members of the Board of uniQure N.V. is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or

c) the consummation of (i) any consolidation or merger of uniQure N.V. where the stockholders of uniQure N.V., immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than fifty (50) percent of the voting shares of uniQure N.V. issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (ii) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of uniQure N.V.

13.5. Release from Work (Garden Leave)

The Company may at any time (including during the Notice Period) and with immediate effect release the Employee from the duty to work. In such case, the Employee continues to be paid the Base Salary. Vacation, any overtime and time compensation entitlements, if any, shall be offset against the time of release from work. The Company may set forth further conditions applying to the release from duties.

14. Work Equipment and Obligation to Return Work Equipment

The Company at its discretion shall provide the Employee with work equipment such as laptops or mobile phones. The work equipment shall remain the property of the Company and the Company shall have the right to replace and/or reclaim the work equipment at any time.

At the Company's first request, but no later than upon termination of this Employment Agreement for any reason, the Employee shall return to the Company everything the Employee produced in the course of the Employee's work for the Company, everything which was given to the Employee throughout the course of this Employment and everything which otherwise fell into the Employee's possession. The obligation to return work equipment includes in particular but is not limited to keys, mobile phones, laptops, badges as well as data carriers and records of any kind, including any copies. Any possible retention right of the Employee is explicitly waived.

15. Working Time

15.1. General

The weekly working time depends on the needs to perform the position successfully but is at least 40 hours per week on an average basis (100% position).

15.2. Additional Work

The Employee shall work overtime, if this is necessary to fulfil the Employee's duties under this Employment Agreement. Considering the Employee's independent position and duties the Swiss Labour Act is not applicable to the Employment. The Employee shall therefore have no entitlement to additional compensation for any such extra work (overtime, extra hours, Sunday work, work on public holidays, or night work). All such extra and overtime work is already compensated by the Base Salary and the vacation days exceeding the statutory minimum.

16. Vacation

The Employee is entitled to 30 business days of vacation per calendar year (for a 100% stint). The 10 additional, days of vacation granted exceeding the statutory minimum entitlement of 20 days shall be granted expressly as compensation for any overtime worked and may be offset against any time off entitlements.

The Company has the right to determine by giving one (1) month advance notice when the Employee shall take vacation days. In exceptional situations, this advance notice period is shortened to up to one week. Nevertheless, the Company will consider wishes of the Employee. If the Employee requests to take vacation, the Employee shall, reasonably prior to the intended vacation, inform the responsible executive. In any event the Employee shall provide for suitable internal representation during the Employee's vacation.

For the year in which the Employment begins or ends, the vacation entitlement is calculated *pro rata temporis*.

It is the Employee's duty to refund to the Company any vacation salary received for vacation days in excess of the vacation entitlement of the Employee.

The Employee shall take vacation days within the calendar year for which such entitlement accrues. The Employee shall not, without prior consultation and approval of the Company

and/or the responsible executive or otherwise as allowed pursuant to Company policy, roll such days over to the subsequent calendar year.

17. Public Holidays and Short Absences

17.1. Public Holidays

The Employee is not obliged to work on federal and cantonal public holidays at the primary place of work in Switzerland. The Employee is not entitled to any compensation whether in cash or in kind for such public holidays when such public holidays are on weekends.

17.2. Short Absences

The Employee shall, upon request, be granted the usual hours or days off without deduction from the salary, provided that they necessarily fall within working hours. The extent of such absences shall be determined in accordance with the Company's current practice.

Such short absences shall not be grounds for a deduction of the Employee's entitlements to the Base Salary or vacation days, unless the absence exceeds the time period as set forth above.

Such absences shall not be grounds for a deduction of the Employee's entitlements to the Base Salary or vacation days, unless the absence exceeds the time period as set forth above.

18. Incapacity to Work and Insurances

The Employee shall notify the Company immediately about any incapacity to work and its probable duration, stating the respective reasons.

18.1. Medical Certificate

If the Employee's incapacity to work due to illness or accident exceeds 3 business days, the Employee shall without request by the Company furnish a medical certificate in an ongoing Employment. The Company reserves the right to request a medical certificate even in the event of a shorter duration of incapacity to work. If the Employment has been terminated, the Employee shall in any case be obliged to furnish a medical certificate to the Company from the first day of incapacity to work. In all cases of illness and accident, the Company is entitled to ask the Employee to be examined by an independent medical examiner at the Company's expense.

18.2. Salary in case of Employee's Incapacity to Work

If the Employee is prevented from work due to illness or accident, the Company shall continue to pay the remuneration hereunder in accordance with the law (Berne scale) unless a daily sickness benefits insurance exists.

In case a daily sickness benefits insurance exists, the Employee will receive the benefits due under such insurance in accordance with the corresponding insurance policy and the

respective Company regulations and policies, as amended from time to time. The Employee will be notified accordingly by the Company in such case.

In any case, continued salary payment obligation of the Company ceases at the end of the employment relationship.

18.3. Occupational and Non-occupational Accidents

If the Employee works for the Company for an average of less than 8 hours per week, the Employee is only insured for certain medical expenses for occupational accidents. However, if the Employee works for the Company for an average of more than 8 hours per week, the Employee is insured for certain medical expenses for both occupational and non-occupational accidents. Premiums for occupational accident insurance and occupational sickness insurance are paid by the Company. Premiums for non-occupational accident insurance are paid by the Employee.

18.4. Health Insurance (Illness)

Health insurance is compulsory in Switzerland and needs to be obtained by the Employee. The Company will reimburse Employee's health insurance costs.

18.5. Pension Plan

Provided that the Employee meets the regulatory requirements, the Employee is, through a pension plan (the **Pension Plan**), insured against the economic consequences of retirement, disability and death.

The Employee's existing Pension Plan will be continued by the Company.

The Employee will be covered by the Pension Plan as may be amended from time to time.

19. Intellectual Property Rights and Work Results

The Company shall own all work results (including but not limited to data, know-how, documentation, concepts, drafts, inventions, works, applications, software, etc.) and all intellectual property rights therein, irrespective of their protectability under the applicable law, (including but not limited to trademarks, patents, designs, and copyrights) (the foregoing all together "**Work Results**") created by the Employee in the course of the Employment (regardless of whether within or outside agreed office or workplaces and within or outside working hours).

All such Work Results shall vest automatically in the Company upon their creation. If the Company has not become the automatic owner of the Work Results and/or if the Work Results are not transferred to the Company by law, the Employee is obliged to irrevocably transfer and assign and hereby transfers and assigns said Work Results to the Company. If such Work Product cannot be transferred to the Company for any reason whatsoever, the Employee grants the Company an exclusive, worldwide, transferable, unlimited, irrevocable, sub-licensable and royalty-free license to use and exploit the Work Result.

Further, the Employee waives the right (i) to be mentioned as inventor, author or creator of a Work Result, (ii) to object to any change, modification, revision, translation or alteration of the Work Result or (iii) to determine the first publication of any Work Result.

The Employee is obliged to take all steps reasonably requested by the Company in order to fulfil the Employee's obligations according to the above sections. This obligation continues even after termination of the Employment.

If Employee has created the Work Result with the assistance of another individual or legal entity that is not legally or contractually obliged to transfer the Work Result to the Company, the Employee ensures to take the required actions to have such third party's share in the Work Result transferred to the Company or (if a transfer is not possible) to have it licensed to the Company according to the terms above. In addition, the Employee ensures that the third party waives the right (i) to be mentioned as inventor, author or creator of a Work Result, (ii) to object to any change, modification, revision, translation or alteration of the Work Result or (iii) to determine the first publication of any Work Result.

Compensation for the transfer or licensing of any and all Work Results according to the above sections, in particular intellectual property rights and/or licensing rights, is included in the Employee's Base Salary according to Section 11.1.

If a Work Result is created by the Employee in the course of the Employment but outside of the duties under the Employment Agreement, the Employee shall immediately inform the Company thereof in writing. The Company shall have the right to acquire ownership of such Work Result for a reasonable additional compensation, provided that the Company notifies the Employee in writing of its will to exercise this option within six (6) months as of the Employee's notice of the creation of the Work Result.

20. Data Protection

The Company informs the Employee about the processing of the Employee's personal information in a privacy notice (**Personal Data**).

The Company may amend the privacy notice and respective policies at any time.

21. Non-Competition and Non-Solicitation

21.1. General

The Employee acknowledges and agrees to adhere to undertakings in this Section 21 as the Company and the Group have a serious business interest in binding the Employee to the non-competition and non-solicitation undertakings, due to the fact that (i) within the organization of the Company and the Group competition-sensitive information as well as confidential information related to the Company, the Group and their clients and relations, such as but not limited to products, or research or development or commercialization of the Company and the Group (**Sensitive Business Information**) are available and (ii) in the position of General Manager or other title that may be agreed to following commencement of employment, the Employee has access to this Sensitive Business Information and/or will

become aware of this Sensitive Business Information and/or will maintain (commercial) contacts with clients, suppliers, competitors etc. Given the aforesaid considerations (i) and (ii) in this clause, combined with the education and capacities of the Employee, the Company and the Group have a well-founded fear that their business interests will be harmed substantially if the Employee performs competing activities as set forth in this Section 21.

21.2. Non-Competition during Employment

The Employee shall refrain from competing with the Company during the Employment, i.e., the Employee is obliged in particular not to:

– directly or indirectly, once, occasionally or professionally, under the Employee's name or under a third-party name, on behalf of the Employee's own or on behalf of third parties' account knowingly compete with the Company or any Group Company; or

– engage in any way in any enterprise competing with the Company or any Group Company, and the Employee also agrees not to found, assist or promote any business actively competing with the Company or any Group Company, including, without limitation, the research and development of product candidates for the same target, indication or disease.

Any solicitation or referral of clients and/or employees of the Company or any Group Company is prohibited.

In the event of a breach of this non-competition or non-solicitation obligation as set out in this Section 21.2, the Employee agrees to pay to the Company a penalty equal to one (1) month's Base Salary (including salary increases as granted from time to time) for each breach.

21.3. Post-Contractual Non-Competition

The Employee agrees that for a period of 12 months after termination of the Employment the Employee will not, directly or indirectly, once, occasionally or professionally, under the Employee's name or under a third-party name, on behalf of the Employee's own or on behalf of third parties' account Compete with, or otherwise engage in any way in any enterprise Competing with, the Company or any Group Company.

"Compete" and "Competing" as used above refer to engaging in activities or functions related to: (i) the treatment of epilepsy by directly inhibiting the expression of the kainate receptor subunits named GluK2 and/or GluK5, or (ii) any other proprietary gene therapy target, platform, or manufacturing technology of the Company or any Group Company, that, in each of clauses (i) – (ii), Employee worked on behalf of Employer during the two years preceding the termination of the Employment.

21.4. This non-competition obligation shall apply worldwide, to the extent allowed by law.Post-Contractual Non-Solicitation and Non-Disparagement

For a period of 12 months after termination of the Employment the Employee shall abstain directly or indirectly from:

– enticing away, soliciting or interfering with any personnel from the Company or any Group Company with whom the Employee was in contact during the Employment;

– enticing away, soliciting or interfering with clients or contacts of the Company or any Group Company with whom the Employee was in contact during the last three years prior to termination of the Employment or about whom the Employee gained knowledge during the Employment; or

– disparage the Company or any Group Company in any way, provided that this clause does not affect your right to disclose appropriate information to relevant bodies under any applicable laws of Switzerland.

21.5. Penalty

If the Employee violates the post-contractual non-competition obligation according to Section 21.3, the Employee shall pay to the Company a penalty in the amount of 3 monthly Base Salaries Salary (incl. salary increases as granted from time to time) for each violation.

If the Employee violates the post-contractual non-solicitation obligation with respect to co-workers according to Section 21.4, the Employee shall pay the Company a penalty of 1 monthly Base Salary (incl. salary increases as granted from time to time) for each violation.

If the Employee violates the post-contractual non-solicitation obligation with respect to clients according to Section 21.4, the Employee shall pay to the Company a penalty in the amount of 2 monthly Base Salaries (including salary increases as granted from time to time) for each violation.

If the breach consists in non-authorized participation in a competing company or in entering into a long-term obligation (such as an employment, service, agency or consultant contract), the penalty shall be increased by EUR 1’000 for each month or part thereof in which the breach continues (the **Continuous Breach**).

Multiple breaches of the obligations each trigger separate penalties, if necessary, several times within one month. If individual breaches occur within a Continuous Breach, they shall be covered by the penalty which has to be paid for the Continuous Breach.

The payment of the penalty does not release the Employee from the obligation to comply with the non-competition and/or non-solicitation obligations. The Company shall be entitled to seek injunctive measures or any other type of immediate relief to stop the infringement as soon as possible, regardless of whether any penalty is offered or paid.

Further, the Company reserves the right to claim compensation for damages (in addition to the penalty or penalties).

22. Confidentiality

The Employee will have access to confidential and proprietary information relating to the business and operations of the Company, any Group Companies and their clients, in particular to business and manufacturing secrets. Such confidential and proprietary information constitutes a unique and valuable asset of the Company and any Group Companies and their acquisition required great time and expense. The disclosure or any other use of such confidential or proprietary information, other than for the sole benefit of the Company or any Group Company, would cause irreparable harm to the Company.

The Employee is under a strict duty to keep all confidential and proprietary information strictly and permanently confidential and, accordingly, shall not during the Employment or after termination of the Employment directly or indirectly for any purpose other than for the sole benefit of the Company or any Group Company disclose or permit to be disclosed to any third party any confidential or proprietary information without first obtaining the written consent of the responsible executive and the party concerned, if applicable, except if required to do so by law.

The Employee may not make any statement to the media, as far as the Employee is not authorized to do so by the Company and/or the responsible executive.

In the event the Employee breaches the obligations pursuant to this Section, the Employer may take reasonable disciplinary action up to and including termination of Employment for each breach.

However, the payment of the penalty does not release the Employee from further complying with the confidentiality obligation.

The Company reserves the right to claim compensation for damages in addition to the penalty.

23. Regulations and Policies

The Employee confirms that he is familiar with the regulations and policies of the Company and will comply with them at all times. The Employee acknowledges that the Company may amend existing regulations and policies from time to time and may issue new regulations and policies from time to time.

24. Miscellaneous

24.1. Entire Agreement

This Employment Agreement constitutes the complete Employment Agreement between the Parties regarding its subject matter and supersedes all prior oral and/or written agreements, representations and/or communications concerning the subject matter hereof.

All prior agreements, including any employment agreements with Corlieve Therapeutics SAS, are terminated as of the Effective Date of this Agreement. Further, the Employee resigns and terminates his mandate with Corlieve Therapeutics SAS dated October 29, 2019 as of the Effective Date of this Agreement.

24.2. Severability

Should any of the provisions of this Employment Agreement be or become legally invalid, such invalidity shall not affect the validity of the remaining provisions. Any gap resulting from such invalidity shall be filled by a provision consistent with the spirit and purpose of the Employment Agreement. In the same way shall be proceeded if a contractual gap appears.

24.3. Amendments

Any amendments or supplementation of this Employment Agreement shall require written form and must be signed by both Parties. The written form may be dispensed only in writing.

Upon 30 day written notice to the Employee, the Company may convert any amounts owed under this agreement (including any Base Salary, allowance or other payment) from CHF (Swiss Francs) to Euros using a generally accepted exchange rate at the time of such conversion.

24.4. Applicable Law

This Employment Agreement shall be construed in accordance with and governed by Swiss law (without giving effect to the principles of conflicts of law).

24.5. Place of Jurisdiction

Any dispute arising out of or in connection with this Employment Agreement and the Employment resulting therefrom shall be exclusively submitted to and determined by the ordinary courts at the domicile of the Company, subject to mandatory places of jurisdiction.

24.6. Execution

The Parties have duly executed this Employment Agreement in two originals, each Party receiving one original.

24.7. Proof of right to work

Upon request, you agree to promptly provide to the Company documentation proving your eligibility to work in the jurisdiction governing this Agreement, and you agree to promptly inform the Company if you cease to be eligible to work in the jurisdiction governing this Agreement.

Signatures

Corlieve Therapeutics AG (Company)

By: /s/ David J. Cerveny, Attorney in Fact

Employee

/s/ Richard Porter

Place, date

Richard Porter

First Amended Employment Agreement

dated 1 April 2022 (the **Effective Date**)

by and between

Corlieve Therapeutics AG, (the **Company**)
Switzerland Innovation Park
Basel Area AG
Gewerbestrasse 24
4123 Allschwil, Switzerland

and

Richard Porter (the **Employee**)
A British citizen born [***] in [***], England, and currently residing at [***]

(The Company and the Employee are also referred to as **Party** or **Parties;** this employment agreement referred to as the **Employment Agreement** and the **Agreement**.)

1. Prior Agreement

This Agreement amends and restates the Employment Agreement having an effective date of July 30, 2021 between the parties (the "Prior Employment Agreement"). The Prior Employment Agreement is amended as of, and governs the period from July 30, 2021 to immediately prior to, the Effective Date. This Agreement governs as of the Effective Date.

2. Seniority Date

The Employment Agreement, as amended, is a transfer of the existing employment contract (Mandate dated October 29, 2019), subject to certain changes that have been negotiated effective July 30, 2021 and as amended effective as of the Effective Date, from Corlieve Therapeutics SAS to Corlieve Therapeutics AG. For purposes of calculating length of employment and any benefits and security related to the length of employment, the transition should not result in a loss of security or benefit for the employee due to the transition and the Employee's employment shall be considered continuous beginning as of October 29, 2019.

3. Function and Job Title

The Employee shall assume the title as Chief Business Officer ("CBO") for the Company and its affiliates (including, without limitation, uniQure N.V., uniQure biopharma B.V., and uniQure, Inc.) (each a **Group Company**, together the **Group**), on a full-time basis as provided in Article 15 of this Agreement. The function and/or the job title may be adjusted by the Company at any time to reflect current circumstances. Employee will report to the Chief Executive Officer of uniQure N.V.

Employee will continue to serve as the General Manager of Company to assist with the management and administration of Company on an as needed basis, including, without limitation, during the transition to his new role as CBO.

The Executive will continue to serve as a director of the Company and Corlieve Therapeutics SAS, subject to the discretion of uniQure, N.V. to appoint and remove directors of those companies.

The detailed duties of the Employee are the customary role of a Chief Business Officer overseeing business development activities, as provided in the job description attached at Exhibit A. Employee will be covered under the Directors and Officers Insurance of Company or its affiliates. Company agrees to indemnify Employee to the fullest extent permitted by law and the Company's articles of association for any claims arising from actions taken by Employee in the scope of the employment.

4. Group Structure

The Employee acknowledges that the Company is part of a group of companies ultimately controlled by uniQure N.V. The Employee acknowledges that the Employee will need to work with and/or report to other employees and/or officers of other Group Companies. The

Employee acknowledges that this does not create separate employment relationships with other Group Companies.

5. Duties and Responsibilities

It is understood that the duties and responsibilities arising out of the above function include all tasks customarily or reasonably incidental to such function.

The Company may assign to the Employee any other, additional, or new duties or responsibilities as deemed reasonable or appropriate by the Company in the course and fulfilment of its business.

The Employee undertakes to use the Employee's entire working ability to fulfill the Employee's contractual obligations and to loyally safeguard and foster the business and the interests of the Company. The Employee shall carefully perform all work and tasks assigned to the Employee.

6. Work for Third Parties

The Employee is not entitled to work for any third party or to engage in any gainful or unpaid employment, whether full-time or part-time, for the duration of the Employment Agreement without the prior written approval of the Company.

Membership of the boards of directors of other companies and other institutions that are related to the business purpose of the Company or otherwise affect the interests of the Company or a Group Company also requires the prior consent of the Company. Consent will not be unreasonably withheld if there is no conflict of interest with regard to the Company.

7. Officer Position

In fulfilment of the Employee's duties, the Employee may have to act as officer, director or in any other corporate function within the Company or any Group Company. The Company may decide at its full discretion when such function shall end, and the Employee will retire from such functions and sign the necessary documentation upon first request.

The base salary as defined in Section 11.1 includes any and all remuneration for such functions and positions. In case the law provides for a mandatory remuneration the Company will decide whether such compensation shall be forwarded to the Company or be set off against the base salary as defined in Section 11.1 paid to the Employee by the Company.

8. Conflict of Interests

The Employee shall avoid any conflict of interest and inform the Company immediately if any potential conflict of interest arises.

A conflict of interest arises especially in case of a participation in suppliers or clients of the Company or in a Group Company.

9. Gifts

In connection with the performance of his duties, the Employee is prohibited from accepting or stipulating, either directly or indirectly, any commission, reimbursement, or payment, in whatever form, or gifts from third parties. The foregoing does not apply to standard promotional gifts having little monetary value.

10. Place of Work

The Employees primary place of work shall be at the offices of the Company.

The Employee understands and agrees that the Employee may, in the course of the Employment and where reasonably requested by the Company, be required to travel to and work in other places and countries in order to perform the Employee's obligations and duties under the Employment Agreement. In particular, the Employee will need to be present from time to time in the head offices of the Company in the Netherlands.

The Employee is obliged to track any days not worked in Switzerland, including place of work, and submit such schedule regularly to the Company upon request.

The Company will work with you to determine a reasonable budget for costs associated with travel between your home in Switzerland, and Company facilities in Amsterdam, Netherlands and Lexington, Massachusetts to include airfare, lodging and associated expenses while doing business on behalf of the Company.

11. Compensation

11.1. Base Salary

The Employee shall receive an annual base salary of Four Hundred Ten Thousand CHF (CHF 410,000) per year gross (the **Base Salary**), payable in 12 monthly instalments at the end of the month to a bank or postal account to be specified by the Employee. Alternatively, you may be paid in instalments in accordance with the regular payroll practices of the Group Companies.

11.2. Bonus

The Employee may, if applicable, participate in a bonus program of the Company or a Group Company, which the Company or the issuing Group Company shall determine at its full discretion. If no bonus program is issued, any bonus shall be determined at the discretion of the Company.

The Company may set targets for the bonus, according to which the amount of the bonus is determined. However, the Company is free to deviate at its own discretion upwards or

downwards from the targets set in its final determination of the bonus. If no targets are set, any bonus shall be determined at the discretion of the Company.

The target bonus shall be 40% of the Base Salary ("Target Bonus"). The Target Bonus may be adjusted by the Company to the extent consistent with advice of the compensation consultant of the Board of uniQure N.V. or otherwise consistent with adjustments made to the target bonuses of other executive employees.

In the event of termination of the Employment, the Employee has no entitlement to a bonus, not even on a pro rata basis. To be eligible for any bonus pursuant to this Agreement or otherwise pursuant to Employee's employment with Employer, Employee must be in service of Employer on the date any bonus is paid.

11.3. Participation Plan

The Employee may be given the opportunity by uniQure N.V. to participate in the growth of the Group pursuant to a participation plan such as, for instance, an employee share option plan or a share plan, and as amended from time to time (the **Participation Plan**). It is in the full discretion of uniQure N.V. to issue and/or to unilaterally amend such Participation Plan at any time.

The Employee expressly acknowledges that the Employee does not have any right or claim under the Participation Plan against the Company, but only against uniQure N.V. or the Group Company issuing the Participation Plan. The Employee also confirms that any participation in the Participation Plan does not constitute an employment relationship with uniQure N.V. or the issuing Group Company.

11.4. Acknowledgements of the Employee

The Employee acknowledges and agrees that any entitlements granted, and payments made in addition to the Base Salary, including, but not limited to any bonuses, participations, or gratuities of the Company or any Group Company (the **Additional Payments**) are not part of the salary legally or contractually owed by the Company and are made at full discretion of the Company or the Group Company granting such bonus, participation, or gratuity. Any Additional Payments shall not create any obligation of the Company or any Group Company to make such Additional Payments in the future and shall not create any right or claim of the Employee to such Additional Payments in the future even if paid over consecutive years and without express reservation.

11.5. No other Compensation

The Employee acknowledges and agrees that the Employee shall not be entitled to receive any other compensation or benefit of any nature from the Company except as expressly provided for in this Employment Agreement.

11.6. Social security, tax, and deductions

Until retirement age and while this Agreement is effective, the Employee is insured according to the Federal Laws on old age (AHVG), disability (IVG), compensation for the loss of earnings (EOG), unemployment insurance (AVIG), accident insurance (UVG), sickness benefits insurance and pension plan (BVG). The Corlieve insurance and pension provisions in existence as of the commencement date of employment will be carried forward unless and until modifications are legally required or a new scheme is adopted by the Employer. From any and all gross compensation hereunder – if provided by law, regulations, or policies – any portions of the Employee's contributions to the sickness benefits insurance, if any, and withholding taxes, if any, will be deducted and withheld by the Company from the payments made to the Employee.

Any portions of the Employee's social security contributions in accordance with the AHVG, IVG, EOG, AVIG, UVG and premiums to pension schemes (BVG) must be paid by the Employee to the respective insurance institutions in Switzerland in accordance with the separately signed agreement according to art. 21 para. 2 of Regulation (EC) No. 987/09 as per Annex B to this Employment Agreement. In accordance with said agreement is the Employee further obliged to pay the Company's social security contributions portions in accordance with the AHVG, IVG, EOG, AVIG, UVG and premiums to pension schemes (BVG). Therefore, the Company transfers any and all compensation hereunder after having deducted any portions of the Employee's contributions to the sickness benefits insurance, if any, and withholding taxes, if any. In addition, the Company transfers the Company's social security contributions portions in accordance with the AHVG, IVG, EOG, AVIG, UVG and premiums to pension schemes (BVG) as provided by law, regulations, or policies, to the Employee.

The Company reserves the right to unilaterally terminate this agreement according to art. 21 para. 2 of Regulation (EC) No. 987/09 at any time, to register as a different company and to pay any social security contributions due (employee and employer contributions). In case of such unilateral termination of said agreement, the Employee shall be notified by the Company in due time. In this case, from any and all gross compensation hereunder – if provided by law, regulations or policies – any portions of the Employee's social security contributions in accordance with the AHVG, IVG, EOG, AVIG, UVG, sickness benefits insurance, if any, premiums to pension schemes and withholding taxes, if any, will be deducted and withheld by the Company from the payments made to the Employee.

Where it will not be possible anymore to remain in the Swiss social security system, the Employee will be insured according to the applicable social security system in accordance with the respective applicable legislation, Company policies, as well as insurance policies and regulations.

12. Expenses

The Employee shall be entitled to reimbursement by the Company of out-of-pocket business expenses reasonably incurred by the Employee during the Employment in the performance of the Employee's duties under this Employment Agreement. The provisions

in Section 10 shall be reserved. However, the reimbursement is subject to (i) the submission of relevant vouchers and receipts indicating the amount and purpose of the expenses, and (ii) the compliance with the reimbursement policies of the Company issued and unilaterally amended from time to time.

13. Termination

13.1. Reserved.

13.2. Termination

Employment may be terminated by either Party with a notice period of 4 (four) months (the "Notice Period").

Upon observance of the notice period, termination shall be effective as of the end of a calendar day and not the end of a calendar month.

The Employment is being terminated automatically at the end of the month in which the Employee reaches the retirement age according to the Federal Law on Old-age and Survivors' Insurance (*AHVG*). In case of a permanent disability to work the same applies. In case of a partial permanent disability the Employment ends to the same extent as the Employee is declared disabled.

13.3. Severance Generally

If the Employment is terminated by the Company, except

(i) in case of a summary dismissal for good cause by the Company (in accordance with Article 337 CO);

(ii) in case the Employee having given the Company good cause to do so (in accordance with Article 340c(2) CO);

(iii) in case the Employee the Employee is in breach of any duties and failed to remedy such breach within 30 days after having been asked in writing to do so;

(iv) in case the Employee is terminated after an illness lasting for at least 6 months; or

(v) in case of poor performance after having been put on a performance improvement plan for at least 90 days and having failed to meet the set targets,

then the Company shall grant the Employee severance pay (**Severance**) equal to

(i) 100% of the annual Base Salary (less any pay received during the Notice Period);

(ii) 100% an amount corresponding to the Target Bonus; and

(iii) an amount corresponding to a pro-rata Target Bonus amount for the year of termination as provided. The pro-rata Bonus shall be the product of the formula B

x D/365 where B represents the Target Bonus, and D represents the number of days elapsed in the calendar year through the date of notice to the Employee.

Any severance payment is subject to the condition that the Employee signs a termination agreement with the Company including a full waiver of any other claims and the reinstatement of all restrictive covenants. For the avoidance of any doubt, no other bonus or severance shall become payable in such case.Except as expressly provided in this clause, any other bonus payments will not be taken into account for the calculation of any possible severance payment upon termination of the Agreement.

13.4. Severance on a Change of Control

If the Employment is terminated by the Company within the period beginning ninety (90) days before and continuing until twelve (12) months after a Change of Control (as defined below), and subject to the conditions for Severance as per Section 13.3 above being fulfilled and in lieu of the severance provided in Section 13.3, the Company shall grant the Employee a severance pay (**Change of Control Severance**) equal to

(i) 150% of the annual Base Salary (less any pay received during the Notice Period);

(ii) 150% of the Target Bonus; plus

(iii) an amount corresponding to a pro-rata Target Bonus amount for the year of termination as provided. The pro-rata Bonus shall be the product of the formula B x D/365 where B represents the Target Bonus, and D represents the number of days elapsed in the calendar year through the date of notice to the Employee.

The Change of Control Severance is subject to the condition that the Employee signs a termination agreement with the Company including a full waiver of any other claims and the reinstatement of all restrictive covenants. For the avoidance of any doubt, no other bonus or severance shall become payable in such case.Except as expressly provided in this clause, any other bonus payment will not be taken into account for the calculation of any possible severance payment upon termination of the Agreement.

In the event of a Change of Control of uniQure N.V. as defined below and provided that the Company is directly or indirectly a subsidiary or affiliate of uniQure N.V. upon such Change of Control event, the vesting conditions that may apply to any stock options, restricted shares, restricted stock units, performance stock units or other grants of equity held by Employee pursuant to this Agreement and the Company's Amended and Restated 2014 Share Incentive Plan will be automatically waived and shall be deemed fully vested immediately prior to the Change of Control event. All Stock Options will be deemed to be fully exercisable commencing on the date of and immediately prior to the Change of Control and ending on the eighteen (18) month anniversary of the Change of Control or, if earlier, the expiration of the term of such Stock Options

For the purposes of this Employment Agreement, **Change of Control** shall mean with respect to uniQure N.V. the date on which any of the following events occurs:

a) any "person," as such term is used in Sections 13(d) and 14(d) of the United States Securities Exchange Act of 1934, as amended (the **Act**) (other than uniQure N.V., any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of uniQure N.V. or any of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of uniQure N.V. representing forty (40) percent or more of the combined voting power of uniQure N.V.'s then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the uniQure N.V.); or

b) a majority of the members of the Board of uniQure N.V. is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or

c) the consummation of (i) any consolidation or merger of uniQure N.V. where the stockholders of uniQure N.V., immediately prior to the consolidation or merger, would not, immediately after the consolidation or merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than fifty (50) percent of the voting shares of uniQure N.V. issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (ii) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of uniQure N.V.

13.5. Release from Work (Garden Leave)

The Company may at any time (including during the Notice Period) and with immediate effect release the Employee from the duty to work. In such case, the Employee continues to be paid the Base Salary. Vacation, any overtime and time compensation entitlements, if any, shall be offset against the time of release from work. The Company may set forth further conditions applying to the release from duties.

14. Work Equipment and Obligation to Return Work Equipment

The Company at its discretion shall provide the Employee with work equipment such as laptops or mobile phones. The work equipment shall remain the property of the Company and the Company shall have the right to replace and/or reclaim the work equipment at any time.

At the Company's first request, but no later than upon termination of this Employment Agreement for any reason, the Employee shall return to the Company everything the Employee produced in the course of the Employee's work for the Company, everything which was given to the Employee throughout the course of this Employment and everything which otherwise fell into the Employee's possession. The obligation to return

work equipment includes in particular but is not limited to keys, mobile phones, laptops, badges as well as data carriers and records of any kind, including any copies. Any possible retention right of the Employee is explicitly waived.

15. Working Time

15.1. General

The weekly working time depends on the needs to perform the position successfully but is at least 40 hours per week on an average basis (100% position).

15.2. Additional Work

The Employee shall work overtime, if this is necessary to fulfil the Employee's duties under this Employment Agreement. Considering the Employee's independent position and duties the Swiss Labour Act is not applicable to the Employment. The Employee shall therefore have no entitlement to additional compensation for any such extra work (overtime, extra hours, Sunday work, work on public holidays, or night work). All such extra and overtime work is already compensated by the Base Salary and the vacation days exceeding the statutory minimum.

16. Vacation

The Employee is entitled to 30 business days of vacation per calendar year (for a 100% stint). The 10 additional, days of vacation granted exceeding the statutory minimum entitlement of 20 days shall be granted expressly as compensation for any overtime worked and may be offset against any time off entitlements.

The Company has the right to determine by giving one (1) month advance notice when the Employee shall take vacation days. In exceptional situations, this advance notice period is shortened to up to one week. Nevertheless, the Company will consider wishes of the Employee. If the Employee requests to take vacation, the Employee shall, reasonably prior to the intended vacation, inform the responsible executive. In any event the Employee shall provide for suitable internal representation during the Employee's vacation.

For the year in which the Employment begins or ends, the vacation entitlement is calculated pro *rata temporis*.

It is the Employee's duty to refund to the Company any vacation salary received for vacation days in excess of the vacation entitlement of the Employee.

The Employee shall take vacation days within the calendar year for which such entitlement accrues. The Employee shall not, without prior consultation and approval of the Company and/or the responsible executive or otherwise as allowed pursuant to Company policy, roll such days over to the subsequent calendar year.

17. Public Holidays and Short Absences

17.1. Public Holidays

The Employee is not obliged to work on federal and cantonal public holidays at the primary place of work in Switzerland. The Employee is not entitled to any compensation whether in cash or in kind for such public holidays when such public holidays are on weekends.

17.2. Short Absences

The Employee shall, upon request, be granted the usual hours or days off without deduction from the salary, provided that they necessarily fall within working hours. The extent of such absences shall be determined in accordance with the Company's current practice.

Such short absences shall not be grounds for a deduction of the Employee's entitlements to the Base Salary or vacation days, unless the absence exceeds the time period as set forth above.

Such absences shall not be grounds for a deduction of the Employee's entitlements to the Base Salary or vacation days, unless the absence exceeds the time period as set forth above.

18. Incapacity to Work and Insurances

The Employee shall notify the Company immediately about any incapacity to work and its probable duration, stating the respective reasons.

18.1. Medical Certificate

If the Employee's incapacity to work due to illness or accident exceeds 3 business days, the Employee shall without request by the Company furnish a medical certificate in an ongoing Employment. The Company reserves the right to request a medical certificate even in the event of a shorter duration of incapacity to work. If the Employment has been terminated, the Employee shall in any case be obliged to furnish a medical certificate to the Company from the first day of incapacity to work. In all cases of illness and accident, the Company is entitled to ask the Employee to be examined by an independent medical examiner at the Company's expense.

18.2. Salary in case of Employee's Incapacity to Work

If the Employee is prevented from work due to illness or accident, the Company shall continue to pay the remuneration hereunder in accordance with the law (Berne scale) unless a daily sickness benefits insurance exists.

In case a daily sickness benefits insurance exists, the Employee will receive the benefits due under such insurance in accordance with the corresponding insurance policy and the respective Company regulations and policies, as amended from time to time. The Employee will be notified accordingly by the Company in such case.

In any case, continued salary payment obligation of the Company ceases at the end of the employment relationship.

18.3. Occupational and Non-occupational Accidents

If the Employee works for the Company for an average of less than 8 hours per week, the Employee is only insured for certain medical expenses for occupational accidents. However, if the Employee works for the Company for an average of more than 8 hours per week, the Employee is insured for certain medical expenses for both occupational and non-occupational accidents. Premiums for occupational accident insurance and occupational sickness insurance are paid by the Company. Premiums for non-occupational accident insurance are paid by the Employee.

18.4. Health Insurance (Illness)

Health insurance is compulsory in Switzerland and needs to be obtained by the Employee. The Company will reimburse Employee's health insurance costs.

18.5. Pension Plan

Provided that the Employee meets the regulatory requirements, the Employee is, through a pension plan (the **Pension Plan**), insured against the economic consequences of retirement, disability, and death.

The Employee's existing Pension Plan will be continued by the Company.

The Employee will be covered by the Pension Plan as may be amended from time to time.

19. Intellectual Property Rights and Work Results

The Company shall own all work results (including but not limited to data, know-how, documentation, concepts, drafts, inventions, works, applications, software, etc.) and all intellectual property rights therein, irrespective of their protectability under the applicable law, (including but not limited to trademarks, patents, designs, and copyrights) (the foregoing all together "**Work Results**") created by the Employee in the course of the Employment (regardless of whether within or outside agreed office or workplaces and within or outside working hours).

All such Work Results shall vest automatically in the Company upon their creation. If the Company has not become the automatic owner of the Work Results and/or if the Work Results are not transferred to the Company by law, the Employee is obliged to irrevocably transfer and assign and hereby transfers and assigns said Work Results to the Company. If such Work Product cannot be transferred to the Company for any reason whatsoever, the Employee grants the Company an exclusive, worldwide, transferable, unlimited, irrevocable, sub-licensable and royalty-free license to use and exploit the Work Result.

Further, the Employee waives the right (i) to be mentioned as inventor, author, or creator of a Work Result, (ii) to object to any change, modification, revision, translation, or alteration of the Work Result or (iii) to determine the first publication of any Work Result.

The Employee is obliged to take all steps reasonably requested by the Company in order to fulfil the Employee's obligations according to the above sections. This obligation continues even after termination of the Employment.

If Employee has created the Work Result with the assistance of another individual or legal entity that is not legally or contractually obliged to transfer the Work Result to the Company, the Employee ensures to take the required actions to have such third party's share in the Work Result transferred to the Company or (if a transfer is not possible) to have it licensed to the Company according to the terms above. In addition, the Employee ensures that the third party waives the right (i) to be mentioned as inventor, author, or creator of a Work Result, (ii) to object to any change, modification, revision, translation, or alteration of the Work Result or (iii) to determine the first publication of any Work Result.

Compensation for the transfer or licensing of any and all Work Results according to the above sections, in particular intellectual property rights and/or licensing rights, is included in the Employee's Base Salary according to Section 11.1.

If a Work Result is created by the Employee in the course of the Employment but outside of the duties under the Employment Agreement, the Employee shall immediately inform the Company thereof in writing. The Company shall have the right to acquire ownership of such Work Result for a reasonable additional compensation, provided that the Company notifies the Employee in writing of its will to exercise this option within six (6) months as of the Employee's notice of the creation of the Work Result.

20. Data Protection

The Company informs the Employee about the processing of the Employee's personal information in a privacy notice (**Personal Data**).

The Company may amend the privacy notice and respective policies at any time.

21. Non-Competition and Non-Solicitation

21.1. General

The Employee acknowledges and agrees to adhere to undertakings in this Section 21 as the Company and the Group have a serious business interest in binding the Employee to the non-competition and non-solicitation undertakings, due to the fact that (i) within the organization of the Company and the Group competition-sensitive information as well as confidential information related to the Company, the Group and their clients and relations, such as but not limited to products, or research or development or commercialization of the Company and the Group (**Sensitive Business Information**) are available and (ii) in the position of General Manager or other title that may be agreed to following commencement

of employment, the Employee has access to this Sensitive Business Information and/or will become aware of this Sensitive Business Information and/or will maintain (commercial) contacts with clients, suppliers, competitors etc. Given the aforesaid considerations (i) and (ii) in this clause, combined with the education and capacities of the Employee, the Company and the Group have a well-founded fear that their business interests will be harmed substantially if the Employee performs competing activities as set forth in this Section 21.

21.2. Non-Competition during Employment

The Employee agrees that for a period of 12 months after termination of the Employment the Employee will neither:

– directly or indirectly, once, occasionally or professionally, under the Employee's name or under a third-party name, on behalf of the Employee's own or on behalf of third parties' account compete with the Company or any Group Company; nor

– engage in any way in any enterprise competing with the Company or any Group Company, and the Employee also agrees not to found, assist or promote any business being active in the same line of business as the Company or any Group Company.

Particularly, any gene therapy activity (including the manufacture or development of a gene therapy) shall be considered as competing activity.

This non-competition obligation shall apply to the whole territory for which the Employee was responsible during the Employment and/or to the whole territory in which the Employee was working with products of the Company or any Group Company during the Employment, but at least to the territories and in relation to the markets of Switzerland, the European Union, Australia, and the United States.

Any solicitation or referral of clients and/or employees of the Company or any Group Company is prohibited.

In the event of a breach of this non-competition or non-solicitation obligation as set out in this Section 21.2, the Employee agrees to pay to the Company a penalty equal to one (1) month's Base Salary (including salary increases as granted from time to time) for each breach.

21.3. Post-Contractual Non-Competition

The Employee agrees that for a period of 12 months after termination of the Employment the Employee will not, directly or indirectly, once, occasionally or professionally, under the Employee's name or under a third-party name, on behalf of the Employee's own or on behalf of third parties' account Compete with, or otherwise engage in any way in any enterprise Competing with, the Company or any Group Company.

"Compete" and "Competing" as used above refer to engaging in activities or functions that are similar in scope to, competitive with, or otherwise related to: (i) any program of any Group Company in the research, development, clinical trial, or commercialization stage, or (ii) any other proprietary gene therapy target, platform, or manufacturing technology of any Group Company, that, in each of clauses (i) – (ii), Employee either worked on on behalf of Employer, or had access to any confidential information concerning, during the two years preceding the termination of the Employment.

21.4. This non-competition obligation shall apply worldwide, to the extent allowed by law.Post-Contractual Non-Solicitation and Non-Disparagement

For a period of 12 months after termination of the Employment the Employee shall abstain directly or indirectly from:

- enticing away, soliciting, or interfering with any personnel from the Company or any Group Company with whom the Employee was in contact during the Employment;

- enticing away, soliciting, or interfering with clients or contacts of the Company or any Group Company with whom the Employee was in contact during the last three years prior to termination of the Employment or about whom the Employee gained knowledge during the Employment; or

- disparage the Company or any Group Company in any way, provided that this clause does not affect your right to disclose appropriate information to relevant bodies under any applicable laws of Switzerland.

21.5. Penalty

If the Employee violates the post-contractual non-competition obligation according to Section 21.3, the Employee shall pay to the Company a penalty in the amount of 3 monthly Base Salaries Salary (incl. salary increases as granted from time to time) for each violation.

If the Employee violates the post-contractual non-solicitation obligation with respect to co-workers according to Section 21.4, the Employee shall pay the Company a penalty of 1 monthly Base Salary (incl. salary increases as granted from time to time) for each violation.

If the Employee violates the post-contractual non-solicitation obligation with respect to clients according to Section 21.4, the Employee shall pay to the Company a penalty in the amount of 2 monthly Base Salaries (including salary increases as granted from time to time) for each violation.

If the breach consists in non-authorized participation in a competing company or in entering into a long-term obligation (such as an employment, service, agency, or consultant contract), the penalty shall be increased by EUR 1'000 for each month or part thereof in which the breach continues (the Continuous Breach).

Multiple breaches of the obligations each trigger separate penalties, if necessary, several times within one month. If individual breaches occur within a Continuous Breach, they shall be covered by the penalty which has to be paid for the Continuous Breach.

The payment of the penalty does not release the Employee from the obligation to comply with the non-competition and/or non-solicitation obligations. The Company shall be entitled to seek injunctive measures or any other type of immediate relief to stop the infringement as soon as possible, regardless of whether any penalty is offered or paid. Further, the Company reserves the right to claim compensation for damages (in addition to the penalty or penalties).

22. Confidentiality

The Employee will have access to confidential and proprietary information relating to the business and operations of the Company, any Group Companies, and their clients, in particular to business and manufacturing secrets. Such confidential and proprietary information constitutes a unique and valuable asset of the Company and any Group Company, and their acquisition required great time and expense. The disclosure or any other use of such confidential or proprietary information, other than for the sole benefit of the Company or any Group Company, would cause irreparable harm to the Company.

The Employee is under a strict duty to keep all confidential and proprietary information strictly and permanently confidential and, accordingly, shall not during the Employment or after termination of the Employment directly or indirectly for any purpose other than for the sole benefit of the Company or any Group Company disclose or permit to be disclosed to any third party any confidential or proprietary information without first obtaining the written consent of the responsible executive and the party concerned, if applicable, except if required to do so by law.

The Employee may not make any statement to the media, as far as the Employee is not authorized to do so by the Company and/or the responsible executive.

In the event the Employee breaches the obligations pursuant to this Section, the Employer may take reasonable disciplinary action up to and including termination of Employment for each breach.

However, the payment of the penalty does not release the Employee from further complying with the confidentiality obligation.

The Company reserves the right to claim compensation for damages in addition to the penalty.

23. Regulations and Policies

The Employee confirms that he is familiar with the regulations and policies of the Company and will comply with them at all times. The Employee acknowledges that the Company may amend existing regulations and policies from time to time and may issue new regulations and policies from time to time.

24. Miscellaneous

24.1. Entire Agreement

This Employment Agreement constitutes the complete Employment Agreement between the Parties regarding its subject matter and supersedes all prior oral and/or written agreements, representations and/or communications concerning the subject matter hereof. All prior agreements, including any written or oral employment agreements or side letters with Corlieve Therapeutics SAS or Company, are terminated as of the Effective Date of this Agreement. This Employment Agreement shall not affect any equity grants or bonus plans previously approved by the Board uniQure N.V. or otherwise awarded pursuant to the side letter dated July 30, 2021.

24.2. Severability

Should any of the provisions of this Employment Agreement be or become legally invalid, such invalidity shall not affect the validity of the remaining provisions. Any gap resulting from such invalidity shall be filled by a provision consistent with the spirit and purpose of the Employment Agreement. In the same way shall be proceeded if a contractual gap appears.

24.3. Amendments

Any amendments or supplementation of this Employment Agreement shall require written form and must be signed by both Parties. The written form may be dispensed only in writing.

Upon 30 day written notice to the Employee, the Company may convert any amounts owed under this agreement (including any Base Salary, allowance, or other payment) from CHF (Swiss Francs) to Euros using a generally accepted exchange rate at the time of such conversion.

24.4. Applicable Law

This Employment Agreement shall be construed in accordance with and governed by Swiss law (without giving effect to the principles of conflicts of law).

24.5. Place of Jurisdiction

Any dispute arising out of or in connection with this Employment Agreement and the Employment resulting therefrom shall be exclusively submitted to and determined by the ordinary courts at the domicile of the Company, subject to mandatory places of jurisdiction.

24.6. Execution

The Parties have duly executed this Employment Agreement in two originals, each Party receiving one original.

24.7. Proof of right to work

Upon request, you agree to promptly provide to the Company documentation proving your eligibility to work in the jurisdiction governing this Agreement, and you agree to promptly inform the Company if you cease to be eligible to work in the jurisdiction governing this Agreement.

Signatures

Corlieve Therapeutics AG (Company)

/s/ David J. Cerveny, Attorney in Fact

By: David J. Cerveny, Attorney in Fact

Employee

/s/ Richard Porter

Place, date

Richard Porter

EXHIBIT A
Job Description

The Chief Business Officer's duties will include, but not be limited to:

- Serving as a key advisor to the Chief Executive Officer on strategy, business development, including M&A, collaborations, technology/IP licenses, and other strategic transactions, as well as changes in competitive landscape, market trends and business environment
- Leading corporate strategic planning, under direction by the Chief Executive Officer and Board of Directors, including formalizing and leading the strategic planning process, assessing long-term trends, and competitive intelligence
- Developing the business development strategy in close collaboration with the Chief Executive Officer, the President of Research and Development, and other members of the Leadership Team
- Working in partnership with Chief Executive Officer and the President of Research and Development on a process to identify and evaluate business development opportunities, as well as cultivate external relationships aligned with these opportunities
- Leading execution of transactions, including coordinating due diligence, negotiating business terms, conducting financial analysis and valuation, and interacting with the Board of Directors
- Leading early commercial planning, including assessing market access and reimbursement strategies, developing value propositions, and conducting market research, as well as partnering with R&D to evaluate potential new therapies and to integrate commercial perspectives early in the research and development process
- Facilitating execution of strategy by working collaboratively with the other Leadership Team members, ensuring that strategy is communicated and understood throughout the organization, and that appropriate metrics are in place to measure performance and progress towards strategic goals
- Preparing presentations and communicating updates to the Leadership Team and Board of Directors

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October 5, 2023

Richard Porter, Ph.D.
uniQure
Switzerland Innovation Park, Main Campus
Hegenheimermattweg 167A
4123 Allschwil, Switzerland

Dear Richard,

We refer to the first amended employment agreement dated April 1, 2022, between Corlieve Therapeutics AG. (together with all of its affiliates, the "Company") (the "Employment Agreement").

The Compensation Committee of the Board of Directors of uniQure N.V. (the "Committee") is pleased to offer you the following amendment to your Employment Agreement effective as of the first date written above:

All terms used but not defined herein shall be as defined in the Employment Agreement.

1. The function and job title set forth under the heading "Function and Job Title" are hereby revised to Chief Scientific Officer and Chief Business Officer for the Group with continued reporting to the Chief Executive Officer of uniQure, N.V. The detailed duties for these functions are as provide in the job description attached to this letter as Exhibit A that hereby replaces Exhibit A in the Agreement.

2. Section 11.1 Base Salary of the Employment Agreement shall be replaced in its entirety with the following:

   The Employee shall receive an annual base salary of CHF 450,000 per year gross (the Base Salary), payable in 12 monthly instalments at the end of the month to a bank or postal account to be specified by the Employee. Alternatively, you may be paid in instalments in accordance with the regular payroll practices of the Group Companies.

3. Section 13.2 Termination of the Employment Agreement shall be amended by replacing the first sentence of this section in its entirety with the following:

   Employment may be terminated by either Party with a notice period of 6 (six) months (the "Notice Period").

4. For clarity, any material change to the Employee's job description (attached as Exhibit A to this letter) shall require the prior consent of the Employee. If the

Employee does not provide his consent to such proposed change, then the Company shall have the option either to terminate the Employment Agreement or not materially change such job description. If the Employment Agreement is terminated by the Company solely in order to materially change the Employee's job description according to Exhibit A within 12 months of the effective date of the second amendment to the Employment Agreement — e.g. through a notice of termination with the option of altered conditions of employment ("Anderungskiindigung") —, then the Company shall grant the Employee severance pay under the terms of clause 13.3 of the Employment Agreement ("Severance Generally").

In addition to the foregoing amendment to the Employment Agreement, the Committee is also pleased to offer you a one-time equity grant for your promotion to CSO/CBO of the Group, approved by the Board of Directors of uniQure N.V. on September 27, 2023, consisting of:

(a) twelve thousand eight hundred (12,800) restricted stock units of uniQure N.V. (RSUs), such RSUs vesting pro-rata on each of the first three anniversaries of the grant date; and

(b) an option to purchase twenty-two thousand one hundred (22,100) ordinary shares of uniQure N.V., having an exercise price as of the closing share price on the date of grant, such option vesting over a period of four years, with one-quarter of the shares vesting on the first anniversary of the grant date and the remaining shares vesting quarterly on a pro-rata basis during the remainder of the vesting period.

This one-time equity grant is not to be considered part of the salary legally or contractually owed to you, is made at full discretion of uniQure N.V. and shall not create any obligation to make any additional equity grants in the future. Further, this one-time grant is subject to the terms and conditions of uniQure N. V.'s Amended and Restated 2014 Share Incentive Plan.

With the exception of the changes stated above, the terms and conditions of employment set out in the Employment Agreement remain the same. This letter shall form a part of the Employment Agreement and shall be governed by the terms of the Employment Agreement.

Best Regards,

/s/ Jeannette Potts
Jeannette Potts
Chief Legal Officer
Director, Corlieve Therapeutics, AG

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This letter and my Employment Agreement, together, constitute the entire agreement between the Company and me with respect to my employment with the Company and may not be altered or amended unless in writing and signed by both parties.

/s/ Richard Porter
Richard Porter

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Exhibit A

Job Description

In addition to the duties described below, the Employee will perform other duties as may be customarily provided by a person in such positions.

The Chief Scientific Officer's duties will include, but not be limited to:

- Directing the research, technology and pre-clinical aspects of the Group's pipeline.
- Develop, refine and execute uniQure's research, scientific and enabling technology platform strategy that supports and enhances the corporate long-term plan;
- Lead the effort to translate discovery research into clinical-ready product candidates;
- Work closely with the Chief Medical Officer, Chief Operating Officer and other key leaders to ensure execution on a corporate and global strategy related to research and enabling technology;
- Establish and/or help to maintain relationships with KOLs and academic institutions, and serve as a key liaison between the company and its external scientific advisors and the investment community;
- Productively work with the R&D Committee of the Board and regularly report to the Board and other members of the organization to ensure transparency regarding the progress of research and enabling technology programs;
- Participate in leadership team meetings, Board meetings and other key operating mechanisms required of senior management and by the Chief Executive Officer;
- Make and attend scientific presentations, and participate in key scientific and medical conferences;
- Develop budgets for relevant functional responsibilities, subject to approval by the Chief Executive Officer and Chief Financial Officer, and ensure execution within approved targets; and
- Foster and develop an innovative and productive organization of talented scientists, including the management, motivation, recruitment and evaluation of personnel.

The Chief Business Officer's duties will include, but not be limited to:

- Serve as a key advisor to the Chief Executive Officer on business development, including M&A, partnerships, collaborations, technology/lP licenses, and other strategic transactions;
- Develop the business development strategy in close collaboration with the Chief Executive Officer, the Chief Medical Officer, and other members of the Leadership Team;
- Work in partnership with Chief Executive Officer and other members of the Leadership Team on a process to identify and evaluate business development opportunities, as well as cultivate external relationships aligned with these opportunities;

- Lead execution of transactions, including coordinating due diligence, negotiating business terms, conducting financial analysis and valuation, and interacting with the Board of Directors and any appropriate committees of the Board; and
- Leading early New Product Planning (commercial), including assessing market access, developing value propositions, and conducting market re- search, as well as partnering with R&D to evaluate potential new therapies and to integrate commercial perspectives early in the research and development process
- Prepare presentations and communicate updates to the Leadership Team, the Board of Directors and any appropriate committees of the Board.
- To be reassessed at a mutually agreed timepoint in line with business objectives

Exhibit 10.77

Confidential

EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (this "Agreement") is made and entered into as of May 22, 2023 (the "Effective Date"), by and between uniQure, Inc., 113 Hartwell Avenue, Lexington, MA 02421 (the "Company") and Jeannette Potts, Ph.D., J.D., an individual residing at [***] (the "Executive").

WITNESSETH:

WHEREAS, the Company wishes to employ Executive as its Chief Legal and Compliance Officer;

WHEREAS, Executive wishes to be employed by the Company and to serve in such capacity under the terms and conditions set forth in this Agreement; and

WHEREAS, the awards of equity provided in Section 8 ("Equity") of this Agreement is a material inducement to the Executive in entering into this Agreement;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and intending to be legally bound hereby, the Company and Executive agree as follows.

1. Employment. The Company hereby agrees to employ Executive, and Executive hereby accepts such employment by the Company, as a full-time employee for the period and upon the terms and conditions contained in this Agreement. Any prior agreement related to the employment of Executive (whether written or oral) is hereby terminated as of the Effective Date.

2. Term. Executive's term of employment with the Company under this Agreement shall begin on the Effective Date and shall continue in force and effect from year to year unless terminated earlier in accordance with Section 19 (the "Term").

3. Position and Duties. During the Term, Executive shall serve the Company as its Chief Legal and Compliance Officer, reporting directly to the uniQure Chief Executive Officer (the "CEO"). Executive's duties will include but not be limited to:

- Serve as the principal strategic legal advisor to the Company, the CEO, and Senior Management Team.
- Provide objective advice to Board of Directors in exercise of its fiduciary duties.
- Be responsible for overseeing corporate governance and compliance work related to a publicly traded company.
- Advise the Chief Financial Officer (the "CFO") on the legal aspects of the Company's financial transactions and structure.
- Advise the executive team on the legal aspects of licensing, joint venture, or other collaboration transactions.
- Advise Human Resources on employment and regulatory matters on a multi-state level.

- As Secretary, subject to appointment to such position by the Board of Directors, oversee the planning and coordination of board meetings and annual stockholder meetings.
- Prepare all Board minutes and resolutions to ensure compliance with corporate laws and governance guidelines;
- Advise and assist the Board with the development, implementation and maintenance of various compliance initiatives and corporate governance policies and practices including committee charters, insider trading policy, ethics policy, etc.
- Serve as chief legal advisor on all major business transactions. Ensure the timely drafting and negotiation of all business contracts so that the corporate objectives / strategic plans are met.
- Review, draft, and with members of the executive team negotiate corporate transaction agreements and a wide range of domestic and international business agreements, including joint ventures, mergers and acquisitions, debt/equity financings, and other special projects requiring the advice and counsel of the Company's chief legal officer.
- Oversee the contracting process. Negotiate and structure major contracts and licensing agreements, supplier agreements, NDAs, and other commercial agreements. Supervise part-time operations legal counsel and other legal staff.
- Prepare and/or review contracts involving patents, leases, capital investments/purchases, employment, insurance, CRO, manufacturing and key supply agreements, etc.
- Advise on employment matters, including compliance, termination decisions and investigations as required.
- Assist in preparing periodic and annual reports and other securities law filings under the Securities Exchange Act of 1934 and the Securities Act of 1933. Establish and reinforce disclosure procedures to support the CEO and CFO SOX certifications.
- Review public disclosures for compliance with Reg FD and other securities laws.
- Review the Company's '34 Act filings prepared by the Finance department; draft the annual proxy including compensation committee's CD&A.
- Be responsible in conjunction with the CFO for stock plan administration, including Section 16 filings.
- Participate in the definition and development of corporate policies, procedures and programs and provide continuing counsel and guidance on legal and compliance matters.
- Assume responsibility for advising the Company on the conduct of its business to comply with applicable state, federal, and local laws and regulations that materially may affect the Company's business interests.
- Analyze and evaluate the potential legal risks and likely outcomes of threatened or filed legal claims against or on behalf of the company, work with the appropriate senior executive(s) to define a strategic course of action and approve settlements of disputes where warranted.

- Make decisions to manage the Company's legal department, including roles, staffing, functions, and hiring of employees, inside and outside counsel and other necessary advisors and/or consultants.
- Any other duties as may from time to time be reasonably assigned to you by the Company, and any other duties as may from time to time be assigned to you by the CEO and which are consistent with Executive's status as a senior executive and the Company's chief legal officer.

Executive will perform other duties consistent with the job description previously provided and as may be customarily provided by a person in such position.

4. During the Term, Executive shall devote full business time, best efforts, skill, knowledge, attention, and energies to the advancement of the Company's business and interests and to the performance of Executive's duties and responsibilities as an employee of the Company. Executive shall abide by the rules, regulations, instructions, personnel practices and policies of the Company and any changes therein that may be adopted from time to time by the Company.

5. During the Term, Executive shall not be engaged in any business activity which, in the judgment of the Company, conflicts with Executive's duties hereunder, whether such activity is pursued for pecuniary advantage. Should Executive wish to provide any services to any other person or entity other than the Company or to serve on the board of directors of any other entity or organization, Executive shall submit a written request to the Company for consideration and approval by the Company, which approval shall not unreasonably be withheld. If the Company later makes a reasonable, good faith determination that Executive's continued service on another entity's board would be detrimental to the Company, it will give Executive thirty (30) days' written notice that it is revoking the original approval, and Executive will resign from the applicable board within thirty (30) days after receipt of such notice. Notwithstanding the foregoing, Executive may engage in civic and charitable organizations and manage Employee's personal and business affairs during normal business hours provided such activities do not, individually or collectively, interfere with the performance of his duties hereunder.

6. Location. Executive shall perform the services hereunder from the Company's USA headquarters at 113 Hartwell Avenue, Lexington MA, USA; provided, however, that Executive shall be required to travel from time to time for business purposes, including, without limitation, to the Company's facilities in Amsterdam, Netherlands.

7. Compensation and Benefits.

(a) *Base Salary.* For all services rendered by Executive under this Agreement, the Company will pay Executive a base salary at the annual rate of four hundred sixty-five thousand dollars ($465,000), which shall be reviewed annually by the CEO for adjustment (the base salary in effect at any time, the "Base Salary"). Executive's Base Salary shall be paid in bi-weekly installments, less withholdings as required by law and deductions authorized by Executive, and payable pursuant to the Company's regular

payroll practices in effect at the time and as may be changed from time to time, subject to the terms of this agreement.

(b) *Discretionary Bonus.* Following the end of each calendar year and subject to the approval of the Company, Executive shall be eligible for a target retention and performance bonus of up to forty percent (40%) of the annual Base Salary based on performance and the Company's performance and financial condition during the applicable calendar year, as determined by the Company in its sole discretion (a "Bonus"). In any event, Executive must be an active employee of the Company as of the 1st of October of the relevant calendar year and on the date the Bonus is distributed to be eligible for and to earn any Bonus, as it also serves as an incentive to remain employed by the Company.

8. Equity. Subject to Board of Directors approval at the next regularly scheduled uniQure N.V. Board meeting after the execution of this Agreement and commencement of employment, Executive shall be granted:

(a) Forty-seven thousand one hundred (47,100) restricted stock units of uniQure N.V. (RSUs), such RSUs vesting pro-rata on each of the first three anniversaries of the grant date; and

(b) an option to purchase eighty-one thousand three hundred (81,300) ordinary shares ofuniQure N.V., having an exercise price as of the closing share price on the date of grant, such option vesting over a period of four years, with one-quarter of the shares vesting on the first anniversary of the grant date and the remaining shares vesting quarterly on a pro-rata basis during the remainder of the vesting period.

Each grant of options and RSUs shall be granted as inducement grants pursuant to a plan separate and distinct from the Company's 2014 Share Incentive Plan, as amended, and the terms will otherwise reflect the standard terms and conditions contained in the Company's standard equity grant agreements. The grants will be approved by the Board of Directors ofuniQure N.V. not later than at its next regularly scheduled meeting. If the Board fails to make the grant at such regularly scheduled meeting or within a reasonable time thereafter, it shall be deemed a Good Reason event under Section 19(f) hereof. The Executive will be eligible for future equity grants pursuant to the Company's policies and procedures. Any additional grants during the first year of employment (not including those provided above) will be prorated based on hire date, and all future grants of equity shall be subject to the provisions of this Agreement, including, without limitation, Sections 17 (Change of Control) and 19 (Termination).

9. Retirement and Welfare Benefits. Executive is eligible to participate in any and all benefit programs that the Company establishes and makes available to its employees from time to time, provided that Executive is eligible under (and subject to all provisions of) the plan documents that govern those programs. These include medical, dental and disability insurances. Benefits are subject to change at any time in the Company's sole discretion.

10. Paid Time Off and Holidays. Executive is eligible for 4 weeks of paid vacation per calendar year (prorated for any partial year during the term) to be taken at such times as may be approved in advance by the Company. Executive is also entitled to all paid holidays observed by the Company in the United States. Executive shall have all rights and be subject to all obligations and responsibilities with respect to paid time off and holidays as are set forth in the Company's employee manual or other applicable policies and procedures, which may provide for benefits greater than but not less than those provided in this Agreement.

11. Expense Reimbursement. During the Term, Executive shall be reimbursed by the Company for all necessary and reasonable expenses incurred by Executive in connection with the performance of Executive's duties hereunder (including business trips to the uniQure Amsterdam headquarters). Executive shall keep an itemized account of such expenses, together with vouchers and/or receipts verifying the same and submit for reimbursement on a monthly basis. Any such expense reimbursement will be made in accordance with the Company's travel and expense policies governing reimbursement of expenses as are in effect from time to time.

12. Withholding. All amounts set forth in this Agreement are on a gross, pre-tax basis and shall be subject to all applicable federal, state, local and foreign withholding, payroll and other taxes, and the Company may withhold from any amounts payable to Executive (including any amounts payable pursuant to this Agreement) in order to comply with such withholding obligations.

13. IP and Restrictive Covenants. The Company's agreement to enter into this Agreement is contingent upon Executive's execution of the Company's Confidentiality, Developments, and Restrictive Covenants Agreement, attached as Exhibit A to this Agreement. Nothing in this Agreement or the Confidentiality, Developments, and Restrictive Covenants Agreement shall prohibit or restrict Executive from initiating communications directly with, responding to any inquiry from, providing testimony before, providing confidential information to, reporting possible violations of law or regulation to, or filing a claim or assisting with an investigation directly with a self-regulatory authority or a government agency or entity, including the Equal Employment Opportunity Commission, the Department of Labor, the National Labor Relations Board, the Department of Justice, the Securities and Exchange Commission, Congress, any agency Inspector General or any other federal, state or local regulatory authority (collectively, the "Regulators"), or from making other disclosures that are protected under the whistleblower provisions of state or federal law or regulation. Executive does not need the prior authorization of the Company to engage in conduct protected by this subsection, and Executive does not need to notify the Company that Executive has engaged in such conduct. Please take notice that federal law provides criminal and civil immunity to federal and state claims for trade secret misappropriation to individuals who disclose trade secrets to their attorneys, courts, or government officials in certain, confidential circumstances that are set forth at 18 U.S.C. §§ 1833(b)(1) and 1833(b)(2), related to the reporting or investigation of a suspected violation of the law, or in connection with a lawsuit for retaliation for reporting a suspected violation of the law.

14. At-Will Employment. This Agreement shall not be construed as an agreement, either express or implied, to employ Executive for any stated term, and shall in no way alter the Company's policy of employment at-will, under which both the Company and Executive remain

free to end the employment relationship for any reason, at any time, with or without Cause or notice. Similarly, nothing in this Agreement shall be construed as an agreement, either express or implied, to pay Executive any compensation or grant Executive any benefit beyond the end of employment with the Company.

15. Conflicting Agreements. Executive acknowledges and represents that by executing this Agreement and performing Executive's obligations under it, Executive will not breach or be in conflict with any other agreement to which Executive is a party or is bound, and that Executive is not subject to any covenants against competition or similar covenants that would affect the performance of Executive's obligations for the Company.

16. No Prior Representations. This Agreement and its exhibits constitute all the terms of Executive's hire and supersedes all prior representations or understandings, whether written or oral, relating to the terms and conditions of Executive's employment.

17. Change of Control. In the event of a Change of Control as defined below, the vesting conditions that may apply to any options, restricted shares, restricted stock units, performance stock units or other grants of equity held by Executive pursuant to this Agreement and the Company's Amended and Restated 2014 Share Incentive Plan will be automatically waived, and all the Stock Options will be deemed to be fully exercisable commencing on the date of the Change of Control and ending on the eighteen (18) month anniversary of the Change of Control or, if earlier, the expiration of the term of such Stock Options. For pmposes of this Agreement, "Change of Control" shall mean the date on which any of the following events occurs:

(a) any "person," as such tennis used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the "Act") (other than the Company, any of its subsidiaries, or any trustee, fiduciary or other person or entity holding securities under any employee benefit plan or trust of the Company or any of its subsidiaries), together with all "affiliates" and "associates" (as such terms are defined in Rule 12b-2 under the Act) of such person, shall become the "beneficial owner" (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, of securities of the Company representing forty (40) percent or more of the combined voting power of the Company's then outstanding securities having the right to vote in an election of the Board ("Voting Securities") (in such case other than as a result of an acquisition of securities directly from the Company); or

(b) a majority of the members of the Board is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board before the date of the appointment or election; or

(c) the consummation of (i) any consolidation or merger of the Company where the stockholders of the Company, immediately prior to the consolidation or merger, would not, immediately after the consolidation or

merger, beneficially own (as such term is defined in Rule 13d-3 under the Act), directly or indirectly, shares representing in the aggregate more than fifty (50) percent of the voting shares of the Company issuing cash or securities in the consolidation or merger (or of its ultimate parent corporation, if any), or (ii) any sale or other transfer (in one transaction or a series of transactions contemplated or arranged by any party as a single plan) of all or substantially all of the assets of the Company.

18. Reserved.

19. Termination. The Term shall continue until the termination of Executive's employment with the Company as provided below.

(a) *Events of Termination.* Executive's employment, Base Salary and any and all other rights of Executive under this Agreement or otherwise as an employee of the Company will terminate:

(i) upon the death of Executive;

(ii) upon the Disability of Executive (immediately upon notice from either party to the other). For purposes hereof, the term "Disability" shall mean an incapacity by accident, illness or other circumstances which renders Executive mentally or physically incapable of performing the duties and services required of Executive hereunder on a full-time basis for a period of at least 120 consecutive days.

(iii) upon termination of Executive for Cause;

(iv) upon the resignation of employment by Executive without Good Reason (upon sixty (60) days' prior written notice);

(v) upon termination by the Company for any reason other than those set forth in Sections 19(a)(i) through 19(a)(iv) above;

(vi) upon voluntary resignation of employment by Executive for Good Reason as described in Section 19(f), below;

(vii) upon a Change of Control Termination as described in Section 19(g), below.

(b) In the event Executive's termination occurs pursuant to Sections 19(a)(i) -

(i) above, Executive will be entitled only to the Accrued Benefits through the termination date. The Company will have no further obligation to pay any compensation of any kind (including, without limitation, any Bonus or portion of a Bonus that otherwise may have become due and payable to Executive with respect to the year in which such termination date occurs), or severance payment of any kind, unless otherwise provided herein. For purposes of this Agreement, Accrued Benefits shall mean (i) payment of Base Salary through the termination date, (ii) subject to the above and to Section 7(b), payment of any bonus for performance periods completed prior to the termination date, (iii) any payments or benefits under the Company's benefit plans that are vested, earned or accrued prior to the termination date (including, without limitation, earned but unused vacation); and (iv) payment of unreimbursed business expenses incurred by Executive.

(c) For purposes of this Agreement, "Cause" shall mean the good faith determination by the Company after written notice from the Company to Executive that one or more of the following events has occurred and stating with reasonable specificity the actions that constitute Cause and the specific reasonable cure (related to subsections (i) and (viii) below):

(i) Executive has willfully or repeatedly failed to perform Executive's material duties and such failure has not been cured after a period of thirty (30) days' written notice;

(ii) any reckless or grossly negligent act by Executive having the foreseeable effect of injuring the interest, business, or reputation of the Company, or any of its parents, subsidiaries, or affiliates in any material respect;

(iii) Executive's evidenced use of any illegal drug, or illegal narcotic, or excessive amounts of alcohol (as determined by the Company in its reasonable discretion) on Company property or at a function where Executive is working on behalf of the Company;

(iv) the indictment on charges or conviction for (or the procedural equivalent of conviction for), or entering of a guilty plea or plea of no contest with respect to a felony;

(v) the conviction for (or the procedural equivalent of conviction for), or entering of a guilty plea or plea of no contest with respect to a misdemeanor which, in the Company's reasonable judgment, involves moral turpitude deceit, dishonesty or fraud; except that, in the event that Executive is indicted on charges for a misdemeanor

set forth in this subsection 19(c)(v), the Company may elect, in its sole discretion, to place Executive on administrative garden leave with or without continuation of full compensation and benefits under this Agreement during the pendency of the proceedings;

(vi) conduct by or at the direction of Executive constituting misappropriation or embezzlement of the property of the Company, or any of its parents or affiliates (other than the occasional, customary and *de minimis* use of Company property for personal purposes);

(vii) a breach by Executive of a fiduciary duty owing to the Company, including the misappropriation of (or attempted misappropriation of) a corporate opportunity or undisclosed self-dealing;

(viii) a material breach by Executive of any material provision ofthis Agreement, any of the Company's written employment policies or Executive's fiduciary duties to the Company, which breach, if curable, remains uncured for a period of thirty (30) days after receipt by Executive of written notice of such breach from the Company, which notice shall contain a reasonably specific description of such breach and the specific reasonable cure requested by the Board; and

(ix) any breach of Executive's Confidentiality, Developments, and Restrictive Covenants Agreement.

(d) The definition of Cause set forth in this Agreement shall govern for purposes of Executive's equity compensation and any other compensation containing such a concept.

(e) *Notice Period for Termination Under Section 19(a)(iv).* Upon a termination of Executive under Section 19(a)(iv), during the notice period the Company may, in its sole discretion, relieve Executive of all of Executive's duties, responsibilities, and authority, may restrict Executive's access to Company property, and may take other appropriate measures deemed necessary under the circumstances.

(f) *Termination by Executive for Good Reason.* During the Term, Executive may terminate this Agreement at any time upon thirty (30) days' written notice to the Company for Good Reason. For purposes ofthis Agreement, "Good Reason" shall mean that Executive has complied with the Good Reason Process (hereinafter defined) following the occurrence of any of the following actions undertaken by the Company without Executive's express prior written consent: (i) the material diminution in Executive's responsibilities, authority and function; (ii) a material reduction in Executive's Base Salary, provided, however, that Good Reason shall not

be deemed to have occurred in the event of a reduction in Executive's Base Salary which is pursuant to a salary reduction program affecting the CEO and all or substantially all other senior management employees of the Company and that does not adversely affect Executive to a greater extent than other similarly situated employees; provided, however that such reduction may not exceed twenty (20%) percent; (iii) a material change in the geographic location at which Executive provides services to the Company (i.e., outside a radius of fifty (50) miles from Lexington, Massachusetts); or (iv) a material breach by the Company of this Agreement or any other material agreement between Executive and the Company concerning the terms and conditions of Executive's employment, benefits or Executive's compensation (each a "Good Reason Condition").

"Good Reason Process" shall mean that: (i) Executive has reasonably determined in good faith that a Good Reason Condition has occurred; (ii) Executive has notified the Company in writing of the first occurrence of the Good Reason Condition within 60 days of the first occurrence of such condition; (iii) Executive has cooperated in good faith with the Company's efforts, for a period not less than thirty (30) days following such notice (the "Cure Period"), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason Condition continues to exist; and (v) Executive terminates employment within sixty (60) days after the end of the Cure Period. If the Company cures to Executive's satisfaction (not unreasonably withheld) the Good Reason condition during the Cure Period, Good Reason shall be deemed not to have occurred.

(g) *Termination As A Result of a Change Of Control.* For purposes of this Agreement, "Change of Control Termination" shall mean any of the following:

(i) Any termination by the Company of Executive's employment, other than for Cause (as defined in Section 19(c), above), that occurs within the period beginning ninety (90) days before and continuing until twelve (12) months after the Change of Control; or

(ii) Any resignation by Executive for Good Reason (as defined in Section 19(f), above), that occurs within twelve (12) months after the Change of Control.

(iii) For purposes of this Section 19(g), "Change of Control" shall have the same meaning as defined above in Section 17.

(h) *Separation Benefits.* Should Executive experience a termination of employment during the Term pursuant to Section 19(a)(v), (vi) or (vii) above, in addition to the Accrued Benefits Executive shall also be entitled to:

(i) Lump Sum Severance Payment:

a. In the case of a termination of employment during the Term pursuant to Section 19(a)(v) or (vi) above: a lump sum severance payment equal to 100% of the sum of (A) Executive's annual Base Salary and (B) Executive's target Bonus amount pursuant to Section 7(b) hereof(i.e., forty percent (40%) of Executive's annual Base Salary);

b. In the case of a termination of employment during the Term pursuant to Section 19(a)(vii) above: a lump sum severance payment equal to 150% of the sum of (A) Executive's annual Base Salary and (B) Executive's target Bonus amount pursuant to Section 7(b) hereof *(i.e.,* forty percent (40%) of Executive's annual Base Salary);

(ii) a Pro-rata Bonus paid at the target bonus amount for the year of termination, as set forth in and subject to Section 7(b); as used in this Agreement, the term "Pro-rata Bonus" shall mean the product of the formula Bx D/365 where B represents the target Bonus *(i.e., i.e.,* forty percent (40%) of Executive's annual Base Salary), and D represents the number of days elapsed in the calendar year through the date of the separation of Executive's employment from the Company.

(iii) Provided that Executive and Executive's eligible dependents, if any, are participating in the Company's group health, dental and vision plans on the termination date and elect on a timely basis to continue that participation in some or all of the offered plans through the federal law commonly known as "COBRA," the Company will pay or reimburse Executive for Executive's full COBRA premiums (i.e., employer and employee portion) until the earlier to occur of: (a) the expiration of the COBRA Payment Term (as defined below), (b) the date Executive becomes eligible to enroll in the health, dental and/or vision plans of another employer,

(i) the date Executive (and/or Executive's eligible dependents, as applicable) is no longer eligible for COBRA coverage, or (d) the Company in good faith determines that payments under this paragraph would result in a discriminatory health plan pursuant to the Patient Protection and Affordable Care Act of 2010, as amended, and any guidance or regulations promulgated thereunder (collectively, "PPACA"). Executive agrees to notify the Company promptly if Executive becomes eligible to enroll in the plans of another employer or if Executive or any of Executive's dependents cease to be eligible to continue participation in the Company's plans through COBRA. "COBRA Payment Term" mean (x) in the case of a termination of employment during the Term pursuant to

Section 19(a)(v) or (vi) above, the twelve (12) month anniversary of Executive's termination date, and (y) in the case of a termination of employment during the Term pursuant to Section 19(a)(vii) above, the eighteen (18) month anniversary of Executive's termination date.

To avoid duplication of severance payments, any amount paid under this subsection shall be offset against any severance amounts that may be owed by the Company to Executive pursuant to any of Company's Change of Control guidelines as may be adopted or amended.

20. General Release of Claims. Notwithstanding any provision of this agreement, all severance payments and benefits described in Section 19 of this Agreement (except for payment of the Accrued Benefits) are conditioned upon the execution, delivery to the Company, and expiration of any applicable revocation period without a notice of revocation having been given by Executive, all by the 30th day following the termination date of a General Release of Claims by and between Executive (or Executive's estate) and the Company in the form attached as Exhibit B to this Agreement. (In the event of Executive's death or incapacity due to Disability, the release will be revised for signature accordingly.) Provided any applicable timing requirements set forth above have been met, the payments and benefits will be paid or provided to Executive as soon as administratively practicable (but not later than forty-five (45) days) following the date Executive signs and delivers the General Release to the Company and any applicable revocation period has expired without a notice of revocation having been given. Any severance or termination pay will be the sole and exclusive remedy, compensation or benefit due to Executive or Executive's estate upon any termination of Executive's employment (without limiting Executive's tights under any disability, life insurance, or deferred compensation arrangement in which Executive participates or at the time of such termination of employment or any Option Agreements or any other equity agreements to which Executive is a party). If such 45-day period spans two calendar years, payment will be paid after such 45-day period and revocation period have expired.

21. Certain Company Remedies. Executive acknowledges that Executive's promised services and covenants are of a special and unique character, which give them peculiar value, the loss of which cannot be reasonably or adequately compensated for in an action at law, and that, in the event there is a breach hereof by Executive, the Company will suffer irreparable harm, the amount of which will be impossible to ascertain. Accordingly, the Company shall be entitled, if it so elects, to institute and prosecute proceedings in any court of competent jurisdiction, either at law or in equity, to obtain damages for any breach of this Agreement, or to enjoin Executive from committing any act in breach of this Agreement. The remedies granted to the Company in this Agreement are cumulative and are in addition to remedies otherwise available to the Company at law or in equity.

22. Indemnification.

(a) The Company agrees that Executive shall be entitled to indemnification to the fullest extent permitted by Delaware law and under the Company's articles of incorporation, bylaws and any other corporate-related plan, program, or policy. In addition, for a period of at least three (3) years after

Executive's termination of employment, the Company shall maintain a directors and officers liability insurance policy under which Executive shall be included as a "Covered Person."

(b) In addition, and for the sake of clarity, the Company hereby specifically agrees that (i) if Executive is made a party, or is threatened to be made a party, to any "Proceeding" (defined as any threatened or actual suit or proceeding whether civil, criminal, administrative, investigative, appellate or other) by reason of the fact that (I) Executive is or was an employee, officer, director, agent, consultant or representative of the Company, or (2) is or was serving at the request of the Company as employee, officer, director, agent, consultant or representative of another person, or (ii) if any "Claim" (defined as any claim, demand, request, investigation, dispute, controversy, threat, discovery request or request for testimony or information) is made, or threatened to be made, that arises out of or relates to Executive's service in any of the foregoing capacity or to the Company, then Executive shall be indemnified and held harmless by the Company to the fullest extent permitted by applicable law, against any and all costs, expenses, liabilities and losses (including, without limitation, attorney's fees, judgments, interest, expenses of investigation, penalties, fines, taxes or penalties and amounts paid or to be paid in settlement) incurred or suffered by Executive in connection therewith, except with respect to any costs, expenses, liabilities or losses (A) that were incurred of suffered as a result of Executive's willful misconduct, gross negligence or knowing violation of any written agreement between Executive and the Company, (B) that a court of competent jurisdiction determines to have resulted from Executive's knowing and fraudulent acts; provided, however, that the Company shall provide such indemnification only if (I) notice of any such Proceeding is given promptly to the Company, by Executive; (II) the Company is permitted to participate in and assume the defense of any such Proceeding; (III) such cost, expense, liability or loss results from the final judgment of a court of competent jurisdiction or as a result of a settlement entered into with the prior written consent of the Company; and (IV) in the case of any such Proceeding (or part thereof) initiated by Executive, such Proceeding (or part thereof) was authorized in advance in writing by the Company. Such indemnification shall continue even if Executive has ceased to be an employee, officer, director, agent, consultant, or representative of the Company until all applicable statute of limitations have expired, and shall inure to the benefit of Executive's heirs, executors, and administrators. The Company shall pay directly or advance to Executive all costs and expenses incurred by Executive in connection with any such Proceeding or Claim (except for Proceedings brought by the Company against Executive for claims other than shareholder derivative actions) within 30 days after receiving written notice requesting such an advance. Such notice shall include, to the extent required by applicable law, an undertaking by Executive to repay the amount advanced if

Executive was ultimately determined not to be entitled to indemnification against such costs and expenses.

23. Miscellaneous.

(a) *Right to Offset.* The Company may offset any undisputed amounts Executive owes the Company at the time of Executive's termination of employment (including any payment of Accrued Benefits or separation pay), except for secured or unsecured loans, against any amounts the Company owes Executive hereunder, subject in all cases to the requirements of Section 409A of the Code.

(b) *Cooperation.* Executive agrees that, during and after Executive's employment with the Company, subject to reimbursement of Executive's reasonable expenses, Executive will cooperate fully with the Company and its counsel with respect to any matter (including, without limitation, litigation, investigations, or governmental proceedings) in which Executive was in any way involved during Executive's employment with the Company. Executive shall render such cooperation in a timely manner on reasonable notice from the Company, and at such times and places as reasonably acceptable to Executive and the Company. The Company, following Executive's termination of employment, exercises commercially reasonable efforts to schedule and limit its need for Executive's cooperation under this paragraph so as not to interfere with Executive's other personal and professional commitments.

(c) *Company Documents and Property.* Upon termination of Executive's employment with the Company, or at any other time upon the request of Company, Executive shall forthwith deliver to Company any and all documents, notes, notebooks, letters, manuals, prints, drawings, block diagrams, photocopies of documents, devices, equipment, keys, security passes, credit cards, hardware, data, databases, source code, object code, and data or computer programming code stored on an optical or electronic medium, and any copies thereof, in the possession of or under the control of Executive that embodies any confidential information of the Company. Executive agrees to refrain from purging or deleting data from any Company-owned equipment, including email systems, in connection with Executive's termination. To the extent that Executive possesses any data belonging to Company on any storage media owned by Executive (for example, a home computer's hard disk drive, portable data storage device, etc.), Executive agrees that Executive will work cooperatively with the Company to return such data and ensure it is removed from Executive's devices in a manner that does not adversely impact any personal data. Executive agrees not to take any steps to delete any Company data from any device without first obtaining Company's written approval. Executive agrees to cooperate with Company if Company requests written or other positive confirmation of the return or destruction of such data from any

personal storage media. Nothing herein shall be deemed to prohibit Executive from retaining (and making copies of): Executive's personal non-business-related correspondence files; or (ii) documents relating to Executive's personal compensation, benefits, and obligations, and documents reasonably necessary to prepare personal income tax returns.

(d) *Waivers.* No waiver of any provision will be effective unless made in writing and signed by the waiving party. The failure of any party to require the performance of any term or obligation of this Agreement does not prevent subsequent enforcement of that term or obligation. The waiver by any party of any breach of this Agreement does not waive any subsequent breach.

(e) *Section 409A.* This Agreement is intended to comply with Section 409A of the Code, and its corresponding regulations, or an exemption thereto, and payments may only be made under this Agreement upon an event and in a manner permitted by Section 409A of the Code, to the extent applicable. Severance benefits under this Agreement are intended to be exempt from Section 409A of the Code under the "short-term deferral" exception, to the maximum extent applicable, and then under the "separation pay" exception, to the maximum extent applicable. Notwithstanding anything in this Agreement to the contrary, if required by Section 409A of the Code, if Executive is considered a "specified employee" for purposes of Section 409A of the Code and if payment of any amounts under this Agreement is required to be delayed for a period of six months after separation from service pursuant to Section 409A of the Code, payment of such amounts shall be delayed as required by Section 409A of the Code, and the accumulated amounts shall be paid in a lump-sum payment within 10 days after the end of the six-month period. If Executive dies during the postponement period prior to the payment of benefits, the amounts withheld on account of Section 409A of the Code shall be paid to the personal representative of Executive's estate within 60 days after the date of Executive's death. All payments to be made upon a termination of employment under this Agreement may only be made upon a "separation from service" under Section 409A of the Code. For purposes of Section 409A of the Code, each payment hereunder shall be treated as a separate payment, and the right to a series of installment payments under this Agreement shall be treated as a right to a series of separate payments. In no event may Executive, directly, or indirectly, designate the fiscal year of a payment. Notwithstanding any provision of this Agreement to the contrary, in no event shall the timing of Executive's execution of the General Release, directly or indirectly, result in Executive's designating the fiscal year of payment of any amounts of deferred compensation subject to Section 409A of the Code, and if a payment that is subject to execution of the General Release could be made in more than one taxable year, payment shall be made in the later taxable year. All reimbursements and in-kind benefits provided under this Agreement shall be made or provided in accordance with the requirements of Section 409A of the Code, including, where applicable, the requirement that (i) any reimbursement be for expenses incurred during the period specified in this Agreement, (ii) the amount of expenses eligible for reimbursement, or in kind benefits provided, during a fiscal year not affect the expenses eligible for reimbursement, or in-kind benefits to be provided, in any other fiscal year, (iii) the reimbursement of an eligible expense be made no later than the last day of the fiscal year following the year in which the expense is incurred, and (iv) the right to reimbursement or in-kind benefits not be subject to liquidation or exchange for another benefit.

(f) *Governing Law; Consent to Exclusive Jurisdiction and Venue.* This Agreement and all questions relating to its validity, interpretation, performance and enforcement (including, without limitation, provisions concerning limitations of actions), shall be governed by and construed in accordance with the laws of the Commonwealth of Massachusetts (notwithstanding any conflict-of-laws doctrines of such state or other jurisdiction to the contrary), and without the aid of any canon, custom or rule of law requiring construction against the draftsman. The parties hereby consent and submit to the exclusive jurisdiction of the federal and state courts in the Commonwealth of Massachusetts, and to exclusive venue in any Massachusetts federal court and/or Massachusetts state court located in Suffolk County, for any dispute arising from this Agreement.

(g) *Notices.* Any notices, requests, demands, and other communications described in this Agreement are sufficient if in writing and delivered in person or sent postage prepaid, by certified or registered U.S. mail or by FedEx/UPS **to** Executive at Executive's last known home address and a copy by e-mail to Executive, or in the case of the Company, to the attention of the CFO or SVP HR, copy to the CEO at the main office of uniQure, N.V. Any notice sent by U.S. mail shall be deemed given for all purposes 72 hours from its deposit in the U.S. mail, or the next day if sent by overnight delivery.

(h) *Successors and Assigns.* Executive may not assign this Agreement, by operation of law or otherwise, without the Company's prior written consent. Without the Company's consent, any attempted transfer or assignment will be void and of no effect. The Company may assign its rights under this Agreement if the Company consolidates with or merges into any other entity, or transfers substantially all its properties or assets to any other entity, provided that such entity expressly agrees to be bound by the provisions hereof. This Agreement will inure to the benefit of and be binding upon the Company and Executive, their respective successors, executors, administrators, heirs, and permitted assigns.

(i) *Counterparts; Facsimile.* This Agreement may be executed in two or more counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument. This Agreement may be executed by facsimile transmission, PDF, electronic signature or other similar electronic means with the same force and effect as if such signature page were an original thereof.

(j) *Severability.* The provisions of this Agreement are independent of and separable from each other, and no provision shall be affected or rendered invalid or unenforceable by virtue of the fact that for any reason any other provision or provisions may be invalid or unenforceable in whole or in part.

(k) *Enforceability.* If any portion or provision of the Agreement is declared illegal or unenforceable by a court of competent jurisdiction, the remainder of the Agreement will not be affected, and each remaining portion and provision of this Agreement will be valid and enforceable to the fullest extent permitted by law.

(l) *Survival.* Sections 13, 20, 21, and the Company's Confidentiality, Developments, and Restrictive Covenants Agreement (Exhibit A) and all other provisions necessary to give effect thereto, shall survive the termination of Executive's employment for any reason.

(m) *Recoupment and Other Policies.* All payments under this Agreement shall be subject to any applicable clawback and recoupment policies and other policies that may be implemented by the Board from time to time, including, without limitation, the Company's right to recover amounts in the event of a financial restatement due in whole or in part to fraud or misconduct by one or more of the Company's executives or in the event Executive violates any applicable restrictive covenants in favor of the Company to which Executive is subject.

(n) *Entire Agreement; Amendment.* This Agreement contains the entire understanding among the parties hereto with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements and understandings, inducements or conditions, express or implied, oral or written, between the parties hereto (including without limitation any prior employment agreements between the parties hereto); provided, however, that any agreements referenced in this Agreement or executed herewith are not superseded. The express terms hereof control and supersede any course of performance and/or usage of the trade inconsistent with any of the terms hereof. This Agreement may be amended or modified only by a written instrument signed by Executive and by a duly authorized representative of the Company.

(o) *Section Headings.* The section headings in this Agreement are for convenience only, form no part ofthis Agreement and shall not affect its interpretation.

[This space intentionally left blank.]

IN WITNESS WHEREOF, the parties have executed and delivered this Agreement as of the date first above written.

uniQure, Inc.

By: /s/
Name: Matthew Kapusta
Title: Chief Executive Officer

EXECUTIVE

Jeannette Potts, Ph.D., J.D.

EXHIBIT A

UNIQURE, INC.
CONFIDENTIALITY, DEVELOPMENTS, AND
RESTRICTIVE COVENANTS AGREEMENT

EXHIBIT B

GENERAL RELEASE OF CLAIMS

In exchange for the promises and benefits set forth in Section 19 of the Employment Agreement between uniQure, Inc. and Jeannette Potts, Ph.D., J.D. made as of [May 22, 2023], and to be provided to me following the Effective Date of this General Release, I, Jeanette Potts, on behalf of myself, my heirs, executors and assigns, hereby acknowledge, understand and agree as follows:

1. On behalf of myself and my family, heirs, executors, administrators, personal representatives, agents, employees, assigns, legal representatives, accountants, affiliates and for any partnerships, corporations, sole proprietorships, or other entities owned or controlled by me, I fully release, acquit, and forever discharge uniQure, Inc., its past, present and future officers, directors, shareholders, agents, representatives, insurers, employees, attorneys, subsidiaries, affiliated corporations, parents, and assigns (collectively, the "Releasees"), from any and all charges, actions, causes of action, claims, grievances, damages, obligations, suits, agreements, costs, expenses, attorneys' fees, or any other liability of any kind whatsoever, suspected or unsuspected, known or unknown, which have or could have arisen out of my employment with or services performed for Releasees and/or tennination of my employment with or termination of my services performed for Releasees (collectively, "Claims"), including:

a. Claims arising under Title VII of the Civil Rights Act of 1964 (as amended); the Civil Rights Acts of 1866 and 1991; the Americans With Disabilities Act; the Family and Medical Leave Act; the Employee Retirement Income Security Act; the Occupational Health and Safety Act; the Sarbanes-Oxley Act; the Massachusetts Law Against Discrimination (M.G.L. c. 151B, et seq., and/or any other laws of the Commonwealth of Massachusetts related to employment or the separation from employment;

b. Claims for age discrimination arising under the Age Discrimination in Employment Act of 1967 (as amended) ("ADEA") and the Older Workers Benefits Protection Act, except ADEA claims that may arise after the execution of this General Release;

c. Claims arising out of any other federal, state, local or municipal statute, law, constitution, ordinance, or regulation; and/or

d. Any other employment related claim whatsoever, whether in contract, tort, or any other legal theory, arising out of or relating to my employment with the Company and/or my separation of employment from the Releasees.

e. Excluded from this General Release are any claims that cannot be released or waived by law. This includes, but is not limited to, my right to file a charge with or participate in an investigation conducted by certain government agencies, such as the EEOC or NLRB. I acknowledge and agree, however, that I am releasing and waiving my right to any monetary

recovery should any government agency pursue any claims on my behalf that arose prior to the Effective Date of this General Release.

f. I waive all rights to re-employment with the Releasees. If I do apply for employment with the Releasees, the Releasees and I agree that the Releasees need not employ me, and that if the Releasees declines to employ me for any reason, it shall not be liable to me for any cause of action or damages whatsoever.

2. Release of Other Claims. I fully release, acquit, and forever discharge the Releasees from any and all other charges, actions, causes of action, claims, grievances, damages, obligations, suits, agreements, costs, expenses, attorneys' fees or any other liability of any kind whatsoever related to my employment, my employment agreement, my termination or the business of uniQure of which I have knowledge as of the time I sign this General Release.

3. I further acknowledge that I have received payment, salary, and wages in full for all services rendered in conjunction with my employment with uniQure, Inc., including payment for all wages, bonuses, and accrued, unused paid time off, and that no other compensation is owed to me except as provided herein. I specifically understand that this general release of claims includes, without limitation, a release of claims for alleged wages due, overtime or other compensation or payment including any claim for treble damages, attorneys' fees and costs pursuant to the Massachusetts Wage Act and State Overtime Law M.G.L. c. 149, §§148, 150 *et seq.* and M.G.L. c. 151, §IA *et seq.* and I further acknowledge that I are unaware of any facts that would support a claim against the Released Parties for violation of the Fair Labor Standards Act or the Massachusetts Wage Act.

4. Notwithstanding anything to the contrary herein, nothing in this General Release shall be deemed to release any of the Releasees for: (i) any claim for the payment of compensation due under the Employment Agreement; (ii) any claim for any of the Accrued Benefits under the Employment Agreement; (iii) any claim for any separation benefit under Section 19 of the Employment Agreement including, without limitation, separation pay and accelerated vesting of stock options (as applicable and as defined in the Employment Agreement); or (iv) any rights to indemnification or coverage under a directors and officers liability insurance policy.

5. Restrictive Covenants. I acknowledge and agree that all of my obligations under the restrictive covenants in my Confidentiality, Developments, and Restrictive Covenants Agreement remain in full force and effect and shall survive the termination of my employment with the Releasees and the execution of this General Release.

6. Consultation with Attorney. I am advised and encouraged to consult with an attorney prior to executing this General Release. I acknowledge that if I have executed this General Release without consulting an attorney, I have done so knowingly and voluntarily.

7. Period for Review. I acknowledge that I have been given at least 21 days from the date I first received this General Release (or at least 45 days from the date I first received this

General Release if my termination is part of a group reduction in force) during which to consider signing it.

8. Revocation of General Release. I acknowledge and agree that I have the right to revoke my acceptance of this General Release if I notify the Releasees in writing within 7 calendar days following the date I sign it. Any revocation, to be effective, must be in writing, signed by me, and either: a) postmarked within 7 calendar days of the date I signed it and addressed to the then current address of uniQure, Inc.'s headquarters (to the attention of the CEO); orb) hand delivered within 7 days of execution of this General Release to the uniQure, Inc.'s CEO. This General Release will become effective on the 8th day after I sign it (the "Effective Date ofthis General Release"); provided that I have not timely revoked it.

I ACKNOWLEDGE AND AGREE THAT I HAVE BEEN ADVISED THAT THE GENERAL RELEASE IS A LEGAL DOCUMENT, AND I HAVE BEEN ADVISED TO CONSULT WITH AN ATTORNEY CONCERNING THIS GENERAL RELEASE. I ACKNOWLEDGE AND AGREE THAT I HAVE CAREFULLY READ AND FULLY UNDERSTAND ALL PROVISIONS OF THIS GENERAL RELEASE AND I AM VOLUNTARILY AND KNOWINGLY SIGNING IT.

IN, WITNESS WHEREOF, I have duly executed this Agreement under seal as of the ___ day of _____ [month], _____ [year]

_____
Jeannette Potts, Ph.D., J.D.

Exhibit 14.1

UNIQURE N.V.

Code Of Conduct

(Amended as of February 27, 2024)

1. **Introduction**

The Board of Directors (the "Board") of uniQure N.V. and its subsidiaries (collectively, the "Company") has adopted this code of conduct (as amended or modified from time to time by the Board, this "Code"), which sets forth legal and ethical standards of conduct for employees, directors and senior managers ("officers") of the Company. While this Code is specifically written for employees, directors and officers, we expect contractors, consultants and others temporarily assigned to perform work or services for the Company to follow this Code (each, "you" or the "Covered Person," and collectively, the "Covered Persons").

This Code is intended to: (i) promote honest and ethical conduct, including the ethical handling of actual or apparent conflicts of interest; (ii) promote the full, fair and accurate disclosure of information in reports, documents and other filings made by the Company to the Securities and Exchange Commission (the "SEC") and in other public communications made by the Company; (iii) deter wrongdoing; and (iv) promote the conduct of all Company business in accordance with high standards of integrity and in compliance with all applicable laws and regulations.

Except as otherwise required by applicable local law, this Code applies to uniQure N.V. and all of its direct and indirect subsidiaries and other business entities controlled by the Company worldwide. If you have any questions regarding this Code or its application to you in any situation, you should contact your supervisor or the Company's Chief Legal Officer.

2. **Compliance with Laws, Rules and Regulations**

The Company requires that all employees, directors and officers comply with all laws, rules and regulations applicable to the Company wherever it does business. You are expected to use good judgment and common sense in seeking to comply with all applicable laws, rules and regulations and to ask for advice when you are uncertain about them. While it is the Company's desire to address matters internally, nothing in this Code prohibits you from reporting any illegal activity to the appropriate regulatory authority.

If you become aware of any of the following by the Company, whether by its employees, directors, officers or any third-party doing business on behalf of the Company, it is your responsibility to promptly report the matter following the reporting procedures set forth in Section 15 (Reporting, Enforcement and Compliance Procedures) below:

(i) suspected violation or alleged violation of any applicable law, rule or regulation arising in the conduct of the Company's business or occurring on the Company's property;

(ii) suspected violation or alleged violation of this Code or any other Company policies or procedures published on its corporate website; or

(iii) questionable accounting, violations of internal accounting controls, or any auditing or financial matters, or the reporting of fraudulent information.

See Section 15 (Reporting, Enforcement and Compliance Procedures) below for more information on reporting any of the above.

The Company has a strict non-retaliation policy. Covered Persons shall not discharge, demote, suspend, threaten, harass or in any other manner discriminate or retaliate against an employee because he or she reports any such violation. If the report was made with knowledge that it was false, the Company may take appropriate disciplinary action up to and including termination. This Code should not be construed to prohibit any Covered Person from testifying, participating or otherwise assisting in any administrative, judicial or legislative proceeding or investigation.

3. **Compliance with Company Policies**

All Covered Persons are expected to comply with all Company policies and rules as in effect from time to time. You are expected to familiarize yourself with such policies.

4. **Conflicts of Interest**

All Covered Persons must act in the best interests of the Company. You must refrain from engaging in any activity or having a personal interest that presents a "conflict of interest" and should seek to avoid even the appearance of a conflict of interest. A conflict of interest occurs when a Covered Person's personal interest interferes with the interests of the Company. A conflict of interest can arise whenever you may take action or have an interest that prevents you from performing your Company duties and responsibilities honestly, objectively and effectively.

All Covered Persons must comply with the detailed requirements set out in the Company's Related Party Transactions Policy, as amended from time to time, which is available on the Company's intranet. It is your responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict-of-interest pursuant Section 15 (Reporting, Enforcement and Compliance Procedures) below.

5. **Insider Trading**

Covered Persons who have material non-public information about the Company or other companies, including our collaborators, licensors, licensees, business partners, suppliers and customers, as a result of their relationship with the Company are prohibited by law and Company policy from trading in securities of the Company or such other companies, as well as from communicating such information to others who might trade on the basis of that information. To help ensure that you do not engage in prohibited insider trading and avoid even the appearance of an improper transaction, the Company has adopted an Insider Trading Policy, as amended from time to time, which is available on the Company's intranet.

If you are uncertain about the constraints on your purchase or sale of any Company securities or the securities of any other company that you are familiar with by virtue of your relationship with the Company, you should consult the Company's Insider Trading Policy or the Company's Chief Legal Officer before making any such purchase or sale.

6. **Confidentiality**

All Covered Persons must maintain the confidentiality of confidential information entrusted to them by the Company or other companies, including our collaborators, licensors, licensees, business partners, suppliers and customers, except when disclosure is authorized by a supervisor or legally permitted in connection with reporting illegal activity to the appropriate regulatory authority. Unauthorized

disclosure of any confidential information is prohibited. Additionally, Covered Persons should take appropriate precautions to ensure that confidential or sensitive business information, whether it is proprietary to the Company or another company, is not communicated within the Company except to employees who have a need to know such information to perform their responsibilities for the Company.

Third parties may ask you for information concerning the Company. Subject to the exceptions noted in the preceding paragraph, Covered Persons (other than the Company's authorized spokespersons) must not discuss internal Company matters with, or disseminate internal Company information to, anyone outside the Company, except as required in the performance of their Company duties and, if appropriate, after a confidentiality agreement is in place. This prohibition applies particularly to inquiries concerning the Company from the media, market professionals (such as securities analysts, institutional investors, investment advisers, brokers and dealers) and security holders. All responses to inquiries on behalf of the Company must be made only by the Company's authorized spokespersons. If you receive any inquiries of this nature, you must decline to comment and refer the inquirer to your supervisor or one of the Company's authorized spokespersons. The Company's policies with respect to public disclosure of internal matters are described more fully in the Company's Disclosure Policy, which is available on the Company's intranet.

You also must abide by any lawful obligations that you have to your former employer. These obligations may include restrictions on the use and disclosure of confidential information, restrictions on the solicitation of former colleagues to work at the Company and any applicable non-competition or non-solicitation obligations.

7. **Honest and Ethical Conduct and Fair Dealing**

All Covered Persons should endeavor to deal honestly, ethically and fairly with each other and the Company's collaborators, licensors, licensees, business partners, suppliers, customers, and competitors. Statements regarding the Company's therapies and services must not be untrue, misleading, deceptive or fraudulent. You must not take unfair advantage of anyone through manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other unfair-dealing practice.

8. **Protection and Proper Use of Corporate Assets**

All Covered Persons should seek to protect the Company's assets, including proprietary information. Theft, carelessness and waste have a direct impact on the Company's financial performance. You must use the Company's assets and services solely for legitimate business purposes of the Company and not for any personal benefit or the personal benefit of anyone else.

Covered Persons must advance the Company's legitimate interests when the opportunity to do so arises. You must not take for yourself personal opportunities that are discovered through your position with the Company or the use of property or information of the Company.

9. **Gifts and Gratuities**

The use of Company funds or assets for gifts, gratuities or other favors to government officials is prohibited, except to the extent such gifts, gratuities or other favors are in compliance with applicable law, insignificant in amount and not given in consideration or expectation of any action by the recipient. The use of Company funds or assets for gifts to any customer, supplier, or other person doing or seeking to do

business with the Company is prohibited, except to the extent such gifts are in compliance with the policies of both the Company and the recipient and are in compliance with applicable law.

Covered Persons must not accept or permit any member of his or her immediate family to accept, any gifts, gratuities or other favors from any person doing or seeking to do business with the Company, other than items of insignificant value. Any gifts that are not of insignificant value should be returned immediately and reported to your supervisor. If immediate return is not practical, they should be given to the Company for charitable disposition or such other disposition as the Company, in its sole discretion, believes appropriate.

Common sense and moderation should prevail in business entertainment engaged in on behalf of the Company. Covered Persons should provide, or accept, business entertainment to or from anyone doing business with the Company only if the entertainment is infrequent, modest, intended to serve legitimate business goals and in compliance with applicable law.

10. **Bribes and Kickbacks**

Bribes and kickbacks are criminal acts, strictly prohibited by law. You must not offer, give, solicit or receive any form of bribe or kickback anywhere in the world. The U.S. Foreign Corrupt Practices Act prohibits giving anything of value, directly or indirectly, to officials of foreign governments, departments, agencies or state-controlled entities, foreign political parties or foreign political candidates in order to obtain or retain business.

11. **Accuracy of Books and Records and Public Reports**

All Covered Persons must honestly and accurately report all business transactions. You are responsible for the accuracy of your records and reports. Accurate information is essential to the Company's ability to meet its legal and regulatory obligations.

All Company books, records and accounts shall be maintained in accordance with all applicable regulations and standards and accurately reflect the true nature of the transactions they record. The financial statements of the Company shall conform to applicable generally accepted accounting principles and the Company's accounting policies. No undisclosed or unrecorded account or fund shall be established for any purpose. No false or misleading entries shall be made in the Company's books or records for any reason, and no disbursement of corporate funds or other corporate property shall be made without adequate supporting documentation.

It is the policy of the Company to provide full, fair, accurate, timely and understandable disclosure in reports and documents filed with, or submitted to, the Securities and Exchange Commission and in other public communications.

12. **Concerns Regarding Accounting or Auditing Matters**

Employees with concerns regarding questionable accounting or auditing matters or complaints regarding accounting, internal accounting controls or auditing matters may confidentially, and anonymously if they wish, submit such concerns or complaints following the reporting procedures described in Section 15 (Reporting, Enforcement and Compliance Procedures) below.

All such concerns and complaints will be forwarded to the Audit Committee of the Board of Directors (the "Audit Committee") unless they are determined to be without merit by the Chief Legal Officer; provided, however, that if such concerns and complaints include any allegations of fraud or

violation of law or regulation, such concerns and complaints shall be forwarded to the Audit Committee regardless of merit. In any event, a record of all complaints or concerns received regarding accounting or auditing matters will be provided to the Audit Committee each fiscal quarter, or timelier, if in the opinion of the Chief Legal Officer, the complaint warrants more immediate action.

The Audit Committee will evaluate the merits of any concerns or complaints received by it and authorize such follow-up actions, if any, as it deems necessary or appropriate to address the substance of the concern or complaint, including providing disclosure to the Company's independent auditor.

The Company will not discipline, discriminate against or retaliate against any employee who reports a complaint or concern, unless it is determined that the report was made with knowledge that it was false.

13. **Dealings with Independent Auditors**

No Covered Person shall, directly or indirectly, make or cause to be made a materially false or misleading statement to an accountant in connection with (or omit to state, or cause another person to omit to state, any material fact necessary in order to make statements made, in light of the circumstances under which such statements were made, not misleading to, an accountant in connection with) any audit, review or examination of the Company's financial statements or the preparation or filing of any document or report with the SEC. No Covered Person shall, directly or indirectly, take any action to coerce, manipulate, mislead or fraudulently influence any independent public or certified public accountant engaged in the performance of an audit or review of the Company's financial statements.

14. **Waivers of this Code of Business Conduct and Ethics**

While some of the policies contained in this Code must be strictly adhered to and no exceptions can be allowed, in other cases exceptions may be appropriate. Any Covered Person who believes that a waiver of any of these policies is appropriate in his or her case should first contact his or her supervisor. If the supervisor agrees that a waiver is appropriate, the approval of the Chief Legal Officer must be obtained. The Chief Legal Officer shall be responsible for maintaining a record of all requests by employees or officers for waivers of any of these policies and the disposition of such requests.

Any officer or director who seeks a waiver of any of these policies should contact the Chief Legal Officer. Any waiver of this Code for officers or directors or any change to this Code that applies to officers or directors may be made only by the Board or a committee delegated by the Board. All waivers will be disclosed as required by law or the rules of the Nasdaq Stock Market.

15. **Reporting, Enforcement and Compliance Procedures**

Reporting. All Covered Persons have the responsibility to ask questions, seek guidance, report suspected violations and express concerns regarding compliance with this Code to his or her supervisor or to the Chief Legal Officer, as described below, or such other compliance officer as shall be designated from time to time by the Board. Any Covered Person who knows or believes that any other representative of the Company has engaged or is engaging in Company-related conduct that violates applicable law or this Code should report such information to his or her supervisor or to the Chief Legal Officer. You may report such conduct openly or anonymously without fear of retaliation. The Company will not discipline, discriminate against or retaliate against any employee who reports such conduct, unless it is determined that the report was made with knowledge that it was false, or who cooperates in any investigation or inquiry regarding such conduct. Any supervisor who receives a report of a violation of this Code must immediately inform the Chief Legal Officer.

You may report violations of this Code, on a confidential or anonymous basis, by:

(i) contacting the Chief Legal Officer, Jeannette Potts at j.potts@uniqure.com;

(ii) contacting the Chairperson of the Audit Committee, at auditcommitteechair@uniqure.com; or

(iii) calling either the U.S. or Netherlands toll-free hotline: US: (844) 548 9460, or the Netherlands: 08000 200 784.

While we prefer that you identify yourself when reporting violations so that we may follow up with you, as necessary, for additional information, you may remain anonymous if you wish.

Enforcement and Compliance Procedures. If the Chief Legal Officer or Chairperson of the Audit Committee receives information regarding an alleged violation of this Code, he or she shall, as appropriate, take the following steps:

(i) evaluate such information and acknowledge receipt of the report to the sender within a reasonable period of time, and document such complaint;

(ii) determine whether the allegation is with merit, and, if so, whether it is necessary or appropriate to conduct an informal inquiry or a formal investigation;

(iii) if the alleged violation is determined to be with merit and involves (x) an officer or director of the Company, inform the Chief Executive Officer and the Board of the alleged violation (unless such allegation involves the Chief Executive Officer, in which case only the Board shall be informed), or (y) accounting or audit matters (as further set forth in Section 12 above), inform the Audit Committee;

(iv) if the alleged violation is determined to be without merit and involves allegations of fraud or violation of law or regulation, inform the Audit Committee; and

(v) to the extent it is determined that an investigation is necessary or appropriate, report the results of any such inquiry or investigation, together with a recommendation as to disposition of the matter, to the Chief Executive Officer for action, or if the alleged violation involves the Chief Executive Officer, a director or allegation of fraud, report the results of any such inquiry or investigation to the Board or a committee thereof.

The Chief Legal Officer, Chairperson of the Audit Committee or other authorized committee or officer shall determine whether violations of this Code have occurred and, if so, shall determine the disciplinary measures to be taken against the individual who has violated this Code. The determination of whether a violation of this Code has occurred and the resulting disciplinary measures shall be made by the Chief Executive Officer and the Chairperson of the Audit Committee if the alleged violation involves an officer, and the Board if the alleged violation involves a director.

All Covered Persons are expected to cooperate fully with any inquiry or investigation by the Company regarding an alleged violation of this Code. Failure to cooperate with any such inquiry or investigation may result in disciplinary action, up to and including discharge. Failure to comply with the standards outlined in this Code will result in disciplinary action including, but not limited to, reprimands, warnings, probation or suspension without pay, demotions, reductions in salary, discharge and restitution.

Certain violations of this Code may require the Company to refer the matter to the appropriate governmental or regulatory authorities for investigation or prosecution. Moreover, any supervisor who directs or approves of any conduct in violation of this Code, or who has knowledge of such conduct and does not immediately report it, also will be subject to disciplinary action, up to and including discharge.

16. **Dissemination, Amendment and Administration**

This Code shall be distributed to each new employee, director and officer of the Company upon commencement of his or her employment or other relationship with the Company and shall also be distributed annually to each employee, director and officer of the Company. The most current version of this Code can be found on the Company's intranet.

The Company reserves the right to amend, alter or terminate this Code at any time for any reason. Any revisions to this Code regarding Section 12 shall be approved by the Audit Committee in accordance with Exchange Act Rule 10A-3(b)(3).

Subject to the policies and procedures set forth herein, the Chief Legal Officer is responsible for the administration of this Code.

Exhibit 21.1

February 28, 2024

SUBSIDIARIES OF UNIQURE N.V.

Name of Subsidiary	Jurisdiction of Organization
uniQure biopharma B.V.	The Netherlands
uniQure IP B.V.	The Netherlands
uniQure Inc.	Delaware
uniQure France SAS	France
Corlieve Therapeutics AG	Switzerland

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-253749) on Form S-3 and (No. 333-258036, No. 333-225629, No. 333-222051, No. 333-218005, No. 333-197887, No. 333-270039 and No. 333-275944) on Form S-8 of our report dated February 28, 2024, with respect to the consolidated financial statements of uniQure N.V. and the effectiveness of internal control over financial reporting.

/s/ KPMG Accountants N.V.

Amstelveen, the Netherlands

February 28, 2024

Exhibit 31.1

Certification of Chief Executive Officer

I, Matthew Kapusta, certify that:

1. I have reviewed this Annual Report on Form 10-K of uniQure N.V.;

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 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 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.

By: /s/ MATTHEW KAPUSTA

Matthew Kapusta
Chief Executive Officer
(Principal Executive Officer)
February 28, 2024

Exhibit 31.2

Certification of Chief Financial Officer

I, Christian Klemt, certify that:

1. I have reviewed this Annual Report on Form 10-K of uniQure N.V.;

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 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 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.

By: /s/ CHRISTIAN KLEMT

Christian Klemt
Chief Financial Officer
(Principal Financial Officer)
February 28, 2024

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with this Annual Report of uniQure N.V. (the "Company") on Form 10-K for the period ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Matthew Kapusta, Chief Executive Officer, and Christian Klemt, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1 the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

2 the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By: /s/ MATTHEW KAPUSTA

Matthew Kapusta
Chief Executive Officer
(Principal Executive Officer)
February 28, 2024

By: /s/ CHRISTIAN KLEMT

Christian Klemt
Chief Financial Officer
(Principal Financial Officer)
February 28, 2024

A signed original of this written statement required by Section 906 has been provided to uniQure N.V. and will be retained by uniQure N.V. and furnished to the SEC or its staff upon request.

uniQure N.V.

COMPENSATION CLAWBACK POLICY

The Board of Directors (the "Board") of uniQure N.V., a public company with limited liability (*naamloze vennootschap*) incorporated under the laws of the Netherlands (the "Company"), has adopted a Compensation Clawback Policy (this "Policy") as described below. This Policy was originally effective on December 8, 2021 ("Effective Date") and has been amended and restated as of December 1, 2023. Capitalized terms used in this Policy and not previously defined are included in Sections A.6 and C.2.

A. Dodd Frank Compensation Clawback Due to Accounting Restatement

1. In the event the Company is required to prepare an Accounting Restatement after the Dodd Frank Effective Date, the Company shall reasonably promptly recover from its Executive Officers the amount of any erroneously awarded Incentive-Based Compensation that is Received by any such Executive Officer (a) during the Recovery Period and (b) on or after the Dodd Frank Effective Date. The amount of erroneously Received Incentive-Based Compensation will be the excess of the Incentive-Based Compensation Received by such Executive Officer (whether in cash or shares) based on the erroneous data in the original financial statements over the Incentive-Based Compensation (whether in cash or in shares) that would have been Received by the Executive Officer had such Incentive-Based Compensation been based on the restated results, without respect to any tax liabilities incurred or paid by the Executive Officer. This Section A covers all persons who are Executive Officers at any time during the Recovery Period for which Incentive-Based Compensation is Received or during the performance period applicable to such Incentive-Based Compensation. Subsequent changes in an Executive Officer's employment status, including retirement or termination of employment, do not affect the Company's right to recover Incentive-Based Compensation pursuant to this Section A. Recovery of any erroneously awarded compensation under this Section A is not dependent on fraud or misconduct by any Executive Officer in connection with an Accounting Restatement.

2. No recovery shall be required under this Section A if any of the following conditions are met and the Committee determines that, on such basis, recovery would be impracticable:

    a) the direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered; *provided* that, prior to making a determination that it would be impracticable to recover any Incentive-Based Compensation based on the expense of enforcement, the Company shall (i) have made a reasonable attempt to recover the Incentive-Based Compensation, (ii) have documented such reasonable attempts to recover, and (iii) provide the documentation to Nasdaq;

    b) recovery would violate home country law where that law was adopted prior to November 28, 2022; *provided* that, prior to making a determination that it would be impracticable to recover any Incentive-Based Compensation based on a violation of home country law, the Company shall (i) have obtained an opinion of

home country counsel, acceptable to Nasdaq, that recovery would result in such violation, and (ii) provide a copy of such opinion to Nasdaq; or

c) recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees, to fail to meet the requirements of Section 401(a)(13) or Section 411(a) of the Internal Revenue Code of 1986, as amended (the "Code"), and U.S. Treasury regulations promulgated thereunder.

3. The Company shall make all required disclosures and filings with Securities and Exchange Commission (the "SEC") and the Nasdaq Stock Market LLC ("Nasdaq") with respect to this Section A in accordance with the applicable requirements of the SEC and Nasdaq, and any other requirements applicable to the Company, including the disclosures required in connection with SEC filings.

4. To the extent the Applicable Rules require recovery of Incentive-Based Compensation in additional circumstances besides those specified in this Section A, nothing in this Policy shall be deemed to limit or restrict the right or obligation of the Company to recover Incentive-Based Compensation to the fullest extent required by the Applicable Rules.

5. For Incentive-Based Compensation based on the Company's stock price or total shareholder return, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in the Accounting Restatement, (a) the amount shall be based on the Company's reasonable estimate of the effect of the Accounting Restatement on the stock price or total shareholder return upon which the Incentive-Based Compensation was Received and (b) the Company shall maintain documentation of the determination of that reasonable estimate and provide such estimate to the SEC and/or Nasdaq as required by the Applicable Rules.

6. For purposes of this Policy, the following terms have the following meanings:

a) "Accounting Restatement" means that the Company is required to prepare an accounting restatement due to material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements (i) that is material to the previously issued financial statements, or (ii) that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

b) "Applicable Rules" means Section 10D of the Exchange Act and Rule 10D-1 promulgated thereunder, and Listing Rule 5608 of the Listing Rules of The Nasdaq Stock Market LLC ("Nasdaq").

c) "Committee" means the Compensation Committee of the Board.

d) "Dodd Frank Effective Date" means October 2, 2023.

e) "Executive Officer" means the Company's president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice president of the Company in charge of a principal business unit, division or function (such as sales, administration, or finance), any other officer who performs a policy-making function, or any other person who performs similar significant policy-making functions for the Company. The identification of an executive officer for the purposes of this Policy shall include each executive officer who is or was identified as such pursuant to Item 401(b) of Regulation S-K (17 CFR §229.401(b)).

f) "Financial Reporting Measures" means measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, any measures that are derived wholly or in part from such measures, and share price and total shareholder return.

g) "Incentive-Based Compensation" means any compensation that is granted, earned, or vested, based wholly or in part upon the attainment of a Financial Reporting Measure. Incentive-Based Compensation does not include, among other forms of compensation, equity awards that vest exclusively upon completion of a specified employment period, without any performance condition, and bonus awards that are discretionary or based on subjective goals or goals unrelated to Financial Reporting Measures.

h) "Received" – Incentive-Based Compensation is deemed "Received" for the purposes of this Policy in the Company's fiscal period during which the Financial Reporting Measure applicable to the Incentive-Based Compensation award is attained, even if the payment or grant of the Incentive-Based Compensation occurs after the end of that period.

i) "Recovery Period" means the three completed fiscal years immediately preceding the date on which the Company is required to prepare an Accounting Restatement, which date is the earlier of (i) the date the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare an Accounting Restatement or (ii) a date that a court, regulator or other legally authorized body directs the Company to prepare an Accounting Restatement.

B. Compensation Clawback Due to a Fault-Based Accounting Restatement

1. In addition to (and without limiting) the provisions of Section A above, in the event the Company is required to prepare an Accounting Restatement after the Effective Date, the Board may take, in its discretion, such action as it deems necessary to recover from any Covered Person the Incentive Compensation that represents the excess of what was paid to or received by such Covered Person over what would have been paid to or received by such Covered Person under the Accounting Restatement, as determined by the Board in its sole discretion. "Covered Person" means any Executive Officer and any other current or former

employee of the Company who received Incentive Compensation from the Company during the Recovery Period.

2. This Section B will apply to any Covered Person who the Board, in its sole discretion, determines committed any act or omission that contributed to the circumstances requiring the Accounting Restatement and which involved any of the following: (a) willful misconduct or wrongdoing or a willful violation of any of the Company's rules or of any applicable legal or regulatory requirements in the course of the Covered Person's employment by, or otherwise in connection with, the Company; (b) a breach of a fiduciary duty to the Company or its shareholders by the Covered Person; or (c) fraud in the course of the Covered Person's employment by, or otherwise in connection with, the Company.

3. To the extent that the Company is entitled to recover any Incentive Compensation that is granted to a Covered Person pursuant to this Section B, if determined by the Board, such amounts shall be recovered net of any withholdings or taxes paid by or on behalf of the Covered Person.

C. Compensation Clawback Due to Detrimental Conduct

1. If the Board determines that a Covered Employee has engaged in Detrimental Conduct after the Effective Date, all or a portion of any Incentive Compensation that has been granted or paid by the Company to such Covered Employee after the adoption of this Policy may be subject to clawback as determined by the Board to the extent such compensation was granted or paid during the 1-year period preceding the date of such Detrimental Conduct or any time thereafter.

2. For purposes of this Policy, the following terms have the following meanings:

a) "Covered Employee" means any Executive Officer and any other current or former employee of the Company who received Incentive Compensation from the Company during the Recovery Period.

b) "Detrimental Conduct" means:

(i) failure by a Covered Employee to comply with the Company's policies and procedures, including the Code of Business Conduct and Ethics and human resource policies;

(ii) the violation of any law or regulation by a Covered Employee; or

(iii) engaging in willful misconduct (including, but not limited to, bribery or other illegal acts) or fraud by a Covered Employee;

provided that, in the case of each of the foregoing, the Board reasonably determines that the conduct has resulted, or is likely to result, in a material adverse impact on the Company's financial results, operations or reputation.

c) "Incentive Compensation" means any compensation of a Covered Employee, (a) excluding base salary or perquisites constituting reimbursement for actual expenses (e.g., payments for relocation expenses), and (b) including (i) all equity compensation and (ii) all bonuses and other cash incentive compensation.

D. Administration; Indemnification

1. This Policy shall be administered by the Board and Section A will be administered consistent with the Applicable Rules. All references in this Policy to the "Board" shall mean the Company's Board of Directors or any duly established committee thereof. The Board has the sole authority to construe, interpret and implement this Policy, and to make any determination necessary or advisable in administering this Policy. Any determinations of the Board under this Policy shall be conclusive and binding on the Company and the applicable Executive Officer, Covered Person, or Covered Employee. The determinations of the Board need not be uniform with respect to each Executive Officer, Covered Person, or Covered Employee.

2. In the event that the Board determines that this Policy should apply, to the extent permitted by applicable law, the Company shall, as determined by the Board in its sole discretion, take any such actions as it deems necessary or appropriate to recover Incentive-Based Compensation or Incentive Compensation. The actions may include, without limitation (and as applicable):

   a) forfeit, reduce or cancel any Incentive-Based Compensation or Incentive Compensation (whether vested or unvested) that has not been distributed or otherwise settled;

   b) seek recovery of any Incentive-Based Compensation or Incentive Compensation that was previously paid to the Executive Officer, Covered Person, or Covered Employee;

   c) seek recovery of any amounts realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based Incentive-Based Compensation or Incentive Compensation;

   d) recoup any amount in respect of Incentive-Based Compensation or Incentive Compensation that was contributed or deferred to a plan that takes into account Incentive-Based Compensation or Incentive Compensation (excluding certain tax-qualified plans, but including deferred compensation plans, and supplemental executive retirement plans, and insurance plans to the extent otherwise permitted by applicable law, including Section 409A of the Code) and any earnings accrued on such Incentive-Based Compensation or Incentive Compensation;

   e) offset, withhold, eliminate or cause to be forfeited any amount that could be paid or awarded to the Executive Officer, Covered Employee or Covered Person after the date of determination; and

f) take any other remedial and recovery action permitted by law, as determined by the Committee.

3. The Board may amend this Policy from time to time in its discretion, subject to any limitations under applicable law or listing standards, including the Applicable Rules. Without limiting the forgoing, the Board may amend this Policy as it deems necessary to reflect any amendment of the Applicable Rules or regulations or guidance issued under the Applicable Rules

4. Any right of recoupment under this Policy, including each Section hereof, is in addition to, and not in lieu of, (a) any other remedies or rights that may be available to the Company pursuant to (i) the Company's equity plan or any successor plan thereto or the Company's annual bonus plan or any other incentive plan or agreement of the Company or any of its subsidiaries, (ii) the terms of any recoupment policy or provision in any employment agreement, compensation agreement or arrangement, or other agreement, or (iii) any other Section of this Policy, or (b) any other legal remedies available to the Company under applicable law.

5. The Company shall not indemnify any Executive Officer, Covered Employee or Covered Person against the loss of previously awarded Incentive-Based Compensation or Incentive Compensation under this Policy.

6. If any provision of this Policy shall be held illegal or invalid for any reason, such illegality or invalidity shall not affect the remaining parts of this Policy, but this Policy shall be construed and enforced as if the illegal or invalid provision had never been included in this Policy.