UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2020

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

Commission File Number 001-36818

TRACON Pharmaceuticals, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**34-2037594**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
4350 La Jolla Village Drive, Suite 800, San Diego, CA	**92122**
(Address of Principal Executive Offices)	**(Zip Code)**

(858) 550-0780
(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
Common Stock, par value $0.001 per share	TCON	The Nasdaq Stock Market LLC

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 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. ☐

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

As of June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's voting and non-voting common stock held by non-affiliates of the registrant was approximately $14.3 million, based on the closing price of the registrant's common stock on the Nasdaq Capital Market on June 30, 2020 of $1.96 per share.

The number of outstanding shares of the registrant's common stock as of February 19, 2021 was 15,478,787.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement to be filed with the Securities and Exchange Commission (SEC) subsequent to the date hereof pursuant to Regulation 14A in connection with the Registrant's 2021 Annual Meeting of Stockholders, are incorporated by reference into Part III of this Annual Report on Form 10-K. Such proxy statement will be filed with the SEC not later than 120 days after the conclusion of the registrant's fiscal year ended December 31, 2020.

TRACON Pharmaceuticals, Inc.

FORM 10-K — ANNUAL REPORT
For the Fiscal Year Ended December 31, 2020

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Forward-Looking Statements

This Annual Report on Form 10-K (Annual Report), including the sections entitled “Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” contains forward-looking statements. We may, in some cases, use words such as “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “will,” “would” or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes, to identify these forward-looking statements. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. Forward-looking statements in this Annual Report include, but are not limited to, statements about:

- the success, cost and timing of results of our and our collaborators’ ongoing clinical trials;
- our and our collaborators’ plans to develop and commercialize our product candidates;
- the potential effects of the COVID-19 pandemic on our operations;
- the potential benefits of our collaboration arrangements and our ability to enter into additional collaboration arrangements;
- our regulatory strategy and potential benefits associated therewith;
- the timing of, and our ability to obtain and maintain, regulatory approvals for our product candidates;
- the rate and degree of market acceptance and clinical utility of any approved product candidate;
- the success of competing products that are or may become available;
- the size and growth potential of the markets for our product candidates, and our ability to serve those markets;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our intellectual property position;
- our estimates regarding expenses, future revenues, capital requirements, the sufficiency of our current and expected cash resources, and our need for additional financing; and
- our ability to realize the anticipated benefits associated with our capital efficiency focused initiatives.

These forward-looking statements reflect our management’s beliefs and views with respect to future events and are based on estimates and assumptions as of the date of this Annual Report and are subject to risks and uncertainties. We discuss many of these risks in greater detail under “Risk Factors.” Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. Given these uncertainties, you should not place undue reliance on these forward-looking statements.

We qualify all of the forward-looking statements in this Annual Report by these cautionary statements. Except as required by law, we undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

Our business is subject to numerous risks, as more fully described immediately below. You should read these risks before you invest in our common stock. We may be unable, for many reasons, including those that are beyond our control, to implement our business strategy. In particular, risks associated with our business include:

- We have incurred losses from operations since our inception and anticipate that we will continue to incur substantial operating losses for the foreseeable future. We may never achieve or sustain profitability.
- We will require substantial additional financing to achieve our goals, and failure to obtain additional financing when needed could force us to delay, limit, reduce or terminate our drug development efforts.
- Our loan and security agreement with Silicon Valley Bank (SVB) contains restrictions that limit our flexibility in operating our business. We may be required to make a prepayment or repay the outstanding indebtedness earlier than we expect if a prepayment event or an event of default occurs, including a material adverse change with respect to us, which could have a materially adverse effect on our business.
- The COVID-19 pandemic could continue to adversely impact our business, including our clinical trials, supply chain and business development activities.
- We are heavily dependent on the success of our lead clinical stage product candidate envafolimab. We cannot give any assurance that envafolimab will successfully complete clinical development or receive regulatory approval, which is necessary before it can be commercialized.
- Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Failure can occur at any stage of clinical development.
- Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.
- The regulatory approval processes of the U.S. Food and Drug Administration (FDA), and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.
- We depend in part on National Cancer Institute (NCI) to advance clinical development of TRC102 and also depend in part on Case Western to advance clinical development of TRC102. If these third party sponsors ceased their support for our product candidates, our ability to advance clinical development of product candidates could be limited and we may not be able to pursue the number of different indications for our product candidates that are currently being pursued.
- We are dependent on our corporate partners for the advancement of our product candidates. Specifically, we are dependent on 3D Medicines Co., Ltd. (3D Medicines) and Jiangsu Alphamab Biopharmaceuticals Co., Ltd. (Alphamab) with respect to certain aspects of our development of envafolimab for sarcoma in North America. The failure to maintain the collaboration and clinical trial agreement, the failure of 3D Medicines or Alphamab to perform their obligations under the agreement, or the actions of 3D Medicines or Alphamab or their other partners with respect to envafolimab in other indications or outside North America could negatively impact our business. Additionally, our ability to realize value from any product candidates developed under our agreements with I-Mab Biopharma (I-Mab) will depend in part on I-Mab’s activities and willingness to fund future development.
- We may be unable to adequately maintain and protect our intellectual property rights, including our licenses under collaboration agreements, which could impair the advancement of our product pipeline and our commercial opportunities.
- We face intense competition and rapid technological change and the possibility that our competitors may develop therapies that are more advanced or effective than ours, which may adversely affect our financial condition and our ability to successfully commercialize our product candidates.

Item 1. Business.

Overview

We are a biopharmaceutical company focused on the development and commercialization of novel targeted therapeutics for cancer and utilizing our cost efficient, contract research organization (CRO) independent product development platform to partner with ex-U.S. companies to develop and commercialize innovative products in the United States.

In December 2019, we entered into a collaboration and clinical trial agreement (the Envafolimab Collaboration Agreement) with 3D Medicines and Alphamab for the development of envafolimab, also known as KN035, an investigational PD-L1 single-domain antibody (sdAb) administered by rapid subcutaneous injection for the treatment of sarcoma in North America. In December 2020, we announced the dosing of the first patient in the ENVASARC pivotal trial which will enroll approximately 160 patients with the sarcoma subtypes of undifferentiated pleomorphic sarcoma (UPS) and myxofibrosarcoma (MFS). The trial includes one cohort of approximately 80 patients who receive single agent treatment with envafolimab and a second cohort of approximately 80 patients who receive envafolimab in combination with Yervoy® (ipilimumab), a checkpoint inhibitor marketed by Bristol-Myers Squibb (BMS), with the primary endpoint in each of the cohorts being objective response rate (ORR). Achieving the primary endpoint of ORR could be the basis for accelerated approval of envafolimab by the FDA as a single agent and/or in combination with Yervoy. The trial will provide at least 86% power to demonstrate the primary endpoint of whether ORR is greater than 5% in each cohort, which is greater than the 4% ORR of Votrient® (pazopanib) reported in refractory soft tissue sarcoma in its package insert. Votrient is the only approved treatment for refractory soft tissue sarcoma, which includes UPS and MFS. Nine or more objective responses among the 80 patients expected to enroll in cohort A or cohort B would be sufficient to demonstrate envafolimab or envafolimab combined with Yervoy, respectively, have an ORR that is statistically superior to the 4% ORR reported for Votrient in refractory soft tissue sarcoma.

We estimate disclosing a summary of the independent data monitoring committee decisions following reviews of interim data in 2021, and assuming sufficient patient responses in line with meeting the endpoint, we expect to apply for orphan drug designation and breakthrough therapy designation for envafolimab for the treatment of soft tissue sarcoma subtypes in the United States in 2021. Thereafter, we expect having a final response assessment in 2022, and, assuming positive data, submitting a biologics license application (BLA) to the FDA for accelerated approval in 2023. Additionally, assuming positive interim data from the ENVASARC trial, we plan to initiate a trial in multiple soft tissue sarcoma subtypes to expand the target patient population.

In November 2020, we announced the submission by our corporate partners, 3D Medicines and Alphamab, of a new drug application (NDA) for the approval of envafolimab in the indication of microsatellite instability-high (MSI-H)/dMMR cancer to the Chinese National Medical Products Administration (NMPA), and in December 2020, we announced the acceptance of the NDA. In January 2021, we announced the NMPA had granted envafolimab NDA priority review.

In September 2020, we highlighted updated clinical data from the pivotal trial of envafolimab in MSI-H/dMMR cancer patients that were presented by our corporate partners, 3D Medicines and Alphamab at the Chinese Society of Clinical Oncology (CSCO) 2020 Virtual Scientific Program. In a presentation entitled, “Subcutaneous Injection of PD-L1 Antibody Envafolimab (KN035) in Advanced Tumors with Mismatch-Repair Deficiency,” single agent envafolimab was shown to have a 32% confirmed ORR by central radiographic review in 41 patients with MSI-H/dMMR colorectal cancer (CRC) who failed a fluoropyrimidine, oxaliplatin and irinotecan, and had at least two on-study tumor assessments. The 32% ORR is nearly identical to the 28% ORR reported for Opdivo® and 33% ORR reported for Keytruda® in separate trials of MSI-H/dMMR CRC patients who failed a fluoropyrimidine, oxaliplatin and irinotecan. Duration of response (DOR) was greater than or equal to 12 months in 75% of patients and overall survival (OS) was greater than or equal to 12 months in 65% of patients. The ORR in the overall population (n=103) of MSI-H/dMMR cancer patients, including tumor types other than CRC, was 43%, DOR was greater than or equal to 12 months in 92% of patients and OS was greater than or equal to 12 months in 75% of patients.

Our other clinical stage oncology product candidates include TRC102, which is a small molecule that has been studied in Phase 1 and Phase 2 trials for the treatment of mesothelioma, lung cancer, glioblastoma and solid tumors, TRC253, which is a Phase 3 ready small molecule for the treatment of metastatic castration-resistant prostate cancer that we licensed from Janssen Pharmaceutica N.V. (Janssen), and TJ004309, which is a CD73 antibody in Phase 1 clinical development for the treatment of solid tumors, that we licensed from I-Mab Biopharma (I-Mab) in November 2018.

TRC102 is a small molecule in clinical development to reverse resistance to specific chemotherapeutics by inhibiting DNA base excision repair (BER). In initial clinical trials of more than 100 patients, TRC102 has shown good tolerability and promising anti-tumor activity in combination with alkylating and antimetabolite chemotherapy for the treatment of cancer patients. TRC102 has been studied in Phase 1 or Phase 2 trials in mesothelioma patients in combination with the approved chemotherapeutic Alimta® (pemetrexed), in glioblastoma, ovarian cancer, lung and CRC patients in combination with the approved chemotherapeutic Temodar® (temozolomide) and in lung cancer patients in combination with the approved chemotherapeutics Alimta and cisplatin as well as external beam radiation (i.e., chemoradiation). All current TRC102 trials are sponsored and funded by the National Cancer Institute (NCI). We retain global rights to develop and commercialize TRC102 in all indications. In October 2020, TRC102 received orphan drug designation from the FDA for the treatment of patients with malignant glioma, including glioblastoma.

In November 2020, we announced the publication of clinical data in the journal *Cancer Cell* that provides molecular insight into TRC102’s mechanism of action and patient populations most likely to respond to treatment. The article, entitled, “Molecular Features of Cancers Exhibiting Exceptional Responses to Treatment,” highlighted the clinical features and tumor biology of an exceptional responder patient treated with TRC102 at the NCI. The patient was diagnosed with metastatic and highly refractory CRC and received Temodar and TRC102. Following treatment, the patient was considered an exceptional responder through the achievement of a near complete response lasting 45 months at the most recent follow-up. Detailed molecular analyses of the patient’s tumor showed

silencing of DNA repair pathways that may have resulted in sensitivity to the inhibition of DNA BER pathway by TRC102. Specifically, methylguanine-DNA methyltransferase (MGMT) expression was silenced by promoter methylation, and RAD50, a mediator of DNA double strand break repair, was silenced by genetic mutation and loss of heterozygosity. The publication authors hypothesized that the combination of Temodar and TRC102 was effective because all necessary DNA repair pathways were compromised genetically or through the activity of TRC102. MGMT expression was also assessed in biopsies from 11 colorectal patients who subsequently enrolled in an expansion cohort, one of whom demonstrated a partial response. The tumor associated with the partial response did not express MGMT, whereas each of the 10 tumors that did not respond to therapy expressed this enzyme robustly. MGMT deficiency is observed in about one third of glioblastoma patients, and a prior study of Temodar and TRC102 reported at the Society for Neuro-Oncology in 2018 demonstrated that two MGMT deficient glioblastoma patients had prolonged survival when treated with Temodar and TRC102 after progressing previously on Temodar and radiation therapy. We expect further development by the NCI in glioblastoma based on these data and believe a trial in first line glioblastoma of Temodar, radiation therapy and TRC102 is warranted.

In May 2020, positive data from multiple TRC102 clinical trials were presented at the 2020 ASCO Virtual Scientific Program. Dr. Koczywas of City of Hope Medical Center presented Phase 1 data for TRC102 in combination with cisplatin and Alimta in patients with advanced solid tumors, and Phase 2 data for TRC102 in combination with Alimta in patients with mesothelioma refractory to Alimta and platinum therapy. Notably two of 14 mesothelioma patients who progressed previously on Alimta had objective responses following treatment with Alimta and TRC102. Multiple responses were also noted in the Phase 1 trial of Alimta, cisplatin and TRC102, with particular activity noted in parotid salivary gland tumors. Dr. Biswas of Case Comprehensive Cancer Center presented Phase 1 data of TRC102 in combination with chemoradiation for locally advanced non-squamous non-small cell lung cancer. All 15 patients demonstrated an objective response, including three patients with a complete response to treatment. The 100% ORR compares favorably to historical data of the same combination of chemoradiation without TRC102 in locally advanced lung cancer. For example, the PROCLAIM clinical trial reported an ORR of 36% and the PACIFIC clinical trial reported an ORR of 51% in locally advanced non-squamous non-small cell lung cancer patients treated with Alimta, cisplatin and thoracic radiation. We are discussing further development of TRC102 in combination with chemoradiation in advanced lung cancer and in glioblastoma with investigators at this time.

TRC253 is a product candidate for the treatment of men with prostate cancer and is a novel small molecule high affinity competitive inhibitor of wild type androgen receptor (AR) and multiple AR mutant receptors containing point mutations that cause drug resistance to currently approved treatments. In April 2020, Janssen notified us that it was not exercising its exclusive option to reacquire the TRC253 program following a review of the Phase 1/2 data in prostate cancer patients with acquired resistance to Xtandi® or Erleada®. In the completed Phase 1/2 trial, data demonstrated the prevalence of the AR F877L mutation is much less common than expected at the time of initiation of Phase 1/2 trial, making commercialization of TRC253 in prostate cancer in the United States not viable. TRC253, however, was as active as Xtandi in preclinical models of prostate cancer and has not been studied in patients without acquired resistance to Xtandi or Erleada. As a result of Janssen not exercising its exclusive option to reacquire the program, we have retained worldwide development and commercialization rights, and are obligated to pay Janssen a total of up to $45.0 million in development and regulatory milestones upon achievement of specified events, in addition to a low single digit royalty. We believe TRC253 may be able to be developed in China, where standard of care therapies such as Xtandi and Erleada are not widely accessible to patients with prostate cancer and are actively looking for a corporate partner to develop and potentially commercialize TRC253 in China.

TJ004309, also known as TJD5, is a novel humanized antibody against CD73 expressed on stromal cells and tumors that converts extracellular adenosine monophosphate (AMP) to the immunosuppressive metabolite adenosine. We are developing TJ004309 in collaboration with I-Mab under a strategic collaboration and clinical trial agreement that we entered into in November 2018 (the TJ004309 Agreement). In July 2019, we began enrollment in a Phase 1 clinical trial to assess safety and preliminary efficacy of TJ004309 as a single agent and when combined with the PD-L1 checkpoint inhibitor Tecentriq® in patients with advanced solid tumors. We also entered into a separate strategic collaboration and clinical trial agreement (the Bispecific Agreement) which allows for the development of up to five of I-Mab's proprietary bispecific antibody product candidates to be nominated by I-Mab within a five-year period for development and commercialization in North America, with the option to opt-in and acquire product rights outside of Greater China and Korea prior to completing the first pivotal clinical trial for any bispecific product candidate.

In March 2020, I-Mab issued a press release announcing a strategic partnership with Kalbe Genexine Biologics (KG Bio), whereby KG Bio received what the press release described as a right of first negotiation outside North America for TJ004309 for up to $340 million in potential payments to I-Mab. In March 2020, we also learned that I-Mab entered into two license and collaboration agreements with ABL Bio in July 2018 (ABL Bio License 1 and ABL Bio License 2). Under ABL Bio License 1, I-Mab granted to ABL Bio exclusive, worldwide (excluding Greater China), royalty-bearing rights to develop and commercialize a bispecific antibody (BsAb) using certain monoclonal antibody sequences. Under ABL License 2, I-Mab and ABL agreed to collaborate to develop three PD-L1-based bispecific antibodies by using ABL Bio's proprietary BsAb technology and commercialize them in their respective territories, which, collectively, include China, Hong Kong, Macau, Taiwan and South Korea, and potentially other territories throughout the rest of the world. On April 8, 2020, we issued a notice of dispute regarding possible breaches of the TJ004309 Agreement and the Bispecific Agreement. As of the date of this Annual Report, these disputes have not been resolved. We believe that based on these transactions, we may be entitled to receive payments under the TJ004309 Agreement, although I-Mab has disputed that any payment is due. We cannot currently estimate the likely outcome of the dispute under the TJ004309 Agreement or the Bispecific Agreement. Until these discussions are complete, we may be unable to provide a timeline as to when or if we will file an IND for a bispecific antibody under the Bispecific Agreement. Furthermore, our ability to license certain bispecific product candidates from I-

Mab may be more limited than we previously believed due to I-Mab's separate license with ABL Bio that preceded our license with I-Mab. In February 2021, I-Mab sent us a notice purporting to terminate the TJ4309 Agreement, which would result in I-Mab owing us a prespecified early termination fee of $9.0 million. However, I-Mab does not have an option to terminate the TJ004309 Agreement without cause until the ongoing Phase 1 trial of TJ004309 is complete, and we therefore believe the TJ4309 Agreement has not been terminated and continue to perform our contractual obligations.

The following table summarizes key information regarding ongoing and planned development of our clinical stage product candidates:

	Phase	Data Expected
Envafolimab (3D Medicines and Alphamab)		
Soft Tissue Sarcoma (UPS and MFS)	Pivotal Phase 2	Interim Data - 2021 Final Data - 2022
TRC102		
Solid tumors and Lymphomas	Phase 1/2	2021
TJ004309 (I-Mab)		
Solid Tumors	Phase 1	2021

We utilize a CRO-independent product development platform that emphasizes capital efficiency. Our experienced clinical operations, data management, quality assurance, product development and regulatory affairs groups manage significant aspects of our clinical trials with internal resources. We use these internal resources to minimize the costs associated with utilizing CROs to conduct clinical trials. In our experience, this model has resulted in capital efficiencies and improved communication with clinical trial sites, which expedites patient enrollment and improves the quality of patient data as compared to a CRO-managed model. We have leveraged this platform in all of our sponsored clinical trials. We have also leveraged our product development platform to diversify our product pipeline without payment of upfront license fees through license agreements with 3D Medicines and Alphamab, I-Mab, and Janssen. We continue to evaluate ex-U.S. companies that would benefit from a rapid and capital-efficient U.S. drug development solution that includes U.S. and European Union (EU) clinical development expertise. We believe we will continue to be recognized as a preferred U.S. clinical development partner through a cost- and risk-sharing partnership structure, which may include U.S. commercialization.

Our goal is to be a leader in the development of targeted therapies for patients with cancer and other diseases of high unmet medical need.

Our Lead Clinical Stage Product Candidate – Envafolimab

Overview of PD-L1

PD-L1 is an immune-inhibitory checkpoint molecule expressed on epithelial and vascular endothelial cells, as well as by a number of immune cells, that is utilized by tumor cells as an immune escape mechanism. Numerous preclinical and clinical studies of PD-1/PD-L1 products have demonstrated that antibodies that block the interaction of PD-1 with its ligands, PD-L1 and PD-L2, or those that block only the interaction of PD-L1 with PD-1, can augment anti-tumor T-cell responses and lead to complete and durable tumor eradication in a certain proportion of patients. Potent therapeutic anti-tumor responses due to blocking of the PD-1/PD-L1 interaction has been demonstrated by these approved products in patients with various solid tumors including, but not limited to, non-small cell lung cancer (NSCLC), small cell lung cancer, gastric cancer, melanoma, renal cell carcinoma (RCC), head and neck cancer, cutaneous squamous cell carcinoma (cSCC) and urothelial carcinoma.

About Envafolimab and Preclinical Studies

Envafolimab is an investigational sdAb that binds selectively to PD-L1 and is administered by rapid subcutaneous injection without an adjuvant. Envafolimab is being developed by 3D Medicines for the treatment of various cancer indications, including an ongoing first line biliary tract cancer (BTC) pivotal trial in China and a completed MSI-H/dMMR cancer pivotal trial in China, the NDA submission of which was recently accepted for review by the Chinese NMPA for priority review, and by TRACON for the treatment of sarcoma in the pivotal ENVASARC trial.

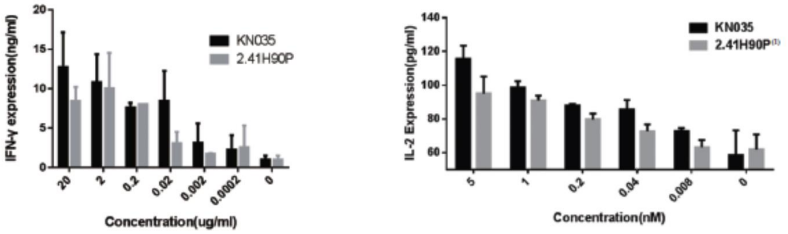
Single-domain antibodies are a novel class of therapeutic protein that contain the unique structural and functional properties of naturally-occurring antibodies from camels and llamas that contain heavy chains and lack light chains. On February 6, 2019, the FDA approved the first sdAb, Cablivi® (caplacizumab), for adults with acquired thrombotic thrombocytopenic purpura.

Envafolimab is a camelid IgG1 sdAb with single digit nanomolar affinity to PD-L1. Benefitting from the sdAb format, envafolimab has approximately half the molecular weight compared to a typical monoclonal antibody with better stability and high solubility, which enables the development of a high concentration formulation suitable for rapid subcutaneous injection. In addition, the effector functions are muted in envafolimab to help limit side effects and limit its exposure to the immune system to avoid unwanted adverse immune responses. As a result, compared with approved PD-(L)1 inhibitors, envafolimab potentially has the following advantages:

- *Better patient compliance with increased convenience*. Subcutaneous injection enables more rapid administration and the potential for self-injection, which enables better patient compliance with the treatment regimen;
- *Relatively stable plasma-drug concentration*. The plasma-drug concentration of envafolimab is relatively stable without significant fluctuations due to the nature of subcutaneous administration. This unique pharmacokinetic (PK) profile compared with intravenous formulations may result in lower risks to patients; and
- *Potential for improved tumor penetration*. Envafolimab is approximately half the size of a typical monoclonal antibody, which may provide for improved tumor penetration in cancer patients as was observed in pre-clinical experiments. This unique tumor penetration compared with typical monoclonal antibodies may improve efficacy.

In pre-clinical studies in human cell models and a humanized mouse model, envafolimab was compared with 2.41H90P, an antibody with a sequence that is identical to durvalumab, the only approved PD-L1 inhibitor at the time, and envafolimab showed the following potential advantages:

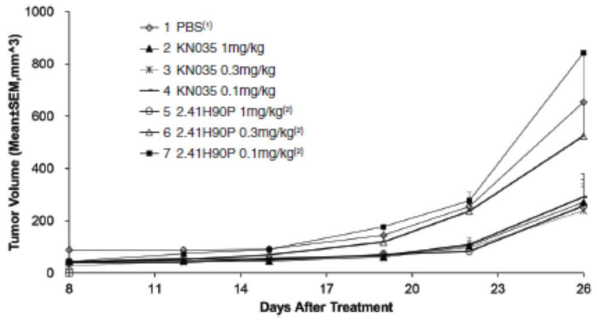
- *Stronger T-cell activation effect*. The level of T-cell activation can be measured by the secretion levels of IFN- and IL-2. Higher secretion levels are generally associated with stronger T-cell activation. In pre-clinical studies, envafolimab (referred to as KN035) demonstrated higher potency and a higher maximal stimulatory effect on IFN- and IL-2 secretion compared to 2.41H90P, as illustrated in the following figure.



(1) 2.41H90P was an in-house produced durvalumab with the same amino acid sequence as MedImmune's Imfinzi (durvalumab), and cloned using the 2.14H9 method.

Source: Investigator's Brochure (v.4.0) on KN035

- *Higher anti-tumor efficacy*. Envafolimab and 2.41H90P were each injected intraperitoneally in mice at 0.1 mg/kg, 0.3 mg/kg and 1.0 mg/kg dose levels. As illustrated in the following graph, envafolimab showed more potent tumor growth inhibition effects with maximum inhibition demonstrated at a ten-fold lower dose.



(1) The control group was given PBS alone.

(2) 2.41H90P was an in-house produced durvalumab with the same amino acid sequence as MedImmune's Imfinzi (durvalumab), and cloned using the 2.14H9 method.

Source: Investigator's Brochure (v.4.0) on KN035

- *More rapid tumor penetration*. After injection of envafolimab and 2.4H90P in tumor bearing nude mice, the tumor radioactivity signal was consistently higher in the envafolimab group up to 52 hours post injection. The tumor radioactivity signal in the envafolimab group between 1 hour to 2.5 hours was statistically significantly higher, which suggests potentially better distribution of envafolimab into the tumor.

Clinical Trials of Envafolimab

As of December 31, 2020, envafolimab had been dosed in more than 700 patients in a total of 7 ongoing or completed clinical trials in the United States, China or Japan, including our pivotal Phase 2 ENVASARC trial, a pivotal Phase 2 trial in microsatellite instability-high (MSI-H) cancer patients in China, a Phase 2 trial of envafolimab plus chemotherapy in gastric cancer, a Phase 3 randomized trial of envafolimab plus chemotherapy versus chemotherapy alone in BTC in China, a Phase 1 dose escalation and dose exploration trial in the United States, a Phase 1 dose escalation and dose exploration trial in China, and a Phase 1 dose escalation and dose exploration trial in Japan.

Phase 1 Dose Escalation Clinical Trial in China

An open-label, single-arm Phase 1 dose escalation and exploration clinical trial of envafolimab has completed enrollment in China. The safety and efficacy data from this trial were presented at the 2019 American Society of Clinical Oncology (ASCO) Annual Meeting in June 2019. Based on the data presented in the ASCO Annual Meeting (ASCO Presentation), 17 subjects were enrolled in the dose escalation phase in this trial as of May 1, 2019. A total of 287 subjects were enrolled in this Phase 1 trial at dose levels shown to be tolerable during dose escalation.

Trial purpose. The primary objectives of the Phase 1 dose escalation were to assess the safety and tolerability profile and maximum tolerated dose (MTD) of single agent envafolimab administered subcutaneously in subjects with advanced solid tumors. The secondary objectives were to evaluate the PK profile, immunogenicity and anti-tumor activity.

Trial design of the dose escalation phase. This trial adopted a modified "3+3" design with a dose limiting toxicity (DLT) evaluation period of 28 days. Subjects received envafolimab in six cohorts at 0.1 mg/kg, 0.3 mg/kg, 1.0 mg/kg, 2.5 mg/kg, 5.0 mg/kg and 10.0 mg/kg once every week (QW) subcutaneously. Starting from the 1.0 mg/kg cohort, a traditional "3+3" design was followed. Safety and tolerability were assessed by monitoring treatment emergent adverse events (TEAEs). Tumor assessments were performed based on RECIST version 1.1.

Safety of dose escalation phase. The majority of the subjects received two or more prior systemic oncology treatments. According to the ASCO Presentation, 16 of the subjects discontinued treatment due to disease progression (n=15) or consent withdrawal (n=1). All of the enrolled subjects experienced TEAEs. 13 (76.5%) subjects experienced treatment-related TEAEs. Three (17.6%) subjects experienced serious TEAEs, although none were determined to be treatment-related. A TEAE led to treatment discontinuation in one subject and was also determined to be not treatment-related. No DLT was reported and the MTD was not reached. Details of the TEAEs observed from the 17 subjects enrolled in the Phase 1 dose escalation trial are summarized in the following table.

TEAE categories[1]	n (%) (N=17)
AE	17 (100%)
Any TEAE	17 (100%)
TEAE, Grade ≥ 3	7 (41.2%)
Treatment-related TEAE[2]	13 (76.5%)
Treatment-related TEAE, Grade ≥ 3[3]	1 (5.9%)
SAEs	3 (17.6%)
Treatment-related SAEs	0
IrAEs	1 (5.9%)
IrAEs, Grade ≥ 3[3]	1 (5.9%)
TEAE leading to permanent treatment discontinuation	1 (5.9%)
Treatment-related TEAE leading to permanent treatment discontinuation	0
TEAE leading to death	0
Treatment-related TEAE leading to death	0

(1) Reported under National Cancer Institute Common Terminology Criteria for Adverse Events v. 4.03.
(2) The most frequent treatment-related TEAEs (all grades ≥ 10%) included increased alanine aminotransferase (n=6, 35.3%), increased aspartate aminotransferase (n=6, 35.3%), dermatitis/rash (n=3, 17.6%), blood bilirubin increased (n=3, 17.6%), injection site reaction (n=2, 11.8%).
(3) An immune-related dermatitis that occurred in the 0.3 mg/kg cohort. The subject recovered completely after the study drug was withheld.

Source: Phase I Study of KN035, the First Subcutaneous Administered, Novel Fusion Anti-PD-L1 Antibody in Patients with Advanced Solid Tumors in China, Abstract No. 2608, Poster No. 252, 2019 American Society of Clinical Oncology (ASCO) Annual Meeting

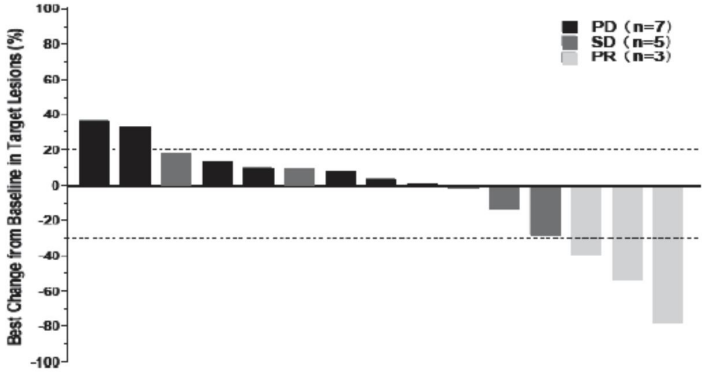
Efficacy. According to the ASCO Presentation, 15 out of 17 subjects were evaluable for the efficacy analysis. Three subjects had confirmed partial response (PR), including one renal cell carcinoma (RCC) subject in the 2.5 mg/kg cohort, one intrahepatic cholangiocarcinoma subject from the 5.0 mg/kg cohort and one BTC subject from the 10.0 mg/kg cohort. In addition, five subjects achieved stable disease (SD). All 15 subjects completed at least one post-baseline tumor assessment, according to the ASCO Presentation. Two enrolled subjects who had not reached the first post-baseline tumor assessment were excluded. The table below summarizes the best overall response in the efficacy analysis of this trial, according to the ASCO Presentation.

Response	0.1 mg/kg (N=1)	0.3 mg/kg (N=2)	1.0 mg/kg (N=3)	2.5 mg/kg (N=3)	5.0 mg/kg (N=3)	10.0 mg/kg (N=3)	Total (N=15)
				n (%)			
CR	0	0	0	0	0	0	0
PR	0	0	0	1	1	1	3 (20.0%)
SD	0	0	2	2	1	0	5 (33.3%)
PD	1	2	1	0	1	2	7 (46.7%)
CR+PR	0	0	0	1	1	1	3 (20.0%)
DCR (CR+PR+SD)	0	0	2	3	2	1	8 (53.3%)

Abbreviations: CR=complete response, PR=partial response, SD=stable disease, PD=progressive disease, DCR=disease control rate.

Source: Phase I Study of KN035, the First Subcutaneous Administered, Novel Fusion Anti-PD-L1 Antibody in Patients with Advanced Solid Tumors in China, 2019 American Society of Clinical Oncology (ASCO) Annual Meeting

The following waterfall plot shows the best overall response of the 15 evaluable subjects receiving envafolimab as measured by percentage of change of target lesions from baseline, according to the ASCO Presentation.



Abbreviations: PD=progressive disease, SD=stable disease, PR=partial response.

Source: Phase I Study of KN035, the First Subcutaneous Administered, Novel Fusion Anti-PD-L1 Antibody in Patients with Advanced Solid Tumors in China, 2019 American Society of Clinical Oncology (ASCO) Annual Meeting

Conclusion. According to the ASCO Presentation, envafolimab exhibited a tolerable safety profile and preliminary efficacy in patients with advanced malignancies in the Phase 1 dose escalation trial in China.

Phase 1 Dose Escalation Clinical Trial in the United States

An open-label Phase 1 dose escalation and dose exploration clinical trial of envafolimab is being conducted in the United States. Safety and efficacy data from the dose escalation phase of the trial were presented at the 2018 Annual Congress of the European Society for Medical Oncology (ESMO) in October 2018. Based on the data presented at ESMO (the ESMO Presentation), 18 subjects were enrolled in the dose escalation phase of this trial as of July 5, 2018.

Trial purpose of the dose escalation phase. The primary objectives of the Phase 1 dose escalation clinical trial were to evaluate and characterize the tolerability and safety profile of single agent envafolimab in subjects with locally advanced or metastatic solid tumors. The secondary objectives were to characterize the PK profile, determine MTD and to evaluate anti-tumor activity.

Trial design of the dose escalation phase. This trial adopted a modified "3+3" design with a DLT evaluation period of 28 days. Subjects received envafolimab across eight cohorts at 0.01 mg/kg, 0.03 mg/kg, 0.1 mg/kg, 0.3 mg/kg, 1.0 mg/kg, 2.5 mg/kg, 5.0 mg/kg and 10.0 mg/kg QW subcutaneously. Starting from the 0.3 mg/kg cohort, a traditional "3+3" design was followed. Safety and tolerability were assessed by monitoring TEAEs. Tumor assessments were performed based on RECIST version 1.1.

Safety of dose escalation phase. The median duration of exposure to envafolimab was 9 weeks with a range of 6 to 32 weeks. As of July 5, 2018, two of the subjects (11.1%) remained in the trial, 11 subjects had discontinued treatment due to disease progression, three subjects had discontinued treatment due to TEAEs, and two subjects had discontinued treatment due to the opinion of the investigator that no more clinical benefit could be obtained or for other reasons. All of the 18 enrolled subjects experienced TEAEs. Treatment-related TEAEs at grade 3 or above included increased aspartate aminotransferase (10.5%), increased alanine aminotransferase (10.5%) and lymphopenia (10.5%). No DLT was observed and the planned maximum dose of 10.0 mg/kg was reached.

Efficacy of dose escalation phase. According to the ESMO Presentation, 17 out of 18 subjects were evaluable for the efficacy analysis. Two subjects had confirmed PR, including one NSCLC subject from the 0.3 mg/kg QW cohort (response duration of 9 months) and one MSI-H prostate cancer subject from the 2.5 mg/kg QW cohort. In addition, five subjects achieved SD. All 17 evaluable subjects completed at least one post-baseline tumor assessment according to the ESMO Presentation. One enrolled subject who had not reached the first post-baseline tumor assessment was excluded. The table below summarizes the best overall response in the efficacy analysis of this trial according to the ESMO Presentation.

	0.01 mg/kg weekly (N=1)	0.03 mg/kg weekly (N=1)	0.1 mg/kg weekly (N=1)	0.3 mg/kg weekly (N=3)	1.0 mg/kg weekly (N=3)	2.5 mg/kg weekly (N=3)	5.0 mg/kg weekly (N=3)	10.0 mg/kg weekly (N=3)	Total (N=18)
	n (%)	*n (%)*	*n (%)*	*n (%)*	*n (%)*	*n (%)*	*n (%)*	*n (%)*	*n (%)*
CR	0	0	0	0	0	0	0	0	0
PR	0	0	0	1 (33.3)	0	1 (33.3)	0	0	2 (11.1)
SD	0	1 (100)	0	1 (33.3)	1 (33.3)	0	1 (33.3)	1 (33.3)	5 (27.8)
PD	1 (100)	0	1 (100)	0	2 (66.7)	2 (66.7)	2 (66.7)	1 (33.3)	9 (50.0)
NE	0	0	0	0	0	0	0	1 (33.3)	1 (5.6)
CR+PR	0	0	0	1 (33.3)	0	1 (33.3)	0	0	2 (11.1)
DCR: (CR+PR+SD)	0	1 (100)	0	2 (66.7)	1 (33.3)	1 (33.3)	1 (33.3)	1 (33.3)	7 (38.9)

Abbreviations: CR=complete response, PR=partial response, SD=stable disease, PD=progressive disease, NE=not evaluable, DCR=disease control rate.

Source: *Phase I Study of KN035, A Novel Fusion Anti-PD-L1 Antibody Administered Subcutaneously in Patients with Advanced Solid Tumors in the USA, 2018 Annual Congress of the European Society for Medical Oncology (ESMO)*

PK profile of dose escalation phase. This trial showed that the exposure to envafolimab was dose-dependent and increased proportionally across all eight dose levels. Mean half-life of envafolimab was approximately 200 hours.

Conclusion. According to the ESMO Presentation, envafolimab exhibited a favorable safety profile in subjects with advanced solid tumors and preliminary efficacy results demonstrated encouraging anti-tumor activity. Based on the PK profile, patients in the trial were treated with envafolimab at 300 mg every 4 weeks by subcutaneous injection.

Phase 1 Clinical Trial in Japan

An open-label Phase 1 dose escalation and dose exploration clinical trial of envafolimab is being conducted in Japan. The safety, efficacy and PK data of this trial as of May 5, 2019 were presented at the 2019 American Society of Clinical Oncology (ASCO)

Annual Meeting in June 2019. Based on the data presented in the ASCO Annual Meeting (the Japan Trial ASCO Presentation), 26 subjects were enrolled in this trial as of May 5, 2019.

Trial purpose. The primary objectives of the Phase 1 clinical trial are to assess the safety and tolerability profile of single agent envafolimab in Japanese subjects with previously treated advanced solid tumors. The secondary objectives are to characterize the PK profile, determine MTD and evaluate the anti-tumor activity.

Trial design. This Phase 1 trial consists of a multi-dose escalation phase followed by a dose exploration phase. Subjects will receive envafolimab across five cohorts at 1.0 mg/kg, 2.5 mg/kg and 5.0 mg/kg QW subcutaneously, and 2.5 mg/kg and 5.0 mg/kg Q2W subcutaneously. The QW schedule adopted a traditional "3+3" design. For the Q2W schedule, six patients were planned for each cohort. Safety and tolerability are being assessed by monitoring TEAEs under common terminology criteria for adverse events (CTCAE) version 4.0. Tumor assessments are being performed based on RECIST version 1.1. Full PK sampling is performed after the first dose of cycle 1 (28 days) and sparse PK samples are collected at pre-dose and around Cmax during the subsequent cycles.

Safety. According to the Japan Trial ASCO Presentation, as of May 5, 2019, no MTD had been reached. As of the same date, three subjects had remained in the trial. 21 subjects had discontinued treatment due to disease progression and two subjects had discontinued treatment due to TEAEs. All of the enrolled subjects experienced TEAEs, 17 subjects (65.4%) experienced treatment-related TEAEs, and only one grade 3 treatment-related TEAE (cerebral infraction) was reported. There were no grade 4/5 treatment-related TEAEs. There were a total of four SAEs, two of which were treatment-related. No DLT was reported.

Efficacy. According to the Japan Trial ASCO Presentation, nine out of 26 patients were evaluable for the efficacy analysis as of May 5, 2019. Two subjects had confirmed PR and two subjects had unconfirmed PR. The other five evaluable subjects had achieved SD. 17 enrolled subjects who did not reach the first post-baseline tumor assessment were excluded.

PK profile. In the dose escalation phase, the exposure to envafolimab was dose-dependent and increased proportionally. Tmax varied from 96 to 168 hours after a single dose as shown in Figure 1 below. In the dose exploration phase, the exposure to envafolimab was dose-dependent and increased proportionally. Preliminary PK suggested a prolonged half-life that may support a less frequent dosing schedule than once every 2 weeks.

Figure 1: Pharmacokinetics (Escalation Part)

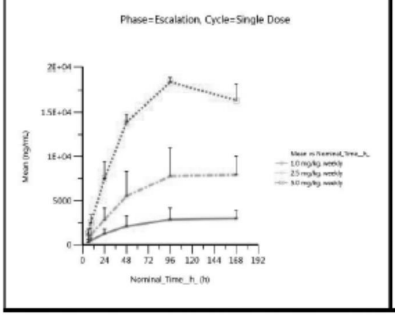
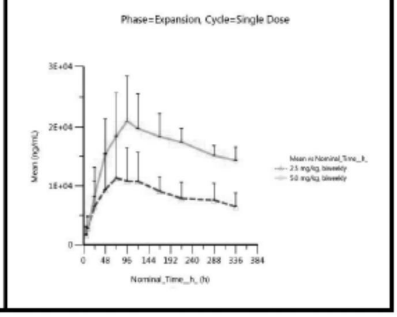


Figure 2 : Pharmacokinetics (Expansion Part)



Source: Phase 1 Study and Pharmacokinetic Study of KN035, the First Subcutaneous Administered, Novel Fusion Anti-PD-L1 Antibody in Japanese Patients with Advanced Solid Tumors, 2019 American Society of Clinical Oncology (ASCO) Annual Meeting

Conclusion. Envafolimab exhibited a favorable safety profile in patients with advanced malignancies and preliminary efficacy results demonstrated promising anti-tumor activity in the Phase 1 clinical trial in Japan. Based on the PK profile, patients in the trial are currently being treated with envafolimab at 300 mg every 4 weeks by subcutaneous injection.

Pivotal Clinical Trial in China in MSI-H/dMMR tumors

A pivotal clinical trial of envafolimab dosed as a single agent for the treatment of MSI-H/dMMR tumors was initiated in August 2018. The trial was a non-randomized trial enrolling approximately 110 patients in China, including CRC patients who are required to have been previously treated with standard therapies, which must include fluoropyrimidine, oxaliplatin or irinotecan, and other solid tumor patients, who are required to have been previously treated with at least one line of systemic standard of care therapy. Patients received 150mg of envafolimab subcutaneously dosed weekly and ORR was the primary endpoint defined by RECIST version 1.1. In a presentation at the CSCO 2020 Virtual Scientific Program entitled, "Subcutaneous Injection of PD-L1 Antibody Envafolimab (KN035) in Advanced Tumors with Mismatch-Repair Deficiency," single agent envafolimab was shown to have a 32% confirmed ORR by central radiographic review in 41 patients with MSI-H/dMMR CRC who failed a fluoropyrimidine, oxaliplatin and irinotecan, and had at least two on-study tumor assessments. The 32% ORR is nearly identical to the 28% ORR reported for Opdivo and 33% ORR reported for Keytruda in separate trials of MSI-H/dMMR CRC patients who failed a fluoropyrimidine, oxaliplatin and

irinotecan. DOR was greater than or equal to 12 months in 75% of patients and OS was greater than or equal to 12 months in 65% of patients. The ORR in the overall population (n=103) of MSI-H/dMMR cancer patients, including tumor types other than CRC, was 43%, DOR was greater than or equal to 12 months in 92% of patients and OS was greater than or equal to 12 months in 75% of patients. In November 2020, 3D Medicines and Alphamab submitted an NDA for the approval of envafolimab in the indication of MSI-H/dMMR cancer to the Chinese NMPA that was accepted for review by the NMPA in December 2020 and accepted for priority review by the NMPA in January 2020.

Clinical Development in Sarcoma in the U.S.

In July 2020, we filed the pivotal ENVASARC protocol with the FDA as part of an investigational new drug (IND) application, which was cleared by the FDA 30 days later in August 2020, and in December 2020, we announced the dosing of the first patient in the ENVASARC pivotal trial that enrolls patients with the refractory sarcoma subtypes of UPS and MFS. The trial includes one cohort of approximately 80 patients who receive single agent treatment with envafolimab and a second cohort of approximately 80 patients who receive envafolimab in combination with Yervoy (ipilimumab), a checkpoint inhibitor marketed by BMS, with the primary endpoint in each of the cohorts being ORR, which could be the basis for accelerated approval of envafolimab by the FDA as a single agent and in combination with Yervoy. Achieving the primary endpoint of ORR could be the basis for accelerated approval of envafolimab by the FDA as a single agent and/or in combination with Yervoy. The trial will provide at least 86% power to demonstrate the primary endpoint of whether ORR is greater than 5% in each cohort, which is greater than the 4% ORR of Votrient (pazopanib) reported in refractory soft tissue sarcoma in its package insert. Votrient is the only approved treatment for refractory soft tissue sarcoma, which includes UPS and MFS. Nine or more objective responses among the 80 patients expected to enroll in cohort A or cohort B would be sufficient to demonstrate envafolimab or envafolimab combined with Yervoy, respectively, have an ORR that is statistically superior to the 4% ORR reported for Votrient in refractory soft tissue sarcoma in its package insert.

We estimate disclosing a summary of the independent data monitoring committee decisions following reviews of interim data in 2021 and assuming patient responses in line with meeting the endpoint, we expect to apply for orphan drug designation and breakthrough therapy designation for envafolimab for the treatment of soft tissue sarcoma subtypes in the United States in 2021. Thereafter, we expect having a final response assessment in 2022, and assuming positive data, submitting a BLA to the FDA for accelerated approval in 2023. Additionally, assuming positive interim data from the ENVASARC trial, we plan to initiate a trial in multiple soft tissue sarcoma subtypes to expand the target patient population.

UPS has an incidence of 0.8 to 1.0 cases per 100,000 patients in the western world per orpha.net and accounts for 10-15% of new cases of soft tissue sarcoma in the United States, with prevalence rates estimated at approximately 1.5 to 2.0 times incidence, and MFS accounts for half as many cases as UPS in the United States. We estimate that marketing envafolimab in refractory UPS and MFS could generate peak annual sales of up to $200 million in the United States without considering a price premium to the reference PD-1 inhibitors Opdivo (nivolumab) or Keytruda (pembrolizumab) that are administered intravenously.

Other Ongoing Clinical Trials

A Phase 3 randomized clinical trial in BTC was initiated in April 2018. This trial is an open-label trial to assess the safety and efficacy of envafolimab plus standard of care gemcitabine-based chemotherapy compared to gemcitabine-based chemotherapy alone with OS as the primary endpoint. In the envafolimab arm, envafolimab will be dosed at 2.5 mg/kg subcutaneously QW, along with gemcitabine and oxaliplatin at recommended doses. The trial is expected to enroll over 390 patients in China and data are expected in 2022.

A Phase 2 clinical trial of envafolimab in combination with folinic acid, fluorouracil and oxaliplatin chemotherapy (FOLFOX) in the first line treatment of advanced gastric cancer was fully enrolled (n=15) as of January 15, 2019. In an abstract at the ASCO 2020 Virtual Scientific Program entitled "Envafolimab plus chemotherapy in advanced gastric or gastroesophageal junction (G/GEJ) cancer" data were reported in 15 patients who were evaluable for response. ECOG performance status was 1 in 80% of subjects and the majority had gastric cancer (86.7%). At the time of data cutoff, the minimum follow-up was 6 months. The occurrence of treatment emergent adverse events (TEAEs) was 100% (all grades) and 73.3% (grades 3-4). The most frequent grade 3-4 TEAEs included neutrophil count decreased 46.7%, anemia 20.0%, and platelet disorder 20% (3/15). Confirmed ORR was 60% (unconfirmed ORR: 73.3%). Median DOR was not reached. Median PFS was 6.8 months.

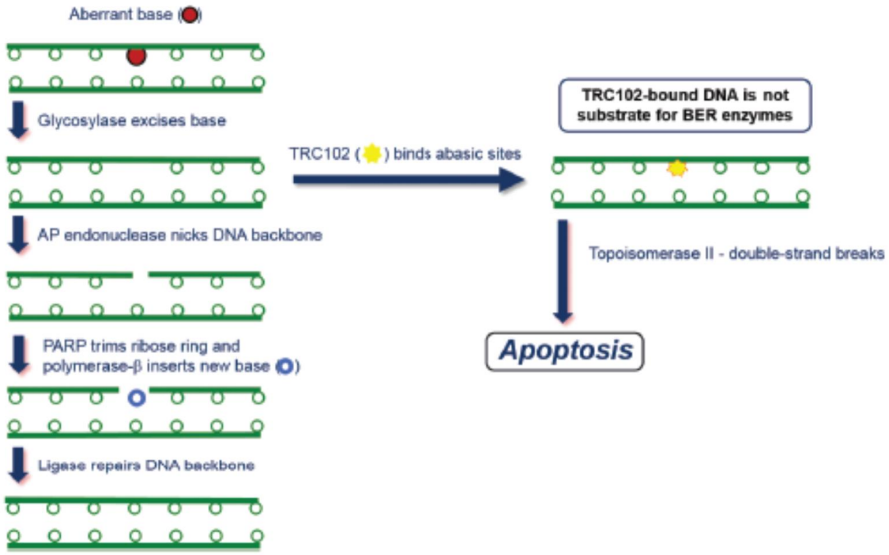
Our Second Clinical Stage Product Candidate – TRC102

Overview of Base Excision Repair and the Mechanism of Action of TRC102

Base-excision repair (BER) is a complex and fundamental cellular process used by cancer cells to repair the DNA damage caused by chemotherapeutics, especially the classes of chemotherapeutics known as alkylating agents, including Temodar, dacarbazine and bis-dichloroethyl-nitrosourea (BCNU), and anti-metabolite agents, including Fludara and Alimta. The process of BER removes DNA bases damaged by chemotherapy, resulting in the formation of gaps in the DNA strand called apurinic and apyrimidinic (AP) sites. The appropriate base is then inserted in this gap to restore the proper tumor DNA sequence. By this process, cancer cells can circumvent the anti-tumor effects of chemotherapy.

Inhibition of BER has been proposed as a way to improve the efficacy of chemotherapeutics; however, to our knowledge, no inhibitors of BER have been tested in clinical trials. We are developing TRC102 (methoxyamine hydrochloride) to reverse resistance to specific chemotherapeutics by inhibiting BER. TRC102 interrupts BER by rapidly and covalently binding within AP sites, converting the AP site to a substrate for the enzyme topoisomerase II, which cleaves TRC102-bound DNA, resulting in an accumulation of DNA strand breaks that trigger cellular apoptosis, or programmed cell death, as illustrated in the figure below:

TRC102 binding results in apoptosis



The induction of apoptosis by TRC102 is relatively selective for cancer cells, which typically overexpress topoisomerase II. In nonmalignant cells with low topoisomerase II expression, TRC102-bound DNA is excised and replaced by a separate DNA repair system.

In November 2020, we announced the publication of clinical data in the journal *Cancer Cell* that provides molecular insight into TRC102's mechanism of action and patient populations most likely to respond to treatment. The article, entitled, "Molecular Features of Cancers Exhibiting Exceptional Responses to Treatment," highlighted the clinical features and tumor biology of an exceptional responder patient treated with TRC102 at the National Cancer Institute. The patient was diagnosed with metastatic and highly refractory CRC and received Temodar and TRC102. Following treatment, the patient was considered an exceptional responder through the achievement of a near complete response lasting 45 months at the most recent follow-up. Detailed molecular analyses of the patient's tumor showed silencing of DNA repair pathways that may have resulted in sensitivity to the inhibition of DNA BER pathway by TRC102. Specifically, MGMT expression was silenced by promoter methylation, and RAD50, a mediator of DNA double strand break repair, was silenced by genetic mutation and loss of heterozygosity. The publication authors hypothesized that the combination of Temodar and TRC102 was effective because all necessary DNA repair pathways were compromised genetically or through the activity of TRC102. MGMT expression was also assessed in biopsies from 11 colorectal patients who subsequently enrolled in an expansion cohort, one of whom demonstrated a partial response. The tumor associated with the partial response did not express MGMT, whereas each of the 10 tumors that did not respond to therapy expressed this enzyme robustly.

TRC102 Development in Oncology

TRC102 is being developed to reverse resistance to Temodar, an alkylating chemotherapeutic, as well as to Alimta and Fludara, two antimetabolite chemotherapeutics. We consider it advantageous to combine TRC102 with Alimta because Alimta is approved in one large market indication (lung cancer) and one orphan drug indication (mesothelioma). Temodar is an approved chemotherapeutic used as a standard of care agent to treat glioblastoma, and Fludara is an approved chemotherapeutic used as a standard of care agent to treat lymphoma and leukemia. In initial clinical trials of more than 100 patients, TRC102 has shown good tolerability and promising anti-tumor activity in combination with alkylating and antimetabolite chemotherapy.

We filed an IND application for TRC102 in March 2008, Case Western filed an IND application for TRC102 in March 2006, and NCI filed an IND for TRC102 in March 2013, all for the treatment of patients with advanced solid tumors. The IND application filed by NCI cross references our IND application.

The following table summarizes certain key information regarding ongoing clinical trials of TRC102 in cancer patients:

Phase	Indication	Sponsor	Companion Treatment	Design (Number of Patients)
2	Mesothelioma	NCI	Alimta	Single arm Phase 2 portion (14 total)
1	Solid Tumors	NCI	Almita + Cisplatin	Dose escalation (44)
1	Solid Tumors and Lymphomas	NCI	Temodar	Dose escalation (65)
1	Lung Cancer	NCI	Chemoradiation	Dose escalation (15)

In May 2020, positive data from multiple TRC102 clinical trials were presented at the 2020 ASCO Virtual Scientific Program. Dr. Koczywas of City of Hope Medical Center presented Phase 1 data for TRC102 in combination with cisplatin and Alimta in patients with advanced solid tumors, and Phase 2 data for TRC102 in combination with Alimta in patients with mesothelioma refractory to Alimta and platinum therapy. Notably two of 14 mesothelioma patients who progressed previously on Alimta had objective responses following treatment with Alimta and TRC102. Multiple responses were also noted in the Phase 1 trial of Alimta, cisplatin and TRC102, with particular activity noted in parotid salivary gland tumors. Dr. Biswas of Case Comprehensive Cancer Center presented Phase 1 data of TRC102 in combination with chemoradiation for locally advanced non-squamous non-small cell lung cancer. All 15 patients demonstrated an objective response, including three patients with a complete response to treatment. The 100% ORR compares favorably to historical data of the same combination of chemoradiation without TRC102 in locally advanced lung cancer. For example, the PROCLAIM clinical trial reported an ORR of 36% and the PACIFIC clinical trial reported an ORR of 51% in locally advanced non-squamous non-small cell lung cancer patients treated with Alimta, cisplatin and thoracic radiation. We are discussing further development of TRC102 in combination with chemoradiation in advanced lung cancer and in glioblastoma with investigators at this time.

Phase 1 ascending dose clinical trials evaluating the safety, tolerability, PK, pharmacodynamics and anti-tumor activity of TRC102 were completed with Alimta in patients with advanced solid tumors, with Fludara in patients with hematologic malignancy and with Temodar in patients with solid tumors. In each trial, TRC102 was tolerable with the companion chemotherapeutic, and demonstrated signs of activity. One patient treated with TRC102 and Alimta had a partial response as assessed by RECIST 1.1 and remained in our clinical trial without cancer progression for 14 months. In addition, 14 patients had SD including patients with squamous cell lung cancer (three patients), epithelial ovarian cancer (three patients), CRC (two patients), non-squamous non-small cell lung cancer (one patient), pancreatic cancer (one patient), prostate cancer (one patient), endometrial cancer (one patient), head and neck cancer (one patient) and breast cancer (one patient). These data were published in *Investigational New Drugs* in 2012. Case Western reported data from a trial of intravenous TRC102 given in combination with Fludara in a Phase 1 clinical trial that were

published in *Oncotarget* in 2017. Anti-tumor activity, including partial response, was noted in patients with lymphoma and chronic lymphocytic leukemia, including patients treated previously with Fludara. TRC102 combined with Fludara was safe and well tolerated. Hematologic toxicity was comparable to single agent Fludara and activity appeared to correlate with increased levels of DNA damage. Case Western reported data from a trial of TRC102 given intravenously in combination with Temodar in a Phase 1 clinical trial at the ASCO annual meeting in June 2015. Anti-tumor activity was noted in patients with ovarian cancer and neuroendocrine tumors.

The NCI reported data from the Phase 1 trial of TRC102 in combination with Temodar in relapsed solid tumors and lymphoma patients at ASCO in 2017. There were no pharmacologic interactions between the two drugs and TRC102 target concentrations were achieved. Based on partial responses in patients with ovarian cancer, non-small cell lung cancer, and KRAS-positive CRC, the NCI decided to enroll expansion cohorts in each of these tumor types at the recommended Phase 2 oral dose of TRC102. The authors concluded that the combination of Temodar and TRC102 is active, and DNA damage response markers (Rad51, ϒ-H2AX and/or pNbs1) were induced in four of five paired colonic biopsies, indicating DNA damage following treatment. Updated data in the cohort of patients with CRC reported by the NCI at AACR in 2019 indicated a low response rate in patients with CRC treated with Temodar and TRC102.

The combination of TRC102 and Temodar was assessed in a Phase 2 trial of patients with recurrent glioblastoma that was reported at the Society for Neuro-Oncology annual meeting in November 2018. The combination of Temodar and TRC102 was tolerable, but did not meet the primary efficacy endpoint of demonstrating objective responses by Response Assessment in Neuro-Oncology criteria in the 19 enrolled patients, most of whom were treated at Cleveland Clinic. Two patients (10.5%) demonstrated evidence of clinical benefit and met the secondary endpoint of progression free survival (PFS) beyond six months. Both patients who demonstrated PFS for more than 11 months were alive over 30 months following treatment initiation with TRC102 and Temodar for recurrent glioblastoma. PFS of greater than 11 months was associated with N-methylpurine DNA glycosylase expression, a biomarker that initiates the BER pathway of resistance that is inhibited by TRC102. Efforts to identify whether DNA glycosylase expression or other biomarkers can be used as a predictive biomarker of TRC102 activity are expected to continue in ongoing TRC102.

Our Third Clinical Stage Product Candidate – TJ004309

TJ004309, is a novel, humanized antibody against CD73, an ecto-enzyme expressed on stromal cells and tumors that converts extracellular AMP to the immunosuppressive metabolite adenosine. In December 2018, we submitted an IND application to the FDA for the initiation of a Phase 1 clinical trial in patients with advanced solid tumors, which was cleared by the FDA in January 2019. In July 2019, we began enrollment in a Phase 1 clinical trial to assess safety and preliminary efficacy of TJ004309 as a single agent and when combined with the PD-L1 checkpoint inhibitor Tecentriq (atezolizumab) in patients with advanced solid tumors. We expect to present Phase 1 data in 2021.

Collaboration and License Agreements

Collaboration Agreement with 3D Medicines and Alphamab

In December 2019, we, 3D Medicines, and Alphamab entered into the Envafolimab Collaboration Agreement for the development of envafolimab, an investigational PD-L1 sdAb, or nanobody, administered by rapid subcutaneous injection, for the treatment of sarcoma in North America.

Pursuant to the Envafolimab Collaboration Agreement, we were granted an exclusive license to develop and commercialize envafolimab for the treatment of sarcoma in North America. We are responsible for conducting and will bear the costs of any Phase 1, Phase 2, and Phase 3 or post-approval clinical trial in North America for envafolimab in the indications of refractory and first line treatment of sarcoma. 3D Medicines and Alphamab are responsible for conducting and will bear the costs of IND-enabling studies (other than those specific to the sarcoma indication) and the preparation of chemical, manufacturing and controls (CMC) activities sections of an IND application for envafolimab. 3D Medicines and Alphamab have agreed to manufacture and supply, or to arrange for a third party manufacturer to manufacture and supply, envafolimab to us at pre-negotiated prices that vary based on clinical or commercial use. 3D Medicines and Alphamab retained the right to develop envafolimab in all territories outside of North America as well as within North America for all indications other than sarcoma.

We will be responsible for commercializing envafolimab for sarcoma in North America, including booking of sales revenue, unless (a) envafolimab is first approved in North America for an indication other than sarcoma and launched in North America, or (b) envafolimab is first approved in North America for sarcoma and subsequently approved in North America for an additional non-orphan indication and sold commercially by 3D Medicines and/or Alphamab, or licensee, in which case 3D Medicines and Alphamab will be responsible for commercializing envafolimab for sarcoma in North America, including booking of sales revenue. If 3D Medicines and Alphamab become responsible for commercialization under the Envafolimab Collaboration Agreement, we have the option to co-market envafolimab for sarcoma in North America. In the event that envafolimab is first approved in North America for sarcoma and within three years of the commercial launch of envafolimab in North America for sarcoma 3D Medicines and Alphamab replace us as the party responsible for commercialization, and we elect and 3D Medicines and Alphamab agree for us to not co-market envafolimab for sarcoma in North America, then 3D Medicines and Alphamab will be required to compensate us for our costs associated with preparing for and conducting commercial activities.

If we have the responsibility for commercialization under the Envafolimab Collaboration Agreement, we will owe 3D Medicines and Alphamab tiered double digit royalties on net sales of envafolimab for sarcoma in North America ranging from the teens to mid-double digits. If 3D Medicines and Alphamab have responsibility for commercialization under the Envafolimab Collaboration Agreement, we will be entitled to (a) tiered double digit royalties on net sales of envafolimab for sarcoma in North America ranging from the teens to mid-double digits if we have elected to not co-market envafolimab in sarcoma or (b) a 50% royalty on net sales of envafolimab for sarcoma in North America if we have chosen to co-market envafolimab in sarcoma. Payment obligations under the Envafolimab Collaboration Agreement continue on a country-by-country basis until the last to expire licensed patent covering envafolimab expires.

3D Medicines and Alphamab retain the right to reacquire the rights to envafolimab for sarcoma in North America in connection with an arm's length sale to a third party of the rights to develop and commercialize envafolimab in North America for all indications, provided that the sale may not occur prior to completion of a pivotal trial of envafolimab in sarcoma without our written consent and the parties must negotiate in good faith and agree to fair compensation be paid to us for the value of and opportunity represented by the reacquired rights.

Each party agreed that during the term of the Envafolimab Collaboration Agreement, it would not develop or license from any third party a monospecific inhibitor to PD-L1 or PD-1 in sarcoma.

The term of the Envafolimab Collaboration Agreement continues until the later of the date the parties cease further development and commercialization of envafolimab for sarcoma in North America or the expiration of all payment obligations. The Envafolimab Collaboration Agreement may be terminated earlier by a party in the event of an uncured material breach by the other party or bankruptcy of the other party, or for safety reasons related to envafolimab. In the event we elect, or a joint steering committee (JSC) determines, to cease further development or commercialization of envafolimab, or if we fail to use commercially reasonable efforts to develop (including progress in clinical trials) and commercialize envafolimab and do not cure such failure within a specified time period, then our rights and obligations under the Envafolimab Collaboration Agreement will revert to 3D Medicines and Alphamab.

Collaboration Agreements with I-Mab Biopharma

In November 2018, we entered into two separate strategic collaboration and clinical trial agreements with I-Mab for the development of multiple immuno-oncology programs, including I-Mab's proprietary CD73 antibody TJ004309 as well as up to five proprietary bispecific antibodies currently under development by I-Mab.

In the TJ004309 Agreement, we are collaborating with I-Mab on developing TJ004309, and will bear the costs of filing an IND application and for Phase 1 clinical trials, share costs equally for Phase 2 clinical trials, and we will bear 40% and I-Mab 60% of the costs for pivotal clinical trials. I-Mab will also be responsible for the cost of certain non-clinical activities and the supply of TJ004309 and any reference drugs used in the development activities. We also agreed with I-Mab for a specified period of time to not develop or

license to or from a third party any monoclonal antibody targeting CD73 or any other biologic for certain indications that a JSC, as set up under the TJ004309 Agreement, selects for TJ004309 development.

In the event that I-Mab licenses rights to TJ004309 to a third party, we would be entitled to receive escalating portions of royalty and non-royalty consideration received by I-Mab with respect to territories outside of Greater China. In the event that I-Mab commercializes TJ004309, we would be entitled to receive a royalty on net sales by I-Mab in North America ranging from the mid-single digits to low double digits, and in the EU and Japan in the mid-single digits. The portions of certain third party royalty and non-royalty consideration and the royalty from net sales by I-Mab to which we would be entitled escalate based on the phase of development and relevant clinical trial obligations we complete under the TJ004309 Agreement, ranging from a high-single digit to a mid-teen percentage of non-royalty consideration as well as a double digit percentage of royalty consideration. In March 2020, I-Mab issued a press release announcing a strategic partnership with KG Bio, whereby KG Bio received what the press release described as a right of first negotiation outside North America for TJ004309 for up to $340 million in potential payments to I-Mab. On April 8, 2020, we issued a notice of dispute to I-Mab as we may be entitled to receive a payment under the TJ004309 Agreement, although I-Mab has disputed that any payment is due. We cannot currently estimate the likely outcome of the dispute under the TJ004309 Agreement.

The TJ004309 Agreement may be terminated by either party in the event of an uncured material breach by the other party or bankruptcy of the other party, or for safety reasons related to TJ004309. I-Mab may also terminate the TJ004309 Agreement if we cause certain delays in completing a Phase 1 clinical trial. In addition, I-Mab may terminate the TJ004309 Agreement for any reason within 90 days following the completion of the first Phase 1 clinical trial, in which case we would be entitled to a minimum termination fee of $9.0 million, or following the completion of the first Phase 2 clinical trial, in which case we would be entitled to a pre-specified termination fee of $15.0 million and either a percentage of non-royalty consideration I-Mab may receive as part of a license to a third party or an additional payment if TJ004309 is approved for marketing outside Greater China before a third party license is executed, in addition to a double digit percentage of royalty consideration. In February 2021, I-Mab sent us a notice purporting to terminate the TJ4309 Agreement, which would result in I-Mab owing us a prespecified early termination fee of $9.0 million. However, I-Mab does not have an option to terminate the TJ004309 Agreement without cause until the ongoing Phase 1 trial of TJ004309 is complete, and we therefore believe the TJ4309 Agreement has not been terminated and continue to perform our contractual obligations.

Pursuant to the Bispecific Agreement, we and I-Mab may mutually select through a JSC up to five of I-Mab's bispecific antibody product candidates within a five-year period for development and commercialization in North America.

For each product candidate selected by the JSC for development under the Bispecific Agreement, I-Mab will be responsible and bear the costs for IND-enabling studies and establishing manufacturing for the product candidate, we will be responsible for and bear the costs of filing an IND and conducting Phase 1 and Phase 2 clinical trials, and we will be responsible for and will share equally with I-Mab in the costs of conducting Phase 3 or pivotal clinical trials, in each case within North America. Subject to I-Mab's right to co-promote an approved product candidate, we will be responsible for commercializing any approved product candidates in North America, and we will share profits and losses equally with I-Mab in North America. We would also be entitled to receive tiered low single digit royalties on net sales of product candidates in the EU and Japan.

At any time prior to completing the first pivotal clinical trial for a product candidate or if I-Mab ceases to support development costs or pay its portion of Phase 3 clinical trial costs for a product candidate or the JSC decides to cease development over our objections after initiating Phase 3 clinical trials, we will have an option to obtain an exclusive license to such product candidate in all territories except Greater China and Korea and any other territories in which I-Mab previously licensed rights to a third party subject to our right of first refusal for any licenses I-Mab may grant to third-parties.

If we exercise our licensing option, we would assume sole responsibility for developing and commercializing the product candidate in the licensed territory, and in lieu of profit or loss sharing with I-Mab with respect to such product candidate, we would owe I-Mab pre-specified upfront and milestone payments and royalties on net sales, with the payments and royalties escalating depending on the phase of development the product candidate reached at the time we obtained the exclusive license as follows: (i) if before IND-enabling studies and the preparation of the CMC activities of the collaborative product, we would owe I-Mab a one-time upfront payment of $10.0 million, development and regulatory based milestone payments totaling up to $90.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the mid-single digits on annual net sales; (ii) if after IND submission but before completion of a Phase 1a clinical trial of the collaborative product, we would owe I-Mab a one-time upfront payment of $25.0 million, development and regulatory based milestone payments totaling up to $125.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the high single digits on annual net sales; (iii) if after completion of a Phase 1a clinical trial but before completion of a Phase 2 proof of concept clinical trial for the collaborative product, we would owe I-Mab a one-time upfront payment of $50.0 million, development and regulatory based milestone payments totaling up to $250.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the low double digits on annual net sales; and (iv) if after completion of a Phase 2 proof of concept clinical trial and before completion of a pivotal trial for the collaborative product, we would owe I-Mab a one-time upfront payment of $80.0 million, development and regulatory based milestone payments totaling up to $420.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the high-teens on annual net sales.

Each party agreed that for a specified period of time, it would not develop or license to or from any third party any bispecific monoclonal antibody targeting the same two biological targets as those of any selected product candidates under the Bispecific Agreement.

If development of any selected product candidates is terminated by a decision of the JSC, all rights to the product candidate will revert to I-Mab, subject to our rights to obtain an exclusive license in certain circumstances. If development is terminated after submission of an IND and prior to initiating Phase 3 clinical studies or after initiating Phase 3 clinical studies and with our concurrence, we would be entitled to tiered low single digit royalties on net sales of the product candidate in North America, the EU and Japan.

The Bispecific Agreement may be terminated by either party in the event of an uncured material breach by the other party or bankruptcy of the other party, or with respect to any selected product candidate, for safety reasons related to that product candidate.

In March 2020, we learned that I-Mab entered into two license and collaboration agreements with ABL Bio in July 2018. Under the ABL Bio License 1, I-Mab granted to ABL Bio exclusive, worldwide (excluding Greater China), royalty-bearing rights to develop and commercialize the BsAb using certain monoclonal antibody sequences. Under ABL License 2, I-Mab and ABL agreed to collaborate to develop three PD-L1-based bispecific antibodies by using ABL Bio's proprietary BsAb technology and commercialize them in their respective territories, which, collectively, include China, Hong Kong, Macau, Taiwan and South Korea, and other territories throughout the rest of the world if both parties agree to do so in such other territories during the performance of the agreement. On April 8, 2020, we issued a notice of dispute regarding possible breach of the Bispecific Agreement. We cannot currently estimate the likely outcome of the dispute under the Bispecific Agreement. Until these discussions are complete, we may be unable to provide a timeline as to when or if it will file an IND for a bispecific antibody under the Bispecific Agreement. Furthermore, our ability to license certain bispecific product candidates from I-Mab may be more limited than we previously believed due to I-Mab's separate license with ABL Bio that preceded our license with I-Mab.

License Agreement with Janssen Pharmaceutica N.V.

In September 2016, we entered into a strategic licensing collaboration with Janssen for two novel oncology assets from Janssen's early oncology development portfolio. The agreement, as amended, grants us the right to develop TRC253 (formerly JNJ-63576253), a novel small molecule high affinity competitive inhibitor of wild type androgen receptor (AR Mutant Program) and multiple AR mutant receptors which display drug resistance to approved treatments, which is intended for the treatment of men with prostate cancer.

In April 2020, Janssen notified us that it would not be exercising its option to reacquire rights to TRC253 following its review of data from the Phase 1/2 trial of TRC253 in prostate cancer. As a result, we have retained worldwide development and commercialization rights to TRC253, and are obligated to pay to Janssen (x) development and regulatory based milestone payments totaling up to $45.0 million upon achievement of specified events and (y) royalties in the low single digits based on annual net sales of TRC253 products, subject to certain specified reductions.

License Agreement with Case Western

In August 2006, we entered into a license agreement with Case Western, under which we obtained an exclusive, worldwide license to certain patents, know-how and other intellectual property controlled by Case Western related to methoxyamine, which we refer to as the TRC102 Technology. Under the agreement, as amended, we have the right to use, manufacture and commercialize products utilizing the TRC102 Technology for all mammalian therapeutic uses, and to sublicense these rights.

Under the agreement, we are generally obligated to use our best efforts to commercialize the TRC102 Technology as soon as possible. We are also required to meet specified diligence milestones, and if we fail to do so and do not cure such failure, Case Western may convert our license into a non-exclusive license or terminate the agreement.

In consideration of the rights granted to us under the agreement, we paid a one-time upfront fee to Case Western. In addition, we may be required to pay up to an aggregate of approximately $9.8 million in milestone payments, of which $0.7 million relates to the initiation of certain development activities and approximately $9.1 million relates to the submission of certain regulatory filings and receipt of certain regulatory approvals. If products utilizing the TRC102 Technology are successfully commercialized, we will be required to pay Case Western a single-digit royalty on net sales, subject to adjustments in certain circumstances. Beginning on the earlier of a specified number of years from the effective date of the agreement and the anniversary of the effective date following the occurrence of a specified event, we will be required to make a minimum annual royalty payment of $75,000, which will be credited against our royalty obligations. In the event we sublicense any of our rights under the agreement relating to the TRC102 Technology, we will be obligated to pay Case Western a portion of certain fees we may receive under the sublicense. Our royalty obligations will continue through the later of (i) the expiration of any orphan drug marketing exclusivity for a product utilizing the TRC102 Technology, (ii) August 2026, or (iii) on a country-by-country basis upon the expiration of the last valid claim under the TRC102 Technology or any patent we receive that is a derivative of the TRC102 Technology.

We may unilaterally terminate this agreement in its entirety, for any reason or for no reason, upon at least 30 days' notice to Case Western. If we do so, we will be required to pay Case Western a termination fee. If we fail to pay any amount required under the agreement and do not cure the default within 90 days of receiving notice, Case Western will have the right to convert our exclusive license to a non-exclusive license or to terminate the agreement entirely. Either party may terminate the agreement in the event of the other party's material breach of the agreement that remains uncured 60 days after receiving notice of the breach.

Cooperative Research and Development Agreements with NCI

We are a party to a Cooperative Research and Development Agreement (CRADA) with the U.S. Department of Health and Human Services, as represented by NCI, for the development of TRC102 for the treatment of cancer. We entered into the CRADA governing the development of TRC102 (TRC102 CRADA) in August 2012 with NCI's Center for Cancer Research.

Under the CRADA, as amended, NCI conducts clinical trials and non-clinical studies of TRC102. Pursuant the TRC102 CRADA, we are required to pay NCI $20,000 per year per Phase 1 clinical trial and $25,000 per year per Phase 2 clinical trial, as well as expenses incurred by NCI in connection with carrying out its responsibilities under the TRC102 CRADA, up to an aggregate maximum per year of $200,000. We may also provide funding to support assays and other studies, and if NCI supplies TRC102 for additional mutually approved clinical trials beyond the planned trials, we will reimburse NCI for costs associated with manufacturing TRC102. In addition, we made a one-time payment of $20,000 for the initial IND filing and may be required to make additional one-time payments of $10,000 each for additional IND filings. Funding for clinical trials beyond those contemplated by the TRC102 CRADA will be determined in an amendment to the applicable CRADA.

Under the CRADA, each party individually owns all inventions, data and materials produced solely by its employees in the course of performing research activities pursuant to the CRADA. The parties jointly own any inventions and materials that are jointly produced by employees of both parties. Subject to certain conditions, we have the option under the CRADA to negotiate commercialization licenses from the government to intellectual property conceived or first reduced to practice in performance of the CRADA research plan that was developed solely by NCI employees or jointly by us and NCI employees.

The TRC102 CRADA had an original five-year term and was subsequently amended to extend the term to August 7, 2023. The CRADA may be terminated at any time by mutual written consent, and we or NCI may unilaterally terminate the CRADA for any reason or no reason by providing written notice at least 60 days before the desired termination date.

Manufacturing

We do not own or operate, nor do we expect to own or operate, facilities for product manufacturing, storage, distribution or testing. We contract with third parties or our collaboration partners for the manufacture of our product candidates and we intend to continue to do so in the future.

Envafolimab is manufactured by AlphaMab in China and fill finish is performed by a contract manufacturer in the United States. Pursuant to the Envafolimab Collaboration Agreement, 3D Medicines and Alphamab have agreed to manufacture and supply, or to arrange for a third party manufacturer to manufacture and supply, envafolimab to us at pre-negotiated prices that vary based on clinical or commercial use.

TRC102 drug substance is manufactured through a standard chemical synthesis and may be obtained from multiple manufacturers.

TJ004309 is supplied to us from a contract manufacturer contracted by I-Mab as I-Mab is responsible for the supply of TJ004309 and all related drug supply activities under the terms of the TJ004309 Agreement.

Competition

The development and commercialization of new drugs is highly competitive, and we and our collaborators face competition with respect to each of our product candidates in their target indications. Many of the entities developing and marketing potentially competing products have significantly greater financial, technical and human resources and expertise than we do in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated among a smaller number of our competitors. 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. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Our commercial opportunity will be reduced or eliminated if our competitors develop and commercialize products that are more effective, have fewer side effects, are more convenient or are less expensive than any products that we may develop.

If our product candidates are approved, they will compete with currently marketed drugs and therapies used for treatment of the following indications, and potentially with drug candidates currently in development for the same indications.

The key competitive factors affecting the success of any approved product will include its efficacy, safety profile, price, method of administration and level of promotional activity.

Oncology Therapies

There is no PD-1 or PD-L1 therapy approved by the FDA for the treatment of sarcoma. Keytruda (marketed by Merck) has a compendia listing for the treatment of UPS, and is used off-label for the treatment of patients with UPS. If envafolimab is approved, it may nevertheless compete with currently marketed PD-1 and PD-L1 inhibitors, including Opdivo (marketed by BMS), Keytruda

(marketed by Merck), Imfinzi (marketed by AstraZeneca), and Tecentriq (marketed by Roche) which are approved by the FDA in multiple indications other than soft tissue sarcoma. PD-1 and PD-L1 inhibitors collectively sold over $21 billion Worldwide in 2019.

We are developing TRC102 to be used in combination with alkylating chemotherapeutics (including Temodar) and antimetabolite chemotherapeutics (including Alimta and Fludara) for the treatment of cancer. If TRC102 is approved, it could compete with other inhibitors of DNA repair. Tesaro, Inc. (now GSK), Clovis Oncology and Astra Zeneca each market inhibitors of DNA repair that work by a mechanism of action that is distinct from that of TRC102. In addition to the therapies mentioned above, there are many generic chemotherapeutics and other regimens commonly used to treat various types of cancer, including soft tissue sarcoma and glioblastoma.

We are developing TJ004309 for the treatment of solid tumors. If TJ004309 is approved, it could compete with other anti-CD73 immunotherapies including CD73 antibodies as well as adenosine receptor inhibitors already in clinical development sponsored by BMS, AstraZeneca, Arcus Biosciences and Corvus Pharmaceuticals.

Commercialization

We hold North America commercialization rights in the field of sarcoma for envafolimab (subject to certain rights held by 3D Medicines and Alphamab) and worldwide commercialization rights for our other oncology product candidates (subject to certain rights held by I-Mab for TJ004309). If any of our product candidates are approved in oncology indications, our plan is to build an oncology-focused specialty sales force in the U.S. to support their commercialization and seek a partner(s) to support commercialization outside the U.S. to the extent we have commercial rights in other territories. We believe that a specialty sales force will be sufficient to target key prescribing physicians in oncology. We currently do not have any sales or marketing capabilities or experience as a company. We plan to establish the required capabilities within an appropriate time frame ahead of any product approval and commercialization to support a product launch.

Intellectual Property

Our commercial success depends in part on our ability to obtain and maintain proprietary protection for our protein therapeutics, novel biological discoveries, to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development and implementation of our business. We also rely on trade secrets, know-how, continuing technological innovation and potential in-licensing opportunities to develop and maintain our proprietary position. Additionally, we expect to benefit from a variety of statutory frameworks in the United States, Europe, Japan and other countries that relate to the regulation of biosimilar molecules and orphan drug status. These statutory frameworks provide periods of non-patent-based exclusivity for qualifying molecules. See “Government Regulation.”

Our patenting strategy is focused on our protein therapeutics. We seek composition of matter and method of treatment patents for each such protein in key therapeutic areas. We also seek patent protection with respect to companion diagnostic methods and compositions and treatments for targeted patient populations. We have sought patent protection alone or jointly with our collaborators, as dictated by our collaboration agreements.

Our patent estate as of December 31, 2020, on a worldwide basis, includes nine (9) U.S. patents, thirty (30) issued non-U.S patents and nine (9) pending non-U.S. patent applications relating to “Antifolate Agent Combinations in the Treatment Of Cancer,” “Potentiation of Anti-Cancer Activity Through Combination Therapy with BER Pathway Inhibitors”, and “Anti-Endoglin Antibodies and Uses Thereof”. As of December 31, 2020 we are also the exclusive licensee of two (2) issued U.S. patents, forty-four (44) issued non-U.S. patents, one (1) pending U.S. patent application, and thirty-seven (37) pending non-U.S. applications related to TRC253. Specific to the development of TJ004309 in North America, we hold a non-exclusive license from I-Mab to any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering any pharmaceutical composition or preparation comprising or containing TJ004309. Specific to the development of envafolimab for the treatment of sarcoma in North America, we hold an exclusive license from 3D Medicines and Alphamab to any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering envafolimab. We also hold a non-exclusive license for the conduct of clinical trials in the EU in support of the development of envafolimab for the treatment of sarcoma in North America.

Individual patents extend for varying periods of time depending on the date of filing of the patent application or the date of patent issuance and the legal term of patents in the countries in which they are obtained. Generally, patents issued from applications filed in the United States are effective for twenty years from the earliest non-provisional filing date. In addition, in certain instances, a patent term can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period, however, the restoration period cannot be longer than five years and the total patent term including the restoration period must not exceed 14 years following FDA approval. The duration of foreign patents varies in accordance with provisions of applicable local law, but typically is also twenty years from the earliest international filing date. Our issued patents and pending applications with respect to our protein therapeutic candidates (excluding licensed rights) will expire on dates ranging from 2027 to 2030, exclusive of possible patent term extensions. However, the actual protection afforded by a patent varies on a product by product basis, from country to

country and depends upon many factors, including the type of patent, the scope of its coverage, the availability of extensions of patent term, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

National and international patent laws concerning protein therapeutics remain highly unsettled. No consistent policy regarding the patent-eligibility or the breadth of claims allowed in such patents has emerged to date in the United States, Europe or other countries. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries can diminish our ability to protect our inventions and enforce our intellectual property rights. Accordingly, we cannot predict the breadth or enforceability of claims that may be granted in our patents or in third-party patents. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. Our ability to maintain and solidify our proprietary position for our drugs and technology will depend on our success in obtaining effective claims and enforcing those claims once granted. We do not know whether any of the patent applications that we may file or license from third parties will result in the issuance of any patents. The issued patents that we own or may receive in the future, may be challenged, invalidated or circumvented, and the rights granted under any issued patents may not provide us with sufficient protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may be able to independently develop and commercialize similar drugs or duplicate our technology, business model or strategy without infringing our patents. Because of the extensive time required for clinical development and regulatory review of a drug we may develop, it is possible that, before any of our drugs can be commercialized, any related patent may expire or remain in force for only a short period following commercialization, thereby reducing any advantage of any such patent. The patent positions for our most advanced programs are summarized below:

Envafolimab Patent Coverage

Specific to the development of envafolimab for the treatment of sarcoma in North America, we hold an exclusive license from 3D Medicines and Alphamab to any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering envafolimab. We also hold a non-exclusive license for the conduct of clinical trials in the European Union in support of the development of envafolimab for the treatment of sarcoma in North America. 3D Medicines and Alphamab retain ownership of any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering any pharmaceutical composition or preparation comprising envafolimab.

TRC102 Patent Coverage

We hold issued patents directed to combination of TRC102 and pemetrexed in the United States, Australia, Canada, Europe, Japan, Mexico, Norway, Russia, Singapore, South Africa, South Korea, Ukraine, and the United Kingdom. We also have pending applications in other jurisdictions, including Brazil, China, Hong Kong, and India. The expected expiration date for these patents is 2027, exclusive of possible patent term extensions.

We hold an issued patent on further combinations of TRC102 in Europe. The expected expiration date for these patents is 2031, exclusive of possible patent term extensions.

TJ004309 Patent Coverage

Specific to the development of TJ004309 in North America, we hold a non-exclusive license from I-Mab to any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering any pharmaceutical composition or preparation comprising or containing TJ004309. I-Mab retains ownership of any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering any pharmaceutical composition or preparation comprising or containing TJ004309.

Trade Secrets, Trademarks and Know-How

In addition to patents, we rely upon unpatented trade secrets, trademarks and know-how and continuing technological innovation to develop and maintain our competitive position. We seek to protect our proprietary information, in part, using confidentiality agreements with our commercial partners, collaborators, employees and consultants and invention assignment agreements with our employees and consultants. These agreements are designed to protect our proprietary information and, in the case of the invention assignment agreements, to grant us ownership of technologies that are developed through a relationship with a third party. These agreements may be breached, and we may not have adequate remedies for any breach. In addition, our trade secrets may otherwise become known or be independently discovered by competitors. To the extent that our commercial partners, collaborators, employees and consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions. In addition, we seek trademark protection in the United States and internationally where available and when we deem appropriate. Furthermore, we are a party to a number of license agreements under which we are granted intellectual property rights to know-how that are important to our business.

U.S. Government Regulation

The preclinical studies and clinical testing, manufacture, labeling, storage, record keeping, advertising, promotion, export, marketing and sales, among other things, of our product candidates and future products, are subject to extensive regulation by governmental authorities in the United States and other countries. In the United States, pharmaceutical products are regulated by the FDA under the Federal Food, Drug, and Cosmetic Act (FFDCA), and other laws, including, in the case of biologics, the Public Health Service Act (PHSA), in addition to the FDA's implementing regulations. We expect envafolimab to be regulated by the FDA as a biologic, which requires the submission of a BLA and approval by the FDA prior to being marketed in the United States. We expect our small molecule product candidate TRC102 to be regulated as a drug and subject to New Drug Application, or NDA, requirements, which are substantially similar to the BLA requirements discussed below. Manufacturers of our product candidates may also be subject to state regulation. Failure to comply with FDA requirements, both before and after product approval, may subject us or our partners, contract manufacturers and suppliers to administrative or judicial sanctions, including FDA refusal to approve applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, fines and/or criminal prosecution.

The steps required before a biologic may be approved for marketing of an indication in the United States generally include:

- completion of preclinical laboratory tests, animal studies and formulation studies conducted according to Good Laboratory Practices, or GLPs, and other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may commence;
- completion of adequate and well-controlled human clinical trials in accordance with Good Clinical Practices, or GCPs, to establish that the biological product is "safe, pure and potent," which is analogous to the safety and efficacy approval standard for a chemical drug product for its intended use;
- submission to the FDA of a marketing application;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with applicable current Good Manufacturing Practice requirements, or cGMPs; and
- FDA review of the marketing application and issuance of a biologics license which is the approval necessary to market a biologic therapeutic product.

Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation as well as animal studies to assess the potential safety and efficacy of the biologic candidate. Preclinical studies must be conducted in compliance with FDA regulations regarding GLPs. The results of the preclinical tests, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND. Nonclinical testing may continue after the IND is submitted. In addition to including the results of the preclinical testing, the IND will also include a protocol detailing, among other things, the objectives of the clinical trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated if the first phase or phases of the clinical trial lends themselves to an efficacy determination. The IND will automatically become effective 30 days after receipt by the FDA, unless the FDA within the 30-day time period places the IND on clinical hold because of its concerns about the drug candidate or the conduct of the trial described in the clinical protocol included in the IND. The FDA can also place the IND on clinical hold at any time during drug development for safety concerns related to the investigational drug or to the class of products to which it belongs. The IND sponsor and the FDA must resolve any outstanding concerns before clinical trials can proceed.

All clinical trials must be conducted under the supervision of one or more qualified principal investigators in accordance with GCPs. They must be conducted under protocols detailing the objectives of the applicable phase of the trial, dosing procedures, research subject selection and exclusion criteria and the safety and effectiveness criteria to be evaluated. Each protocol must be submitted to the FDA as part of the IND, and progress reports detailing the status of the clinical trials must be submitted to the FDA annually. Sponsors also must timely report to the FDA serious and unexpected adverse reactions, any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator’s brochure, or any findings from other studies or animal or in vitro testing that suggest a significant risk in humans exposed to the drug. An institutional review board, or IRB, at each institution participating in the clinical trial must review and approve the protocol before a clinical trial commences at that institution, approve the information regarding the trial and the consent form that must be provided to each research subject or the subject’s legal representative, and monitor the trial until completed.

Clinical trials are typically conducted in three sequential phases, but the phases may overlap and different trials may be initiated with the same drug candidate within the same phase of development in similar or differing patient populations. Phase 1 clinical trials may be conducted in a limited number of patients, but are usually conducted in healthy volunteer subjects for indications other than oncology. The drug candidate is initially tested for safety and, as appropriate, for absorption, metabolism, distribution, excretion, pharmacodynamics and pharmacokinetics.

Phase 2 usually involves trials in a larger, but still limited, patient population to evaluate preliminarily the efficacy of the drug candidate for specific, targeted indications to determine dosage tolerance and optimal dosage and to identify possible short-term adverse effects and safety risks.

Phase 3 trials are undertaken to further evaluate clinical efficacy of a specific endpoint and to test further for safety within an expanded patient population at geographically dispersed clinical trial sites. Phase 1, Phase 2, or Phase 3 testing might not be completed successfully within any specific time period, if at all, with respect to any of our product candidates. Results from one trial are not necessarily predictive of results from later trials. Furthermore, the FDA or the sponsor may suspend clinical trials at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB’s requirements or if the drug candidate has been associated with unexpected serious harm to patients.

The results of the preclinical studies and clinical trials, together with other detailed information, including information on the manufacture and composition of the product, are submitted to the FDA as part of a marketing application requesting approval to market the drug candidate for a proposed indication. Under the PDUFA, the fees payable to the FDA for reviewing a marketing application, as well as annual program fees for approved products, can be substantial. The fees typically increase each year. Each marketing application submitted to the FDA for approval is reviewed for administrative completeness and reviewability within 60 days following receipt by the FDA of the application. If the application is found complete, the FDA will file the marketing application, triggering a full review of the application. The FDA may refuse to file any marketing application that it deems incomplete or not properly reviewable at the time of submission. The FDA’s established goal is to review 90% of priority marketing applications within six months after the application is accepted for filing and 90% of standard marketing applications within 10 months of the acceptance date, whereupon a review decision is to be made. The FDA, however, may not approve a drug candidate within these established goals and its review goals are subject to change from time to time. Further, the outcome of the review, even if generally favorable, may not be an actual approval but a “complete response letter” that describes additional work that must be done before the application can be approved. Before approving a marketing application, the FDA may inspect the facility or facilities at which the product is manufactured and will not approve the product unless the facility complies with cGMPs. The FDA may deny approval of a marketing application if applicable statutory or regulatory criteria are not satisfied, or may require additional testing or information, which can extend the review process. FDA approval of any application may include many delays or never be granted. If a product is approved, the approval may impose limitations on the uses for which the product may be marketed, may require that warning statements be included in the product labeling, may require that additional studies be conducted following approval as a condition of the approval, and may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a Risk Evaluation and Mitigation Strategy, or REMS, or otherwise limit the scope of any approval. The FDA must approve a marketing application supplement or a new marketing application before a product may be marketed for other uses or before certain manufacturing or other changes may be made. Further post-marketing testing and surveillance to monitor the safety or efficacy of a product is required. Also, product approvals may be withdrawn if compliance with regulatory standards is not maintained or if safety or manufacturing problems

occur following initial marketing. In addition, new government requirements may be established that could delay or prevent regulatory approval of our product candidates under development.

The Biologics Price Competition and Innovation Act of 2009, or the BPCIA, created a pathway for licensure, or approval, of biological products that are biosimilar to, and possibly interchangeable with, earlier biological products licensed under the PHSA. Also under the BPCIA, innovator manufacturers of original reference biological products are granted 12 years of exclusivity before biosimilars can be approved for marketing in the United States.

Both before and after the FDA approves a product, the manufacturer and the holder or holders of the marketing application for the product are subject to comprehensive regulatory oversight. For example, quality control and manufacturing procedures must conform, on an ongoing basis, to cGMP requirements, and the FDA periodically inspects manufacturing facilities to assess compliance with cGMPs. Accordingly, manufacturers must continue to spend time, money and effort to maintain cGMP compliance.

Additionally, the FDA strictly regulates marketing, labeling, advertising and promotion of 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. However, physicians may, in their independent medical judgment, prescribe legally available products for off-label uses. The FDA does not regulate the behavior of physicians in their choice of treatments but the FDA does restrict manufacturer's communications on the subject of off-label use of their products.

Other Healthcare Laws

Although we currently do not have any products on the market, we may be subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which we conduct our business. Such laws include, without limitation, state and federal, fraud and abuse, including anti-kickback and false claims, privacy and security and physician sunshine laws and regulations, many of which may become more applicable if our product candidates are approved and we begin commercialization. For additional details regarding the federal, state and foreign healthcare laws that may affect our ability to operate, see "Risk Factors—Risks Related to Our Business and Industry— "We are subject to extensive federal, state, and foreign regulation, and our failure to comply with these laws could harm our business." If our operations are found to be in violation of any of such laws or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, significant civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of our operations, exclusion from participation in federal and state healthcare programs, imprisonment, and additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, any of which could adversely affect our ability to operate our business and our financial results.

Orphan Drug Act

The United States Orphan Drug Act provides incentives to manufacturers to develop and market drugs for rare diseases and conditions affecting fewer than 200,000 persons in the United States at the time of application for orphan drug designation. Orphan drug designation must be requested before submitting a BLA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the holder of the approval is entitled to a seven-year exclusive marketing period in the United States for that product except in very limited circumstances. For example, a drug that the FDA considers to be clinically superior to, or different from, another approved orphan drug, even though for the same indication, may also obtain approval in the United States during the seven-year exclusive marketing period. In addition, holders of exclusivity for orphan drugs are expected to assure the availability of sufficient quantities of their orphan drugs to meet the needs of patients. Failure to do so could result in the withdrawal of marketing exclusivity for the drug.

Legislation similar to the Orphan Drug Act has been enacted outside the United States, including in the European Union and Japan. The orphan legislation in the European Union is available for therapies addressing chronic debilitating or life-threatening conditions that affect five or fewer out of 10,000 persons or are financially not viable to develop. The market exclusivity period is for ten years, although that period can be reduced to six years if, at the end of the fifth year, available evidence establishes that the product is sufficiently profitable not to justify maintenance of market exclusivity. The market exclusivity may be extended to 12 years if sponsors complete a pediatric investigation plan agreed upon with the relevant committee of the European Medicines Agency. Orphan legislation in Japan similarly provides for ten years of marketing exclusivity for drugs that are approved for the treatment of rare diseases and conditions.

Exclusivity

New biological products will benefit, if approved, from the data exclusivity provisions legislated in the United States, the European Union and Japan. All three regions effectively provide a period of data exclusivity to innovator biologic products. U.S. legislation provides a 12-year period of data exclusivity from the date of first licensure of a reference biologic product. EU legislation provides a period of 10 to 11 years and Japan legislation provides a period of 8 years during which companies cannot be granted approval as generic drugs to approved biologic therapies. Protection from generic competition is also available for new chemical entities, including potentially the small molecule TRC102, in the United States for 5 years, in the European Union for 10 to 11 years and in Japan for 8 years.

Exclusivity in the European Union

The European Union has led the way among the International Council for Harmonisation regions in establishing a regulatory framework for biosimilar products. The marketing authorization of generic medicinal products and similar biological medicinal products are governed in the European Union by Article 10(1) of Directive 2001/83/EC (2001). Unlike generic medicinal products, which only need to demonstrate bioequivalence to an authorized reference product, similar biological medicinal products are required to submit preclinical and clinical data, the type and quantity of which is dictated by class and product specific guidelines. In order to submit a marketing authorization for a similar biological medicinal product, the reference product must have been authorized for marketing in the European Union for at least 8 years. Biosimilars can only be authorized for use once the period of data exclusivity on the biological reference medicine has expired. In general, this means that the biological reference medicine must have been authorized for at least 10 years before a similar biological medicine can be made available by another company. The 10-year period can be extended to a maximum of 11 if, during the first 8 years of those 10 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 to existing therapies.

Many EU countries have banned interchangeability of biosimilars with their reference products to ensure adequate characterization of the safety profile of the biosimilar and to enable comparison to that of reference product.

Exclusivity in Japan

In 2009, Japan's Ministry of Health, Labour and Welfare, or MHLW, and Pharmaceuticals and Medical Device Agency, or PMDA, issued the first Japanese guidance on biosimilars. The guideline (currently available only in Japanese), which shares common key features to EU guidelines, outlines the nonclinical, clinical and CMC requirements for biosimilar applications and describes the review process, naming conventions and application fees.

Japan does not grant exclusivity to pharmaceutical products; however, the country does have a Post Marketing Surveillance, or PMS, system that affects the timing of generic entry and, in effect, provides a period of market exclusivity to innovator products. This system allows safety data to be acquired for each product. A PMS period is set for most of new drug approvals, and until this period is over, generic companies cannot submit their applications for drug approvals as generic drugs. Recently, this period was extended to 8 years for all new drug approvals. Japan's regulations do not allow currently for interchangeability of biosimilars with their reference products.

Expedited Review and Approval

The FDA has various programs, including Fast Track, priority review, and accelerated approval, which are intended to expedite or simplify the process for reviewing drugs and biologics, and/or provide for the approval of a drug or biologic on the basis of a surrogate endpoint. Even if a drug qualifies for one or more of these programs, the FDA may later decide that the drug no longer meets the conditions for qualification or that the time period for FDA review or approval will be shortened. Generally, drugs that are eligible for these programs are those for serious or life-threatening conditions, those with the potential to address unmet medical needs and those that offer meaningful benefits over existing treatments. For example, Fast Track is a process designed to facilitate the development and expedite the review of drugs to treat serious or life-threatening diseases or conditions and fill unmet medical needs. Priority review is designed to give drugs that offer major advances in treatment or provide a treatment where no adequate therapy exists an initial review within six months as compared to a standard review time of ten months. Although Fast Track and priority review do not affect the standards for approval, the FDA will attempt to facilitate early and frequent meetings with a sponsor of a Fast Track designated drug and expedite review of the application for a drug designated for priority review. Accelerated approval provides for an earlier approval for a new drug that is intended to treat a serious or life-threatening disease or condition and that fills an unmet medical need based on a surrogate endpoint. A surrogate endpoint is a laboratory measurement or physical sign used as an indirect or substitute measurement representing a clinically meaningful outcome. As a condition of approval, the FDA may require that a sponsor of a drug candidate receiving accelerated approval perform post-marketing clinical trials to confirm the clinically meaningful outcome as predicted by the surrogate marker trial.

Pediatric Exclusivity and Pediatric Use

Under the Best Pharmaceuticals for Children Act, certain drugs may obtain an additional six months of exclusivity, if the sponsor submits information requested in writing by the FDA, or a Written Request, relating to the use of the active moiety of the drug in children. The FDA may decline to issue a Written Request for studies on unapproved or approved indications or where it determines that information relating to the use of a drug in a pediatric population, or part of the pediatric population, may not produce health benefits in that population.

We have not received a Written Request for such pediatric studies, although we may ask the FDA to issue a Written Request for such studies in the future. To receive the six-month pediatric market exclusivity, we would have to receive a Written Request from the FDA, conduct the requested studies in accordance with a written agreement with the FDA or, if there is no written agreement, in accordance with commonly accepted scientific principles, and submit reports of the studies. A Written Request may include studies for indications that are not currently in the labeling if the FDA determines that such information will benefit the public health. The FDA will accept the reports upon its determination that the studies were conducted in accordance with and are responsive to the

original Written Request or commonly accepted scientific principles, as appropriate, and that the reports comply with the FDA's filing requirements.

In addition, the Pediatric Research Equity Act, or PREA, requires a sponsor to conduct pediatric studies for most drugs and biologicals, for a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration. Under PREA, original NDAs, BLAs and supplements thereto must contain a pediatric assessment unless the sponsor has received a deferral or waiver. The required assessment must include the evaluation of the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The sponsor or FDA may request a deferral of pediatric studies for some or all of the pediatric subpopulations. A deferral may be granted for several reasons, including a finding that the drug or biologic is ready for approval for use in adults before pediatric studies are complete or that additional safety or effectiveness data needs to be collected before the pediatric studies begin. The FDA must send a non-compliance letter to any sponsor that fails to submit the required assessment, keep a deferral current or fails to submit a request for approval of a pediatric formulation.

Coverage and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In both domestic and foreign markets, sales and reimbursement of any approved products will depend, in part, on the extent to which third-party payors, such as government health programs, commercial insurance and managed healthcare organizations provide coverage, and establish adequate reimbursement levels, for such products. Third-party payors are increasingly challenging the prices charged for medical products and services and imposing controls to manage costs. Third-party payors may limit coverage to specific products on an approved list, or also known as a formulary, which might not include all of the FDA-approved products for a particular indication. Additionally, we may need to conduct expensive pharmacoeconomic studies in order to demonstrate the cost-effectiveness of our products. If third-party payors do not consider our products to be cost-effective compared to other therapies, the payors may not cover our products after approved as a benefit under their plans or, if they do, the level of reimbursement may not be sufficient to allow us to sell our products on a profitable basis.

The containment of healthcare costs also has become a priority of federal and state governments and the prices of drugs have been a focus in this effort. Governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit our net revenue and results.

Outside the United States, ensuring adequate coverage and payment for our products will face challenges. Pricing of prescription pharmaceuticals is subject to governmental control in many countries. Pricing negotiations with governmental authorities can extend well beyond the receipt of regulatory marketing approval for a product and may require us to conduct a clinical trial that compares the cost effectiveness of our product candidates or products to other available therapies. The conduct of such a clinical trial could be expensive and result in delays in our commercialization efforts. Third-party payors are challenging the prices charged for medical products and services, and many third-party payors limit reimbursement for newly-approved health care products. Recent budgetary pressures in many European Union countries are also causing governments to consider or implement various cost-containment measures, such as price freezes, increased price cuts and rebates. If budget pressures continue, governments may implement additional cost-containment measures. Cost-control initiatives could decrease the price we might establish for products that we may develop or sell, which would result in lower product revenues or royalties payable to us. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products.

Healthcare Reform

There have been a number of federal and state proposals during the last few years regarding the pricing of pharmaceutical and biological products, government control and other changes to the healthcare system of the United States. It is uncertain what legislative proposals will be adopted or what actions federal, state or private payors for medical goods and services may take in response to any healthcare reform proposals or legislation. Adoption of new legislation at the federal or state level could further limit reimbursement for pharmaceuticals, including our product candidates if approved. We cannot predict the effect medical or healthcare reforms may have on our business, and no assurance can be given that any such reforms will not have a material adverse effect. For additional details regarding health reform activity, see "Risk Factors—Risks Related to Commercialization of Product Candidates — "Healthcare legislative reform measures may have a material adverse effect on our business and results of operations."

Foreign Regulation

In addition to regulations in the United States, we and our collaborators will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our product candidates. Whether or not we or our collaborators obtain FDA approval for a product candidate, we or our collaborators must obtain approval from the comparable regulatory authorities of foreign countries or economic areas, such as the European Union, before we or our collaborators may commence clinical trials or market products in those countries or areas. The approval process and requirements governing the conduct of clinical trials, product

licensing, pricing and reimbursement vary greatly from place to place, and the time may be longer or shorter than that required for FDA approval.

Certain countries outside of the United States have a process that requires the submission of a clinical trial application much like an IND prior to the commencement of human clinical trials. In Europe, for example, a clinical trial application, or CTA, must be approved by the competent national health authority and by independent ethics committees in each country in which a company intends to conduct clinical trials. Once the CTA is approved in accordance with a country's requirements, clinical trial development may proceed in that country. In all cases, the clinical trials must be conducted in accordance with good clinical practices, or GCPs and other applicable regulatory requirements.

Under European Union regulatory systems, a company may submit marketing authorization applications either under a centralized or decentralized procedure. The centralized procedure is compulsory for medicinal products produced by biotechnology or those medicinal products containing new active substances for specific indications such as the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, viral diseases and designated orphan medicines, and optional for other medicines which are highly innovative. Under the centralized procedure, a marketing application is submitted to the European Medicines Agency where it will be evaluated by the Committee for Medicinal Products for Human Use. A favorable opinion typically results in the grant by the European Commission of a single marketing authorization that is valid for all European Union member states within 67 days of receipt of the opinion. The initial marketing authorization is valid for five years, but once renewed is usually valid for an unlimited period. The decentralized procedure provides for approval by one or more "concerned" member states based on an assessment of an application performed by one member state, known as the "reference" member state. Under the decentralized approval procedure, an applicant submits an application, or dossier, and related materials to the reference member state and concerned member states. The reference member state prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. Within 90 days of receiving the reference member state's assessment report, each concerned member state must decide whether to approve the assessment report and related materials. If a member state does not recognize the marketing authorization, the disputed points are eventually referred to the European Commission, whose decision is binding on all member states.

In China, the NMPA monitors and supervises the administration of pharmaceutical products, as well as medical devices and equipment. In order to conduct clinical trials in China a clinical trial application must be submitted and approved by the NMPA. When clinical trials have been completed, an applicant must apply to the NMPA for approval of a new drug application. The NMPA, the Center for Drug Evaluation (CDE), and the Drug Inspection Institution will then conduct reviews and on-site inspections. The NMPA determines whether to approve the application according to the comprehensive evaluation opinions produced by the reviews and on-site inspections. We or our collaborators must obtain approval of new drug applications before our product candidates can be manufactured and sold in the Chinese market. In addition, all facilities and techniques used in the manufacture of products for clinical use or for sale in China must be operated in conformity with good manufacturing practice guidelines as established by the NMPA. Failure to comply with applicable requirements could result in the termination of manufacturing and significant fines.

Additional Regulation

We are also subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other present and potential federal, state or local regulations. These and other laws govern our use, handling and disposal of various biological and chemical substances used in, and waste generated by our operations. Our research and development involves the controlled use of hazardous materials, chemicals and viruses. Although we believe that our safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources.

Employees

As of December 31, 2020, we had a total of 18 employees, 11 of whom are involved in research, development or manufacturing, and two of whom have Ph.D., Pharm.D. or M.D. degrees. We have no collective bargaining agreements with our employees and we have not experienced any work stoppages. We consider our relations with our employees to be good.

Corporate and Other Information

We were incorporated in the state of Delaware on October 28, 2004. Our principal executive offices are located at 4350 La Jolla Village Dr., Suite 800, San Diego, CA 92122, and our telephone number is (858) 550-0780. Our corporate website address is www.traconpharma.com and we regularly post copies of our press releases as well as additional information about us on our website. Information contained on or accessible through our website is not a part of this Annual Report, and the inclusion of our website address in this Annual Report is an inactive textual reference only.

This Annual Report contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this Annual Report, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the

fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Item 1A. Risk Factors.

Certain factors may have a material adverse effect on our business, financial condition and results of operations, and you should carefully consider them. Accordingly, in evaluating our business, we encourage you to consider the following discussion of risk factors, in its entirety, in addition to other information contained in this Annual Report as well as our other public filings with the Securities and Exchange Commission.

Risks Related to our Financial Position and Need for Additional Capital

We have incurred losses from operations since our inception and anticipate that we will continue to incur substantial operating losses for the foreseeable future. We may never achieve or sustain profitability.

We are a clinical stage company with limited operating history. All of the product candidates we are developing will require substantial additional development time and resources before we or our partners would be able to apply for or receive regulatory approvals and begin generating revenue from product sales. We have incurred losses from operations in each year since our inception, including net losses of $16.8 million and $22.7 million for the years ended December 31, 2020 and 2019, respectively. At December 31, 2020, we had an accumulated deficit of $179.1 million.

We expect to continue to incur substantial expenses as we expand our development activities and advance our clinical programs. To become and remain profitable, we or our partners must succeed in developing product candidates, obtaining regulatory approval for them, and manufacturing, marketing and selling those products for which we or our partners may obtain regulatory approval. We or they may not succeed in these activities, and we may never generate revenue from product sales that is significant enough to achieve profitability. Because of the numerous risks and uncertainties associated with pharmaceutical and biological product development, we are unable to predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. In addition, our expenses could increase if we are required by the FDA or comparable foreign regulatory authorities to perform studies or trials in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of any product candidates. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to become or remain profitable would depress our market value and could impair our ability to raise capital, expand our business, develop other product candidates or continue our operations.

We will require substantial additional financing to achieve our goals, and failure to obtain additional financing when needed could force us to delay, limit, reduce or terminate our drug development efforts.

Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is expensive. We expect our current level of research and development expenses to increase slightly in 2021 due to enrollment of the ENVASARC pivotal trial.

At December 31, 2020, we had cash, cash equivalents, and short-term investments totaling $36.1 million. Based upon our current operating plan, we believe that our existing cash, cash equivalents, and short-term investments will be sufficient to fund our operating expenses and capital requirements into the second half of 2022. We will need additional funding to complete the development and commercialization of product candidates, including envafolimab. In November 2018, we entered into separate collaboration and clinical trial agreements with I-Mab for the development of multiple immuno-oncology programs. Under the agreements, we are responsible for various portions of the costs to conduct clinical trials, among other development obligations. We will need additional funds to advance the development of these programs and meet our cost-sharing obligations, and these requirements may be substantial depending on how many programs are selected for development and the stage of development each program reaches.

Regardless of our expectations, changing circumstances beyond our control, including the COVID-19 pandemic, may cause us to consume capital more rapidly than we currently anticipate. For example, our clinical trials may encounter technical, enrollment or other difficulties or we could encounter difficulties obtaining clinical trial material that could increase our development costs more than we expect. In any event, we will require additional capital prior to completing clinical development, filing for regulatory approval, or commercializing any product candidates.

In December 2020, we entered into a Capital on Demand™ Sales Agreement (JonesTrading Agreement) with JonesTrading Institutional Services LLC (JonesTrading) pursuant to which we could sell from time to time, at our option, up to an aggregate of $50.0 million of shares of our common stock through JonesTrading, as sales agent or principal, all of which remains available for sale as of December 31, 2020. In connection with entering into the JonesTrading Agreement in December 2020, we terminated our prior Capital on Demand™ Sales Agreement, dated September 6, 2018, with JonesTrading and no further sales of our common stock will occur under the prior sales agreement. As of December 31, 2020, we sold an aggregate 3.0 million shares of common stock for net

proceeds of $7.1 million under the prior sales agreement with JonesTrading. In October 2019, as amended in April 2020, we entered into a Common Stock Purchase Agreement (2019 Purchase Agreement) with Aspire Capital Fund, LLC (Aspire Capital) pursuant to which, upon the terms and subject to the conditions and limitations set forth in the 2019 Purchase Agreement, Aspire Capital committed to purchase up to an aggregate of $15.0 million of shares of our common stock at our request from time to time. As of December 31, 2020, we sold an aggregate 4.8 million shares of common stock under the 2019 Purchase Agreement with Aspire Capital for net proceeds of $9.6 million. While the JonesTrading Agreement and 2019 Purchase Agreement provide us with additional options to raise capital through sales of our common stock, there can be no guarantee that we will be able to sell shares under either agreement in the future, or that any sales will generate sufficient proceeds to meet our capital requirements. In particular, JonesTrading is under no obligation to sell any shares of our common stock that we may request to be sold under the JonesTrading Agreement from time to time, and while Aspire Capital is obligated to purchase shares of our common stock under the 2019 Purchase Agreement, the obligation is subject to our satisfaction of various conditions which we may not be able to meet in the future. If sales are made under either the JonesTrading Agreement or the 2019 Purchase Agreement, our existing stockholders may experience dilution and such sales, or the perception that such sales are or will be occurring, may cause the trading price of our common stock to decline.

Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. As a result of the COVID-19 pandemic and actions taken to slow its spread, the global credit and financial markets have experienced extreme volatility and disruptions, including diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. If the equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. If we are unable to raise additional capital when required or on acceptable terms, we may be required to significantly delay, scale back or discontinue the development or commercialization of product candidates or otherwise significantly curtail, or cease, operations. If we are unable to pursue or are forced to delay our planned drug development efforts due to lack of financing, it would have a material adverse effect on our business, operating results and prospects.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to product candidates on unfavorable terms to us.

We may seek additional capital through a variety of means, including through equity offerings and debt financings. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through licensing or collaboration arrangements with third parties, we may have to relinquish valuable rights to product candidates, or grant licenses on terms that are not favorable to us.

Our loan and security agreement with Silicon Valley Bank, or SVB, contains restrictions that limit our flexibility in operating our business. We may be required to make a prepayment or repay the outstanding indebtedness earlier than we expect if a prepayment event or an event of default occurs, including a material adverse change with respect to us, which could have a materially adverse effect on our business.

On May 3, 2018, we entered into an amended loan and security agreement with SVB to borrow $7.0 million, all of which was used to refinance amounts outstanding under prior credit facilities with SVB. The agreement, as amended, contains various covenants that limit our ability to engage in specified types of transactions. These covenants limit our ability to, among other things:

- convey, sell, lease or otherwise dispose of certain parts of our business or property;
- change the nature of our business;
- liquidate or dissolve;
- enter into certain change in control or acquisition transactions;
- incur or assume certain debt;
- grant certain types of liens on our assets;
- maintain certain collateral accounts;
- pay dividends or make certain distributions to our stockholders;
- make certain investments;
- enter into material transactions with affiliates;

- make or permit certain payments on subordinate debt; and
- become an “investment company” as defined under the Investment Company Act of 1940, as amended.

The restrictive covenants of the agreement could cause us to be unable to pursue business opportunities that we or our stockholders may consider beneficial.

A breach of any of these covenants could result in an event of default under the agreement. An event of default will also occur if, among other things, a material adverse change in our business, operations or condition occurs, which could potentially include negative results in clinical trials, or a material impairment of the prospect of our repayment of any portion of the amounts we owe under the agreement occurs. In the case of a continuing event of default under the agreement, SVB could elect to declare all amounts outstanding to be immediately due and payable, proceed against the collateral in which we granted SVB a security interest under the agreement, or otherwise exercise the rights of a secured creditor. Amounts outstanding under the agreement are secured by all of our existing and future assets, excluding intellectual property, which is subject to a negative pledge arrangement.

Risks Related to Clinical Development and Regulatory Approval of Product Candidates

If the response rate of envafolimab as a single agent or in combination with ipilimumab in UPS/MFS is not significantly higher than existing therapies, our strategy of basing the initial accelerated approval of envafolimab on ORR as the primary endpoint could delay or prevent the approval of envafolimab in UPS/MFS.

Envafolimab will be initially developed in refractory UPS/MFS, where the PD-(L)1 inhibitors given as single agents or in combination with ipilimumab demonstrated response rates which were significantly higher than the response rate demonstrated by the approved treatment Votrient or chemotherapy in UPS/MFS. If the response rate of envafolimab as a single agent or in combination with ipilimumab in UPS/MFS is not significantly higher than Votrient or other chemotherapy, our strategy of basing the initial accelerated approval of envafolimab on ORR as the primary endpoint will be unlikely to succeed, which could delay or prevent the approval of envafolimab in UPS/MFS.

Our plan to develop envafolimab in combination with ipilimumab exposes us to additional risks.

We intend to develop envafolimab in combination with ipilimumab and may in the future develop envafolimab or other product candidates in combination with other approved therapies or therapies in development. Patients may not be able to tolerate envafolimab or any of our other product candidates in combination with ipilimumab or other therapies or dosing of envafolimab in combination with ipilimumab or other therapies may have unexpected consequences. Even if any of our product candidates were to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to be subject to the risks that the FDA or other comparable foreign regulatory authorities could revoke approval of the therapy used
in combination with any of our product candidates, or safety, efficacy, manufacturing or supply issues could arise with these existing therapies. In addition, it is possible that existing therapies with which our product candidates are approved for use could themselves fall out of favor or be relegated to later lines of treatment. This could result in the need to identify other combination therapies for our product candidates or our own products being removed from the market or being less successful commercially.

Additionally, if the third-party providers of therapies or therapies in development used in combination with our product candidates are unable to produce sufficient quantities for clinical trials or for commercialization of our product candidates, or if the cost of combination therapies are prohibitive, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and prospects.

Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Failure can occur at any stage of clinical development.

Clinical development is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. Even if product candidates demonstrate favorable results in ongoing or planned Phase 1 and 2 clinical trials, many product candidates fail to show desired safety and efficacy traits in late-stage clinical trials despite having progressed through earlier trials. In addition to the potential lack of safety or efficacy of product candidates, clinical trial failures may result from a multitude of factors including flaws in trial design, manufacture of clinical trial material, dose selection and patient enrollment criteria, or differences in determination of progression events by investigators compared to central radiographic reviewers. With respect to envafolimab, while results of trials conducted by others outside of the United States have been promising, they may not be predictive of results in U.S. trials due to differences in trial design, target indications, patient populations, availability of alternative treatments and other factors. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we or our partners may decide, or regulators may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from trials and studies are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may delay, limit or prevent regulatory approval. If patients drop out

of our trials, miss scheduled doses or follow-up visits or otherwise fail to follow trial protocols, or if our trials are otherwise disrupted due to COVID-19 or actions taken to slow its spread, the integrity of data from our trials may be compromised or not accepted by the FDA or other regulatory authorities, which would represent a significant setback for the applicable program.

If any product candidate is found to be unsafe or lack efficacy, we will not be able to obtain regulatory approval for it and our stock price would be materially and adversely affected.

Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.

We may experience delays in clinical trials of product candidates. Our ongoing and planned clinical trials may not begin on time, have an effective design, enroll a sufficient number of patients or be completed on schedule, if at all. Our clinical trials can be delayed for a variety of reasons, including:

- inability to raise funding necessary to initiate or continue a trial;
- delays in obtaining regulatory approval to commence a trial;
- delays in reaching agreement with the FDA on final trial design;
- adverse findings in toxicology studies, including chronic toxicology studies;
- imposition of a clinical hold for safety reasons or following an inspection of our clinical trial operations or trial sites by the FDA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective clinical trial sites;
- delays in obtaining required institutional review board approval at each site;
- delays in recruiting suitable patients to participate in a trial;
- delays in enrollment caused by the availability of alternative treatments;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- clinical sites dropping out of a trial to the detriment of enrollment;
- time required to add new clinical sites; or
- delays in our ability to acquire sufficient supply of clinical trial materials.

In addition, the COVID-19 pandemic has impacted clinical trials broadly, including our own with some sites pausing enrollment or not completing all assessments specified in the protocol, and some patients choosing not to enroll or continue participating in ongoing trials. We and our collaborators may continue to experience delays in site initiation and patient enrollment, failures to comply with trial protocols, delays in the manufacture of product candidates for clinical testing and other difficulties in starting or competing our clinical trials due to the COVID-19 pandemic.

If initiation or completion of our ongoing or planned clinical trials are delayed for any of the above reasons or other reasons, our development costs may increase, our approval process could be delayed and our ability to commercialize product candidates could be materially harmed, which could have a material adverse effect on our business.

Our product candidates or those of our partners may cause adverse events or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.

Adverse events, or AEs, caused by product candidates or other potentially harmful characteristics of product candidates could cause us, our partners, including the National Cancer Institute, or NCI, or other third party clinical trial sponsors, clinical trial sites or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval.

Phase 1 or Phase 2 clinical trials of TRC102 conducted to date have generated AEs related to the trial drug, some of which have been serious. The most common AE identified in our clinical trials of TRC102 has been anemia. The most common AE identified in the Phase 1/2 trial of TRC253 was QTcF prolongation. There can be no assurance that adverse events associated with product candidates will not be observed. As is typical in drug development, we have a program of ongoing toxicology studies in animals for clinical stage product candidates and cannot provide assurance that the findings from such studies or any ongoing or future clinical trials will not adversely affect our clinical development activities.

Further, if any approved products cause serious or unexpected side effects after receiving market approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product or impose restrictions on its distribution;
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients; or
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidate and could substantially increase the costs of commercializing product candidates.

The regulatory approval processes of the FDA and comparable foreign authorities are lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. For example, we cannot guarantee that for certain oncology indications where the FDA has traditionally granted approval to therapies that can demonstrate progression-free survival, the agency will not later require us to demonstrate overall survival, which would greatly extend the time and increase the capital required to complete clinical development. We have not obtained regulatory approval for any product candidate, and it is possible that none of our existing product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design, scope or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of product candidates may not be sufficient to support the submission of a Biologics License Application, or BLA, or a New Drug Application, or NDA, or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may change significantly in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of future clinical trial results, may result in our failing to obtain regulatory approval to market product candidates, which would harm our business, results of operations and prospects significantly.

In addition, even if we were to obtain approval, regulatory authorities may approve any product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could harm the commercial prospects for our product candidates or those of our partners.

We have not previously submitted a marketing application, or any similar drug approval filing to the FDA or any comparable foreign authority for any product candidate, and we cannot be certain that any product candidates will be successful in clinical trials or receive regulatory approval. Further, product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approvals to market one or more product candidates, our revenue will be dependent, to a significant extent, upon the size of the markets in the territories for which we gain regulatory approval. If the markets for patients or indications that we are targeting are not as significant as we estimate, we may not generate significant revenue from sales of such products, if approved.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could negatively impact our business.

The ability of the FDA to review and approve proposed clinical trials or new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory, and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new product candidates to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the global COVID-19 pandemic, in March 2020 the FDA announced its intention to postpone most foreign inspections of manufacturing facilities. In July 2020, the FDA restarted domestic on-site inspections on a risk-based basis. Regulatory authorities outside the United States have and may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

We may not receive Fast Track designation for our product candidates from the FDA, or Fast Track designation may not actually lead to a faster development or regulatory review or approval process.

Fast track designation provides increased opportunities for sponsor meetings with the FDA during preclinical and clinical development, in addition to the potential for rolling review once a marketing application is filed. A new drug or biologic is eligible for Fast Track designation if it is intended to treat a serious or life-threatening disease or condition and the drug demonstrates the potential to address unmet medical needs for the disease or condition. The FDA has broad discretion whether or not to grant this designation, and even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA will grant it. The FDA may also withdraw Fast Track designation if it believes that the designation is no longer supported by data from our clinical development program.

Even though we have obtained orphan drug designation for TRC102 for the treatment of patients with malignant glioma, including glioblastoma, we may not be able to obtain or maintain the benefits associated with orphan drug status, including market exclusivity.

Regulatory authorities in some jurisdictions, including the United States, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 people in the United States, or a patient population of greater than 200,000 people in the United States, but for which there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States.

In October 2020, the FDA granted orphan drug status to TRC102 for the treatment of patients with malignant glioma, including glioblastoma. Generally, if a drug with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the drug may be entitled to a period of marketing exclusivity, which precludes the FDA from approving another marketing application for the same drug for that time period. Another drug may receive marketing approval prior to TRC 102. The applicable period is seven years in the United States, which may be extended by six months, in the case of product candidates that have complied with the respective regulatory agency's agreed upon pediatric investigation plan. Orphan drug exclusivity may be lost if the FDA 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. In addition, even after a drug is granted orphan exclusivity and approved, the FDA can subsequently approve another drug for the same condition before the expiration of the seven-year exclusivity period if the FDA concludes that the later drug is clinically superior in that it is shown to be

safer, more effective or makes a major contribution to patient care. In addition, if an orphan designated product receives marketing approval for an indication broader than or different from what is designated, such product may not be entitled to orphan exclusivity. Even though the FDA has granted orphan drug designation to TRC102 for the treatment of patients with malignant glioma, including glioblastoma, if we receive approval for TRC102 for a modified or different indication, our current orphan designations may not provide us with exclusivity.

Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process. Also, regulatory approval for any product candidate may be withdrawn, and other product candidates may obtain approval before us and receive orphan drug exclusivity, which could block us from entering the market.

Even if we obtain orphan drug exclusivity for TRC102, that exclusivity may not effectively protect us from competition because different drugs can be approved for the same condition before the expiration of the orphan drug exclusivity period.

We may be unsuccessful in our efforts to obtain orphan drug designations from the FDA for product candidates or may not ultimately realize the potential benefits of orphan drug designation.

We intend to apply for orphan drug designation for envafolimab for the treatment of soft tissue sarcoma and may seek orphan drug designations for other product candidates and indications. The FDA grants orphan designation to drugs that are intended to treat rare diseases with fewer than 200,000 patients in the United States or that affect more than 200,000 persons but are not expected to recover the costs of developing and marketing a treatment drug. Orphan drugs do not require prescription drug user fees with a marketing application, may qualify the drug development sponsor for certain tax credits, and may be eligible for a market exclusivity period of seven years. We cannot guarantee that we will be able to receive orphan drug status from the FDA for any product candidates or indications. If we are unable to secure orphan drug designation for product candidates or indications, our regulatory and commercial prospects may be negatively impacted.

Despite orphan drug exclusivity, the FDA can still approve another drug containing the same active ingredient and used for the same orphan indication if it determines that a subsequent drug is safer, more effective or makes a major contribution to patient care, and orphan exclusivity can be lost if the orphan drug manufacturer is unable to assure that a sufficient quantity of the orphan drug is available to meet the needs of patients with the rare disease or condition. Orphan drug exclusivity may also be lost if the FDA later determines that the initial request for designation was materially defective. In addition, orphan drug exclusivity does not prevent the FDA from approving competing drugs for the same or similar indication containing a different active ingredient. If orphan drug exclusivity is lost and we were unable to successfully enforce any remaining patents covering our eligible product candidates, we could be subject to generic competition earlier than we anticipate. In addition, if a subsequent drug is approved for marketing for the same or a similar indication as any product candidates that receive marketing approval, we may face increased competition and lose market share regardless of orphan drug exclusivity.

Although we intend to seek breakthrough therapy designation for envafolimab for the treatment of soft tissue sarcoma subtypes, such designation may not be granted, and even if granted this may not lead to a faster development, regulatory review or approval process, and it does not increase the likelihood that envafolimab will receive marketing approval in the United States.

A breakthrough therapy is defined as a therapy that is intended, alone or in combination with one or more other therapies, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the therapy may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For therapies that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Therapies designated as breakthrough therapies by the FDA may also be eligible for priority review and accelerated approval. Although we intend to seek breakthrough therapy designation for envafolimab for the treatment of soft tissue sarcoma if our interim data from the ENVASARC trial is positive, we may not be granted such designation and even if designated this may not lead to a faster development, regulatory review or approval process, and it does not increase the likelihood that envafolimab will receive marketing approval in the United States. In addition, if granted breakthrough therapy designation, the FDA may later decide that envafolimab no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Obtaining and maintaining regulatory approval of product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve

requirements and administrative review periods different from, and greater than, those in the United States, including additional preclinical studies or clinical trials, as studies or trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we would intend to charge for our products is also subject to approval.

Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates or those of our partners will be harmed.

Even if we receive regulatory approval of product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense, and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with product candidates.

Any product candidates for which we receive regulatory approvals will require surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a Risk Evaluation and Mitigation Strategy, or REMS, in order to approve product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves product candidates, the manufacturing processes, labeling, packaging, distribution, AE reporting, storage, advertising, promotion, import, export and recordkeeping for product candidates will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, establishment registration and drug listing, as well as continued compliance with regulatory requirements for current good manufacturing practices, or cGMPs, and current good clinical practices, or cGCPs, for any clinical trials that we conduct post-approval. Although physicians, in the practice of medicine, may prescribe an approved drug for unapproved indications, pharmaceutical companies are prohibited from promoting uses that are not approved by the FDA as reflected in the product's approved labeling. However, companies may share truthful and not misleading information that is otherwise consistent with the labeling. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses of approved pharmaceutical products, and a company that is found to have improperly promoted off-label may be subject to significant liability. Later discovery of previously unknown problems with product candidates, including adverse events of unanticipated severity or frequency, or with our third party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of product candidates, withdrawal of the product from the market, or voluntary or mandatory product recalls;
- fines, warning letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of existing approvals;
- product seizure or detention, or refusal to permit the import or export of product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Risks Related to Our Reliance on Third Parties

We and our partners rely on third party manufacturers to make product candidates, and any failure by a third party manufacturer may delay or impair our ability to complete clinical trials or commercialize our product candidates.

Manufacturing drugs and biologics is complicated and is tightly regulated by regulatory authorities, including the FDA and foreign equivalents. We currently rely on third party manufacturers to supply us with drug substance for preclinical and clinical trials. Moreover, the market for contract manufacturing services for drug products is highly cyclical, with periods of relatively abundant capacity alternating with periods in which there is little available capacity. If our need for contract manufacturing services increases during a period of industry-wide tight capacity, we may not be able to access the required capacity on a timely basis or on

commercially viable terms, which could result in delays in initiating or completing clinical trials or our ability to apply for or receive regulatory approvals.

We rely on other third parties for drug substance and to perform additional steps in the manufacturing process, including filling into vials, shipping and storage. For our clinical stage pipeline programs, there can be no guarantee that lack of clinical supplies will not force us or our partners to delay or terminate any ongoing or planned clinical trials.

We expect to continue to rely on third party manufacturers for any drug required for commercial supply and do not intend to build our own manufacturing capability. Successfully transferring complicated manufacturing techniques to contract manufacturing organizations and scaling up these techniques for commercial quantities is costly, time consuming and subject to potential difficulties and delays. With respect to envafolimab specifically, pursuant to the Envafolimab Collaboration Agreement, 3D Medicines and Alphamab have agreed to manufacture and supply, or to arrange for a third party manufacturer to manufacture and supply, envafolimab to us at pre-negotiated prices that vary based on clinical or commercial use.

We do not have any long-term supply agreements for the manufacture of product candidates and cannot guarantee that any third party manufacturer would be willing to continue supplying drug product for clinical trials or commercial sale at a reasonable cost or at all. In addition, manufacturing agreements are often subject to early termination by the third party manufacturer under certain circumstances.

The facilities used by our current or future third party manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted after we submit a BLA or an NDA to the FDA. While we work closely with our third party manufacturers on the manufacturing process for product candidates, we generally do not control the implementation of the manufacturing process of, and are completely dependent on, our third party manufacturers for compliance with cGMP regulatory requirements and for manufacture of both drug substances and finished drug products. If our third party manufacturers or those of our collaborators cannot successfully manufacture material that conforms to applicable specifications and the strict regulatory requirements of the FDA or other regulatory authorities, we may experience delays in initiating planned clinical trials and we may not be able to secure or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers or other third party 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 product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or commercialize product candidates.

We depend in part on NCI and other third party sponsors to advance clinical development of TRC102. If these third party sponsors ceased their support for our product candidates, our ability to advance clinical development of product candidates could be limited and we may not be able to pursue the number of different indications for our product candidates that are currently being pursued.

NCI is currently sponsoring and funding multiple clinical trials involving TRC102. In addition, Case Western has sponsored and funded two separate clinical trials involving TRC102. The advancement of TRC102 depends in part on the continued sponsorship and funding of clinical trials by these organizations, as our resources and capital would not be sufficient to conduct these trials on our own. None of these third party sponsors are obligated to continue sponsorship or funding of any clinical trials involving our product candidates and could stop their support at any time. If these third party sponsors ceased their support for our product candidates, our ability to advance clinical development of product candidates could be limited and we may not be able to pursue the number of different indications for our product candidates that are currently being pursued.

Even if these third party sponsors continue to sponsor and fund clinical trials of our product candidates, our reliance on their support subjects us to numerous risks. For example, we have limited control over the design, execution or timing of their clinical trials and limited visibility into their day-to-day activities, including with respect to how they are providing and administering our product candidates. If a clinical trial sponsored by a third party has a failure due to poor design of the trial, errors in the way the clinical trial is executed or for any other reason, or if the sponsor fails to comply with applicable regulatory requirements or if there are errors in the reported data, it could represent a major set-back for the development and approval of our product candidates, even if we were not directly involved in the trial and even if the clinical trial failure was not related to the underlying safety or efficacy of the product candidate. In addition, these third party sponsors could decide to de-prioritize clinical development of our product candidates in relation to other projects, which could adversely affect the timing of further clinical development. We are also subject to various confidentiality obligations with respect to the clinical trials sponsored by third party sponsors, which could prevent us from disclosing current information about the progress or results from these trials until the applicable sponsor publicly discloses such information or permits us to do so. This may make it more difficult to evaluate our business and prospects at any given point in time and could also impair our ability to raise capital on our desired timelines.

We are dependent on 3D Medicines and Alphamab with respect to certain aspects of our development of envafolimab for sarcoma in North America. The failure to maintain the collaboration and clinical trial agreement, the failure of 3D Medicines or Alphamab to perform their obligations under the agreement, or the actions of 3D Medicines or Alphamab or their other partners with respect to envafolimab in other indications or outside North America could negatively impact our business.

Pursuant to the terms of our collaboration and clinical trial agreement with 3D Medicines and Alphamab, we were granted an exclusive license to develop and commercialize envafolimab for sarcoma in North America. While we are generally responsible for clinical development, 3D Medicines and Alphamab are responsible for certain critical activities, including the manufacture and supply of envafolimab, CMC activities and prosecution and enforcement of intellectual property rights. We have limited control over the amount and timing of resources that 3D Medicines and Alphamab will dedicate to their respective efforts, and their failure to perform their obligations would impair our ability to develop envafolimab for sarcoma in North America. In addition, we very limited influence or control over 3D Medicines' or Alphamab's (or their respective other partners') activities with respect to the development and commercialization of envafolimab in indications outside of sarcoma or outside of North America, even though these activities could have a significant impact on the development and commercialization of envafolimab for sarcoma in North America. For example, adverse events in clinical trials outside of the United States could cause the FDA to put clinical trials of envafolimab in the United States on hold, and negative results of clinical trials of envafolimab in other indications may cast doubt as to the likelihood of positive results of clinical trials in UPS/MFS or other sarcoma indications.

We are subject to a number of other risks associated with our collaboration and clinical trial agreement with 3D Medicines and Alphamab, including:

- we and 3D Medicines and Alphamab could disagree as to future development plans which could delay initiation of clinical trials or stop a future clinical trial;
- there may be disputes between us and 3D Medicines and Alphamab, including disagreements regarding the terms of the collaboration and clinical trial agreement, that may result in the delay of or failure to achieve development, regulatory and commercial objectives and/or costly litigation or arbitration that diverts our management's attention and resources;
- 3D Medicines and Alphamab may not provide us with timely and accurate information regarding development progress and activities outside of sarcoma and North America, which could adversely impact our ability to report progress to our investors and may cause us to make ill-informed decisions with respect to our own development efforts; and
- 3D Medicines and Alphamab may not properly maintain or defend the intellectual property rights licensed to us in North America or may undertake activities that invite litigation that could jeopardize or invalidate the intellectual property rights licensed to us or expose us to potential litigation.
- 3D Medicines and Alphamab are responsible for conducting CMC activities for envafolimab and may not conduct such activities at the quality level required to seek FDA approval.

If we have disagreements with 3D Medicines or Alphamab, if they do not perform their obligations under the collaboration and clinical trial agreement or there are negative events with respect to envafolimab outside of sarcoma or North America, there could be material adverse consequences to our ability to successfully develop and commercialize envafolimab in sarcoma in North America or to the value of envafolimab to us.

Our ability to realize value from any product candidates developed under our agreements with I-Mab will depend in part on I-Mab's activities and willingness to fund future development.

Pursuant to the terms of our strategic collaboration and clinical trial agreements with I-Mab, we are largely responsible for clinical development activities and I-Mab is responsible for pre-clinical development and manufacturing activities. Consequently, our ability to realize value or generate any revenues from the development of product candidates in collaboration with I-Mab will depend in part on I-Mab's willingness and ability to successfully complete pre-clinical development and manufacturing activities, in addition to funding agreed-upon portions of the costs of clinical development. We have limited control over the amount and timing of resources that I-Mab will dedicate to its respective efforts, and have limited rights in the event that I-Mab determines to cease development or manufacturing activities or funding for any product candidate under the collaboration. We could also encounter disagreements with I-Mab over the timing and scope of development or manufacturing of any product candidates or payments owed under the collaboration or which, if any, bispecific antibody product candidates are selected for development. For example, in March 2020, I-Mab issued a press release announcing a strategic partnership with Kalbe Genexine Biologics (KG Bio), whereby KG Bio received what the press release described as a right of first negotiation outside North America for TJ004309 for up to $340 million in potential payments to I-Mab. In March 2020, we also learned that I-Mab entered into two license and collaboration agreements with ABL Bio in July 2018 (ABL Bio License 1 and ABL Bio License 2). Under ABL Bio License 1, I-Mab granted to ABL Bio exclusive, worldwide (excluding Greater China), royalty-bearing rights to develop and commercialize a bispecific antibody (the BsAb) using certain monoclonal antibody sequences. Under ABL License 2, I-Mab and ABL agreed to collaborate to develop three PD-L1-based bispecific antibodies by using ABL Bio's proprietary BsAb technology and commercialize them in their respective territories, which, collectively, include China, Hong Kong, Macau, Taiwan and South Korea, and other territories throughout the rest of the world if both parties agree to do so in such other territories during the performance of the agreement. On April 8, 2020, we issued a notice of dispute regarding possible breaches of the TJ004309 and Bispecific Agreements we signed with I-Mab in November 2018. As of the

date of this filing, these disputes have not been resolved. We believe that based on these transactions, we may be entitled to receive a payment under the TJ004309 Agreement, although I-Mab has disputed that any payment is due. We cannot currently estimate the likely outcome of the dispute under the TJ004309 Agreement or the Bispecific Agreement. Until these discussions are complete, we may be unable to provide a timeline as to when or if we will file an IND for a bispecific antibody under the Bispecific Agreement. Furthermore, our ability to license certain bispecific product candidates from I-Mab may be more limited than we previously believed due to I-Mab's potential separate license with a third party that preceded our license with I-Mab. In February 2021, I-Mab sent us a notice purporting to terminate the TJ4309 Agreement, which would result in I-Mab owing us a prespecified early termination fee of $9.0 million. However, I-Mab does not have an option to terminate the TJ004309 Agreement without cause until the ongoing Phase 1 trial of TJ004309 is complete, and we therefore believe the TJ4309 Agreement has not been terminated and continue to perform our contractual obligations.

We may not be successful in establishing and maintaining additional collaborations, which could adversely affect our ability to develop and commercialize our existing product candidates or to leverage our clinical development capabilities.

A part of our strategy is to strategically evaluate and, as deemed appropriate, enter into additional licensing and collaboration agreements, including potentially with major biotechnology or pharmaceutical companies. In particular, we are actively seeking additional corporate partnerships in which we would share in the cost and risk of clinical development and commercialization of innovative product candidates of third parties. In addition, our strategy with respect to TRC253 is to identify a collaboration partner that would lead the development of TRC253 in China, and our ability to advance TRC253's development will be impaired if we are unable to identify such a partner or enter into a license agreement on acceptable terms. We face significant competition in seeking appropriate partners, and the negotiation process is time-consuming and complex. In order for us to successfully partner our product candidates, potential partners must view these product candidates as having the requisite potential to demonstrate safety and efficacy and as being economically valuable in light of the terms that we are seeking and other available products for licensing by other companies. With respect to additional partnerships whereby we would develop third party product candidates, we will need to identify promising product candidates where the owner of the development and commercial rights could benefit from our clinical development capabilities. Under our collaboration and clinical trial agreement with I-Mab for TJ004309, we are prohibited from developing other biologic product candidates targeting the same indications for which TJ004309 is being developed, which increases our reliance on the success of I-Mab's activities with respect to TJ004309 and could limit our ability to collaborate with others with respect to biologic product candidates in certain indications. Even if we are successful in our efforts to establish new collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product are disappointing. Any inability or delay in entering into new collaboration agreements related to our product candidates, in particular in foreign countries where we do not have and do not intend to establish significant capabilities, could delay the development and commercialization of our product candidates and reduce their market potential. If we are unable to enter into additional collaborations that leverage our clinical development capabilities, we may be forced to reduce these capabilities, which could lower the value of our company and make it less likely that third parties will seek to collaborate with us to develop their product candidates.

We rely on third parties to conduct preclinical studies and clinical trials of product candidates, and if they do not properly and successfully perform their obligations to us, we may not be able to obtain regulatory approvals for product candidates.

We do not have our own capabilities to perform preclinical testing of product candidates, and therefore rely entirely on third party contractors and laboratories to conduct these studies for us. In addition, while we intend to continue designing, monitoring and managing our clinical trials of product candidates using our clinical operations and regulatory team, we still depend upon independent investigators and collaborators, such as universities and medical institutions, to conduct our clinical trials at their sites under agreements with us. We will compete with many other companies for the resources of these third party contractors, laboratories, investigators and collaborators, and the initiation and completion of our preclinical studies and clinical trials may be delayed if we encounter difficulties in engaging these third parties or need to change service providers during a preclinical study or clinical trial.

We control only certain aspects of the activities conducted for us by the third parties on which we currently rely and on which we will rely in the future for our preclinical studies and clinical trials. Nevertheless, we are responsible for ensuring that each of our clinical trials and certain of our preclinical studies is conducted in accordance with applicable protocol, legal, regulatory and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. With respect to clinical trials, we and these third parties are required to comply with cGCPs, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for product candidates in clinical development. Regulatory authorities enforce these cGCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of these third parties fail to comply with applicable cGCP regulations, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, such regulatory authorities will determine that any of our clinical trials comply with the cGCP regulations. In addition, our clinical trials must be conducted with product candidates produced under cGMPs and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business

may be implicated if any of these third parties violates federal or state health care laws, including, among others, fraud and abuse, false claims, privacy and security, and physician payment transparency laws. Any third parties conducting our preclinical studies and clinical trials are not and will not be 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 preclinical and clinical development programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our protocols or regulatory requirements or for other reasons, our preclinical studies and clinical trials may be extended, delayed or terminated and we may not be able to complete development of, obtain regulatory approval of or successfully commercialize product candidates. As a result, our financial results and the commercial prospects for our product candidates or those of our partners would be harmed, our costs could increase and our ability to generate revenue could be delayed.

Switching or adding third parties to conduct our preclinical studies and clinical trials involves substantial cost and requires extensive management time and focus. In addition, there is a natural transition period when a new third party commences work. As a result, delays may occur, which can materially impact our ability to meet our desired development timelines.

Risks Related to Our Intellectual Property

If we are unable to obtain or protect intellectual property rights related to our product candidates, we may not be able to compete effectively.

We rely upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our product candidates. If we do not adequately protect our intellectual property, competitors may be able to use our technologies which could do harm to our business and affect our ability to be profitable. In particular, our success depends in large part on our ability to obtain and maintain patent protection in the United States and other countries with respect to our product candidates. Additionally, we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates in the United States or in other countries. We may also fail to identify patentable aspects of our research and development before it is too late to obtain patent protection. Any disclosure or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements, eroding our competitive position in our market.

The patent position of biotechnology companies is generally uncertain because it involves complex legal and factual considerations in a legal framework that is constantly evolving. The standards applied by the United States Patent and Trademark Office, or USPTO, and foreign patent offices in granting patents are not always applied uniformly or predictably. For example, there is no uniform worldwide policy regarding patentable subject matter or the scope of claims allowable in biotechnology patents. There is a substantial amount of prior art in the biotechnology and pharmaceutical fields, including scientific publications, patents and patent applications. There is no assurance that all potentially relevant prior art relating to our patents and patent applications has been found. We may be unaware of prior art that could be used to invalidate an issued patent or prevent our pending patent applications from issuing as patents. Even if patents do successfully issue and even if such patents cover our product candidates, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property, provide exclusivity for our product candidates or prevent others from designing around our claims. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

If patent applications we hold or have in-licensed with respect to our product candidates fail to issue, if their breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for our product candidates, it could dissuade companies from collaborating with us. Several patent applications covering our product candidates have been filed recently. We cannot offer any assurances about which, if any, patents will issue, the breadth of any such patents or whether any issued patents will be found invalid and unenforceable or will be threatened by third parties. Any successful challenge to these patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any product candidate that we may develop. Since patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we were the first to file any patent application related to a product candidate.

For applications filed before March 16, 2013, or patents issuing from such applications, an interference proceeding can be provoked by a third party, or instituted by the USPTO to determine who was the first to invent any of the subject matter covered by the claims of our applications and patents. As of March 16, 2013, the United States transitioned to a “first-to-file” system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO before us could therefore be awarded a patent covering an

invention of ours even if we had made the invention before it was made by the third party. The change to "first-to-file" from "first-to-invent" is one of the changes to the patent laws of the United States resulting from the Leahy-Smith America Invents Act, or the Leahy-Smith Act, signed into law on September 16, 2011. Among some of the other significant changes to the patent laws are changes that limit where a patentee may file a patent infringement suit and provide opportunities for third parties to challenge any issued patent in the USPTO. It is not yet clear, what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, all of which could have a material adverse effect on our business and financial condition.

Patents granted by the European Patent Office may be opposed by any person within nine months from the publication of their grant and, in addition, may be challenged before national courts at any time. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. Furthermore, due to the patent laws of a country, or the decisions of a patent examiner in a country, or our own filing strategies, we may not obtain patent coverage for all our product candidates or methods involving these product candidates in the parent patent application.

In addition, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available; however, the life of a patent and the protection it affords is limited. If we encounter delays in obtaining regulatory approvals, the period of time during which we could market a product candidate under patent protection could be reduced. Even if patents covering our product candidates are obtained, once the patent life has expired for a product, we may be open to competition from generic and biosimilar products.

Any loss of patent protection could have a material adverse impact on our business. We may be unable to prevent competitors from entering the market with a product that is similar to or the same as our products.

We depend on our licensors to prosecute and maintain patents and patent applications that are material to our business. Any failure by our licensors to effectively protect these intellectual property rights could adversely impact our business and operations.

As of December 31, 2020, our patent estate, on a worldwide basis, includes nine (9) U.S. patents, thirty (30) issued non-U.S patents and nine (9) pending non-U.S. patent applications relating to "Antifolate Agent Combinations in the Treatment Of Cancer," "Potentiation of Anti-Cancer Activity Through Combination Therapy with BER Pathway Inhibitors," and "Anti-Endoglin Antibodies and Uses Thereof." As of December 31, 2020 we are also the exclusive licensee of two (2) issued U.S. patents, forty-four (44) issued non-U.S. patents, one (1) pending U.S. patent application, and thirty-seven (37) pending non-U.S. applications related to TRC253. Specific to the development of TJ004309 in North America, we hold a non-exclusive license from I-Mab to any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering any pharmaceutical composition or preparation comprising or containing TJ004309. Specific to the development of envafolimab for the treatment of sarcoma in North America, we hold an exclusive license from 3D Medicines and Alphamab to any and all intellectual property rights, including patents, copyrights, trademarks and know-how, claiming or covering envafolimab. We also hold a non-exclusive license for the conduct of clinical trials in the European Union in support of the development of envafolimab for the treatment of sarcoma in North America.

As a licensee of third parties, we rely on these third parties to file and prosecute patent applications and maintain patents and otherwise protect the licensed intellectual property under some of our license agreements. We have not had and do not have primary control over these activities for certain of our patents or patent applications and other intellectual property rights. We cannot be certain that such activities by third parties have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents or other intellectual property rights. Pursuant to the terms of the license agreements with some of our licensors, the licensors may have the right to control enforcement of our licensed patents or defense of any claims asserting the invalidity of these patents and even if we are permitted to pursue such enforcement or defense, we will require the cooperation of our licensors. We cannot be certain that our licensors will allocate sufficient resources or prioritize their or our enforcement of such patents or defense of such claims to protect our interests in the licensed patents. Even if we are not a party to these legal actions, an adverse outcome could harm our business because it might prevent us from continuing to license intellectual property that we may need to operate our business.

Third party claims of intellectual property infringement or misappropriation may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on us and our partners not infringing the patents and proprietary rights of third parties. There is a substantial amount of litigation and other proceedings, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions, reexamination and review proceedings before the USPTO and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we and our partners are

developing and may develop our product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates, that we failed to identify. For example, applications filed before November 29, 2000 and certain applications filed after that date that will not be filed outside the United States remain confidential until issued as patents. Except for the preceding exceptions, patent applications in the United States and elsewhere are generally published only after a waiting period of approximately 18 months after the earliest filing. Therefore, patent applications covering our product candidates or methods of use of our product candidates could have been filed by others without our knowledge. Additionally, pending patent applications which have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use or manufacture of our product candidates.

The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our product candidates, products or methods either do not infringe the patent claims of the relevant patent or that the patent claims are invalid, and we may not be able to do this. Proving that a patent is invalid is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Also, in proceedings before courts in Europe, the burden of proving invalidity of the patent usually rests on the party alleging invalidity. Third parties could bring claims against us that would cause us to incur substantial expenses and, if successful against us, could cause us to pay substantial damages. Further, if a patent infringement suit were brought against us, we could be forced to stop or delay research, development, manufacturing or sales of the product or product candidate that is the subject of the suit.

If any third party patents were held by a court of competent jurisdiction to cover aspects of our materials, formulations, methods of manufacture or methods for treatment, the holders of any such patents would be able to block our ability to develop and commercialize the applicable product candidate until such patent expired or unless we or our partner obtain a license. These licenses may not be available on acceptable terms, if at all. Even if we or our partner were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. Ultimately, we or our partner could be prevented from commercializing a product, or be forced to cease some aspect of our business operations, if, as a result of actual or threatened patent infringement claims, we or our partner are unable to enter into licenses on acceptable terms.

Parties making claims against us or our partner may obtain injunctive or other equitable relief, which could effectively block our or our partner's ability to further develop and commercialize one or more of our product candidates. Defending against claims of patent infringement or misappropriation of trade secrets could be costly and time consuming, regardless of the outcome. Thus, even if we were to ultimately prevail, or to settle at an early stage, such litigation could burden us with substantial unanticipated costs. In addition, litigation or threatened litigation could result in significant demands on the time and attention of our management team, distracting them from the pursuit of other company business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Third parties may submit applications for patent term extensions in the United States and/or supplementary protection certificates in the European Union member states seeking to extend certain patent protection which, if approved, may interfere with or delay the launch of one or more of our products.

We may face a claim of misappropriation if a third party believes that we inappropriately obtained and used trade secrets of such third party. If we are found to have misappropriated a third party's trade secrets, we may be prevented from further using such trade secrets, limiting our ability to develop our product candidates, and we may be required to pay damages.

During the course of any patent or other intellectual property litigation, there could be public announcements of the results of hearings, rulings on motions, and other interim proceedings in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our product candidates or intellectual property could be diminished. Accordingly, the market price of our common stock may decline.

We may become involved in lawsuits to protect or enforce our inventions, patents or other intellectual property or the patent of our licensors, which could be expensive and time consuming.

Competitors may infringe our intellectual property, including our patents or the patents of our licensors. In addition, one or more of our third party collaborators may have submitted, or may in the future submit, a patent application to the USPTO without naming a lawful inventor that developed the subject matter in whole or in part while under an obligation to execute an assignment of rights to

us. As a result, we may be required to file infringement or inventorship claims to stop third party infringement, unauthorized use, or to correct inventorship. This can be expensive, particularly for a company of our size, and time-consuming. Any claims that we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property rights. In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patent claims do not cover its technology or that the factors necessary to grant an injunction against an infringer are not satisfied.

An adverse determination of any litigation or other proceedings could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference, derivation or other proceedings brought at the USPTO or any foreign patent authority may be necessary to determine the priority or patentability of inventions with respect to our patent applications or those of our licensors or collaborators. Litigation or USPTO proceedings brought by us may fail. An unfavorable outcome in any such proceedings could require us to cease using the related technology or to attempt to license rights to it from the prevailing party, or could cause us to lose valuable intellectual property rights. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms, if any license is offered at all. Even if we are successful, domestic or foreign litigation or USPTO or foreign patent office proceedings may result in substantial costs and distraction to our management. We may not be able, alone or with our licensors or collaborators, to prevent misappropriation of our trade secrets, confidential information or proprietary rights, particularly in countries where the laws may not protect such rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other proceedings, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or proceedings. In addition, during the course of this kind of litigation or proceedings, there could be public announcements of the results of hearings, motions or other interim proceedings or developments or public access to related documents. If investors perceive these results to be negative, the market price for our common stock could be significantly harmed.

We have in-licensed a portion of our intellectual property, and, if we fail to comply with our obligations under these arrangements, we could lose such intellectual property rights or owe damages to the licensor of such intellectual property.

We are a party to a number of license agreements that are important to our business, and we may enter into additional license agreements in the future. TRC253 and associated intellectual property have been licensed from Janssen Pharmaceutica NV, envafolimab and associated intellectual property have been licensed from 3D Medicines and Alphamab, and TJ004309 and associated intellectual property have been licensed from I-Mab.

Our existing license agreements impose, and we expect that future license agreements will impose, various diligence, milestone payment, royalty and other obligations on us. If there is any conflict, dispute, disagreement or issue of non-performance between us and our licensing partners regarding our rights or obligations under the license agreements, including any such conflict, dispute or disagreement arising from our failure to satisfy payment or diligence obligations under any such agreement, we may owe damages, our licensor may have a right to terminate the affected license, and our and our partners' ability to utilize the affected intellectual property in our drug development efforts, and our ability to enter into collaboration or marketing agreements for a product candidate, may be adversely affected.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States and in some cases may even force us to grant a compulsory license to competitors or other third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and further, may export otherwise infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not

issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate; and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

In addition, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in domestic and foreign intellectual property laws.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to use our technologies and this circumstance would have a material adverse effect on our business.

Risks Related to Commercialization of Product Candidates

Even if we obtain regulatory approval of product candidates, the products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers, third party payors and others in the medical community.

Factors that will influence whether product candidates are accepted in the market include:

- the clinical indications for which product candidates are approved, if any;
- physicians, hospitals, cancer treatment centers and patients considering product candidates as a safe and effective treatment;
- the potential and perceived advantages of product candidates over alternative treatments;
- the prevalence and severity of any side effects;
- product labeling or product insert requirements of the FDA or other regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or other regulatory authorities;
- the timing of market introduction of product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement by governmental and commercial third party payors;
- the willingness of patients to pay out-of-pocket in the absence of coverage by governmental and commercial third party payors;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

If, for any of these or other reasons, product candidates fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers, third party payors or others in the medical community, we will not be able to generate significant revenue. Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete.

Off-label use of approved drugs could adversely impact a product candidate's peak sales, including Keytruda's off-label use in UPS/MFS if we are able to successfully commercialize envafolimab in the U.S.

While no PD-(L)1 treatments are currently FDA approved in UPS/MFS or any other sarcoma subtype, Keytruda has a compendia listing in UPS and is reimbursed for off-label use in UPS. The off-label use of Keytruda in UPS/MFS may adversely affect

the peak net sales of envafolimab in UPS/MFS and other sarcoma subtypes, if envafolimab is approved by the U.S. FDA and commercialized in the U.S.

We face intense competition and rapid technological change and the possibility that our competitors may develop therapies that are more advanced or effective than ours, which may adversely affect our financial condition and our ability to successfully commercialize product candidates.

We face competition both in the United States and internationally, including from major multinational pharmaceutical companies, biotechnology companies and universities and other research institutions.

Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staff and experienced marketing and manufacturing organizations. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis, products that are more effective or less costly than any product candidate that we may develop, or achieve earlier patent protection, regulatory approval, product commercialization and market penetration than we do. Additionally, technologies developed by our competitors may render our potential product candidates uneconomical or obsolete, and we may not be successful in marketing product candidates against competitors.

Under the terms of our license agreement with Case Western, we obtained an exclusive, worldwide license to certain patents, know-how and other intellectual property controlled by Case Western related to TRC102. Despite our exclusive license, Case Western retained the right to grant non-exclusive licenses to third parties in the same field of use as our exclusive license as a means to settle any intellectual property disputes Case Western may have in the future with such third parties. While Case Western has not made us aware of any present intent to exercise this right, there can be no guarantee that Case Western will not do so in the future or that it would not grant such a non-exclusive license to a competitor of ours seeking to develop and commercialize a product that is identical to TRC102 in the same field of use that we are pursuing. If this were to occur, and we did not have other intellectual property outside of the Case Western license agreement to prevent competitive products for the same indications, we may face competition much earlier than we currently anticipate and the value of TRC102 may decline substantially.

Even if we are successful in achieving regulatory approval to commercialize a product candidate faster than our competitors, we may face competition from “biosimilars” due to the changing regulatory environment. In the United States, the Biologics Price Competition and Innovation Act created an abbreviated approval pathway for biological products that are demonstrated to be “highly similar,” or “biosimilar,” to or “interchangeable” with an FDA-approved biological product. This pathway could allow competitors to reference data from biological products already approved after 12 years from the time of approval. Future FDA standards or criteria for determining biosimilarity and interchangeability, and FDA discretion to determine the nature and extent of product characterization, non-clinical testing and clinical testing on a product-by-product basis, may further facilitate the approval of biosimilar products and their ability to compete with our product candidates or those of our partners. In addition, companies may be developing biosimilars in other countries that could compete with our products. If competitors are able to obtain marketing approval for biosimilars referencing our products, our products may become subject to competition from such biosimilars, with the attendant competitive pressure and consequences. Any such event or further changes in the law could decrease the period for which we have exclusivity and consequently negatively impact our business and competitive position. Expiration or successful challenge of our applicable patent rights could also trigger competition from other products, assuming any relevant exclusivity period has expired.

Finally, as a result of the expiration or successful challenge of our patent rights, we could face litigation with respect to the validity and/or scope of patents relating to our competitors’ products. The availability of our competitors’ products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize.

Coverage and reimbursement may be limited or unavailable in certain market segments for product candidates, which could make it difficult for us to sell product candidates profitably.

Successful sales of product candidates, if approved, depend on the availability of coverage and adequate reimbursement from third party payors. In addition, because our product candidates and those of our partners represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenue from these product candidates.

Patients who are provided medical treatment for their conditions generally rely on third party payors to reimburse all or part of the costs associated with their treatment. Coverage and adequate reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors are critical to new product acceptance.

Government authorities and other third party payors, such as commercial health insurers and health maintenance organizations, decide which drugs and treatments they will cover and the amount of reimbursement. Coverage and reimbursement by a third party payor may depend upon a number of factors, including, but not limited to, the third party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

In the United States, no uniform policy of coverage and reimbursement for products exists among third party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. Obtaining coverage and reimbursement approval of a product from a government or other third party payor is a time-consuming and costly process that could require us to provide supporting scientific, clinical and cost-effectiveness data to each payor separately for the use of our products, with no assurance that coverage and adequate reimbursement will be obtained. Even if we obtain coverage for a given product, the resulting reimbursement rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Patients are unlikely to use product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of product candidates.

We intend to seek approval to market product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for product candidates, we will be subject to rules and regulations in those jurisdictions. In some foreign countries, particularly those in the European Union, the pricing of biologics is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. In addition, market acceptance and sales of product candidates will depend significantly on the availability of coverage and adequate reimbursement from third party payors for product candidates.

Healthcare legislative reform measures may have a material adverse effect on our business and results of operations.

Third party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, collectively, the ACA, was enacted in the United States. There have been executive, judicial and Congressional challenges to certain aspects of the ACA. For example, President Trump signed several Executive Orders and other directives designed to delay, circumvent or loosen certain requirements mandated by the ACA. Concurrently, Congress considered legislation that would repeal or repeal and replace all or part of the ACA. While Congress has not passed comprehensive repeal legislation, it has enacted laws that modify certain provisions of the ACA. For example, legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act of 2017 (Tax Act) includes a provision which repealed, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA 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". In addition, the 2020 federal spending package permanently eliminated, effective January 1, 2020, the ACA-mandated "Cadillac" tax on high-cost employer-sponsored health coverage and medical device tax and, effective January 1, 2021, also eliminated the health insurer tax. On December 14, 2018, a Texas U.S. District Court Judge ruled that the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress as part of the Tax Act. Additionally, on December 18, 2019, the U.S. Court of Appeals for the 5th Circuit upheld the District Court ruling that the individual mandate was unconstitutional and remanded the case back to the District Court to determine whether the remaining provisions of the ACA are invalid as well. The U.S. Supreme Court is currently reviewing this case, but it is unknown when a decision will be reached. Although the U.S. Supreme Court has yet ruled on the constitutionality of the ACA, on January 28, 2021, President Biden issued an executive order to initiate a special enrollment period from February 15, 2021 through May 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructs certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is unclear how the Supreme Court ruling, other such litigation and the healthcare reform measures of the Biden administration will impact the ACA. We continue to evaluate the effect that the ACA and its possible repeal and replacement has on our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes

aggregate reductions of Medicare payments to providers up to 2% per fiscal year, which went into effect in April 2013 and, due to subsequent legislative changes to the statute, including the Bipartisan Budget Act of 2018, will remain in effect through 2030 unless additional Congressional action is taken. However, COVID-19 pandemic relief legislation suspended the 2% Medicare sequester from May 1, 2020 through March 31, 2021. In January 2013, the former U.S. President signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Recently there has been heightened governmental scrutiny over pharmaceutical pricing practices in light of the rising cost of prescription drugs and biologics. Such scrutiny has resulted in several recent Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration used several means to propose or implement drug pricing reform, including through federal budget proposals, executive orders and policy initiatives. For example, on July 24, 2020 and September 13, 2020, President Trump signed several Executive Orders that attempt to implement several of the Trump administration proposals. The FDA also released a final rule, effective November 30, 2020, implementing a portion of the importation executive order providing guidance for states to build and submit importation plans for drugs from Canada. Further, on November 20, 2020, the Department of Health and Human Services (HHS) finalized a regulation removing safe harbor protection for price reductions from pharmaceutical manufacturers to plan sponsors under Part D, either directly or through pharmacy benefit managers, unless the price reduction is required by law. The implementation of the rule has been delayed by the Biden administration from January 1, 2022 to January 1, 2023 in response to ongoing litigation. The rule also creates a new safe harbor for price reductions reflected at the point-of-sale, as well as a new safe harbor for certain fixed fee arrangements between pharmacy benefit managers and manufacturers, the implementation of which have also been delayed pending review by the Biden administration until March 22, 2021. On November 20, 2020, CMS issued an interim final rule implementing President Trump's Most Favored Nation executive order, which would tie Medicare Part B payments for certain physician-administered drugs to the lowest price paid in other economically advanced countries, effective January 1, 2021. On December 28, 2020, the United States District Court in Northern California issued a nationwide preliminary injunction against implementation of the interim final rule. However, it is unclear whether the Biden administration will work to reverse these measures or pursue similar policy initiatives. At the state level, legislatures have 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.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to obtain market acceptance in the medical community;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

We cannot predict whether future healthcare initiatives will be implemented at the federal or state level or in countries outside of the United States in which we may do business in the future, or the effect any future legislation or regulation will have on us. Further, it is possible that additional governmental action is taken in response to the COVID-19 pandemic.

If we obtain approval to commercialize any approved products outside of the United States, a variety of risks associated with international operations could materially adversely affect our business.

If any product candidates are approved for commercialization, we expect that we or our partners will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- different payor reimbursement regimes, governmental payors or patient self-pay systems and price controls;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;

- 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 taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- 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.

If we or our partners outside of the United States are unable to successfully manage these risks associated with international operations, the market potential for our product candidates or those of our partners outside the United States will be limited and our results of operations may be harmed.

Risks Related to Our Business and Industry

If we fail to develop, acquire or in-license other product candidates or products, our business and prospects will be limited.

We do not have internal new drug discovery capabilities or a technology platform with which to develop novel product candidates. Unless we develop or acquire these capabilities or a technology platform, our only means of expanding our product pipeline will be to acquire or in-license product candidates that complement or augment our current targets, or that otherwise fit into our development or strategic plans on terms that are acceptable to us. In addition, part of our corporate strategy is to leverage our existing internal clinical development and regulatory capabilities by entering into collaborations where we conduct development activities related to third party product candidates in exchange for commercialization and payment rights, such as our collaboration with Janssen with respect to TRC253, our collaboration with 3D Medicines and Alphamab with respect to envafolimab, and our collaboration with I-Mab with respect to I-Mab's proprietary CD73 antibody, TJ004309, and potential bispecific antibody candidates. Identifying, selecting and acquiring or licensing promising product candidates requires substantial technical, financial and human resources. Efforts to do so may not result in the actual development, acquisition or license of a particular product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. With respect to TJ004309, if I-Mab licenses rights to TJ004309 to a third party, while we would be entitled to receive varying portions of royalty and non-royalty payments from I-Mab, we would have no further rights to develop, commercialize or realize value from TJ004309. With respect to envafolimab, 3D Medicines and Alphamab retain certain rights to reacquire the rights for sarcoma in North America in connection with an arm's length sale to a third party of the rights to develop and commercialize envafolimab in North America for all indications. While we and 3D Medicines and Alphamab must negotiate in good faith and agree to fair compensation be paid to us for the value of and opportunity represented by the reacquired rights, we cannot guarantee that any compensation paid to us would adequately cover our investments in the program, the present value of the rights to us or our opportunity costs as a result of having advanced the program prior to reacquisition. Also, in the event that envafolimab is first approved in North America for sarcoma and within three years of the commercial launch of envafolimab in North America for sarcoma 3D Medicines and Alphamab replace us as the party responsible for commercialization, and we do not co-market envafolimab for sarcoma in North America, then 3D Medicine and Alphamab will be required to compensate us for our costs associated with preparing for and conducting commercial activities. However, we may not be able to agree with 3D Medicines and Alphamab on adequate compensation and cannot guarantee that any agreed-upon compensation would adequately cover our investments in commercializing envafolimab in North America or our lost opportunity costs in pursuing commercialization. If we are unable to retain existing product candidates and add additional product candidates to our pipeline, we may not be able to execute on an important part of our business strategy and our long-term business and prospects will be limited.

We are subject to extensive federal, state, and foreign regulation, and our failure to comply with healthcare laws could harm our business.

Although we do not currently have any products on the market, we are subject to healthcare regulation and enforcement by the federal government and the states and foreign jurisdictions in which we conduct our business. The healthcare laws that may affect our ability to operate include:

- the federal anti-kickback statute, which applies to our business activities, including our research, marketing practices, educational programs, pricing policies and relationships with healthcare providers, by prohibiting, among other things, knowingly and willfully soliciting, receiving, offering or providing any remuneration (including any bribe, kickback or rebate) directly or indirectly, overtly or covertly, in cash or in kind, intended to induce or in return for the purchase or

recommendation of any good, facility item or service reimbursable, in whole or in part, under a federal healthcare program, such as the Medicare or Medicaid programs;

- federal civil and criminal false claims laws, including the federal False Claims Act, and civil monetary penalty laws that prohibit, among other things, knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other governmental healthcare programs that are false or fraudulent, or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created federal criminal laws that prohibit, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and its implementing regulations, imposes certain regulatory and contractual requirements on covered entities, and their business associates that create, receive, maintain or transmit individually identifiable health information for or on their behalf, as well as their covered subcontractors, regarding the privacy, security and transmission of individually identifiable health information;
- federal "sunshine" requirements imposed by the ACA on certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to CMS information regarding any transfers of value provided to physicians, as defined by such law, and teaching hospitals, and ownership and investment interests held by such physicians and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report such information regarding its payments and other transfers of value to physician assistants, nurse practitioners, clinical nurse specialists, anesthesiologist assistants, certified registered nurse anesthetists and certified nurse midwives during the previous year; and
- state or foreign law equivalents of each of the above federal laws that may apply to items or services reimbursed by any third party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; state laws that require the reporting of information relating to drug and biologic pricing; state and local laws that require the registration of pharmaceutical sales representatives; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

It is possible that some of our business activities could be subject to challenge under one or more of such laws. In addition, recent health care reform legislation has strengthened certain of these laws. For example, the ACA, among other things, amended the intent requirement of the federal anti-kickback and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of these statutes or specific intent to violate them to have committed a violation. Moreover, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal anti-kickback statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act.

We are also subject to laws and regulations governing data privacy and the protection of health-related and other personal information. These laws and regulations govern our processing of personal data, including the collection, access, use, analysis, modification, storage, transfer, security breach notification, destruction and disposal of personal data. There are foreign and state law versions of these laws and regulations to which we are currently and/or may in the future, be subject. For example, the collection and use of personal health data in the European Union is governed by the General Data Protection Regulation, or the GDPR. The GDPR, which is wide-ranging in scope, imposes several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals, the security and confidentiality of the personal data, data breach notification and the use of third party processors in connection with the processing of personal data. The GDPR also imposes strict rules on the transfer of personal data out of the European Union to the United States, provides an enforcement authority and imposes large monetary penalties for noncompliance. The GDPR requirements apply not only to third party transactions, but also to transfers of information within our company, including employee information. The GDPR and similar data privacy laws of other jurisdictions place significant responsibilities on us and create potential liability in relation to personal data that we or our third party vendors process, including in clinical trials conducted in the United States and European Union. In addition, we expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy and data protection in the United States, the European Union and other jurisdictions, and we cannot determine the impact such future laws, regulations and standards may have on our business.

Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including

without limitation, significant administrative, civil and criminal penalties, damages, fines, disgorgement, contractual damages, reputational harm, imprisonment, exclusion from governmental health care programs, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability.

The use of product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our product candidates or those of our partners. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize product candidates; and
- decreased demand for product candidates, if approved for commercial sale.

We currently carry product liability insurance covering our clinical trials with limits we believe are customary for other companies in our field and stage of development. Our current product liability insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If we obtain marketing approval for product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2020, we had federal and California net operating loss carryforwards, or NOLs, of approximately $152.5 million and $117.7 million, respectively, which expire in various years beginning in 2030, if not utilized. Under the Tax Act, as modified by the CARES Act, federal NOLs generated in tax years beginning after 2017 may be carried forward indefinitely, but the deductibility of such federal NOLs in tax years beginning after 2020 is limited to 80% of taxable income. As of December 31, 2020, we had federal and California research and development and Orphan Drug tax credit carryforwards of approximately $10.3 million and $2.5 million, respectively. The federal research and development and Orphan Drug tax credit carryforwards expire in various years beginning in 2031, if not utilized. The California research and development credit will carry forward indefinitely under current law. Under Sections 382 and 383 of Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOLs and other pre-change tax attributes, such as research tax credits, to offset its post-change income and taxes may be limited. In general, an "ownership change" occurs if there is a cumulative change in our ownership by "5% shareholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. We believe we have experienced certain ownership changes in the past and have reduced our deferred tax assets related to NOLs and research and development tax credit carryforwards accordingly. In the event we experience one or more ownership changes as a result of future transactions in our stock, then we may be further limited in our ability to use our NOLs and other tax assets to reduce taxes owed on the net taxable income that we earn in the event that we attain profitability. Any such limitations on the ability to use our NOLs and other tax assets could adversely impact our business, financial condition and operating results in the event that we attain profitability.

The COVID-19 pandemic could continue to adversely impact our business, including our clinical trials, supply chain and business development activities.

In December 2019, COVID-19, a novel strain of coronavirus, was first reported in Wuhan, China and has since become a global pandemic. President Trump declared the COVID-19 pandemic a national emergency and many states and municipalities in the

United States have announced aggressive actions to reduce the spread of the disease, including limiting non-essential gatherings of people, ceasing all non-essential travel, ordering certain businesses and government agencies to cease non-essential operations at physical locations and issuing "shelter-in-place" orders which direct individuals to shelter at their places of residence (subject to limited exceptions). For example, on March 19, 2020, the Executive Department of the State of California issued Executive Order N-33-20, ordering all individuals in the State of California to stay at their place of residence except as needed to maintain continuity of operations of the federal critical infrastructure sectors. As a result of the California state order, almost all of our employees are currently telecommuting, which has impacted certain of our operations and may continue to do so over the long term. We may experience further limitations on employee resources in the future, including because of sickness of employees or their families. The effects of government actions and our own policies and those of third parties to reduce the spread of COVID-19 may negatively impact productivity and slow down or delay our ongoing and future clinical trials, preclinical studies and research and development activities, and may cause disruptions to our supply chain. In addition, travel restrictions and shutdowns in business operations as a result of the pandemic have limited our ability to pursue our business development strategy with respect to China-based biopharmaceutical companies seeking U.S. drug development expertise. In the event that government authorities were to enhance current restrictions, our employees who currently are not telecommuting may no longer be able to access our facilities, and our operations may be further limited or curtailed.

As COVID-19 continues to spread, we may experience ongoing disruptions that could severely impact our business, preclinical studies and clinical trials, including:

- delays in receiving approval from local regulatory authorities to initiate our planned clinical trials;
- delays or difficulties in enrolling and retaining patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials, including interruption in global shipping that may affect the transport of clinical trial materials;
- changes in local regulations as part of a response to the COVID-19 outbreak which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or to discontinue the clinical trials altogether;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others, or interruption of clinical trial subject visits and trial procedures, the occurrence of which could affect the integrity of clinical trial data;
- interruption or delays in the operations of the FDA or other regulatory authorities, which may impact review and approval timelines;
- risk that participants enrolled in our clinical trials will acquire COVID-19 while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events; and
- refusal of the FDA to accept data from clinical trials in affected geographies.

These and other disruptions in our operations and the global economy could negatively impact our business, operating results and financial condition.

Our clinical trials have been, and may in the future be, affected by the COVID-19 pandemic. For example, some of our clinical trial sites have started to slow down or stop further enrollment of new patients in clinical trials, denied access to site monitors and otherwise curtailed certain operations. Similarly, our ability to recruit and retain principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19, may be adversely impacted. Our ongoing or planned clinical trials may also be impacted by interruptions or delays in the operations of the FDA and comparable foreign regulatory agencies. We and our CROs have also made certain adjustments to the operation of our trials in an effort to ensure the monitoring and safety of patients and minimize risks to trial integrity during the pandemic in accordance with the guidance issued by the FDA, and may need to make further adjustments in the future. Many of these adjustments are new and untested, may not be effective, and may have unforeseen effects on the enrollment, progress and completion of these trials and the findings from these trials. These events could delay our

clinical trials, increase the cost of completing our clinical trials and negatively impact the integrity, reliability or robustness of the data from our clinical trials.

In addition, quarantines, shelter-in-place and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to COVID-19 or other infectious diseases could impact personnel at third-party manufacturing facilities upon which we rely, or the availability or cost of materials, which could disrupt the supply chain for our product candidates. To the extent our suppliers and service providers are unable to comply with their obligations under our agreements with them or they are otherwise unable to deliver or are delayed in delivering goods and services to us due to the COVID-19 pandemic, our ability to continue meeting clinical supply demand for our product candidates or otherwise advancing development of our product candidates may become impaired.

The spread of COVID-19 and actions taken to reduce its spread may also materially affect us economically. While the potential economic impact brought by, and the duration of, the COVID-19 pandemic may be difficult to assess or predict, there could be a significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity and financial position. In addition, the trading prices for other biopharmaceutical companies have been highly volatile as a result of the COVID-19 pandemic. As a result, we may face difficulties raising capital through sales of our common stock or such sales may be on unfavorable terms.

COVID-19 and actions taken to reduce its spread continue to rapidly evolve. The extent to which COVID-19 may impede the development of our product candidates, reduce the productivity of our employees, disrupt our supply chains, delay our clinical trials, reduce our access to capital or limit our business development activities, will depend on future developments, which are highly uncertain and cannot be predicted with confidence.

Risks Related to Our Common Stock

The market price of our common stock may be highly volatile, and our stockholders may not be able to resell their shares at a desired market price and could lose all or part of their investment.

Even though our common stock trades on the Nasdaq Capital Market, we cannot assure you that an active, liquid trading market for our shares will develop or persist. Our stockholders may not be able to sell their shares quickly or at a recently reported market price if trading in our common stock is not active. The trading price of our common stock has been, and is likely to continue to be, volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- adverse results or delays in clinical trials;
- inability to obtain additional funding;
- any delay in submitting a BLA or an NDA for any product candidates and any adverse development or perceived adverse development with respect to the FDA's review of that marketing application;
- failure to successfully develop and commercialize product candidates;
- changes in laws or regulations applicable to product candidates;
- changes in the structure of healthcare payment systems;
- inability to obtain adequate product supply for product candidates, or the inability to do so at acceptable prices;
- adverse regulatory decisions;
- introduction of new products or technologies by our competitors;
- failure to meet or exceed product development or financial projections we provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, collaborations, joint ventures or capital commitments by us or our competitors;
- failure to maintain our collaboration and clinical trial agreements;
- failure of 3D Medicines or Alphamab to perform their obligations under our collaboration and clinical trial agreements, or the actions of 3D Medicines or Alphamab or their other partners with respect to envafolimab in other indications or outside North America;

- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key scientific or management personnel;
- significant lawsuits, including patent or stockholder litigation;
- changes in the market valuations of similar companies;
- sales of our common stock by us or our stockholders in the future, in particular any sales by significant stockholders or our affiliates; and
- trading volume of our common stock.

In addition, the stock market in general, and the Nasdaq Capital Market in particular, have experienced extreme price and volume fluctuations, and we have in the past experienced volatility that has been unrelated or disproportionate to our operating performance. From January 1, 2020 through February 12, 2021, the closing price of our common stock has ranged between $0.95 and $12.20 per share. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

If we fail to continue to meet all applicable listing requirements, our common stock may be delisted from the Nasdaq Capital Market, which could have an adverse impact on the liquidity and market price of our common stock.

Our common stock is currently listed on the Nasdaq Capital Market, which has qualitative and quantitative listing criteria. If we are unable to meet any of the Nasdaq listing requirements in the future, including, for example, if the closing bid price for our common stock falls below $1.00 per share for 30 consecutive trading days, or if we are unable to maintain at least $2.5 million in stockholders' equity, Nasdaq could determine to delist our common stock.

A delisting of our common stock could adversely affect the market liquidity of our common stock, decrease the market price of our common stock, adversely affect our ability to obtain financing for the continuation of our operations and result in the loss of confidence in our company.

In the event that our common stock is delisted from Nasdaq and is not eligible for quotation or listing on another market or exchange, trading of our common stock could be conducted only in the over-the-counter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. In such event, it could become more difficult to dispose of, or obtain accurate price quotations for, our common stock, and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause the price of our common stock to decline further.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that significant additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Additionally, our credit agreement with SVB contains covenants that restrict our ability to pay dividends. Any return to stockholders will therefore be limited to the appreciation of their stock.

Provisions in our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders or remove our current management.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders and may prevent attempts by our stockholders to replace or remove our current management. These provisions include:

- authorizing the issuance of "blank check" preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- limiting the removal of directors by the stockholders;
- creating a staggered board of directors;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by our board of directors. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders. Further, other provisions of Delaware law may also discourage, delay or prevent someone from acquiring us or merging with us.

General Risk Factors

Our internal computer systems, or those used by our CROs or other contractors or consultants, may fail or suffer security breaches.

We are dependent upon our own or third party information technology systems, infrastructure and data, including mobile technologies, to operate our business. The multitude and complexity of our computer systems may make them vulnerable to service interruption or destruction, malicious intrusion, or random attack. Likewise, data privacy or security breaches by employees or others may pose a risk that sensitive data, including our clinical trial data, intellectual property, trade secrets or personal information of our employees, patients, customers or other business partners may be exposed to unauthorized persons or to the public. Cyber-attacks are increasing in their frequency, sophistication and intensity. Cyber-attacks could include the deployment of harmful malware, denial-of-service, social engineering and other means to affect service reliability and threaten data confidentiality, integrity and availability. Third party sites that take part in clinical trials we sponsor or third parties that are also sponsoring clinical trials involving our product candidates or those of our partners, such as NCI and Case Western, face similar risks and any security breach of their systems could adversely affect us. A security breach or privacy violation that leads to disclosure or modification of, or prevents access to, patient information, including personally identifiable information or protected health information, could harm our reputation, compel us to comply with federal and/or state breach notification laws and foreign law equivalents, subject us to mandatory corrective action, require us to verify the correctness of database contents and otherwise subject us to litigation or other liability under laws and regulations that protect personal data, any of which could disrupt our business and/or result in increased costs or loss of revenue. Any of these events could be particularly harmful to our business due to our reliance on internal clinical development functions and systems to conduct our clinical trials. For example, for clinical trials that we conduct, we rely on third party hosted software to manage the resulting clinical data. While the third party vendor is obligated to back up our clinical data on its servers, we do not independently back up our clinical data, and a loss of our clinical data by the third party vendor could result in delays in our development programs, cause us to breach of our obligations to our third party collaborators, and significantly increase our costs to recover or reproduce the data. Moreover, the prevalent use of mobile devices that access confidential information increases the risk of data security breaches, which could lead to the loss of confidential information, trade secrets or other intellectual property. While we have invested, and continue to invest, in the protection of our data and information technology infrastructure, there can be no assurance that our efforts will prevent service interruptions, or identify breaches in our systems, that could adversely affect our business and operations and/or result in the loss of critical or sensitive information, which could result in financial, legal, business or reputational harm to us. In addition, our liability insurance may not be sufficient in type or amount to cover us against claims related to security breaches, cyber-attacks and other related breaches.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

Other business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations, and those of our contractors, consultants and collaborators, could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or man-made disasters or business interruptions, for which we are predominantly self-insured. To the extent our collaborators are unable to comply with their obligations under our agreements with them or they are otherwise unable to complete or are delayed in completing development activities due to business disruptions, our ability to advance development in the United States

may become impaired. In addition, NCI may be affected by government shutdowns in the United States or withdrawn funding, which may lead to suspension or termination of ongoing NCI-sponsored clinical development of our product candidates. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. In addition, our ability and the ability of our partners to obtain clinical supplies of product candidates could be disrupted if the operations of our third party manufacturers are affected by a man-made or natural disaster or other business interruption. Our corporate headquarters are located in San Diego, California near major earthquake faults and fire zones. The ultimate impact on us and our general infrastructure of being located near major earthquake faults and fire zones and being consolidated in certain geographical areas is unknown, but our operations and financial condition could suffer in the event of a major earthquake, fire or other natural disaster.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable or that we elect not to patent, processes for which patents are difficult to enforce and any other elements of our development processes that involve proprietary know-how or information that is not covered by patents. However, trade secrets can be difficult to protect. We seek to protect our proprietary processes, in part, by entering into confidentiality agreements with our employees, consultants, and outside scientific advisors, contractors and collaborators. Although we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, or outside scientific advisors might intentionally or inadvertently disclose our trade secret information to competitors. In addition, competitors may otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques.

Enforcing a claim that a third party illegally obtained and is using any of our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States sometimes are less willing than U.S. courts to protect trade secrets. Misappropriation or unauthorized disclosure of our trade secrets could impair our competitive position and may have a material adverse effect on our business.

If we fail to attract and keep senior management and key clinical operations and regulatory personnel, we may be unable to successfully develop product candidates and execute our business strategy.

We are highly dependent on members of our senior management, including Charles Theuer, M.D., Ph.D., our President and Chief Executive Officer. Our clinical development strategy and ability to directly manage or oversee our on-going and planned clinical trials are also dependent on the members of our clinical operations and regulatory team. The loss of the services of any of these persons could impede the development of product candidates and our ability to execute our business strategy. We may be particularly impacted by the unexpected loss of employees due to our small employee base and limited ability to quickly shift responsibilities to other employees in our organization. We do not maintain "key person" insurance for any of our executives or other employees.

Recruiting and retaining other qualified employees for our business, including scientific, quality assurance and technical personnel, will also be critical to our success. There is currently a shortage of skilled executives in our industry, which is likely to continue. As a result, competition for skilled personnel is intense, particularly in the San Diego, California area, and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical companies for individuals with similar skill sets. The inability to recruit or loss of the services of any executive or key employee could impede the progress of our development and strategic objectives.

Our employees, independent contractors, principal investigators, consultants, vendors and commercial partners may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading.

We are exposed to the risk that our employees, independent contractors, principal investigators, consultants, vendors and commercial partners may engage in fraudulent conduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or unauthorized activities that violate:

- FDA regulations, including those laws that require the reporting of true, complete and accurate information to the FDA;
- manufacturing standards;
- federal and state fraud and abuse laws and other healthcare laws;

- laws governing the conduct of business abroad; or
- laws that require the reporting of true and accurate financial information or data.

Additionally, these parties may fail to disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws intended to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Misconduct could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, imprisonment, possible exclusion from participation in Medicare, Medicaid and other U.S. federal healthcare programs, contractual damages, integrity oversight and reporting obligations, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We may encounter difficulties in managing our growth and expanding our operations successfully.

As we seek to advance product candidates through clinical trials and commercialization, we will need to expand our development, regulatory, manufacturing, marketing and sales capabilities or contract with additional third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with partners, consultants, suppliers and other third parties. Future growth will impose significant added responsibilities on members of our management, including having to divert a disproportionate amount of its attention away from day-to-day operating activities to implement and manage future growth. Our future financial performance and our ability to commercialize product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively. To that end, we must be able to manage our development efforts and clinical trials effectively and hire, train and integrate additional management, administrative and, if necessary, sales and marketing personnel. We may not be able to accomplish these tasks, and our failure to accomplish any of them could prevent us from successfully growing our company.

If our third party manufacturers use hazardous and biological materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials, by our third party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the United States and abroad governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability, including through obligations to indemnify our third party manufacturers, or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our development and production efforts or those of our third party manufacturers, which could harm our business, prospects, financial condition or results of operations.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

Our principal executive offices are located at 4350 La Jolla Village Drive, Suite 800, San Diego, California 92122.

Item 3. Legal Proceedings.

We are not currently a party to any material legal proceedings. From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

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

Market Information

Our common stock is listed on the Nasdaq Capital Market under the ticker symbol "TCON".

Holders of Common Stock

As of February 19, 2021, there were approximately 121 holders of record of our common stock.

Dividend Policy

We have never declared or paid any dividends on our common stock. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. In addition, pursuant to our credit and security agreement with SVB, we are prohibited from paying cash dividends without the prior consent of SVB. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

Information about our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report.

Recent Sales of Unregistered Securities.

Set forth below is information regarding securities issued by us during the year ended December 31, 2020 that were not registered under the Securities Act of 1933, as amended, or Securities Act. Also included is the information relating to the section of the Securities Act, or rule of the Securities and Exchange Commission, under which exemption from registration was claimed.

On March 24, 2020, in connection with a certain consulting agreement and in exchange for services provided, we issued 100,000 shares of common stock to the consultant valued at $126,000 at an issuance price of $1.26 per share. No underwriters were involved in the foregoing issuance of securities. The securities described above were issued in reliance on the exemptions from registration provided by Section 4(2) of the Securities Act and/or Rule 506 of Regulation D promulgated under the Securities Act. The purchaser in this transaction represented to us in connection with its purchase that it was acquiring the securities for investment and not for distribution and that it could bear the risks of the investment.

Item 6. Selected Financial Data.

Not applicable.

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

You should read the following discussion and analysis of our financial condition and results of operations together with "Selected Financial Data" and our consolidated financial statements and the related notes and other financial information included elsewhere in this Annual Report. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report, including information with respect to our plans and strategy for our business and future financial performance, includes forward-looking statements that are based upon current beliefs, plans and expectations and involve risks, uncertainties and assumptions. You should review the "Risk Factors" section of this Annual Report for a discussion of important factors that could cause our actual results and the timing of selected events to differ materially from those described in or implied by the forward-looking statements contained in the following discussion and analysis. Please also see the section within Part I of this Annual Report entitled "Forward-Looking Statements."

Overview

We are a biopharmaceutical company focused on the development and commercialization of novel targeted therapeutics for cancer and utilizing our cost efficient, contract research organization (CRO) independent product development platform to partner with ex-U.S. companies to develop and commercialize innovative products in the United States.

In December 2019, we entered into a collaboration and clinical trial agreement (the Envafolimab Collaboration Agreement) with 3D Medicines and Alphamab for the development of envafolimab, also known as KN035, an investigational PD-L1 single-domain antibody (sdAb) administered by rapid subcutaneous injection for the treatment of sarcoma in North America. In December 2020, we announced the dosing of the first patient in the ENVASARC pivotal trial which will enroll approximately 160 patients with the sarcoma subtypes of undifferentiated pleomorphic sarcoma (UPS) and myxofibrosarcoma (MFS). The trial includes one cohort of approximately 80 patients who receive single agent treatment with envafolimab and a second cohort of approximately 80 patients who receive envafolimab in combination with Yervoy® (ipilimumab), a checkpoint inhibitor marketed by Bristol-Myers Squibb (BMS), with the primary endpoint in each of the cohorts being objective response rate (ORR). Achieving the primary endpoint of ORR could be the basis for accelerated approval of envafolimab by the FDA as a single agent and/or in combination with Yervoy. The trial will provide at least 86% power to demonstrate the primary endpoint of whether ORR is greater than 5% in each cohort, which is greater than the 4% ORR of Votrient® (pazopanib) reported in soft tissue sarcoma in its package insert. Votrient is the only approved treatment for refractory soft tissue sarcoma, which includes UPS and MFS. Nine or more objective responses among the 80 patients expected to enroll in cohort A or cohort B would be sufficient to demonstrate envafolimab or envafolimab combined with Yervoy, respectively, have an ORR that is statistically superior to the 4% ORR reported for Votrient in refractory soft tissue sarcoma.

We estimate disclosing a summary of the independent data monitoring committee decisions following reviews of interim data in 2021, and assuming sufficient patient responses in line with meeting the endpoint, we expect to apply for orphan drug designation and breakthrough therapy designation for envafolimab for the treatment of soft tissue sarcoma subtypes in the United States in 2021. Thereafter, we expect having a final response assessment in 2022, and, assuming positive data, submitting a biologics license application (BLA) to the FDA for accelerated approval in 2023. Additionally, assuming positive interim data from the ENVASARC trial, we plan to initiate a trial in multiple soft tissue sarcoma subtypes to expand the target patient population.

In November 2020, we announced the submission by our corporate partners, 3D Medicines and Alphamab, of a new drug application (NDA) for the approval of envafolimab in the indication of microsatellite instability-high (MSI-H)/dMMR cancer to the Chinese National Medical Products Administration (NMPA), and in December 2020, we announced the acceptance of the NDA. In January 2021, we announced the NMPA had granted envafolimab NDA priority review.

In September 2020, we highlighted updated clinical data from the pivotal trial of envafolimab in MSI-H/dMMR cancer patients that were presented by our corporate partners, 3D Medicines and Alphamab at the Chinese Society of Clinical Oncology (CSCO) 2020 Virtual Scientific Program. In a presentation entitled, "Subcutaneous Injection of PD-L1 Antibody Envafolimab (KN035) in Advanced Tumors with Mismatch-Repair Deficiency," single agent envafolimab was shown to have a 32% confirmed ORR by central radiographic review in 41 patients with MSI-H/dMMR colorectal cancer (CRC) who failed a fluoropyrimidine, oxaliplatin and irinotecan, and had at least two on-study tumor assessments. The 32% ORR is nearly identical to the 28% ORR reported for Opdivo® and 33% ORR reported for Keytruda® in separate trials of MSI-H/dMMR CRC patients who failed a fluoropyrimidine, oxaliplatin and irinotecan. Duration of response (DOR) was greater than or equal to 12 months in 75% of patients and overall survival (OS) was greater than or equal to 12 months in 65% of patients. The ORR in the overall population (n=103) of MSI-H/dMMR cancer patients, including tumor types other than CRC, was 43%, DOR was greater than or equal to 12 months in 92% of patients and OS was greater than or equal to 12 months in 75% of patients.

Our other clinical stage oncology product candidates include TRC102, which is a small molecule that has been studied in Phase 1 and Phase 2 trials for the treatment of mesothelioma, lung cancer, glioblastoma and solid tumors, TRC253, which is a Phase 3 ready small molecule for the treatment of metastatic castration-resistant prostate cancer that we licensed from Janssen Pharmaceutica N.V. (Janssen), and TJ004309, which is a CD73 antibody in Phase 1 clinical development for the treatment of solid tumors, that we licensed from I-Mab Biopharma (I-Mab) in November 2018.

TRC102 is a small molecule in clinical development to reverse resistance to specific chemotherapeutics by inhibiting DNA base excision repair (BER). In initial clinical trials of more than 100 patients, TRC102 has shown good tolerability and promising anti-tumor activity in combination with alkylating and antimetabolite chemotherapy for the treatment of cancer patients. TRC102 has been studied in Phase 1 or Phase 2 trials in mesothelioma patients in combination with the approved chemotherapeutic Alimta® (pemetrexed), in glioblastoma, ovarian cancer, lung and CRC patients in combination with the approved chemotherapeutic Temodar® (temozolomide) and in lung cancer patients in combination with the approved chemotherapeutics Alimta and cisplatin as well as external beam radiation (i.e., chemoradiation). All current TRC102 trials are sponsored and funded by the National Cancer Institute (NCI). We retain global rights to develop and commercialize TRC102 in all indications. In October 2020, TRC102 received orphan drug designation from the FDA for the treatment of patients with malignant glioma, including glioblastoma. MGMT deficiency is observed in about one third of glioblastoma patients, and a prior study of Temodar and TRC102 reported at the Society for Neuro-Oncology in 2018 demonstrated that two MGMT deficient glioblastoma patients had prolonged survival when treated with Temodar and TRC102 after progressing previously on Temodar and radiation therapy. We expect further development by the NCI in glioblastoma based on these data and believe a trial in first line glioblastoma of Temodar, radiation therapy and TRC102 is warranted.

In November 2020, we announced the publication of clinical data in the journal *Cancer Cell* that provides molecular insight into TRC102's mechanism of action and patient populations most likely to respond to treatment. The article, entitled, "Molecular Features of Cancers Exhibiting Exceptional Responses to Treatment," highlighted the clinical features and tumor biology of an exceptional responder patient treated with TRC102 at the NCI. The patient was diagnosed with metastatic and highly refractory CRC and received Temodar and TRC102. Following treatment, the patient was considered an exceptional responder through the achievement of a near complete response lasting 45 months at the most recent follow-up. Detailed molecular analyses of the patient's tumor showed silencing of DNA repair pathways that may have resulted in sensitivity to the inhibition of DNA BER pathway by TRC102. Specifically, methylguanine-DNA methyltransferase (MGMT) expression was silenced by promoter methylation, and RAD50, a mediator of DNA double strand break repair, was silenced by genetic mutation and loss of heterozygosity. The publication authors hypothesized that the combination of Temodar and TRC102 was effective because all necessary DNA repair pathways were compromised genetically or through the activity of TRC102. MGMT expression was also assessed in biopsies from 11 colorectal patients who subsequently enrolled in an expansion cohort, one of whom demonstrated a partial response. The tumor associated with the partial response did not express MGMT, whereas each of the 10 tumors that did not respond to therapy expressed this enzyme robustly.

In May 2020, positive data from multiple TRC102 clinical trials were presented at the 2020 ASCO Virtual Scientific Program. Dr. Koczywas of City of Hope Medical Center presented Phase 1 data for TRC102 in combination with cisplatin and Alimta in patients with advanced solid tumors, and Phase 2 data for TRC102 in combination with Alimta in patients with mesothelioma refractory to Alimta and platinum therapy. Notably two of 14 mesothelioma patients who progressed previously on Alimta had objective responses following treatment with Alimta and TRC102. Multiple responses were also noted in the Phase 1 trial of Alimta, cisplatin and TRC102, with particular activity noted in parotid salivary gland tumors. Dr. Biswas of Case Comprehensive Cancer Center presented Phase 1 data of TRC102 in combination with chemoradiation for locally advanced non-squamous non-small cell lung cancer. All 15 patients demonstrated an objective response, including three patients with a complete response to treatment. The 100% ORR compares favorably to historical data of the same combination of chemoradiation without TRC102 in locally advanced lung cancer. For example, the PROCLAIM clinical trial reported an ORR of 36% and the PACIFIC clinical trial reported an ORR of 51% in locally advanced non-squamous non-small cell lung cancer patients treated with Alimta, cisplatin and thoracic radiation. We are discussing further development of TRC102 in combination with chemoradiation in advanced lung cancer and in glioblastoma with investigators at this time.

TRC253 is a product candidate for the treatment of men with prostate cancer and is a novel small molecule high affinity competitive inhibitor of wild type androgen receptor (AR) and multiple AR mutant receptors containing point mutations that cause drug resistance to currently approved treatments. In April 2020, Janssen notified us that it was not exercising its exclusive option to reacquire the TRC253 program following a review of the Phase 1/2 data in prostate cancer patients with acquired resistance to Xtandi® or Erleada®. In the completed Phase 1/2 trial, data demonstrated the prevalence of the AR F877L mutation is much less common than expected at the time of initiation of Phase 1/2 trial, making commercialization of TRC253 in prostate cancer in the United States not viable. TRC253, however, was as active as Xtandi in preclinical models of prostate cancer and has not been studied in patients without acquired resistance to Xtandi or Erleada. As a result of Janssen not exercising its exclusive option to reacquire the program, we have retained worldwide development and commercialization rights, and are obligated to pay Janssen a total of up to $45.0 million in development and regulatory milestones upon achievement of specified events, in addition to a low single digit royalty. We believe TRC253 may be able to be developed in China, where standard of care therapies such as Xtandi and Erleada are not widely accessible to patients with prostate cancer and are actively looking for a corporate partner to develop and potentially commercialize TRC253 in China.

TJ004309, also known as TJD5, is a novel humanized antibody against CD73 expressed on stromal cells and tumors that converts extracellular adenosine monophosphate (AMP) to the immunosuppressive metabolite adenosine. We are developing TJ004309 in collaboration with I-Mab under a strategic collaboration and clinical trial agreement that we entered into in November 2018 (the TJ004309 Agreement). In July 2019, we began enrollment in a Phase 1 clinical trial to assess safety and preliminary efficacy of TJ004309 as a single agent and when combined with the PD-L1 checkpoint inhibitor Tecentriq® in patients with advanced solid tumors. We also entered into a separate strategic collaboration and clinical trial agreement (the Bispecific Agreement) which allows for the development of up to five of I-Mab's proprietary bispecific antibody product candidates to be nominated by I-Mab within a five-year period for development and commercialization in North America, with the option to opt-in and acquire product rights outside of Greater China and Korea prior to completing the first pivotal clinical trial for any bispecific product candidate.

In March 2020, I-Mab issued a press release announcing a strategic partnership with Kalbe Genexine Biologics (KG Bio), whereby KG Bio received what the press release described as a right of first negotiation outside North America for TJ004309 for up to $340 million in potential payments to I-Mab. In March 2020, we also learned that I-Mab entered into two license and collaboration agreements with ABL Bio in July 2018 (ABL Bio License 1 and ABL Bio License 2). Under ABL Bio License 1, I-Mab granted to ABL Bio exclusive, worldwide (excluding Greater China), royalty-bearing rights to develop and commercialize a bispecific antibody (the BsAb) using certain monoclonal antibody sequences. Under ABL License 2, I-Mab and ABL agreed to collaborate to develop three PD-L1-based bispecific antibodies by using ABL Bio's proprietary BsAb technology and commercialize them in their respective territories, which, collectively, include China, Hong Kong, Macau, Taiwan and South Korea, and other territories throughout the rest of the world if both parties agree to do so in such other territories during the performance of the agreement. On April 8, 2020, we issued a notice of dispute regarding possible breaches of the TJ004309 Agreement and the Bispecific Agreement. As of the date of this Annual Report, these disputes have not been resolved. We believe that based on these transactions, we may be entitled to receive payments under the TJ004309 Agreement, although I-Mab has disputed that any payment is due. We cannot currently estimate the likely outcome of the dispute under the TJ004309 Agreement or the Bispecific Agreement. Until these discussions are complete, we may be unable to provide a timeline as to when or if we will file an IND for a bispecific antibody under the Bispecific Agreement. Furthermore, our ability to license certain bispecific product candidates from I-Mab may be more limited than we previously believed due to I-Mab's separate license with ABL Bio that preceded our license with I-Mab. In February 2021, I-Mab sent us a notice purporting to terminate the TJ4309 Agreement, which would result in I-Mab owing us a prespecified early termination fee of $9.0 million. However, I-Mab does not have an option to terminate the TJ004309 Agreement without cause until the ongoing Phase 1 trial of TJ004309 is complete, and we therefore believe the TJ4309 Agreement has not been terminated and continue to perform our contractual obligations.

The following table summarizes key information regarding ongoing and planned development of our clinical stage product candidates:

	Phase	Data Expected
Envafolimab (3D Medicines and Alphamab)		
Soft Tissue Sarcoma (UPS and MFS)	Pivotal Phase 2	Interim Data - 2021 Final Data - 2022
TRC102		
Solid tumors and Lymphomas	Phase 1/2	2021
TJ004309 (I-Mab)		
Solid Tumors	Phase 1	2021

We utilize a CRO-independent product development platform that emphasizes capital efficiency. Our experienced clinical operations, data management, quality assurance, product development and regulatory affairs groups manage significant aspects of our clinical trials with internal resources. We use these internal resources to minimize the costs associated with utilizing CROs to conduct clinical trials. In our experience, this model has resulted in capital efficiencies and improved communication with clinical trial sites, which expedites patient enrollment and improves the quality of patient data as compared to a CRO-managed model. We have leveraged this platform in all of our sponsored clinical trials. We have also leveraged our product development platform to diversify our product pipeline without payment of upfront license fees through license agreements with 3D Medicines and Alphamab, I-Mab, and Janssen. We continue to evaluate ex-U.S. companies that would benefit from a rapid and capital-efficient U.S. drug development solution that includes U.S. and European Union (EU) clinical development expertise. We believe we will continue to be recognized as a preferred U.S. clinical development partner through a cost- and risk-sharing partnership structure, which may include U.S. commercialization.

Our goal is to be a leader in the development of targeted therapies for patients with cancer and other diseases of high unmet medical need.

Since our inception in 2004, we have devoted substantially all of our resources to research and development efforts relating to our product candidates, including conducting clinical trials and developing manufacturing capabilities, in-licensing related intellectual property, providing general and administrative support for these operations, and protecting our intellectual property. To date, we have not generated any revenue from product sales and instead, have funded our operations from the sales of equity securities, payments received in connection with our collaboration agreements, and commercial bank debt under our credit facility with Silicon Valley Bank (SVB). At December 31, 2020, we had cash, cash equivalents, and short-term investments totaling $36.1 million.

We do not own or operate, nor do we expect to own or operate, facilities for product manufacturing, storage, distribution or testing. We contract with third parties or our collaboration partners for the manufacture of our product candidates and we intend to continue to do so in the future.

We have incurred losses from operations in each year since our inception. Our net losses were $16.8 million and $22.7 million for the years ended December 31, 2020 and 2019, respectively. At December 31, 2020, we had an accumulated deficit of $179.1 million.

We expect to continue to incur significant expenses and operating losses for at least the next several years. Our net losses may fluctuate significantly from quarter to quarter and year to year. We expect our expenses to increase slightly in 2021 as we:

- continue to conduct clinical trials of product candidates, including enrollment of the ENVASARC pivotal trial;
- continue our research and development efforts;
- maintain, expand and protect our intellectual property portfolio; and
- seek regulatory approvals for product candidates that successfully complete clinical trials.

We do not expect to generate any revenues from product sales until we successfully complete development and obtain regulatory approval for one or more product candidates, which we expect will take a number of years. If we obtain regulatory approval for any product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, we will need to raise substantial additional capital. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our preclinical and clinical development efforts, developments under our collaboration agreements, including whether and when we receive milestone and other potential payments, and the timing and nature of the regulatory approval process for product candidates. We anticipate that we will seek to fund our operations through public or private equity or debt financings or other sources. Debt financing, if available, may involve covenants further restricting our operations or our ability to incur additional debt. Any debt financing or additional equity that we raise may contain terms that are not favorable to us or our stockholders. Further, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. As a result of the COVID-19 pandemic and actions taken to slow its spread, the global credit and financial markets have experienced extreme volatility and disruptions, including diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. If the equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Our failure to raise capital or enter into such other arrangements when needed would have a negative impact on our financial condition and ability to develop product candidates.

Collaboration and License Agreements

Collaboration Agreement with 3D Medicines and Alphamab

In December 2019, we, 3D Medicines, and Alphamab entered into the Envafolimab Collaboration Agreement for the development of envafolimab, an investigational PD-L1 sdAb, or nanobody, administered by rapid subcutaneous injection, for the treatment of sarcoma in North America.

Pursuant to the Envafolimab Collaboration Agreement, we were granted an exclusive license to develop and commercialize envafolimab for the treatment of sarcoma in North America. We are responsible for conducting and will bear the costs of any Phase 1, Phase 2, and Phase 3 or post-approval clinical trial in North America for envafolimab in the indications of refractory and first line treatment of sarcoma. 3D Medicines and Alphamab are responsible for conducting and will bear the costs of investigational new drug (IND)-enabling studies (other than those specific to the sarcoma indication) and the preparation of chemical, manufacturing and controls (CMC) activities sections of an IND application for envafolimab. 3D Medicines and Alphamab have agreed to manufacture and supply, or to arrange for a third party manufacturer to manufacture and supply, envafolimab to us at pre-negotiated prices that vary based on clinical or commercial use. 3D Medicines and Alphamab retained the right to develop envafolimab in all territories outside of North America as well as within North America for all indications other than sarcoma.

We will be responsible for commercializing envafolimab for sarcoma in North America, including booking of sales revenue, unless (a) envafolimab is first approved in North America for an indication other than sarcoma and launched in North America, or (b) envafolimab is first approved in North America for sarcoma and subsequently approved in North America for an additional non-

orphan indication and sold commercially by 3D Medicines and/or Alphamab, or licensee, in which case 3D Medicines and Alphamab will be responsible for commercializing envafolimab for sarcoma in North America, including booking of sales revenue. If 3D Medicines and Alphamab become responsible for commercialization under the Envafolimab Collaboration Agreement, we have the option to co-market envafolimab for sarcoma in North America. In the event that envafolimab is first approved in North America for sarcoma and within three years of the commercial launch of envafolimab in North America for sarcoma 3D Medicines and Alphamab replace us as the party responsible for commercialization, and we elect and 3D Medicines and Alphamab agree for us to not co-market envafolimab for sarcoma in North America, then 3D Medicines and Alphamab will be required to compensate us for our costs associated with preparing for and conducting commercial activities.

If we have the responsibility for commercialization under the Envafolimab Collaboration Agreement, we will owe 3D Medicines and Alphamab tiered double digit royalties on net sales of envafolimab for sarcoma in North America ranging from the teens to mid-double digits. If 3D Medicines and Alphamab have responsibility for commercialization under the Envafolimab Collaboration Agreement, we will be entitled to (a) tiered double digit royalties on net sales of envafolimab for sarcoma in North America ranging from the teens to mid-double digits if we have elected to not co-market envafolimab in sarcoma or (b) a 50% royalty on net sales of envafolimab for sarcoma in North America if we have chosen to co-market envafolimab in sarcoma. Payment obligations under the Envafolimab Collaboration Agreement continue on a country-by-country basis until the last to expire licensed patent covering envafolimab expires.

3D Medicines and Alphamab retain the right to reacquire the rights to envafolimab for sarcoma in North America in connection with an arm's length sale to a third party of the rights to develop and commercialize envafolimab in North America for all indications, provided that the sale may not occur prior to completion of a pivotal trial of envafolimab in sarcoma without our written consent and the parties must negotiate in good faith and agree to fair compensation be paid to us for the value of and opportunity represented by the reacquired rights.

Each party agreed that during the term of the Envafolimab Collaboration Agreement, it would not develop or license from any third party a monospecific inhibitor to PD-L1 or PD-1 in sarcoma.

The term of the Envafolimab Collaboration Agreement continues until the later of the date the parties cease further development and commercialization of envafolimab for sarcoma in North America or the expiration of all payment obligations. The Envafolimab Collaboration Agreement may be terminated earlier by a party in the event of an uncured material breach by the other party or bankruptcy of the other party, or for safety reasons related to envafolimab. In the event we elect, or a joint steering committee (JSC) determines, to cease further development or commercialization of envafolimab, or if we fail to use commercially reasonable efforts to develop (including progress in clinical trials) and commercialize envafolimab and do not cure such failure within a specified time period, then our rights and obligations under the Envafolimab Collaboration Agreement will revert to 3D Medicines and Alphamab.

Collaboration Agreements with I-Mab Biopharma

In November 2018, we entered into two separate strategic collaboration and clinical trial agreements with I-Mab for the development of multiple immuno-oncology programs, including I-Mab's proprietary CD73 antibody TJ004309 as well as up to five proprietary bispecific antibodies currently under development by I-Mab.

In the TJ004309 Agreement, we are collaborating with I-Mab on developing TJ004309, and will bear the costs of filing an IND application and for Phase 1 clinical trials, share costs equally for Phase 2 clinical trials, and we will bear 40% and I-Mab 60% of the costs for pivotal clinical trials. I-Mab will also be responsible for the cost of certain non-clinical activities and the supply of TJ004309 and any reference drugs used in the development activities. We also agreed with I-Mab for a specified period of time to not develop or license to or from a third party any monoclonal antibody targeting CD73 or any other biologic for certain indications that a JSC, as set up under the TJ004309 Agreement, selects for TJ004309 development.

In the event that I-Mab licenses rights to TJ004309 to a third party, we would be entitled to receive escalating portions of royalty and non-royalty consideration received by I-Mab with respect to territories outside of Greater China. In the event that I-Mab commercializes TJ004309, we would be entitled to receive a royalty on net sales by I-Mab in North America ranging from the mid-single digits to low double digits, and in the EU and Japan in the mid-single digits. The portions of certain third party royalty and non-royalty consideration and the royalty from net sales by I-Mab to which we would be entitled escalate based on the phase of development and relevant clinical trial obligations we complete under the TJ004309 Agreement, ranging from a high-single digit to a mid-teen percentage of non-royalty consideration as well as a double digit percentage of royalty consideration. In March 2020, I-Mab issued a press release announcing a strategic partnership with KG Bio, whereby KG Bio received what the press release described as a right of first negotiation outside North America for TJ004309 for up to $340 million in potential payments to I-Mab. On April 8, 2020, we issued a notice of dispute to I-Mab as we may be entitled to receive a payment under the TJ004309 Agreement, although I-Mab has disputed that any payment is due. We cannot currently estimate the likely outcome of the dispute under the TJ004309 Agreement.

The TJ004309 Agreement may be terminated by either party in the event of an uncured material breach by the other party or bankruptcy of the other party, or for safety reasons related to TJ004309. I-Mab may also terminate the TJ004309 Agreement if we cause certain delays in completing a Phase 1 clinical trial. In addition, I-Mab may terminate the TJ004309 Agreement for any reason within 90 days following the completion of the first Phase 1 clinical trial, in which case we would be entitled to a minimum

termination fee of $9.0 million, or following the completion of the first Phase 2 clinical trial, in which case we would be entitled to a pre-specified termination fee of $15.0 million and either a percentage of non-royalty consideration I-Mab may receive as part of a license to a third party or an additional payment if TJ004309 is approved for marketing outside Greater China before a third party license is executed, in addition to a double digit percentage of royalty consideration. In February 2021, I-Mab sent us a notice purporting to terminate the TJ4309 Agreement, which would result in I-Mab owing us a prespecified early termination fee of $9.0 million. However, I-Mab does not have an option to terminate the TJ004309 Agreement without cause until the ongoing Phase 1 trial of TJ004309 is complete, and we therefore believe the TJ4309 Agreement has not been terminated and continue to perform our contractual obligations.

Pursuant to the Bispecific Agreement, we and I-Mab may mutually select through a JSC up to five of I-Mab's bispecific antibody product candidates within a five-year period for development and commercialization in North America.

For each product candidate selected by the JSC for development under the Bispecific Agreement, I-Mab will be responsible and bear the costs for IND-enabling studies and establishing manufacturing for the product candidate, we will be responsible for and bear the costs of filing an IND and conducting Phase 1 and Phase 2 clinical trials, and we will be responsible for and will share equally with I-Mab in the costs of conducting Phase 3 or pivotal clinical trials, in each case within North America. Subject to I-Mab's right to co-promote an approved product candidate, we will be responsible for commercializing any approved product candidates in North America, and we will share profits and losses equally with I-Mab in North America. We would also be entitled to receive tiered low single digit royalties on net sales of product candidates in the EU and Japan.

At any time prior to completing the first pivotal clinical trial for a product candidate or if I-Mab ceases to support development costs or pay its portion of Phase 3 clinical trial costs for a product candidate or the JSC decides to cease development over our objections after initiating Phase 3 clinical trials, we will have an option to obtain an exclusive license to such product candidate in all territories except Greater China and Korea and any other territories in which I-Mab previously licensed rights to a third party subject to our right of first refusal for any licenses I-Mab may grant to third-parties.

If we exercise our licensing option, we would assume sole responsibility for developing and commercializing the product candidate in the licensed territory, and in lieu of profit or loss sharing with I-Mab with respect to such product candidate, we would owe I-Mab pre-specified upfront and milestone payments and royalties on net sales, with the payments and royalties escalating depending on the phase of development the product candidate reached at the time we obtained the exclusive license as follows: (i) if before IND-enabling studies and the preparation of the CMC activities of the collaborative product, we would owe I-Mab a one-time upfront payment of $10.0 million, development and regulatory based milestone payments totaling up to $90.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the mid-single digits on annual net sales; (ii) if after IND submission but before completion of a Phase 1a clinical trial of the collaborative product, we would owe I-Mab a one-time upfront payment of $25.0 million, development and regulatory based milestone payments totaling up to $125.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the high single digits on annual net sales; (iii) if after completion of a Phase 1a clinical trial but before completion of a Phase 2 proof of concept clinical trial for the collaborative product, we would owe I-Mab a one-time upfront payment of $50.0 million, development and regulatory based milestone payments totaling up to $250.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the low double digits on annual net sales; and (iv) if after completion of a Phase 2 proof of concept clinical trial and before completion of a pivotal trial for the collaborative product, we would owe I-Mab a one-time upfront payment of $80.0 million, development and regulatory based milestone payments totaling up to $420.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the high-teens on annual net sales.

Each party agreed that for a specified period of time, it would not develop or license to or from any third party any bispecific monoclonal antibody targeting the same two biological targets as those of any selected product candidates under the Bispecific Agreement.

If development of any selected product candidates is terminated by a decision of the JSC, all rights to the product candidate will revert to I-Mab, subject to our rights to obtain an exclusive license in certain circumstances. If development is terminated after submission of an IND and prior to initiating Phase 3 clinical studies or after initiating Phase 3 clinical studies and with our concurrence, we would be entitled to tiered low single digit royalties on net sales of the product candidate in North America, the EU and Japan.

The Bispecific Agreement may be terminated by either party in the event of an uncured material breach by the other party or bankruptcy of the other party, or with respect to any selected product candidate, for safety reasons related to that product candidate.

In March 2020, we learned that I-Mab entered into two license and collaboration agreements with ABL Bio in July 2018. Under the ABL Bio License 1, I-Mab granted to ABL Bio exclusive, worldwide (excluding Greater China), royalty-bearing rights to develop and commercialize the BsAb using certain monoclonal antibody sequences. Under ABL License 2, I-Mab and ABL agreed to collaborate to develop three PD-L1-based bispecific antibodies by using ABL Bio's proprietary BsAb technology and commercialize them in their respective territories, which, collectively, include China, Hong Kong, Macau, Taiwan and South Korea, and other territories throughout the rest of the world if both parties agree to do so in such other territories during the performance of the agreement. On April 8, 2020, we issued a notice of dispute regarding possible breach of the Bispecific Agreement. We cannot

currently estimate the likely outcome of the dispute under the Bispecific Agreement. Until these discussions are complete, we may be unable to provide a timeline as to when or if it will file an IND for a bispecific antibody under the Bispecific Agreement. Furthermore, our ability to license certain bispecific product candidates from I-Mab may be more limited than we previously believed due to I-Mab's separate license with ABL Bio that preceded our license with I-Mab.

License Agreement with Janssen Pharmaceutica N.V.

In September 2016, we entered into a strategic licensing collaboration with Janssen for two novel oncology assets from Janssen's early oncology development portfolio. The agreement, as amended, grants us the right to develop TRC253 (formerly JNJ-63576253), a novel small molecule high affinity competitive inhibitor of wild type androgen receptor (AR Mutant Program) and multiple AR mutant receptors which display drug resistance to approved treatments, which is intended for the treatment of men with prostate cancer.

In April 2020, Janssen notified us that it would not be exercising its option to reacquire rights to TRC253 following its review of data from the Phase 1/2 trial of TRC253 in prostate cancer. As a result, we have retained worldwide development and commercialization rights to TRC253, and are obligated to pay to Janssen (x) development and regulatory based milestone payments totaling up to $45.0 million upon achievement of specified events and (y) royalties in the low single digits based on annual net sales of TRC253 products, subject to certain specified reductions.

Other License Agreements

Under each of our license agreements we may have payment obligations that are contingent upon future events such as our achievement of specified development, regulatory and commercial milestones and are required to make development milestone payments and royalty payments in connection with the sale of products developed under these agreements. We do not have any significant ongoing annual payment obligations under these license agreements. As of December 31, 2020, we were unable to estimate the timing or likelihood of achieving the milestones or making future product sales. These commitments include the following:

- Under our license agreement with Case Western, we may be required to pay up to an aggregate of approximately $9.8 million in milestone payments, of which $0.7 million relates to the initiation of certain development activities ($0.2 million of which has been paid) and approximately $9.1 million relates to the submission of certain regulatory filings and receipt of certain regulatory approvals. If products utilizing certain intellectual property licensed from Case Western, or the TRC102 Technology, are successfully commercialized, we will be required to pay Case Western a single-digit royalty on net sales, subject to adjustments in certain circumstances. Beginning on the earlier of a specified number of years from the effective date of the agreement and the anniversary of the effective date following the occurrence of a specified event, we will be required to make a minimum annual royalty payment of $75,000, which will be credited against our royalty obligations. In the event we sublicense any of our rights under the agreement relating to the TRC102 Technology, we will be obligated to pay Case Western a portion of certain fees we may receive under the sublicense. Our royalty obligations will continue on a country-by-country basis through the later of the expiration of the last valid claim under the TRC102 Technology or 14 years after the first commercial sale of a product utilizing the TRC102 Technology in a given country.
- Under our license agreement with Janssen for TRC253, as amended, we may be required to pay up to an aggregate of $45.0 million in milestone payments, of which $15.0 million relates to the initiation of certain development activities and $30.0 million relates to the submission of certain regulatory filings and receipt of certain regulatory approvals. If TRC253 is successfully commercialized, we will be required to pay Janssen a low single-digit royalty on net sales, subject to reductions in certain circumstances.

Financial Operations Overview

Revenue

Our revenue during the three year period ended December 31, 2020 was derived from our 2017 collaboration with Ambrx, Inc. (Ambrx). In February 2019, Ambrx notified us that it had elected to terminate its agreement with us, which became effective 90 days after the notice. The terms of this arrangement contained multiple promised goods and services. The license agreement provided for the receipt of multiple types of payments, including a non-refundable upfront payment, milestone payments, and royalties on net product sales. In accordance with our revenue recognition policy, we identified one performance obligation for all of the promised goods and services under the agreement and recognized revenue for the fixed or determinable collaboration consideration at a point in time, which occurred in the first quarter of 2018.

We expect that any revenue we generate will fluctuate from quarter to quarter as a result of the timing of any additional collaboration agreements and recognition of associated upfront and milestone payments, and the extent to which any of our products are approved and successfully commercialized by us or our partners. If we or our partners fail to develop product candidates in a timely manner or obtain regulatory approval for them, our ability to generate future revenues, our results of operations and our financial position could be adversely affected.

Research and Development Expenses

Research and development expenses consist of costs associated with the preclinical and clinical development of product candidates. These costs consist primarily of:

- salaries and employee-related expenses, including stock-based compensation and benefits for personnel in research and development functions;
- costs incurred under clinical trial agreements with investigative sites;
- costs to acquire, develop and manufacture preclinical study and clinical trial materials;
- costs associated with conducting our preclinical, development and regulatory activities, including fees paid to third party professional consultants, service providers and our scientific advisory board;
- payments related to licensed products and technologies; and
- facilities, depreciation and other expenses, including allocated expenses for rent and maintenance of facilities.

Research and development costs, including third party costs reimbursed by Santen and I-Mab as part of such collaborations, are expensed as incurred. We account for nonrefundable advance payments for goods and services that will be used in future research and development activities as expenses when the service has been performed or when the goods have been received.

The following table summarizes our research and development expenses by product candidate for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
	(in thousands)		
Third-party research and development expenses:			
TRC105	$ 128	$ 4,596	$ 18,732
TRC253	832	3,752	3,573
TRC102	197	161	164
TRC694	—	115	1,401
TJ004309	1,553	517	21
Envafolimab	1,107	4	—
Total third-party research and development expenses	3,817	9,145	23,891
Unallocated expenses	4,381	5,385	6,569
Total research and development expenses	$ 8,198	$ 14,530	$ 30,460

Unallocated expenses consist primarily of our internal personnel related and facility costs.

We expect our current level of research and development expenses to increase slightly in 2021 due to enrollment of the ENVASARC trial.

We cannot determine with certainty the timing of initiation, the duration or the completion costs of current or future preclinical studies and clinical trials of product candidates due to the inherently unpredictable nature of preclinical and clinical development. Clinical and preclinical development timelines, the probability of success and development costs can differ materially from expectations. As a result of the COVID-19 pandemic and actions taken to slow its spread, many clinical trial sites have temporarily suspended dosing of previously-enrolled patients and/or enrollment of new patients, and patients in clinical trials may choose to not enroll, not participate in follow-up clinical visits or drop out of trials as a precaution against, or as a result of, contracting COVID-19. These events have impacted our clinical trials and those of our collaborators and we cannot predict with certainty the extent to which the COVID-19 pandemic will ultimately delay our clinical trials or those of our collaborators or increase our expenses in completing clinical trials. We anticipate that we will make determinations as to which product candidates to pursue and how much funding to direct to each product candidate on an ongoing basis in response to the results of ongoing and future preclinical studies and clinical trials, regulatory developments and our ongoing assessments as to each product candidate's commercial potential. We will need to raise substantial additional capital in the future. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

The costs of clinical trials to us and the timing of such costs may vary significantly based on factors such as:

- the extent to which costs for comparator drugs are borne by third parties;
- per patient trial costs;
- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring or other studies requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the duration and scope of impact of the COVID-19 pandemic;
- the phase of development of the product candidate;
- the efficacy and safety profile of the product candidate; and
- the extent to which costs are borne by third parties such as NCI.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries and related costs for employees in executive, finance and administration, corporate development and administrative support functions, including stock-based compensation expenses and benefits. Other significant general and administrative expenses include legal services, including those associated with obtaining and maintaining patents, insurance, occupancy costs, accounting services, and the cost of various consultants.

We anticipate that our general and administrative expenses will remain relatively constant in the near term.

Other Income (Expense)

Other income (expense) primarily consists of interest related to our loan agreement with SVB offset in part by interest income from our short-term investments and cash equivalents.

Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States (GAAP). The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, as well as the reported revenues and expenses during the reporting periods. These items are monitored and analyzed by us for changes in facts and circumstances, and material changes in these estimates could occur in the future. We base our estimates on our historical experience and on 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 value of assets and liabilities that are not readily apparent from other sources. Changes in estimates are reflected in reported results for the period in which they become known. Actual results may differ materially from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in the notes to our consolidated financial statements appearing elsewhere in this Annual Report, we believe that the following accounting policies related to revenue recognition, expense accruals, and stock-based compensation are most critical to understanding and evaluating our reported financial results.

Revenue Recognition

Our revenue during the three year period ended December 31, 2020 was derived from our 2017 collaboration with Ambrx. The terms of this arrangement included payments to us for the following: non-refundable, up-front license fees; development, regulatory and commercial milestone payments; and royalties on net sales of licensed products. In accordance with Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers*, we perform the following five steps in determining the appropriate amount of revenue to be recognized as we fulfill our obligations under each of these agreements: (i) identification of the contract(s) with a customer; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including any constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when, or as, we satisfy each performance obligation. We only apply the five-step model to contracts when it is probable that we will collect the consideration we are entitled to in exchange for the goods or services transferred to the customer. Once a contract is determined to be within the scope of Accounting Standards Codification 606, Revenue from Contracts with Customers, at contract inception, we assess the goods or services promised within the contract to determine those that are performance obligations and assess whether each promised good is distinct. We then recognize as revenue the amount of the transaction price that is allocated to the respective performance obligation when, or as, the performance obligation is satisfied.

As part of the accounting for these types of arrangements, we develop assumptions that require judgment to determine the stand-alone selling price for each performance obligation identified in the contract. We use key assumptions to determine the stand-alone selling price, which may include development timelines, reimbursement rates for personnel costs, discount rates, and probabilities of technical and regulatory success.

Licenses of intellectual property: If the license to our intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, we recognize revenues allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are bundled with other promises, we utilize judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue from non-refundable, up-front fees. We evaluate the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone Payments: At the inception of each arrangement that includes development, commercialization, and regulatory milestone payments, we evaluate whether the achievement of the milestones is considered probable and estimate the amount to be included in the transaction price using the most likely amount method. Performance milestone payments represent a form of variable consideration. If it is probable that a significant revenue reversal would not occur, the associated milestone payment is included in the transaction price. Achievement of milestones that are not within our control or the licensee, such as regulatory approvals, are not considered probable until the approvals are achieved. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis, for which we recognize revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, we re-evaluate the probability of achieving such development milestones and any related constraint, and if necessary, adjust our estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Manufacturing Supply Services: Arrangements that include a promise for future supply of drug substance or drug product for either clinical development or commercial supply at the customer's discretion are generally considered options. We assess if these options provide a material right to the licensee and if so, they are accounted for as separate performance obligations at the outset of the arrangement.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, we recognize revenue at the later of (i) when the related sales occur, or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, we have not recognized any royalty revenue resulting from any of our out-licensing arrangements.

We receive payments from our collaborators based on billing schedules established in each contract. Up-front payments and fees may require deferral of revenue recognition to a future period until we perform our obligations under the collaboration arrangements. Amounts are recorded as accounts receivable when our right to consideration is unconditional. We do not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the customer and the transfer of the promised goods or services to the customer will be one year or less.

Clinical Trial Expense Accruals

As part of the process of preparing our financial statements, we are required to estimate expenses resulting from our obligations under contracts with vendors, clinical sites, and consultants in connection with conducting clinical trials. The financial terms of these contracts vary and may result in payment flows that do not match the periods over which materials or services are provided under such contracts.

Our objective is to reflect the appropriate trial expenses in our financial statements by recording those expenses in the period in which services are performed and efforts are expended. We account for these expenses according to the progress of the trial as measured by patient progression and the timing of various aspects of the trial. We determine accrual estimates taking into account discussion with applicable personnel and outside service providers as to the progress or state of consummation of trials. During the course of a clinical trial, we adjust the clinical expense recognition if actual results differ from our estimates. We make estimates of accrued expenses as of each balance sheet date based on the facts and circumstances known at that time. Our clinical accruals are dependent upon accurate reporting by third-party vendors. Although we do not expect our estimates to differ materially from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low for any particular period. For the three years in the period ended December 31, 2020, there were no material adjustments to our prior period estimates of accrued expenses for clinical trials.

Stock-Based Compensation

Stock-based compensation expense represents the grant date fair value of employee stock option and award grants recognized as expense over the requisite service period of the awards (usually the vesting period) on a straight-line basis, net of actual forfeitures. We estimate the fair value of stock option grants using the Black-Scholes option pricing model. The Black-Scholes option pricing model requires the input of subjective assumptions, including the risk-free interest rate, the expected dividend yield of our common stock, the expected volatility of the price of our common stock and the expected term of the option. These estimates involve inherent uncertainties and the application of management's judgment. If factors change and different assumptions are used, our stock-based

compensation expense could be materially different in the future. See Note 6 to our consolidated financial statements included elsewhere in this Annual Report for information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our employee stock options granted for all periods presented.

The following table summarizes the stock-based compensation expense recognized in our consolidated financial statements:

	Years Ended December 31,		
	2020	2019	2018
	(in thousands)		
Research and development	$ 386	$ 776	$ 1,462
General and administrative	648	848	1,205
Total stock-based compensation expense	$ 1,034	$ 1,624	$ 2,667

As of December 31, 2020, the unrecognized stock-based compensation expense related to outstanding time-based stock options was $1.3 million and is expected to be recognized as expense over a weighted-average period of approximately 2.6 years.

Other Company Information

Net Operating Loss and Research and Development Tax Credit Carryforwards

At December 31, 2020, we had federal and California net operating loss, or NOL, carryforwards, of approximately $152.5 million and $117.7 million, respectively. The federal and California NOL carryforwards will begin expiring in 2030, unless previously utilized. The federal NOL generated after 2017 of $69.3 million will carryforward indefinitely and be available to offset up to 80% of future taxable income each year. At December 31, 2020, we had federal and California research and development and Orphan Drug credit carryforwards of approximately $10.3 million and $2.5 million, respectively. The federal research and development and Orphan Drug credit carryforwards will begin expiring in 2031, unless previously utilized. The California research and development credit carryforwards do not expire.

Pursuant to Sections 382 and 383 of the Internal Revenue Code (Code), our annual use of our NOL and research and development credit carryforwards may be limited in the event that a cumulative change in ownership of more than 50% occurs within a three-year period. We completed a Section 382/383 analysis regarding the limitation of our NOL and research and development credit carryforwards as of December 31, 2018 and did not identify a cumulative change in ownership of more than 50% within the proceeding three-year period. Future ownership changes, including changes during the year ended December 31, 2020, may limit our ability to utilize our remaining NOL and research and development tax credit carryforwards. As of December 31, 2020, we had a full valuation allowance against our deferred tax assets.

Results of Operations

This section discusses our results of operations for the year ended December 31, 2020 as compared to the year ended December 31, 2019. For a discussion and analysis of the year ended December 31, 2019 compared to the year ended December 31, 2018 please refer to Management's Discussion and Analysis of Financial Condition and Results of Operations included in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 28, 2020.

Comparison of the Years Ended December 31, 2020 and 2019

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

	Years Ended December 31,		
	2020	2019	Change
	(in thousands)		
Research and development expenses	$ 8,198	$ 14,530	$ (6,332)
General and administrative expenses	8,025	7,766	259
Other income (expense)	(552)	(378)	(174)

Research and development expenses. Research and development expenses were $8.2 million and $14.5 million for the years ended December 31, 2020 and 2019, respectively. The decrease of $6.3 million was primarily due to the termination of carotuximab development in oncology and lower manufacturing expenses for TRC253.

General and administrative expenses. General and administrative expenses were $8.0 million and $7.8 million for the years ended December 31, 2020 and 2019, respectively. The increase of $0.3 million was primarily due to corporate related expenses.

Other expense, net. Other expense, net was $0.6 million and $0.4 million for the years ended December 31, 2020 and 2019, respectively.

Liquidity and Capital Resources

Our sources of cash liquidity include cash and cash equivalents, short-term investments, and amounts available under existing common stock purchase agreements, including our common stock purchase agreement with Aspire Capital and our Capital on DemandTM sales agreement with JonesTrading. We believe that these sources are sufficient to fund the current requirements of working capital and other financial commitments, including our long-term debt and operating lease obligations, for the next twelve months from the financial statement issuance date. However, we periodically consider various financing alternatives and may, from time to time, seek to take advantage of favorable interest rate environments or other market conditions.

We enter into contracts in the normal course of business with clinical trial sites and clinical supply manufacturing organizations and with vendors for preclinical safety and research studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore are cancelable contracts.

We have incurred losses and negative cash flows from operations since our inception. As of December 31, 2020, we had an accumulated deficit of $179.1 million, and we expect to continue to incur net losses for the foreseeable future. We expect our current level of research and development expenses to increase slightly in 2021 due to enrollment of the ENVASARC pivotal trial. Given we do not anticipate any revenues from product sales in the foreseeable future, we will need additional capital to fund our operations, which we may seek to obtain through one or more equity offerings, debt financings, government or other third party funding, and licensing or collaboration arrangements.

Sale of Common Stock

In December 2020, we sold 1,612,844 shares of our common stock at an average purchase price of $8.56 for net proceeds of $13.6 million in two registered direct offerings with certain institutional investors.

In August 2020, we sold 2,633,838 shares of our common stock at an average purchase price of $1.66 per share and warrants to purchase 3,429,696 shares of our common stock at an average purchase price of $1.64 per share with an exercise price of $0.01 per share (the 2020 Pre-Funded Warrants) for net proceeds of approximately $10.0 million in a private placement with multiple accredited institutional health care focused funds. In accordance with their terms, the 2020 Pre-Funded Warrants may not be exercised if the holder’s ownership of our common stock would exceed 19.99% of our total shares outstanding following such exercise.

In March 2018, we entered into a securities purchase agreement with new and certain existing investors for the purchase of $38.7 million of our common stock and warrants. We sold approximately 1.2 million shares of common stock at a purchase price of $27.00 per share, pre-funded warrants to purchase approximately 0.2 million shares of common stock at a purchase price of $26.90 per share and an exercise price of $0.10 per share, and warrants to purchase approximately 1.4 million shares of common stock at a purchase price of $1.25 per share and an exercise price of $27.00 per share. We received total net proceeds of $36.5 million.

Common Stock Purchase Agreement with Aspire Capital

In October 2019, as amended in April 2020, we entered into the 2019 Purchase Agreement with Aspire Capital which provides that, upon the terms and subject to the conditions and limitations of the 2019 Purchase Agreement, Aspire Capital is committed to purchase up to an aggregate of $15.0 million of shares of our common stock at our request from time to time during the 30 month term of the 2019 Purchase Agreement and at prices based on the market price of our common stock at the time of each sale. In consideration for entering into the 2019 Purchase Agreement and concurrently with the execution of the 2019 Purchase Agreement, we issued to Aspire Capital 142,658 shares of our common stock. As of December 31, 2020, we had sold an aggregate 4.8 million shares of common stock under the 2019 Purchase Agreement with Aspire Capital for net proceeds of $9.6 million.

ATM Facility

In December 2020, we entered into a Capital on Demand™ Sales Agreement, or the Sales Agreement, with JonesTrading Institutional Services LLC, or JonesTrading, pursuant to which we could sell from time to time, at our option, up to an aggregate of $50.0 million of shares of our common stock through JonesTrading, as sales agent or principal, all of which remains available for sale as of December 31, 2020. Sales of our common stock made pursuant to the Sales Agreement, if any, will be made on the Nasdaq Capital Market under our effective registration statement on Form S-3, by means of ordinary brokers' transactions at market prices. Additionally, under the terms of the Sales Agreement, we may also sell shares of our common stock through JonesTrading, on the Nasdaq Capital Market or otherwise, at negotiated prices or at prices related to the prevailing market price. JonesTrading will use its commercially reasonable efforts to sell our common stock from time to time, based upon our instructions (including any price, time or size limits or other customary parameters or conditions we may impose). We are required to pay JonesTrading 2.5% of gross proceeds from the common stock sold through the Sales Agreement.

In connection with entering into the Sales Agreement in December 2020, we terminated our prior Capital on Demand™ Sales Agreement, dated September 6, 2018, with JonesTrading and no further sales of Common Stock will occur under the prior sales agreement. As of December 31, 2020, we had sold an aggregate 3.0 million shares of common stock for net proceeds of $7.1 million under the prior sales agreement with JonesTrading.

Credit Facility with SVB

In May 2018, we entered into a third amendment to our Amended and Restated Loan and Security Agreement with SVB (the 2018 Amended SVB Loan) under which we borrowed $7.0 million, all of which was used to refinance previously outstanding amounts under the loan and security agreement. In connection with the 2018 Amended SVB Loan, we issued warrants to purchase up to 5,363 shares of common stock at an exercise price of $26.10 per share. The warrants are fully exercisable and expire on May 3, 2025.

The 2018 Amended SVB Loan provides for interest to be paid at a rate of 9.0% per annum, with interest-only payments due monthly through June 30, 2019. Thereafter, in addition to interest accrued during such period, the monthly payments include an amount equal to the outstanding principal at June 30, 2019 divided by 30 months. At maturity (or earlier prepayment), we are also required to make a final payment equal to 4.0% of the original principal amount of the amounts borrowed. The 2018 Amended SVB Loan provides for prepayment fees of 1.0% of the amount prepaid if the prepayment occurs after May 3, 2020. In April 2020, we entered into an agreement with SVB (Deferral Agreement) which granted us an interest-only payment period for six months, with a corresponding six month extension to the maturity date which is now June 2022. All other material terms and conditions of the 2018 Amended SVB Loan remained unchanged.

The 2018 Amended SVB Loan is collateralized by substantially all of our assets, other than our intellectual property, and contains customary conditions of borrowing, events of default and covenants, including covenants that restrict our ability to dispose of assets, merge with or acquire other entities, incur indebtedness and make distributions to holders of our capital stock. Should an event of default occur, including the occurrence of a material adverse change, we could be required to immediately repay all obligations under the 2018 Amended SVB Loan. As of December 31, 2020, we were in compliance with all covenants and conditions of the 2018 Amended SVB Loan.

As of December 31, 2020, the total outstanding balance owed under the 2018 Amended SVB Loan amounted to $4.2 million. Future minimum principal and interest payments under the 2018 Amended SVB Loan, including the final payment, as of December 31, 2020 are $3.1 million in the next 12 months and $4.8 million in the next 24 months.

Operating Lease Obligations

Our operating lease obligations relate to our corporate headquarters in San Diego, California, which expires in April 2022. Future minimum lease payments under this lease are $0.5 million in the next twelve months and $0.7 million in the next 24 months.

Janssen License Agreement

We have retained worldwide development and commercialization rights to TRC253 following Janssen's decision to not exercise its option to reacquire the TRC253 rights. As a result, we are obligated to pay to Janssen (x) development and regulatory based milestone payments totaling up to $45.0 million upon achievement of specified events and (y) royalties in the low single digits based on annual net sales of TRC253 products, subject to certain specified reductions. These obligations are contingent upon future events such as our achievement of specified development and regulatory milestones and the sale of the developed product. As of December 31, 2020, we were unable to estimate the timing or likelihood of achieving the milestones or making future product sales.

Cash Flows

The following table summarizes our net cash flow activity for each of the periods set forth below:

	Years Ended December 31,	
	2020	2019
	(in thousands)	
Net cash provided by (used in):		
Operating activities	$ (17,042)	$ (23,650)
Investing activities	(4,003)	14,020
Financing activities	36,764	906
Increase (decrease) in cash and cash equivalents	$ 15,719	$ (8,724)

Operating activities. Net cash used in operating activities was $17.0 million and $23.7 million for the years ended December 31, 2020 and 2019, respectively, and was primarily due to our net loss for the respective year, adjusted for noncash items and offset by changes in our working capital.

Investing activities. Net cash used in investing activities was $4.0 million for the year ended December 31, 2020 and was primarily due to the purchase of short-term investment securities. Net cash provided by investing activities was $14.0 million for the year ended December 31, 2019 and was due to maturities of short-term investments partially offset by purchases of these investments.

Financing activities. Net cash provided by financing activities was $36.8 million for the year ended December 31, 2020 and primarily resulted from $13.6 million in net proceeds received from the sale of common stock in two registered direct offerings, $10.0 million in net proceeds received from the sale of common stock and pre-funded warrants in a private placement, $9.6 million in net proceeds of sales of our common stock under our 2019 Purchase Agreement with Aspire Capital, and $4.8 million in net proceeds of sales of our common stock through our prior September 2018 ATM facility with JonesTrading, offset by $1.4 million in net repayments on borrowings under our SVB loan agreement. Net cash provided by financing activities was $0.9 million for the year ended December 31, 2019 and primarily resulted from $2.3 million in net proceeds received from the issuance of common stock through our ATM facility with JonesTrading, offset by $1.4 million in net repayments on borrowings under our SVB loan agreement.

Funding Requirements

At December 31, 2020, we had cash, cash equivalents, and short-term investments totaling $36.1 million. We believe that our existing cash, cash equivalents, and short-term investments will be sufficient to fund our obligations into the second half of 2022. We will need additional funding to complete the development and commercialization of our product candidates or those of our partners. In addition, we may evaluate in-licensing and acquisition opportunities to gain access to new product candidates that fit with our strategy. Any such transaction will likely increase our future funding requirements.

Our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. Our future capital requirements are difficult to forecast and will depend on many factors, including:

- our ability to initiate, and the progress and results of, our ongoing and planned clinical trials;
- the ability and willingness of our collaboration partners and licensees to continue clinical development of product candidates;
- our ability to enter into and maintain our collaborations, including our collaborations with 3D Medicines and Alphamab, and I-Mab;
- our ability to achieve, and our obligations to make, milestone payments under our collaboration and license agreements;
- the outcome of our negotiations with I-Mab with respect to payments under the TJ004309 Agreement;
- the costs and timing of procuring supplies of product candidates for clinical trials and regulatory submissions;
- the scope, progress, results and costs of preclinical development, and clinical trials of our product candidates;
- the extent to which the COVID-19 pandemic delays our clinical development activities or those of our collaborators;
- the costs, timing and outcome of regulatory review of product candidates;
- the revenue, if any, received from commercial sales of our product candidates for which we or any of our partners, including 3D Medicines, Alphamab and I-Mab, may receive marketing approval;
- the costs and timing of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending any intellectual property-related claims;

- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any product candidates for which we receive marketing approval and do not partner for commercialization; and
- the extent to which we acquire or in-license other products and technologies.

Until we can generate substantial product revenues, if ever, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations, and licensing arrangements. There can be no assurance that additional funds will be available when needed from any source or, if available, will be available on terms that are acceptable to us. As a result of the COVID-19 pandemic and actions taken to slow its spread, the global credit and financial markets have experienced extreme volatility and disruptions, including diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. If the equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Even if we raise additional capital, we may also be required to modify, delay or abandon some of our plans or programs which could have a material adverse effect on our business, operating results and financial condition and our ability to achieve our intended business objectives. Any of these actions could materially harm our business, results of operations and future prospects.

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

Not applicable.

Item 8. Financial Statements and Supplementary Data.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of
TRACON Pharmaceuticals, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of TRACON Pharmaceuticals, Inc. (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

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

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

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosure to which it relates.

Clinical Trial Expense Accruals

Description of the Matter	During 2020, the Company incurred $8.2 million for research and development expense and as of December 31, 2020, the Company accrued $3.6 million for clinical trial expenses. As described in Note 1 of the financial statements, the Company records accruals for estimated research and development costs relating to clinical trials comprising payments for work performed by third party vendors and consultants, participating clinical trial sites, and others. The Company accounts for the expenses based upon the progress of the clinical trial as measured by patient progression through the trial. Auditing the Company's accounting for clinical trial expense accruals was especially challenging as evaluating the progress or patient progression through the clinical trials is dependent upon a high volume of data which is tracked in spreadsheets.

How We Addressed the Matter in Our Audit	To test the completeness of the Company's accrued clinical trial expenses, among other procedures, we obtained supporting evidence of the research and development activities performed for significant clinical trials. We inquired of internal clinical trial project managers to understand the status of significant clinical trial activities. To assess the appropriate measurement of accrued clinical trial costs, our audit procedures included, among others, obtaining and inspecting significant agreements and agreement amendments, evaluating the Company's documentation of key milestones and completion terms, activities, timing, and costs of clinical trials, and testing a sample of transactions by comparing the costs against related invoices and contracts. We also tested a sample of subsequent payments by agreeing the invoice to the original accrual and the invoice payments to bank statements.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2011.
San Diego, California
February 25, 2021

TRACON Pharmaceuticals, Inc.

Consolidated Balance Sheets

(in thousands, except share and per share data)

	December 31,	
	2020	2019
Assets		
Current assets:		
Cash and cash equivalents	$ 32,131	$ 16,412
Short-term investments	3,999	—
Prepaid and other assets	784	848
Total current assets	36,914	17,260
Property and equipment, net	16	23
Other assets	508	838
Total assets	$ 37,438	$ 18,121
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and accrued expenses	$ 6,235	$ 7,875
Accrued compensation and related expenses	1,590	1,355
Long-term debt, current portion	2,718	2,604
Total current liabilities	10,543	11,834
Other long-term liabilities	432	850
Long-term debt, less current portion	1,391	2,739
Commitments and contingencies (Note 5)		
Stockholders' equity:		
Preferred stock, $0.001 par value, authorized shares — 10,000,000 at December 31, 2020 and December 31, 2019; issued and outstanding shares — none	—	—
Common stock, $0.001 par value; authorized shares — 40,000,000 and 20,000,000 at December 31, 2020 and December 31, 2019, respectively; issued and outstanding shares — 15,478,787 and 4,051,187 at December 31, 2020 and December 31, 2019, respectively	15	4
Additional paid-in capital	204,166	165,028
Accumulated deficit	(179,109)	(162,334)
Total stockholders' equity	25,072	2,698
Total liabilities and stockholders' equity	$ 37,438	$ 18,121

See accompanying notes.

TRACON Pharmaceuticals, Inc.

Consolidated Statements of Operations

(in thousands, except share and per share data)

	Years Ended December 31,		
	2020	2019	2018
Collaboration revenue	$ —	$ —	$ 3,000
Operating expenses:			
Research and development	8,198	14,530	30,460
General and administrative	8,025	7,766	7,280
Total operating expenses	16,223	22,296	37,740
Loss from operations	(16,223)	(22,296)	(34,740)
Other income (expense):			
Interest expense, net	(545)	(386)	(231)
Other income (expense), net	(7)	8	12
Total other expense	(552)	(378)	(219)
Net loss	$ (16,775)	$ (22,674)	$ (34,959)
Net loss per share, basic and diluted	$ (1.87)	$ (7.47)	$ (12.97)
Weighted-average shares outstanding, basic and diluted	8,984,148	3,034,299	2,694,624

See accompanying notes.

TRACON Pharmaceuticals, Inc.

Consolidated Statements of Stockholders' Equity

(in thousands, except share and per share data)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
Balance at December 31, 2017	1,771,242	$ 2	$ 121,686	$ (104,701)	$ 16,987
Issuance of common stock under equity plans	22,881	—	185	—	185
Stock-based compensation expense	—	—	2,667	—	2,667
Vested shares related to repurchase liability	—	—	8	—	8
Issuances of common stock and warrants, net of offering costs	1,193,059	1	36,455	—	36,456
Issuance of common stock warrants in connection with debt financing	—	—	98	—	98
Net loss	—	—	—	(34,959)	(34,959)
Balance at December 31, 2018	2,987,182	3	161,099	(139,660)	$ 21,442
Issuance of common stock under equity plans	9,270	—	12	—	12
Stock-based compensation expense	—	—	1,624	—	1,624
Issuances of common stock, net of offering costs	1,054,735	1	2,293	—	2,294
Net loss	—	—	—	(22,674)	(22,674)
Balance at December 31, 2019	4,051,187	4	165,028	(162,334)	2,698
Issuance of common stock under equity plans	6,628	—	2	—	2
Stock-based compensation expense	—	—	1,034	—	1,034
Issuances of common stock and warrants, net of offering costs	11,320,972	11	37,976	—	37,987
Issuance of common stock in exchange for services	100,000	—	126	—	126
Net loss	—	—	—	(16,775)	(16,775)
Balance at December 31, 2020	15,478,787	$ 15	$ 204,166	$ (179,109)	$ 25,072

See accompanying notes.

TRACON Pharmaceuticals, Inc.

Consolidated Statements of Cash Flows

(in thousands)

	Years Ended December 31,		
	2020	**2019**	**2018**
Cash flows from operating activities			
Net loss	$ (16,775)	$ (22,674)	$ (34,959)
Adjustments to reconcile net loss to net cash used in operating activities:			
Stock-based compensation	1,034	1,624	2,667
Common stock issued for services	126	—	—
Depreciation and amortization	12	22	28
Noncash interest	123	234	272
Amortization of debt discount	43	81	94
Amortization of premium/discount on short-term investments	(1)	(52)	(100)
Lease asset amortization and liability accretion, net	(25)	(6)	—
Deferred rent	—	—	11
Deferred revenue	—	—	(3,000)
Changes in assets and liabilities:			
Prepaid expenses and other assets	64	651	92
Accounts payable and accrued expenses	(1,878)	(3,421)	4,142
Accrued compensation and related expenses	235	(109)	(30)
Net cash used in operating activities	(17,042)	(23,650)	(30,783)
Cash flows from investing activities			
Purchase of property and equipment	(5)	—	—
Purchases of available-for-sale short-term investments	(3,998)	(4,980)	(32,869)
Proceeds from the maturity of available-for-sale short-term investments	—	19,000	24,000
Net cash provided by (used in) investing activities	(4,003)	14,020	(8,869)
Cash flows from financing activities			
Proceeds from long-term debt	—	—	7,000
Repayment of long-term debt	(1,400)	(1,400)	(8,320)
Proceeds from sale of common stock and warrants, net of offering costs	38,162	2,294	36,456
Proceeds from issuance of common stock under equity plans, net of tax withholdings	2	12	185
Net cash provided by financing activities	36,764	906	35,321
Increase (decrease) in cash and cash equivalents	15,719	(8,724)	(4,331)
Cash and cash equivalents at beginning of period	16,412	25,136	29,467
Cash and cash equivalents at end of period	$ 32,131	$ 16,412	$ 25,136
Supplemental disclosure of cash flow information			
Interest paid	$ 443	$ 612	$ 642
Supplemental schedule of noncash investing and financing activities			
Issuance of common stock warrants in connection with long-term debt	$ —	$ —	$ 98
Issuance of common stock in connection with common stock purchase agreement	$ —	$ 450	$ —

See accompanying notes.

1. Organization and Summary of Significant Accounting Policies

Organization and Business

TRACON Pharmaceuticals, Inc. (TRACON or the Company) was incorporated in the state of Delaware on October 28, 2004. TRACON is a biopharmaceutical company focused on the development and commercialization of novel targeted therapeutics for cancer, and utilizes its cost efficient, contract research organization (CRO) independent product development platform to partner with ex-U.S. companies to develop and commercialize innovative products in the United States.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, TRACON Pharma Limited and TRACON Pharma International Limited, which were formed in September 2015 and January 2019, respectively, and are currently inactive. All significant intercompany accounts and transactions have been eliminated.

Basis of Presentation

As of December 31, 2020, the Company has devoted substantially all of its efforts to product development, raising capital, and building infrastructure and has not realized revenues from its planned principal operations. The Company has incurred operating losses since inception. As of December 31, 2020, the Company had an accumulated deficit of $179.1 million. The Company anticipates that it will continue to incur net losses into the foreseeable future as it continues the development and commercialization of its product candidates and works to develop additional product candidates through research and development programs. At December 31, 2020, the Company had cash, cash equivalents, and short-term investments of $36.1 million. Based on the Company's current business plan, management believes that existing cash, cash equivalents, and short-term investments will be sufficient to fund the Company's obligations for a period in excess of one year from the date of issuance of these financial statements. The completion of the two registered direct offerings in December 2020, which generated net proceeds of $13.6 million, the completion of the private placement of the Company's common stock and pre-funded warrants in August 2020, which generated net proceeds to the Company of $10.0 million, the sale of the Company's common stock under the common stock purchase agreement with Aspire Capital Fund, LLC (Aspire Capital), which generated net proceeds of $9.6 million during 2020, and the sale of the Company's common stock under its prior Capital on Demand™ sales agreement with JonesTrading Institutional Services LLC (JonesTrading), which generated net proceeds of $4.8 million during 2020, alleviated the substantial doubt about the Company's ability to continue as a going concern which existed at the reporting date of the December 31, 2019 consolidated financial statements.

The Company plans to continue to fund its losses from operations through its existing cash, cash equivalents, and short-term investments, as well as through future equity offerings, debt financings, other third party funding, and potential licensing or collaboration arrangements. In addition, the Company may fund its losses from operations through the common stock purchase agreement the Company entered into with Aspire Capital in October 2019, as amended in April 2020, for the purchase of up to $15.0 million of the Company's common stock over the 30 month period of the purchase agreement, $5.4 million of which remained available for sale as of December 31, 2020, and/or the Capital on Demand™ Sales Agreement (the Sales Agreement) the Company entered into with JonesTrading in December 2020, pursuant to which the Company may sell, at its option, up to an aggregate of $50.0 million of the Company's common stock, all of which remained available for sale as of December 31, 2020. There can be no assurance that additional funds will be available when needed from any source or, if available, will be available on terms that are acceptable to the Company. As a result of the COVID-19 pandemic and actions taken to slow its spread, the global credit and financial markets have experienced extreme volatility and disruptions, including diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. If the equity and credit markets continue to deteriorate, it may make any additional debt or equity financing more difficult, more costly and more dilutive. Even if the Company raises additional capital, it may also be required to modify, delay or abandon some of its plans, which could have a material adverse effect on the Company's business, operating results and financial condition, and the Company's ability to achieve its intended business objectives. Any of these actions could materially harm the Company's business, results of operations, and future prospects.

Risks and Uncertainties

In December 2019, COVID-19, a novel strain of coronavirus, was first reported in Wuhan, China and has since become a global pandemic. The virus continues to spread globally, has been declared a pandemic by the World Health Organization and has spread to over 100 countries, including the United States. The impact of this pandemic has been and will likely continue to be extensive in many aspects of society, which has resulted in and will likely continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world.

The Company has experienced temporary closures of its offices in light of state and local orders and most of its employees continue to work remotely. In addition, the Company's employees have not been able to conduct normal business travel, in particular as part of business development activities or in-person monitoring of clinical trial sites. Potential further impacts to the Company's business include, but are not limited to, additional closures of its facilities or those of its vendors, continued disruptions or restrictions on its employees' ability to travel, disruptions to or delays in ongoing clinical trials, third-party manufacturing supply and other operations, the potential diversion of healthcare resources away from the conduct of clinical trials to focus on pandemic concerns, interruptions or delays in the operations of the U.S. Food and Drug Administration or other regulatory authorities, and the Company's ability to raise capital and conduct business development activities.

Use of Estimates

The Company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (GAAP). The preparation of the Company's consolidated financial statements requires it to make estimates and assumptions that impact the reported amounts of assets, liabilities, revenue, and expenses. The most significant estimates in the Company's financial statements relate to expenses incurred for clinical trials. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may ultimately materially differ from these estimates and assumptions. The Company is not aware of any specific event or circumstance that would require an update to its estimates, judgments and assumptions or a revision of the carrying value of the Company's assets or liabilities as of the date of this filing.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and highly liquid investments with original maturities of three months or less at the date of purchase. The carrying amounts approximate fair value due to the short maturities of these investments. Cash and cash equivalents include cash in readily available checking and money market funds.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentration of credit risk consist primarily of cash and cash equivalents. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

Property and Equipment

Property and equipment is stated at cost and depreciated using the straight-line method over the estimated useful life of the related assets, which is generally five years. Leasehold improvements are amortized over the shorter of the lease term or estimated useful life of the related assets. Repairs and maintenance costs are charged to expense as incurred.

Leases

The Company determines if an arrangement contains a lease at inception. For arrangements where the Company is the lessee, operating leases are recorded as other assets, accounts payable and accrued expenses, and other long-term liabilities within the consolidated balance sheet. The Company currently does not have any finance leases.

Operating lease right-of-use (ROU) assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. ROU assets also include any initial direct costs incurred and any lease payments made at or before the lease commencement date, less lease incentives received. The Company uses its incremental borrowing rate based on the information available at the commencement date in determining the lease liabilities as the Company's leases generally do not provide an implicit rate. Lease terms may include options to extend or terminate when the Company is reasonably certain that the option will be exercised. Lease expense is recognized on a straight-line basis over the lease term.

Revenue Recognition

To date, substantially all of the Company's revenue has been derived from its prior license agreements. The terms of these arrangements included payments to the Company for the following: non-refundable, up-front license fees; development, regulatory and commercial milestone payments; payments for manufacturing supply services the Company provides through its contract

manufacturers; and royalties on net sales of licensed products. In accordance with Accounting Standards Update (ASU) No. 2014-09, *Revenue from Contracts with Customers*, the Company performs the following five steps in determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of these agreements: (i) identification of the contract(s) with a customer; (ii) determination of whether the promised goods or services are performance obligations including whether they are distinct in the context of the contract; (iii) measurement of the transaction price, including any constraint on variable consideration; (iv) allocation of the transaction price to the performance obligations; and (v) recognition of revenue when, or as, the Company satisfies each performance obligation. The Company only applies the five-step model to contracts when it is probable that the Company will collect the consideration it is entitled to in exchange for the goods or services transferred to the customer. Once a contract is determined to be within the scope of Accounting Standards Codification 606, Revenue from Contracts with Customers, at contract inception, the Company assesses the goods or services promised within the contract to determine those that are performance obligations and assesses whether each promised good is distinct. The Company then recognizes as revenue the amount of the transaction price that is allocated to the respective performance obligation when, or as, the performance obligation is satisfied.

As part of the accounting for these arrangements, the Company develops assumptions that require judgment to determine the stand-alone selling price for each performance obligation identified in the contract. The Company uses key assumptions to determine the stand-alone selling price, which may include development timelines, reimbursement rates for personnel costs, discount rates, and probabilities of technical and regulatory success.

Licenses of intellectual property: If the license to the Company's intellectual property is determined to be distinct from the other performance obligations identified in the arrangement, the Company recognizes revenues allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. For licenses that are bundled with other promised goods or services, the Company utilizes judgment to assess the nature of the combined performance obligation to determine whether the combined performance obligation is satisfied over time or at a point in time and, if over time, the appropriate method of measuring progress for purposes of recognizing revenue. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition.

Milestone Payments: At the inception of each arrangement that includes development, commercialization, and regulatory milestone payments, the Company evaluates whether the achievement of the milestones is considered probable and estimates the amount to be included in the transaction price using the most likely amount method. Performance milestone payments represent a form of variable consideration. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Achievement of milestones that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable until the approvals are achieved. The transaction price is then allocated to each performance obligation on a relative stand-alone selling price basis and the Company recognizes revenue as or when the performance obligations under the contract are satisfied. At the end of each subsequent reporting period, the Company re-evaluates the probability of achieving such milestones and any related constraint, and if necessary, adjusts its estimate of the overall transaction price. Any such adjustments are recorded on a cumulative catch-up basis, which would affect revenues and earnings in the period of adjustment.

Manufacturing Supply Services: Arrangements that include a promise for future supply of drug substance or drug product for either clinical development or commercial supply at the customer's discretion are generally considered options. The Company assesses if these options provide a material right to the licensee and if so, they are accounted for as separate performance obligations at the outset of the arrangement.

Royalties: For arrangements that include sales-based royalties, including milestone payments based on the level of sales, and the license is deemed to be the predominant item to which the royalties relate, the Company recognizes revenue at the later of (i) when the related sales occur or (ii) when the performance obligation to which some or all of the royalty has been allocated has been satisfied (or partially satisfied). To date, the Company has not recognized any royalty revenue resulting from any of its out-licensing arrangements.

The Company receives payments from its collaborators based on billing schedules established in each contract. Up-front and other payments may require deferral of revenue recognition to a future period until the Company performs its obligations under its collaboration arrangements. Amounts are recorded as accounts receivable when the Company's right to consideration is unconditional. The Company does not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the customer and the transfer of the promised goods or services to the customer will be one year or less.

Clinical Trial Expense Accruals

As part of the process of preparing the Company's financial statements, the Company is required to estimate expenses resulting from its obligations under contracts with vendors, clinical sites, and consultants in connection with conducting clinical trials. The

financial terms of these contracts vary and may result in payment flows that do not match the periods over which materials or services are provided under such contracts.

The Company's objective is to reflect the appropriate trial expenses in its financial statements by recording those expenses in the period in which services are performed and efforts are expended. The Company accounts for these expenses according to the progress of the clinical trial as measured by patient progression and the timing of various aspects of the trial. The Company determines accrual estimates through discussion with the clinical sites and applicable personnel and outside service providers as to the progress or state of consummation of trials. During the course of a clinical trial, the Company adjusts the clinical expense recognition if actual results differ from its estimates. The Company makes estimates of accrued expenses as of each balance sheet date based on the facts and circumstances known at that time. The Company's clinical trial accruals are dependent upon accurate reporting by clinical sites and other third-party vendors. Although the Company does not expect its estimates to differ materially from amounts actually incurred, its understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low for any particular period. For each of the three years in the period ended December 31, 2020, there were no material adjustments to the Company's prior period estimates of accrued expenses for clinical trials.

Research and Development Costs

Research and development costs, including license fees, are expensed as incurred.

Patent Costs

Costs related to filing and pursuing patent applications are recorded as general and administrative expense and expensed as incurred since recoverability of such expenditures is uncertain.

Stock-Based Compensation

Stock-based compensation expense represents the grant date fair value of employee stock option grants, employee restricted stock unit grants (RSUs), and employee stock purchase plan (ESPP) rights recognized as expense over the requisite service period of the awards (usually the vesting period) on a straight-line basis. The Company estimates the fair value of stock option grants and ESPP rights using the Black-Scholes option pricing model. The fair value of RSUs is based on the closing sales price for such stock on the date of grant. Equity award forfeitures are recorded as they occur.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized as income in the period that includes the enactment date.

The Company recognizes net deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If management determines that the Company would be able to realize its deferred tax assets in the future in excess of their net recorded amount, management would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

The Company records uncertain tax positions on the basis of a two-step process whereby (1) management determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, management recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with the related tax authority. The Company recognizes interest and penalties related to unrecognized tax benefits within income tax expense. Any accrued interest and penalties are included within the related tax liability.

Comprehensive Loss

Comprehensive loss is defined as a change in equity during a period from transactions and other events and circumstances from non-owner sources. Net loss and comprehensive loss were the same for all periods presented.

Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average shares of common stock outstanding for the period, without consideration for common stock equivalents and adjusted for the weighted-average number of common shares outstanding that are subject to repurchase. Diluted net loss per share is calculated by dividing the net loss by the weighted-average number of common stock equivalents outstanding for the period determined using the treasury-stock method. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the Company's net loss position.

Potentially dilutive securities not included in the calculation of diluted net loss per share because to do so would be anti-dilutive are as follows (in common stock equivalent shares):

	December 31,		
	2020	2019	2018
Warrants to purchase common stock	4,810,409	1,561,903	1,561,903
Common stock options and RSUs	601,481	370,391	300,738
ESPP shares	5,349	1,322	1,275
Total	5,417,239	1,933,616	1,863,916

Segment Reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker in making decisions regarding resource allocation and assessing performance. The Company views its operations and manages its business in one operating segment.

2. Short-Term Investments, Cash Equivalents and Fair Value Measurements

At December 31, 2020, the Company's short-term investments consisted of U.S. treasury securities and at December 31, 2019, the Company had no short-term investments. The Company classifies all investments as available-for-sale securities, as the sale of such investments may be required prior to maturity to implement management strategies. These investments are carried at amortized cost which approximates fair value. A decline in the market value of any short-term investment below cost that is determined to be other-than-temporary will result in a revaluation of its carrying amount to fair value. The impairment is charged to earnings and a new cost basis for the security is established. No such impairment charges were recorded for any period presented.

Realized gains and losses from the sale of short-term investments, if any, are determined on a specific identification basis. Realized gains and losses and declines in value judged to be other-than-temporary, if any, on available-for-sale securities are included in other income or expense on the consolidated statements of operations. Realized and unrealized gains and losses during the periods presented were immaterial. Premiums and discounts are amortized or accreted over the life of the related security as an adjustment to yield using the straight-line method and are included in interest income on the consolidated statements of operations. Interest and dividends on securities classified as available-for-sale are included in interest income on the consolidated statements of operations.

The carrying amounts of cash and cash equivalents, prepaid and other assets, accounts payable and accrued liabilities are considered to be representative of their respective fair values because of the short-term nature of those instruments. Based on the borrowing rates currently available to the Company for loans with similar terms, which is considered a Level 2 input, the Company believes that the fair value of long-term debt approximates its carrying value.

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets.

Level 2: Inputs, other than the quoted prices in active markets that are observable either directly or indirectly.

Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Assets and liabilities are classified based on the lowest level of input that is significant to the fair value measurements.

None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis. No transfers between levels have occurred during the periods presented.

Cash equivalents, which are classified as equity securities, and short-term investments, which are classified as available-for-sale securities, consisted of the following (in thousands):

	December 31, 2020			
	Cost	Unrealized Gain	Unrealized (Loss)	Estimated Fair Value
Money market funds	$ 1,002	$ —	$ —	$ 1,002
U.S. treasury securities	3,999	—	—	3,999
	$ 5,001	$ —	$ —	$ 5,001
Classified as:				
Cash equivalents				$ 1,002
Short-term investments				3,999
Total cash equivalents and short-term investments				$ 5,001

The fair values of the Company's assets and liabilities, which are measured at fair value on a recurring basis, were determined using the following inputs (in thousands):

		Fair Value Measurements at Reporting Date Using		
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
At December 31, 2020				
Money market funds and U.S. treasury securities	$ 5,001	$ —	$ 5,001	$ —

3. Balance Sheet Details

Property and Equipment

Property and equipment consisted of the following (in thousands):

	December 31,	
	2020	2019
Computer and office equipment	$ 138	$ 133
Furniture and fixtures	19	19
Leasehold improvements	21	21
	178	173
Less accumulated depreciation and amortization	(162)	(150)
	$ 16	$ 23

Depreciation expense related to property and equipment totaled approximately $12,000, $22,000 and $28,000 for the years ended December 31, 2020, 2019 and 2018, respectively.

Accounts payable and accrued expenses

Accounts payable and accrued expenses consisted of the following (in thousands):

	December 31,	
	2020	2019
Accounts payable	$ 1,725	$ 2,408
Accrued clinical related expenses	3,559	4,231
Other accruals	533	881
Current portion of operating lease liability	418	355
	$ 6,235	$ 7,875

4. Long-Term Debt

Long-term debt and unamortized debt discount balances were as follows (in thousands):

	December 31,	
	2020	2019
Long-term debt	$ 4,200	$ 5,600
Less debt discount, net of current portion	(9)	(61)
Long-term debt, net of debt discount	4,191	5,539
Less current portion of long-term debt	(2,800)	(2,800)
Long-term debt, less current portion	$ 1,391	$ 2,739
Current portion of long-term debt	$ 2,800	$ 2,800
Current portion of debt discount	(82)	(196)
Current portion of long-term debt, net	$ 2,718	$ 2,604

In May 2018, the Company entered into a third amendment to its Amended and Restated Loan and Security Agreement with Silicon Valley Bank (the 2018 Amended SVB Loan) under which the Company borrowed $7.0 million, all of which was immediately used to repay the Company's existing loan with SVB (the 2017 Amended SVB Loan). In accordance with the terms of the 2017 Amended SVB Loan, the Company paid a final payment of $0.3 million associated with the payoff of the 2017 Amended SVB Loan. The transaction was accounted for as a debt modification.

The 2018 Amended SVB Loan provides for interest to be paid at a rate of 9.0% per annum. Interest-only payments were due monthly through June 30, 2019. Thereafter, in addition to interest accrued during such period, the monthly payments include an amount equal to the outstanding principal at June 30, 2019 divided by 30 months. In April 2020, the Company entered into a deferral agreement with SVB (the Deferral Agreement) for an interest-only payment period of six months, with a corresponding six month extension to the maturity date to June 2022. All other key terms and conditions of the 2018 Amended SVB Loan remained unchanged and the transaction was accounted for as a debt modification.

At maturity (or earlier prepayment), the Company is required to make a final payment equal to 4.0% of the original principal amount borrowed. The 2018 Amended SVB Loan provides for prepayment fees of 1.0% of the amount prepaid if the prepayment occurs after May 3, 2020.

The 2018 Amended SVB Loan is collateralized by substantially all of the Company's assets, other than the Company's intellectual property, and contains customary conditions of borrowing, events of default and covenants, including covenants that restrict the Company's ability to dispose of assets, merge with or acquire other entities, incur indebtedness and make distributions to holders of the Company's capital stock. Should an event of default occur, including the occurrence of a material adverse change, the Company could be liable for immediate repayment of all obligations under the 2018 Amended SVB Loan. As of December 31, 2020, the Company was in compliance with all covenants and conditions of the 2018 Amended SVB Loan.

In connection with the 2018 Amended SVB Loan, the Company issued SVB a warrant to purchase 5,363 shares of its common stock at an exercise price of $26.10 per share. The warrant is fully exercisable and expires on May 3, 2025. The fair value of the warrant and the final payment related to the 2018 Amended SVB Loan were recorded as debt discounts and are being amortized to interest expense using the effective interest method over the term of the debt, in addition to the remaining unamortized discounts related to the 2017 Amended SVB Loan.

At December 31, 2020, the Company had the following exercisable outstanding warrants for the purchase of common stock issued in connection with the Company's loan agreements with SVB:

Expiration	Number of shares	Exercise price
May 13, 2022	1,841	$ 108.60
November 14, 2023 through June 4, 2024	3,874	$ 77.40
January 25, 2024	4,669	$ 51.40
May 3, 2025	5,363	$ 26.10
	15,747	

Future minimum principal and interest payments under the 2018 Amended SVB Loan, including the final payment, as of December 31, 2020 are as follows (in thousands):

2021	$ 3,066
2022	1,717
	4,783
Less interest and final payment	(583)
Long-term debt	$ 4,200

5. Commitments and Contingencies

License Agreements

The Company has entered into various license agreements pursuant to which the Company acquired licenses to certain intellectual property. The agreements generally required an upfront license fee and, in some cases, reimbursement of patent costs. Additionally, under each agreement, the Company may be required to pay annual maintenance fees, royalties, milestone payments and sublicensing fees. Each of the license agreements is generally cancelable by the Company, given appropriate prior written notice. At December 31, 2020, potential future milestone payments under these agreements, including future milestone payments associated with TRC253 acquired from Janssen Pharmaceutica N.V. (Janssen) as discussed in Note 7, totaled an aggregate of $54.6 million.

6. Stockholders' Equity

Authorized Shares of Common Stock

In December 2020, the Company's stockholders approved a proposal to amend the Company's Amended and Restated Certificate of Incorporation, as amended, and increased the 20,000,000 shares of common stock previously authorized to 40,000,000 shares.

Sales of Common Stock

In December 2020, the Company sold 1,612,844 shares of its common stock at an average purchase price of $8.84 for net proceeds of $13.6 million in two registered direct offerings with certain institutional investors.

In August 2020, the Company sold 2,633,838 shares of its common stock at an average purchase price of $1.66 per share and warrants to purchase 3,429,696 shares of its common stock at an average purchase price of $1.64 per share with an exercise price of $0.01 per share (the 2020 Pre-Funded Warrants) for net proceeds of approximately $10.0 million in a private placement with multiple accredited institutional health care focused funds. In accordance with their terms, the 2020 Pre-Funded Warrants may not be exercised if the holder's ownership of the Company's common stock would exceed 19.99% of the Company's total shares outstanding following such exercise. The 2020 Pre-Funded Warrants were recorded as a component of stockholders' equity within additional paid-in capital on the consolidated balance sheets.

In October 2019, as amended in April 2020, the Company entered into a Common Stock Purchase Agreement (the 2019 Purchase Agreement) with Aspire Capital which provides that, upon the terms and subject to the conditions and limitations set forth in the 2019 Purchase Agreement, Aspire Capital is committed to purchase up to an aggregate of $15.0 million of shares of the Company's common stock solely at the Company's request from time to time during the 30 month period of the agreement and at prices based on the market price at the time of each sale. In consideration for entering into the 2019 Purchase Agreement and concurrently with the execution of the 2019 Purchase Agreement, the Company issued 142,658 shares of its common stock to Aspire Capital. As of December 31, 2020, the Company had sold an aggregate 4.8 million shares of common stock under the 2019 Purchase Agreement with Aspire Capital for net proceeds of $9.6 million.

In March and April 2018, the Company sold 1,193,059 shares of its common stock at a purchase price of $27.00 per share, warrants to purchase 176,554 shares of its common stock at a purchase price of $26.90 per share and an exercise price of $0.10 per share (the 2018 Pre-Funded Warrants) and warrants to purchase 1,369,602 shares of its common stock at a purchase price of $1.25 per share and an exercise price of $27.00 per share (the Common Warrants) for net proceeds of approximately $36.5 million in a private placement to new and certain existing accredited investors. In accordance with their terms, the 2018 Pre-Funded Warrants and the Common Warrants may not be exercised if the holder's ownership of the Company's common stock would exceed 9.99% or 19.99% of the Company's total shares outstanding following such exercise, depending on the investor. Both the 2018 Pre-Funded Warrants and the Common Warrants were recorded as a component of stockholders' equity within additional paid-in capital. In April 2018, in connection with this transaction, the Company paid Angel Pond Capital, an affiliate of a holder of more than 5% of the Company's common stock and an affiliate of a member of the Company's Board of the Directors at that time, a fee totaling approximately $1.9 million as consideration for acting as a nonexclusive placement agent for this financing.

At-The-Market Issuance Sales Agreement

In December 2020, the Company entered into a Capital on Demand™ Sales Agreement, or the Sales Agreement, with JonesTrading, pursuant to which it may sell from time to time, at its option, up to an aggregate of $50.0 million of the Company's common stock through JonesTrading, as sales agent or principal, all of which remains available for sale as of December 31, 2020. Sales of the Company's common stock made pursuant to the JonesTrading Agreement, if any, will be made on the Nasdaq Capital Market under the Company's effective registration statement on Form S-3, by means of ordinary brokers' transactions at market prices. Additionally, under the terms of the JonesTrading Agreement, the Company may also sell shares of its common stock through JonesTrading, on the Nasdaq Capital Market or otherwise, at negotiated prices or at prices related to the prevailing market price. JonesTrading will use its commercially reasonable efforts to sell the Company's common stock from time to time, based upon the Company's instructions (including any price, time or size limits or other customary parameters or conditions the Company may impose). The Company is required to pay JonesTrading 2.5% of gross proceeds for the common stock sold through the Sales Agreement.

In connection with entering into the JonesTrading Agreement in December 2020, the Company terminated its prior Capital on Demand™ Sales Agreement, dated September 6, 2018, with JonesTrading and no further sales of common stock will occur under the prior sales agreement. As of December 31, 2020, the Company had sold an aggregate 3.0 million shares of common stock for net proceeds of $7.1 million under the prior sales agreement with JonesTrading.

Common Stock Warrants

As of December 31, 2020, the Company had the following outstanding warrants for the purchase of common stock:

Expiration	Number of shares	Exercise price
May 13, 2022	1,841	$ 108.60
November 14, 2023 through June 4, 2024	3,874	$ 77.40
January 25, 2024	4,669	$ 51.40
March 27, 2024	1,369,602	$ 27.00
March 27, 2025	176,554	$ 0.10
May 3, 2025	5,363	$ 26.10
August 27, 2027	1,889,513	$ 0.01
August 31, 2027	1,358,993	$ 0.01
	4,810,409	

During the year ended December 31, 2020, 181,190 pre-funded warrants were exercised for net proceeds of $2,000.

Stock Compensation Plans

2015 Equity Incentive Plan

Effective January 1, 2015, the Company's board of directors adopted the 2015 Plan. Under the 2015 Plan, the Company may grant stock options, stock appreciation rights, restricted stock, restricted stock units and other awards to individuals who are then employees, officers, non-employee directors or consultants of the Company or its subsidiaries. Initially, a total of 80,103 shares of common stock were reserved for issuance under the 2015 Plan. In addition, the number of shares of common stock available for issuance under the 2015 Plan will be annually increased on the first day of each fiscal year during the term of the 2015 Plan, beginning with the 2016 fiscal year, by an amount equal to 4% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year or such other amount as the Company's board of directors may determine. The maximum term of the

options granted under the 2015 Plan is no more than ten years. Grants generally vest at 25% one year from the vesting commencement date and ratably each month thereafter for a period of 36 months, subject to continuous service. In December 2015, the 2015 Plan was amended to allow an additional 50,000 shares of common stock to be used exclusively for the grant of equity awards as a material inducement for individuals to commence employment at the Company in compliance with Nasdaq Listing Rule 5635(c)(4).

Restricted Stock Units

In 2016, the Company issued RSUs to employees and members of the Company's board of directors under the 2015 Plan. The total grant-date fair value of RSUs that vested during the years ended December 31, 2020 and 2019 was $0.3 million and $0.4 million, respectively. As of December 31, 2020, there were no outstanding RSUs.

Restricted stock unit activity under the 2015 Plan is summarized as follows:

	Number of Shares	Weighted Average Grant Date Fair Value
Outstanding at December 31, 2019	3,520	$ 79.20
Granted	—	—
Vested	(3,520)	$ 79.20
Forfeited	—	—
Outstanding at December 31, 2020	—	$ 79.20

Stock Options

Stock option activity under all Plans is summarized as follows:

	Number of Options	Weighted-Average Exercise Price
Balance at December 31, 2019	366,871	$ 36.62
Granted	295,510	$ 3.62
Exercised	—	—
Forfeited	(60,900)	$ 25.88
Balance at December 31, 2020	601,481	$ 21.50

Information about the Company's outstanding stock options as of December 31, 2020 is as follows:

	Number of Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Options outstanding	601,481	$ 21.50	7.57	$ 2,746,663
Options vested and expected to vest	601,481	$ 21.50	7.57	$ 2,746,663
Options exercisable	252,565	$ 43.20	5.82	$ 362,644

The weighted-average grant date fair value per share of employee option grants during the years ended December 31, 2020, 2019 and 2018 was $2.62, $5.55 and $16.69, respectively. The aggregate intrinsic value used in the above table of options at December 31, 2020 is based on the Company's closing market price per common share on December 31, 2020 of $11.70. No stock options were exercised during the years ended December 31, 2020 and 2019. The Company received approximately $0.2 million in proceeds from the exercise of stock options during the year ended December 31, 2018. The total intrinsic value of options exercised was approximately $0.2 million during the year ended December 31, 2018. The total grant-date fair value of options that vested during the years ended December 31, 2020, 2019 and 2018 was $1.0 million, $1.5 million and $2.6 million, respectively.

Employee Stock Purchase Plan (ESPP)

On January 1, 2015, the Company's board of directors adopted the ESPP, which became effective upon the pricing of the Company's initial public offering on January 29, 2015. The ESPP permits participants to purchase common stock through payroll deductions of up to 15% of their eligible compensation. Initially, a total of 18,346 shares of common stock was reserved for issuance under the ESPP. In addition, the number of shares of common stock available for issuance under the ESPP will be annually increased on the first day of each fiscal year during the term of the ESPP, beginning with the 2016 fiscal year, by an amount equal to the lessor of: (i) 36,692 shares; (ii) 1% of the total number of shares of common stock outstanding on December 31st of the preceding calendar year; or (iii) such other amount as the Company's board of directors may determine. Stock compensation expense for the years ended December 31, 2020, 2019 and 2018 related to the ESPP was immaterial.

Stock-Based Compensation Expense

The weighted-average assumptions used in the Black-Scholes option pricing model to determine the fair value of the employee stock option grants were as follows:

	Years Ended December 31,		
	2020	2019	2018
Risk-free interest rate	1.2%	2.6%	2.8%
Expected volatility	85.8%	81.1%	79.6%
Expected term (in years)	6.2	6.2	6.2
Expected dividend yield	—	—	—

Risk-free interest rate. The Company bases the risk-free interest rate assumption on the U.S. Treasury's rates for U.S. Treasury zero-coupon bonds with maturities similar to those of the expected term of the award being valued.

Expected volatility. The Company considers its historical volatility when determining the expected volatility.

Expected term. The expected term represents the period of time that options are expected to be outstanding. Because the Company does not have historical exercise behavior, it determines the expected life assumption using the simplified method, which is an average of the contractual term of the option and its vesting period.

Expected dividend yield. The Company bases the expected dividend yield assumption on the fact that it has never paid cash dividends and has no present intention to pay cash dividends.

The allocation of stock-based compensation expense was as follows (in thousands):

	Years Ended December 31,		
	2020	2019	2018
Research and development	$ 386	$ 776	$ 1,462
General and administrative	648	848	1,205
	$ 1,034	$ 1,624	$ 2,667

As of December 31, 2020 and 2019, the unrecognized compensation cost related to outstanding time-based options was $1.3 million and $1.6 million, respectively, and is expected to be recognized as expense over approximately 2.6 years and 2.6 years, respectively.

Common Stock Reserved for Future Issuance

Common stock reserved for future issuance was as follows:

	December 31,	
	2020	2019
Common stock warrants	4,810,409	1,561,903
Common stock options and RSUs granted and outstanding	601,481	370,391
Awards available under the 2015 Plan	57,468	128,589
Shares available under the Employee Stock Purchase Plan	105,614	73,470
	5,574,972	2,134,353

7. Collaborations

3D Medicines and Alphamab

In December 2019, the Company, 3D Medicines Co., Ltd. (3D Medicines), and Jiangsu Alphamab Biopharmaceuticals Co., Ltd. (Alphamab) entered into the Envafolimab Collaboration Agreement for the development of envafolimab, also known as KN035, an investigational PD-L1 sdAb, or nanobody, administered by subcutaneous injection, for the treatment of sarcoma in North America. No consideration was exchanged in the Envafolimab Collaboration Agreement. Given no consideration was exchanged, no value was assigned to the Envafolimab Collaboration Agreement in the accompanying consolidated balance sheets.

Pursuant to the Envafolimab Collaboration Agreement, the Company was granted an exclusive license to develop and commercialize envafolimab for the treatment of sarcoma in North America. The Company is responsible for conducting, and will bear the costs of Phase 1, Phase 2, and Phase 3 or post-approval clinical trials in North America for envafolimab in the indications of refractory and first line treatment of sarcoma. 3D Medicines and Alphamab are responsible for conducting, and will bear the costs of, investigational new drug (IND)-enabling studies (other than those specific to the sarcoma indication) and the preparation of chemistry, manufacturing and controls (CMC) activities sections of an IND application for envafolimab. 3D Medicines and Alphamab have agreed to manufacture and supply, or to arrange for a third party manufacturer to manufacture and supply, envafolimab to the Company at pre-negotiated prices that vary based on clinical or commercial use. 3D Medicines and Alphamab retained the right to develop envafolimab in all territories outside of North America as well as within North America for all indications other than sarcoma.

The Company will be responsible for commercializing envafolimab for sarcoma in North America, including booking of sales revenue, unless (a) envafolimab is first approved in North America for an indication other than sarcoma and launched in North America, or (b) envafolimab is first approved in North America for sarcoma and subsequently approved in North America for an additional non-orphan indication and sold commercially by 3D Medicines and/or Alphamab, or licensee, in which case 3D Medicines and Alphamab will be responsible for commercializing envafolimab for sarcoma in North America, including booking of sales revenue. If 3D Medicines and Alphamab become responsible for commercialization under the Envafolimab Collaboration Agreement, the Company has the option to co-market envafolimab for sarcoma in North America. In the event that envafolimab is first approved in North America for sarcoma and within three years of the commercial launch of envafolimab in North America for sarcoma 3D Medicines and Alphamab replace the Company as the party responsible for commercialization, and the Company elects and 3D Medicines and Alphamab agree for the Company to not co-market envafolimab for sarcoma in North America, then 3D Medicine and Alphamab will be required to compensate the Company for its costs associated with preparing for and conducting commercial activities.

If the Company has the responsibility for commercialization under the Envafolimab Collaboration Agreement, the Company will owe 3D Medicines and Alphamab tiered double digit royalties on net sales of envafolimab for sarcoma in North America ranging from the teens to mid-double digits. If 3D Medicines and Alphamab have responsibility for commercialization under the Envafolimab Collaboration Agreement, the Company will be entitled to (a) escalating double digit royalties on net sales of envafolimab for sarcoma in North America ranging from the teens to mid-double digits if the Company has chosen to not co-market envafolimab in sarcoma or (b) a 50% royalty on net sales of envafolimab for sarcoma in North America if the Company has chosen to co-market envafolimab in sarcoma. Payment obligations under the Envafolimab Collaboration Agreement continue on a country-by-country basis until the last to expire licensed patent covering envafolimab expires.

3D Medicines and Alphamab retain the right to reacquire the rights to envafolimab for sarcoma in North America in connection with an arm’s length sale to a third party, provided that the sale may not occur prior to completion of a pivotal trial of envafolimab in sarcoma without the Company’s written consent and the parties must negotiate in good faith and agree to fair compensation to be paid to the Company for the value of and opportunity represented by the required rights.

Each party agreed that during the term of the Envafolimab Collaboration Agreement, it would not develop or license from any third party a monospecific inhibitor to PD-L1 or PD-1 in sarcoma.

The term of the Envafolimab Collaboration Agreement continues until the later of the date the parties cease further development and commercialization of envafolimab for sarcoma in North America or the expiration of all payment obligations. The Envafolimab Collaboration Agreement may be terminated earlier by a party in the event of an uncured material breach by the other party or bankruptcy of the other party, or for safety reasons related to envafolimab. In the event the Company elects, or a joint steering committee determines, to cease further development or commercialization of envafolimab, or if the Company fails to use commercially reasonable efforts to develop (including progress in clinical trials) and commercialize envafolimab and does not cure such failure within a specified time period, then the Company’s rights and obligations under the Envafolimab Collaboration Agreement will revert to 3D Medicines and Alphamab.

I-Mab

In November 2018, the Company and I-Mab Biopharma (I-Mab) entered into separate strategic collaboration and clinical trial agreements (the Collaboration Agreements) for the development of programs for multiple immuno-oncology product candidates, including I-Mab's proprietary CD73 antibody TJ004309 (the TJ004309 Agreement) as well as up to five proprietary bispecific antibodies currently under development by I-Mab (the Bispecific Agreement).

No consideration was exchanged in the Collaboration Agreements. Given the early preclinical stage of development of these assets as of the agreement date, no value was assigned to the Collaboration Agreements in the accompanying consolidated balance sheets.

TJ004309 Agreement

Pursuant to the TJ004309 Agreement, the Company and I-Mab are collaborating on developing the TJ004309 antibody, with the Company bearing the costs of filing an IND and for Phase 1 clinical trials, with the parties sharing costs equally for Phase 2 clinical trials, and with the Company and I-Mab bearing 40% and 60%, respectively, of the costs for pivotal clinical trials. I-Mab will be responsible for the cost of certain non-clinical activities, the drug supply of TJ004309, and any reference drugs used in the clinical trials. Each of the parties also agreed for a specified period of time to not develop or license to or from a third party any monoclonal antibody targeting CD73 or any other biologic for certain indications that a joint steering committee (JSC), as set up under the TJ004309 Agreement, selects for TJ004309 development.

In the event that I-Mab out-licenses the rights to TJ004309 to a third party, the Company would be entitled to receive escalating portions of royalty and non-royalty consideration received by I-Mab with respect to certain territories outside of Greater China. In the event that I-Mab commercializes TJ004309, the Company would be entitled to receive a royalty percentage on net sales by I-Mab in North America ranging from the mid-single digits to low double digits, and in the EU and Japan in the mid-single digits. The portions of certain third party royalty and non-royalty consideration and the royalty from net sales by I-Mab to which the Company would be entitled will escalate based on the phase of development and relevant clinical trial obligations the Company completes under the TJ004309 Agreement, ranging from a high-single digit to a mid-teen percentage of non-royalty consideration as well as a double digit percentage of royalty consideration. In March 2020, I-Mab issued a press release announcing a strategic partnership with Kalbe Genexine Biologics (KG Bio), whereby KG Bio received what the press release described as a right of first negotiation outside North America for TJ004309 for up to $340 million in potential payments to I-Mab. On April 8, 2020, the Company issued a notice of dispute to I-Mab as the Company believes it may be entitled to receive a payment under the TJ004309 Agreement, although I-Mab has disputed that any payment is due. The Company cannot currently estimate the likely outcome of the dispute under the TJ004309 Agreement. In February 2021, I-Mab sent the Company a notice purporting to terminate the TJ4309 Agreement, which would result in I-Mab owing the Company a prespecified early termination fee of $9.0 million. However, I-Mab does not have an option to terminate the TJ004309 Agreement without cause until the ongoing Phase 1 trial of TJ004309 is complete, and the Company therefore believes the TJ4309 Agreement has not been terminated and continues to perform its contractual obligations.

The TJ004309 Agreement may be terminated by either party in the event of an uncured material breach by the other party, bankruptcy of the other party, or for safety reasons related to TJ004309. I-Mab may also terminate the TJ004309 Agreement if the Company causes certain delays in completing a Phase 1 clinical trial. In addition, I-Mab may terminate the TJ004309 Agreement for any reason within 90 days following the completion of the first Phase 1 clinical trial, in which case the Company would be entitled to a minimum termination fee of $9.0 million, or following the completion of the first Phase 2 clinical trial, in which case the Company would be entitled to a pre-specified termination fee of $15.0 million and either a low double-digit percentage of non-royalty consideration up to $35.0 million that I-Mab may receive as part of a license to a third party, or an additional payment of $35.0 million if TJ004309 is approved for marketing outside Greater China before a third party license is executed, in addition to a double digit percentage of royalty consideration.

Bispecific Agreement

Pursuant to the Bispecific Agreement, the Company and I-Mab may mutually select through a joint steering committee (JSC) up to five of I-Mab's bispecific antibody product candidates within a five-year period for development and commercialization in North America.

For each product candidate selected by the JSC for development under the Bispecific Agreement, I-Mab will be responsible and bear the costs for IND-enabling studies and establishing manufacturing for the product candidate, while the Company will be responsible for and bear the costs of filing an IND and conducting Phase 1 and Phase 2 clinical trials, and the Company will be responsible for and will share equally with I-Mab in the costs of conducting Phase 3 or pivotal clinical trials, in each case within North America. Subject to I-Mab's right to co-promote an approved product candidate, the Company will be responsible for commercializing any approved product candidates in North America and will share profits and losses equally with I-Mab in North

America. The Company would also be entitled to tiered low single digit royalties on net sales of product candidates in the EU and Japan.

At any time prior to completing the first pivotal clinical trial for a product candidate or if I-Mab ceases to support development costs or pay its portion of Phase 3 clinical trial costs for a product candidate or the JSC decides to cease development over the Company's objections after initiating Phase 3 clinical trials, the Company will have an option to obtain an exclusive license to such product candidate in all territories except Greater China and Korea, and any other territories in which I-Mab previously licensed rights to a third party subject to the Company's right of first refusal for any licenses I-Mab may grant to third-parties.

If the Company exercises the option, it would assume sole responsibility for developing and commercializing the product candidate in the licensed territory, and in lieu of profit or loss sharing with I-Mab with respect to such product candidate, the Company would owe I-Mab pre-specified upfront and milestone payments and royalties on net sales, with the payments and royalties escalating depending on the phase of development the product candidate reached at the time the Company obtained the exclusive license as follows: (i) if before IND-enabling studies and the preparation of the CMC activities of the collaborative product, the Company would owe I-Mab a one-time upfront payment of $10.0 million, development and regulatory based milestone payments totaling up to $90.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the mid-single digits on annual net sales; (ii) if after IND submission but before completion of a Phase 1a clinical trial of the collaborative product, the Company would owe I-Mab a one-time upfront payment of $25.0 million, development and regulatory based milestone payments totaling up to $125.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the high single digits on annual net sales; (iii) if after completion of a Phase 1a clinical trial but before completion of Phase 2 proof of concept clinical trial for the collaborative product, the Company would owe I-Mab a one-time upfront payment of $50.0 million, development and regulatory based milestone payments totaling up to $250.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the low double digits on annual net sales; and (iv) if after completion of Phase 2 proof of concept clinical trial and before completion of pivotal trial for the collaborative product, the Company would owe I-Mab a one-time upfront payment of $80.0 million, development and regulatory based milestone payments totaling up to $420.0 million that begin upon completion of a pivotal trial, sales milestones totaling up to $250.0 million, and royalties in the high-teen double digits on annual net sales.

Each party agreed that for a specified period of time, it would not develop or license to or from any third party any bispecific monoclonal antibody targeting the same two biological targets as those of any selected product candidates under the Bispecific Agreement.

If development of any selected product candidates is terminated by a decision of the JSC, all rights to the product candidate will revert to I-Mab, subject to the Company's right to obtain an exclusive license in certain circumstances. If development is terminated after submission of an IND and prior to initiating Phase 3 clinical trials or after initiating Phase 3 clinical trials and with the Company's concurrence, the Company would be entitled to tiered low single digit royalties on net sales of the product candidate in North America, the EU, and Japan.

The Bispecific Agreement may be terminated by either party in the event of an uncured material breach by the other party, bankruptcy of the other party, or with respect to any selected product candidate, for safety reasons related to that product candidate.

In March 2020, the Company learned that I-Mab entered into two license and collaboration agreements with ABL Bio in July 2018 (ABL Bio License 1 and ABL Bio License 2). Under ABL Bio License 1, I-Mab granted to ABL Bio exclusive, worldwide (excluding Greater China), royalty-bearing rights to develop and commercialize a bispecific antibody (the BsAb) using certain monoclonal antibody sequences. Under ABL License 2, I-Mab and ABL agreed to collaborate to develop three PD-L1-based bispecific antibodies by using ABL Bio's proprietary bispecific antibody technology and commercialize them in their respective territories, which, collectively, include China, Hong Kong, Macau, Taiwan and South Korea, and other territories throughout the rest of the world if both parties agree to do so in such other territories during the performance of the agreement. On April 8, 2020, the Company issued a notice of dispute regarding possible breach of the Bispecific Agreement related to I-Mab entering into ABL License 1 and ABL License 2. The Company cannot currently estimate the likely outcome of the dispute under the Bispecific Agreement. Until these discussions are complete, the Company may be unable to provide a timeline as to when or if it will file an IND for a bispecific antibody under the Bispecific Agreement.

Santen

In March 2014, the Company entered into a license agreement with Santen, under which the Company granted Santen an exclusive, worldwide license to certain patents, information and know-how related to carotuximab. Under the agreement, Santen was permitted to use, develop, manufacture and commercialize carotuximab products for ophthalmology indications, excluding systemic treatment of ocular tumors. Santen also had the right to grant sublicenses to affiliates and third party collaborators. In the event Santen sublicensed any of its rights under the agreement, Santen would have been obligated to pay the Company a portion of any upfront and certain milestone payments received under such sublicense.

Santen had sole responsibility for funding, developing, seeking regulatory approval for and commercializing carotuximab products in the field of ophthalmology. In the event that Santen failed to meet certain commercial diligence obligations, the Company would have had the option to co-promote carotuximab products in the field of ophthalmology in the United States with Santen. If the Company exercised this option, the Company would have been obligated to pay Santen a percentage of certain development expenses, and the Company would have received a percentage of profits from sales of the licensed products in the ophthalmology field in the United States, but would not also receive royalties on such sales.

In March 2020, Santen announced the discontinuation of development of carotuximab, and in June 2020 terminated the agreement. No revenue was recognized related to this agreement for the years ended December 31, 2020, 2019 and 2018 and no further revenue will be recognized in connection with this agreement as Santen has terminated the carotuximab program.

Janssen

In September 2016, the Company entered into a license and option agreement with Janssen (the License and Option Agreement) under which Janssen granted the Company a license to technology and intellectual property to develop, manufacture and commercialize two compounds: a small molecule inhibitor of androgen receptor and androgen receptor mutations (the AR Mutant Program or TRC253), which is intended for the treatment of men with prostate cancer, and an inhibitor of NF-kB inducing kinase (the NIK Program or TRC694). Following completion of the pre-clinical development of TRC694, the Company determined the compound did not warrant further development and, in February 2019, issued written notice to terminate the License and Option Agreement with respect to the NIK Program and returned TRC694 and all rights thereto to Janssen.

With respect to the AR Mutant Program, the License and Option Agreement, as amended, provided Janssen with an option, which was exercisable until 90 days after the Company demonstrated clinical proof of concept of TRC253, to regain the rights to the licensed intellectual property and to obtain an exclusive license to commercialize the compounds and certain other specified intellectual property developed under the AR Mutant Program. In April 2020, Janssen notified the Company that it would not regain the rights to TRC253. Therefore, the Company now retains worldwide development and commercialization rights to the AR Mutant Program and is obligated to pay to Janssen (x) development and regulatory based milestone payments totaling up to $45.0 million upon achievement of specified events and (y) royalties in the low single digits based on annual net sales of AR Mutant Program products, subject to certain specified reductions.

No consideration was exchanged for these assets on the acquisition date. Given the early preclinical stage of development of these assets and the low likelihood of success of development through regulatory approval on the acquisition date, no value was assigned to these assets in the accompanying consolidated balance sheets.

The Company is obligated to use diligent efforts to develop the AR Mutant Program according to agreed upon development plans, timelines and budgets. The Company is further obligated as it relates to the AR Mutant Program to use commercially reasonable efforts to develop, obtain marketing approval for, and commercialize licensed products. Until the expiration or earlier termination of the development term of the AR Mutant Program, under the License and Option Agreement, subject to specified exceptions, the Company has agreed not to research, develop or commercialize any compounds or products related to the AR Mutant Program, other than pursuant to the collaboration with Janssen.

The License and Option Agreement may be terminated for uncured breach, bankruptcy, or the failure or inability to demonstrate clinical proof of concept with respect to a particular program during specified timeframes. In addition, the License and Option Agreement will automatically terminate upon the expiration of all payment obligations of the Company to Janssen with respect of the AR Mutant Program. The Company may also terminate the License and Option Agreement in its entirety without cause, subject to specified conditions.

8. Leases

The Company leases its office space under a non-cancelable operating lease that expires in April 2022 and may be extended for an additional term of 60 months. The option to extend this lease has been excluded from the lease term as the Company is not

reasonably certain that the option will be exercised. The lease is subject to base lease payments and additional charges for common area maintenance and other costs and includes certain lease incentives and tenant improvement allowances. Operating lease expense was $0.4 million for each of the three years ended December 31, 2020, 2019 and 2018. As of December 31, 2020, the Company does not have any finance leases, nor any other operating leases.

Supplemental cash flow information related to operating leases was as follows (in thousands):

	Years Ended December 31,		
	2020	2019	2018
Cash paid within operating cash flows	$ 442	$ 423	$ 405

Supplemental balance sheet information related to operating leases was as follows (in thousands, except lease term and discount rate):

	December 31,	
	2020	2019
Reported as:		
Other assets (ROU asset)	$ 508	$ 838
Accounts payable and accrued expenses (lease liability)	$ 418	$ 355
Other long-term liabilities (lease liability)	152	570
Total lease liabilities	$ 570	$ 925
Weighted average remaining lease term	1.3	2.3
Weighted average discount rate	11.3%	11.3%

As of December 31, 2020, the maturities of the Company's operating lease liabilities are as follows (in thousands):

2021	$ 461
2022	156
Total lease payments	617
Less imputed interest	(47)
Total operating lease liabilities	$ 570

Under the terms of the lease agreement, the Company provided the lessor with an irrevocable letter of credit in the amount of $175,000. The lessor is entitled to draw on the letter of credit in the event of any default by the Company under the terms of the lease.

9. Income Taxes

A reconciliation of the Company's effective tax rate and federal statutory tax rate is summarized as follows (in thousands):

	Years Ended December 31,		
	2020	2019	2018
Federal income taxes	$ (3,523)	$ (4,761)	$ (7,341)
State income taxes, net of federal benefit	(1,084)	(1,381)	(2,340)
Permanent items	104	149	439
Uncertain tax positions	1,224	1,828	672
Research and development credits	(555)	(1,253)	(2,545)
Rate change	—	—	629
Other, net	—	(75)	—
Stock compensation	113	395	66
Change in valuation allowance	3,721	5,098	10,420
Provision for income taxes	$ —	$ —	$ —

Significant components of the Company's deferred tax assets and deferred tax liabilities are summarized as follows (in thousands):

	December 31,	
	2020	2019
Deferred tax assets:		
Net operating loss carryforwards	$ 40,103	$ 36,850
Research and development credits and Orphan Drug Credit	9,321	8,944
Depreciation and amortization	258	269
Right-of-use liability	120	194
Other, net	1,476	1,369
Total deferred tax assets	51,278	47,626
Right-of-use asset	(107)	(176)
Total deferred tax liabilities	(107)	(176)
Total net deferred	51,171	47,450
Valuation allowance	(51,171)	(47,450)
Net deferred tax assets	$ —	$ —

The Company has net deferred tax assets relating primarily to net operating loss (NOL) carryforwards, research and development and Orphan Drug tax credit carryforwards. Subject to certain limitations, the Company may use these deferred tax assets to offset taxable income in future periods. Due to the Company's history of losses and uncertainty regarding future earnings, a full valuation allowance has been recorded against the Company's deferred tax assets, as it is more likely than not that such assets will not be realized. The net change in the total valuation allowance for the years ended December 31, 2020, 2019 and 2018 was $3.7 million, $5.1 million and $10.4 million, respectively.

At December 31, 2020, the Company had federal and California NOL carryforwards of approximately $152.5 million and $117.7 million, respectively. The federal and California NOL carryforwards will begin to expire in 2030, unless previously utilized. In response to the COVID-19 global pandemic, the CARES Act was enacted on March 27, 2020, to provide aid and economic stimulus to the economy. Among other provisions, the CARES Act eliminates the 80% NOL limitation for tax years 2018, 2019, and 2020, and allows NOLs generated in those years to be carried back for five years. Due to the enactment of the CARES Act, we are currently unable to quantify the impact that the CARES Act will have on our financial position, results of operations or cash flows, although we do not anticipate the impact to be significant.

At December 31, 2020, the Company also had federal and California research and development and Orphan Drug credit carryforwards of approximately $10.3 million and $2.5 million, respectively. The federal research and development and Orphan Drug credit carryforwards will begin expiring in 2031 unless previously utilized. The California research credit will carry forward indefinitely under current law.

Pursuant to Sections 382 and 383 of the Internal Revenue Code (Code), the annual use of the Company's NOL and research and development credit carryforwards may be limited in the event that a cumulative change in ownership of more than 50% occurs within a three-year period. The Company previously completed a Section 382/383 analysis regarding the limitation of NOL and research and development credit carryforwards as of December 31, 2018 and did not identify any change in ownership of more than 50% within the preceding three-year period since an ownership change was determined to have occurred at the time of the Company's initial public offering in January 2015. The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since December 31, 2018. If the Company has experienced an ownership change at any time since December 31, 2018, utilization of the NOL or R&D credit carryforwards would be subject to an annual limitation under Section 382 of the Code. Any limitation may result in expiration of a portion of the NOL or R&D credit carryforwards before utilization. Any carryforwards that will expire prior to utilization as a result of such limitations will be removed from deferred tax assets with a corresponding reduction of the valuation allowance with no net effect on income tax expense or the effective tax rate.

The changes in the Company's unrecognized tax benefits are summarized as follows (in thousands):

Balance at December 31, 2017	$	2,166
Change related to prior year positions		—
Increase related to current year positions		693
Balance at December 31, 2018		2,859
Change related to prior year positions		—
Increase related to current year positions		2,233
Balance at December 31, 2019		5,092
Change related to prior year positions		—
Increase related to current year positions		1,518
Balance at December 31, 2020	$	6,610

The Company's policy is to include interest and penalties related to unrecognized income tax benefits as a component of income tax expense. The Company has no accruals for interest or penalties in the accompanying consolidated balance sheets as of December 31, 2020 and 2019 and has not recognized interest or penalties in the accompanying consolidated statements of operations for the three years in the period ended December 31, 2020.

Due to the valuation allowance recorded against the Company's deferred tax assets, future changes in unrecognized tax benefits will not impact the Company's effective tax rate. The Company does not expect its unrecognized tax benefits to change significantly in the next 12 months.

The Company is subject to taxation in the United States and California. Due to the net operating loss carryforwards, the U.S. federal and California returns are open to examination for all years since inception. The Company has not been, nor is it currently, under examination by the federal or any state tax authority.

10. 401(k) Plan

The Company maintains a defined contribution 401(k) plan available to eligible employees. Employee contributions are voluntary and are determined on an individual basis, limited to the maximum amount allowable under federal tax regulations. The Company, at its discretion, may make certain matching contributions to the 401(k) plan. Matching contributions for the years ended December 31, 2020, 2019 and 2018 totaled $0.1 million, $0.2 million and $0.2 million, respectively.

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

We maintain disclosure controls and procedures designed to provide reasonable assurance of achieving the objective that information in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified and pursuant to the requirements of the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow for timely decisions regarding required disclosures. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As required by SEC Rule 13a-15(b), we carried out an evaluation, with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures as of December 31, 2020, the end of the period covered by this report. Based upon the foregoing, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at a reasonable assurance level as of December 31, 2020.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintain adequate internal control over our financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act, as amended, as a process designed by, or under the supervision of, a company's principal executive and principal financial officers and effected by a company's 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 U.S. GAAP. Our internal control over financial reporting includes those policies and procedures that:

- pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets;
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. GAAP, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2020. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its 2013 Internal Control — Integrated Framework.

Based on our assessment, our management has concluded that, as of December 31, 2020, our internal control over financial reporting was effective based on those criteria.

Pursuant to Regulation S-K Item 308(b), this Annual Report on Form 10-K does not include an attestation report of our company's registered public accounting firm regarding internal control over financial reporting.

Changes in Internal Control Over Financial Reporting

We regularly review our system of internal control over financial reporting and make changes to our processes and systems to improve controls and increase efficiency, while ensuring that we maintain an effective internal control environment. Changes may include such activities as implementing new, more efficient systems, consolidating activities, and migrating processes. During the quarter ended December 31, 2020, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

We have adopted a Code of Business Conduct and Ethics that applies to our directors and employees (including our principal executive officer, principal financial officer, principal accounting officer and controller), and have posted the text of the policy on our website (www.traconpharma.com). In addition, we intend to promptly disclose on our website in the future (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver, to the extent any such waiver is required to be disclosed pursuant to the rules and regulations of the SEC.

The other information required by this item will be contained in our definitive proxy statement to be filed with the Securities and Exchange Commission on Schedule 14A in connection with our 2021 Annual Meeting of Stockholders, or the Proxy Statement, which is expected to be filed not later than 120 days after the end of our fiscal year ended December 31, 2020, under the headings “Executive Officers,” “Election of Directors,” “Information Regarding the Board of Directors and Corporate Governance,” and “Section 16(a) Beneficial Ownership Reporting Compliance,” and is incorporated herein by reference.

Item 11. Executive Compensation.

The information required by this item regarding executive compensation is incorporated by reference to the information set forth in the sections titled “Executive Compensation” in our Proxy Statement.

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

The information required by this item regarding security ownership of certain beneficial owners and management is incorporated by reference to the information set forth in the section titled “Security Ownership of Certain Beneficial Owners and Management” in our Proxy Statement.

The information required by Item 201(d) of Regulation S-K is incorporated by reference to the information set forth in the section titled “Executive Compensation” in our Proxy Statement.

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

The information required by this item regarding certain relationships and related transactions and director independence is incorporated by reference to the information set forth in the sections titled “Transactions with Related Parties” and “Election of Directors – Independence of the Board of Directors,” respectively, in our Proxy Statement.

Item 14. Principal Accountant Fees and Services.

The information required by this item regarding principal accountant fees and services is incorporated by reference to the information set forth in the section titled “Principal Accountant Fees and Services” in our Proxy Statement.

PART IV

Item 15. Exhibit and Financial Statement Schedules.

(a) Documents filed as part of this report.

1. Financial Statements

The consolidated financial statements of TRACON Pharmaceuticals, Inc. listed below are set forth in Item 8 of this Annual Report for the year ended December 31, 2020:

2. Financial Statement Schedules

These schedules have been omitted because the required information is included in the financial statements or notes thereto or because they are not applicable or not required.

3. Exhibits

Exhibit Number	Description of Document
3.1(1)	Amended and Restated Certificate of Incorporation.
3.2(9)	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of TRACON Pharmaceuticals, Inc.
3.3(1)	Amended and Restated Bylaws.
4.1(2)	Form of Common Stock Certificate of the Registrant.
4.2(8)	Registration Rights Agreement, dated October 18, 2019, by and between the Registrant and Aspire Capital Fund, LLC
4.3(10)	Securities Purchase Agreement, dated March 22, 2018, among the Registrant and the purchasers listed on Exhibit A thereto.
4.4(10)	Form of Pre-Funded Warrant dated March 27, 2018.
4.5(10)	Form of Common Warrant dated March 27, 2018.
4.6(19)	Description of Capital Stock.
4.7(15)	Securities Purchase Agreement, dated August 26, 2020, by and between the Registrant and the purchaser listed on Exhibit A thereto (including the form of Pre-Funded Warrant).
4.8(16)	Securities Purchase Agreement, dated August 28, 2020, by and between the Registrant and the purchasers listed on Exhibit A thereto (including the form of Pre-Funded Warrant).
4.9(17)	Securities Purchase Agreement, dated December 21, 2020, by and between the Registrant and the purchasers listed on Exhibit A thereto.
4.10(18)	Securities Purchase Agreement, dated December 28, 2020, by and between the Registrant and the purchaser listed on Exhibit A thereto.
10.1+(2)	Form of Indemnity Agreement by and between the Registrant and its directors and officers.
10.2+(2)	TRACON Pharmaceuticals, Inc. 2011 Equity Incentive Plan and Forms of Stock Option Agreement and Notice of Exercise thereunder.

Exhibit Number	Description of Document
10.3+(3)	TRACON Pharmaceuticals, Inc. 2015 Equity Incentive Plan and Forms of Stock Option Grant Notice, Stock Option Agreement, Notice of Exercise and Restricted Stock Unit Agreement thereunder, as amended December 14, 2015.
10.4+	TRACON Pharmaceuticals, Inc. Non-Employee Director Compensation Policy, as amended January 29, 2021.
10.5+(4)	TRACON Pharmaceuticals, Inc. 2015 Employee Stock Purchase Plan.
10.6+	TRACON Pharmaceuticals, Inc. Bonus Plan, as amended January 29, 2021.
10.7+(11)	Amended and Restated Employment Agreement by and between the Registrant and Charles P. Theuer, M.D., Ph.D., dated February 5, 2019.
10.8+	Employment Agreement by and between the Registrant and Mark Wiggins, dated January 27, 2021.
10.9+(11)	Severance Agreement by and between the Registrant and Mark Wiggins, dated May 29, 2018.
10.10+(12)	Employment Agreement by and between the Registrant and Scott Brown, dated January 28, 2020.
10.11+(12)	Severance Agreement by and between the Registrant and Scott Brown, dated December 4, 2019.
10.12+(2)	TRACON Pharmaceuticals, Inc. Severance Plan and Summary Plan Description.
10.13*(2)	License Agreement by and between the Registrant and Case Western Reserve University, dated August 2, 2006.
10.14*(4)	Amendment to License Agreement by and between the Registrant and Case Western Reserve University, dated April 3, 2015.
10.15*(12)	Collaboration and Clinical Trial Agreement by and among the Registrant, 3D Medicines (Beijing) Co., LTD. and Jiangsu Alphamab Biopharmaceuticals Co., LTD. dated December 20, 2019.
10.16(2)	Warrant to Purchase Stock issued to Silicon Valley Bank on November 14, 2013.
10.17(2)	Warrant to Purchase Stock issued to Silicon Valley Bank on June 4, 2014.
10.18(4)	Warrant to Purchase Stock issued to Silicon Valley Bank on May 13, 2015.
10.19(7)	Warrant to Purchase Stock issued to Silicon Valley Bank on January 25, 2017.
10.20(5)	Warrant to Purchase Stock issued to Silicon Valley Bank on May 3, 2018.
10.21(9)	Capital on DemandTM Sales Agreement, dated as of December 9, 2020, by and between the Registrant and JonesTrading Institutional Services LLC.
10.22(4)	Amended and Restated Loan and Security Agreement by and between the Registrant and Silicon Valley Bank, dated May 13, 2015.
10.23(6)	First Amendment to Amended and Restated Loan and Security Agreement by and between the Registrant and Silicon Valley Bank, dated August 9, 2016.
10.24(7)	Second Amendment to Amended and Restated Loan and Security Agreement by and between the Registrant and Silicon Valley Bank, dated January 25, 2017.
10.25(5)	Third Amendment to Amended and Restated Loan and Security Agreement between the Registrant and Silicon Valley Bank dated May 3, 2018.
10.26(13)	Deferral agreement to Amended and Restated Loan and Security Agreement between the Registrant and Silicon Valley Bank dated April 10, 2020.
10.27*(2)	Cooperative Research and Development Agreement by and between the Registrant and the U.S. Department of Health and Human Services, as represented by National Cancer Institute, dated August 7, 2012.
10.28*	Amendment #2 to Cooperative Research and Development Agreement by and between the Registrant and the U.S. Department of Health and Human Services, as represented by National Cancer Institute, dated January 8, 2021.
10.29(8)	Common Stock Purchase Agreement, dated October 18, 2019 between the Registrant and Aspire Capital Fund, LLC.
10.30(14)	First Amendment to Common Stock Purchase Agreement, dated April 29, 2020 between TRACON Pharmaceuticals, Inc. and Aspire Capital Fund, LLC.

Exhibit Number	Description of Document
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney. Reference is made to the signature page hereto.
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
31.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934.
32.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350.
32.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

+ Indicates management contract or compensatory plan.

* Confidential treatment has been granted or requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

(1) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on February 4, 2015.

(2) Incorporated by reference to the Registrant's Registration Statement on Form S-1 (File No. 333-201280), as amended.

(3) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on December 17, 2015.

(4) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015, filed with the SEC on May 14, 2015.

(5) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed with the SEC on May 9, 2018.

(6) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016, filed with the SEC on August 11, 2016.

(7) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on January 31, 2017.

(8) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on October 21, 2019.

(9) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on December 9, 2020.

(10) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on March 23, 2018.

(11) Incorporated by reference to the Registrant's Annual Report on Form 10-K, filed with the SEC on March 1, 2019.

(12) Incorporated by reference to Registrant's Annual Report on Form 10-K, filed with the SEC on February 28, 2020.

(13) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on April 15, 2020.

(14) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on May 4, 2020.

(15) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on August 27, 2020.

(16) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on August 31, 2020.

(17) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on December 22, 2020.

(18) Incorporated by reference to the Registrant's Current Report on Form 8-K, filed with the SEC on December 29, 2020.

(19) Incorporated by reference to the Registrant's Annual Report on Form 10-K, filed with the SEC on February 28, 2020.

Signatures

Pursuant to the requirements of the Section 13 or 15(d) of the Securities and Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TRACON Pharmaceuticals, Inc.

Date: February 25, 2021

By: /s/ CHARLES P. THEUER, M.D., PH.D.
Charles P. Theuer, M.D., Ph.D.
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dr. Charles P. Theuer, M.D., Ph.D. and Scott B. Brown, CPA, and each of them, as his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated

Signature	Title	Date
/s/ Charles P. Theuer, M.D., Ph.D. Charles P. Theuer, M.D., Ph.D.	President, Chief Executive Officer and Member of the Board of Directors *(Principal Executive Officer)*	February 25,2021
/s/ Scott B. Brown, CPA Scott B. Brown, CPA	Chief Financial Officer (*Principal Financial and Accounting Officer*)	February 25, 2021
/s/ William R. LaRue William R. LaRue	Member of the Board of Directors	February 25, 2021
/s/ Martin A. Mattingly, Pharm. D. Martin A. Mattingly, Pharm.D.	Member of the Board of Directors	February 25, 2021
/s/ J. Rainer Twiford, J.D., Ph.D. J. Rainer Twiford, J.D., Ph.D.	Member of the Board of Directors	February 25, 2021
/s/ Saundra Pelletier Saundra Pelletier	Member of the Board of Directors	February 25, 2021
/s/ Stephen T. Worland, Ph.D. Stephen T. Worland, Ph.D.	Member of the Board of Directors	February 25, 2021

Exhibit 10.4

TRACON PHARMACEUTICALS, INC.
NON-EMPLOYEE DIRECTOR COMPENSATION POLICY

Each member of the Board of Directors (the "***Board***") who is not also serving as an employee of TRACON Pharmaceuticals, Inc. (the "***Company***") or any of its subsidiaries (each such member, a "***Non-Employee Director***") will receive the compensation described in this Non-Employee Director Compensation Policy (the "***Director Compensation Policy***") for his or her Board service.

The Director Compensation Policy may be amended at any time in the sole discretion of the Board or the Compensation Committee of the Board.

A Non-Employee Director may decline all or any portion of his or her compensation by giving notice to the Company prior to the date cash is to be paid or equity awards are to be granted, as the case may be.

Annual Cash Compensation

Each Non-Employee Director will receive the cash compensation set forth below for service on the Board. The annual cash compensation amounts will be payable in equal quarterly installments, in arrears following the end of each quarter in which the service occurred, pro-rated for any partial months of service. All annual cash fees are vested upon payment.

1. Annual Board Service Retainer:
   a. All Eligible Directors: $40,000
   b. Chairman/Lead Independent Director (as applicable): $60,000 (in lieu of above)

2. Annual Committee Member Service Retainer:
   a. Member of the Audit Committee: $7,500
   b. Member of the Compensation Committee: $5,000
   c. Member of the Nominating and Corporate Governance Committee: $3,750

3. Annual Committee Chair Service Retainer (in lieu of Committee Member Service Retainer):
   a. Chairman of the Audit Committee: $15,000
   b. Chairman of the Compensation Committee: $10,000
   c. Chairman of the Nominating and Corporate Governance Committee: $7,500

Equity Compensation

Equity awards will be granted under the Company's 2015 Equity Incentive Plan or any successor equity incentive plan (the "***Plan***"). All stock options granted under this policy will be Nonqualified Stock Options (as defined in the Plan), with a term of ten years from the date of grant

1.

and an exercise price per share equal to 100% of the Fair Market Value (as defined in the Plan) of the underlying common stock of the Company on the date of grant.

(a) Automatic Equity Grants.

(i) Initial Grant for New Directors. Without any further action of the Board, on the date of the Non-Employee Director's initial election to the Board (or, if such date is not a market trading day, the first market trading day thereafter), the Non-Employee Director will automatically be granted a Nonstatutory Stock Option to purchase 21,000 shares of common stock (the "***Initial Grant***"). Each Initial Grant will vest in a series of 3 successive equal annual installments over the 3-year period measured from the date of grant.

(ii) Annual Grant. Without any further action of the Board, at the close of business on the date of each annual meeting of the Company's stockholders, each person who is then a Non-Employee Director will automatically be granted either (A) a Nonstatutory Stock Option to purchase 10,500 shares of common stock or (B) a restricted stock unit ("***RSU***") covering 5,250 shares of common stock ((A) or (B) as applicable, the "***Annual Grant***"). Whether the Annual Grant for any particular year takes the form of a Nonstatutory Stock Option or an RSU shall be determined prior to each annual meeting of the Company's stockholders by the Board or the Compensation Committee; provided that absent a determination for any given year, the Annual Grant shall take the form of a Nonstatutory Stock Option. Each Annual Grant will vest in full on the earlier of the one-year anniversary of date of grant, or the date of the next annual meeting of the Company's stockholders.

(b) Vesting; Change in Control. All vesting is subject to the Non-Employee Director's "***Continuous Service***" (as defined in the Plan) on each applicable vesting date. Notwithstanding the foregoing vesting schedules, for each Non-Employee Director who remains in Continuous Service with the Company until immediately prior to the closing of a "***Change in Control***" (as defined in the Plan), the shares subject to his or her then-outstanding equity awards that were granted pursuant to this policy will become fully vested immediately prior to the closing of such Change in Control.

(c) Remaining Terms. The remaining terms and conditions of each stock option, including transferability, will be as set forth in the Company's standard Option Agreement, in the form adopted from time to time by the Board. The remaining terms and conditions of each RSU, including transferability, will be as set forth in the Company's standard Restricted Stock Unit Award Agreement, in the form adopted from time to time by the Board.

Expenses

The Company will reimburse Non-Employee Director for ordinary, necessary and reasonable out-of-pocket travel expenses to cover in-person attendance at and participation in Board and committee meetings; *provided*, that the Non-Employee Director timely submit to the Company appropriate documentation substantiating such expenses in accordance with the Company's travel and expense policy, as in effect from time to time.

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TRACON PHARMACEUTICALS, INC.
BONUS PLAN

The TRACON Pharmaceuticals, Inc. ("***TRACON***" or the "***Company***") Bonus Plan (the "***Plan***") is designed to reward eligible employees for the achievement of corporate objectives, as well as measured individual objectives that are consistent with and support the overall corporate objectives.

ELIGIBILITY

All regular employees are eligible to participate in the Plan. In order to be eligible, a participant must have been in an eligible position for at least three (3) full months prior to the end of the Plan year, and the participant must remain continuously employed through the end of the Plan year and until awards are paid. The Plan year is January 1 through December 31. If the participant is not continuously employed through the date awards are paid, the participant will not have earned any bonus. If the participant has been subject to any performance improvement plan or other disciplinary procedure during the Plan year, any award to such individual will be at the discretion of the President/CEO or the Compensation Committee of the Board of Directors (the "***Compensation Committee***"), and may be reduced or withheld regardless of corporate performance as outlined below.

Change in Status During the Plan Period:

a. *Participants hired during the Plan year:*
- Participants hired during the Plan year are eligible for a prorated award based on the number of calendar days employed in an eligible position.
- Participants hired during the months of October through December are not eligible to participate for the Plan year.
- If an employee has worked in a temporary or consulting capacity for TRACON, this time will NOT impact the eligibility start date which is the date of hire. Only as an exception and with approval by the Compensation Committee or the Board of Directors will time worked as a consultant be considered when determining the bonus award proration for an employee.

b. *Promotion/change in level:*
- Participants promoted during the Plan year with a change to bonus target and/or bonus corporate and individual performance factor percentages are eligible for an award that will be prorated based on the number of calendar days employed in each eligible position.

c. *Termination of employment:*
- If a participant's employment is terminated voluntarily prior to the date awards are paid, the participant will not be eligible to receive an award.
- If a participant's employment is terminated involuntarily prior to the date awards are paid, it will be at the absolute discretion of the Company whether or not an award payment is made to such terminated participant.

d. *Leave of absence:*
- Bonus award will be prorated to reflect the calendar days on a leave of absence that exceed 60 calendar days in the Plan year.

AWARD CALCULATION

Awards will be determined by applying a "bonus percentage" to the participant's base salary that is in effect at the end of the Plan year, regardless if the salary has changed at any point during the calendar year.

The President/CEO will present to the Compensation Committee/Board of Directors a list of the overall corporate objectives for the applicable Plan year, which are subject to approval by the Compensation Committee/Board of

Directors. All participants in the Plan whose performance is measured in part based on individual performance factors will then develop a list of key individual objectives, which must be approved by the responsible Vice President, Senior Vice President, Chief Officer, or President/CEO.

The relative weight between "corporate and individual performance factors" varies based on the individual's assigned level within the organization. The bonus percentage and/or the weighting may be reviewed periodically and may be adjusted for any Plan year by the Compensation Committee. The Compensation Committee will use the weighting between the corporate and individual performance factors in effect at the end of the Plan year in making its bonus determination. The bonus percentages and weighting for the performance factors will initially be as follows:

LEVEL/POSITION				
			Individual Factors	
	Bonus Percentage	**Corporate Factor**	**Core Competency**	**Individual Goal Achievement**
President and CEO	50%	100%		
Chief Officer	40%	100%		
Executive Vice President	40%	100%		
Senior Vice President	35%	100%		
Vice President	30%	60%	16%	24%
Executive/Senior Director	25%	50%	20%	30%
Director	20%	40%	24%	36%
Associate Director	20%	40%	24%	36%
Senior Manager II, I	20%	25%	30%	45%
Manager II, I	20%	25%	30%	45%
Individual Contributor II, I	20%	25%	30%	45%
Support	20%	25%	30%	45%

Performance Award Multiplier

Separate award multipliers will be established for both the corporate and the individual components of each award. The award multiplier for the corporate component will be determined by the Compensation Committee/Board of Directors each Plan year, in its sole discretion, based on the achievement of the approved corporate objectives for the Plan year. The same award multiplier for the corporate component of the award shall be used for all such Plan participants.

The award multiplier for the individual component shall be approved by the responsible Chief Officer or President/CEO and consists of the Core Competency Assessment and the achievement of Individual goals, each weighted 40% and 60%, respectively.

The ratings used for the Annual Performance Core Competency Assessment is as follows:

5 = Exceptional; Far exceeds all goals and objectives on a consistent basis
4 = Exceeds; Consistently exceeds goals and objectives
3 = Meets; Consistently meets goals and objectives
2 = Marginal; Met some goals and objectives but requires improvement
1 = Unsatisfactory

Numerical Rating Scale	Multiplier for Core Competency Individual Performance
5	120.00%
4.9	118.37%
4.8	116.70%
4.7	115.03%
4.6	113.36%
4.5	111.69%
4.4	110.02%
4.3	108.35%
4.2	106.68%
4.1	105.01%
4	103.34%
3.9	101.67%
3.8	100.00%
3.7	97.50%
3.6	95.00%
3.5	92.50%
3.4	90.00%
3.3	87.50%
3.2	85.00%
3.1	82.50%
3	80.00%
2.9	72.00%
2.8	64.00%
2.7	56.00%
2.6	48.00%
2.5	40.00%
2.4	32.00%
2.3	24.00%
2.2	16.00%
2.1	8.00%
2	0.00%

For Executives (Vice President level and above): The actual performance bonus awarded in any year, if any, may be more or less than the applicable target, depending primarily on the Compensation Committee's determination of the award multiplier for the corporate component and the executive's individual performance with respect to the corporate objectives. Whether or not a performance bonus is paid for any year is within the discretion of the Compensation Committee/Board of Directors based on such achievement.

Example:

Step # 1: Potential bonus award calculation
Position: Manager
Base salary at end of calendar year: $100,000
Target bonus percentage: 20%
Potential base bonus: $ 20,000

Step # 2: Split award target amount based on weighting of performance factors
Potential corporate performance bonus (25%): $ 5,000
Target individual performance bonus (75%):
Core Competency (40% of 75%, or 30%) $6,000
Personal Goal Achievement (60% of 75%, or 45%) $9,000
$ 20,000

Step # 2: Actual bonus award calculation
Payment multipliers are determined and approved based on assessment of corporate and individual performance, for example:

Corporate multiplier	75.0%
Core Competency Assessment multiplier	116.7% - performance assessed at 4.8
Personal Goal Objective Performance	85.0%

Corporate component	$ 3,750	($5,000 x 75.0%)
Individual component:		
Core Competency Assessment	$ 7,002	($6,000 x 116.7%)
Individual Goals Achieved	$ 7,650	($9,000 x 85.0%)
Total Award	$ 18,402	

AWARD PAYMENTS

Bonus award payments may be made in cash, through the issuance of stock, stock options or another form of equity award, or by a combination of cash, stock, stock options and/or another form of equity award, at the discretion of the Compensation Committee. All bonus award payments are subject to applicable tax withholdings. In the event that the Compensation Committee and/or the Board of Directors elect to pay bonus awards in stock or stock options, the Compensation Committee, in its sole discretion, will make a determination as to the number of shares of stock or stock options to be issued to each Plan participant based, in part, upon the overall corporate performance and each participant's individual performance, as described. The issuance of stock and stock options may also be subject to the approval of the Company's stockholders, and any stock options issued will be subject to the terms and conditions of the Company's equity incentive award plan, as amended from time to time by the Company.

Payment of bonus awards will be made as soon as practicable after the Company's year-end, but not later than December 31 of the year following the Plan year. Payments will not be impacted by any benefits, with the exception of elected 401(k) contributions which will be applied.

PLAN PROVISIONS

Governance

The Plan will be governed by the Compensation Committee. The President and/or CEO of TRACON will be responsible for the administration of the Plan. The Compensation Committee will be responsible for recommending to the Board of Directors a bonus amount for the President and/or CEO. Additionally, the Compensation Committee will be responsible for approving any compensation or incentive awards to other executive officers of the Company and all other officers who are subject to the reporting requirements of Section 16(a) of the Securities Exchange Act of 1934, as amended. All determinations of the Compensation Committee, under the Plan, shall be final and binding on all Plan participants.

Compensation Committee's Absolute Right to Alter or Abolish the Plan

The Compensation Committee reserves the right in its absolute discretion to terminate the Plan, or any portion of the Plan, at any time or to alter the terms and conditions under which a bonus will be paid. In the event of the Plan's termination prior to the payment of a bonus, such bonus will not be payable under this Plan. Such discretion may be exercised any time before, during, and after the Plan year is completed. No participant shall have any vested right to receive any compensation hereunder until actual delivery of such compensation. Participation in the Plan at any given time does not guarantee ongoing participation.

Employment Duration/Employment Relationship

This Plan does not, and TRACON's policies and practices in administering this Plan do not, constitute an express or implied contract or other agreement concerning the duration of any participant's employment with the Company. The employment relationship of each participant is "at will" and may be terminated at any time by TRACON or by the participant, with or without cause.

TRACON PHARMACEUTICALS, INC.

EMPLOYMENT AGREEMENT

For

MARK WIGGINS

This **EMPLOYMENT AGREEMENT** (the ***"Agreement"***) is made and entered into effective as of January 27, 2021 (the ***"Effective Date"***), by and between TRACON Pharmaceuticals, Inc., a Delaware corporation (the ***"Company"***), and Mark Wiggins (the ***"Executive"***). The Company and Executive are hereinafter collectively referred to as the ***"Parties"***, and individually referred to as a ***"Party"***. From and following the Effective Date, this Agreement shall replace and supersede that certain Amended and Restated Employment Agreement between Executive and Company entered into as of May 28, 2018 (the ***"Prior Agreement"***). Certain capitalized terms used in this Agreement are defined in Section 11.

RECITALS

WHEREAS, the Company desires to employ Executive to provide personal services to the Company in that capacity, and wishes to provide Executive with certain compensation and benefits in return for such services, and Executive wishes to be so employed and to receive such benefits; and

WHEREAS, the Company and Executive wish to enter into this Agreement to define their mutual rights and duties with respect to Executive's compensation and benefits;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the Parties, intending to be legally bound, agree as follows:

AGREEMENT

1. Employment by the Company.

1.1 Position. Executive shall serve as the Company's Chief Business Officer. During the term of Executive's employment with the Company, Executive will devote Executive's best efforts and substantially all of Executive's business time and attention to the business of the Company, except as permitted in Section 10 below, and except for approved vacation periods and reasonable periods of illness or other incapacities permitted by the Company's general employment policies.

1.2 Duties and Location. Executive shall report to the Company's Chief Executive Officer (the ***"CEO"***), and shall have such duties and responsibilities as are customary for the position of Chief Business Officer. Executive's primary office location shall be the Company's San Diego, California office. The Company reserves the right to reasonably require Executive to perform Executive's duties at places other than Executive's primary office location from time to time, and to require reasonable business travel.

1.3 Policies and Procedures. The employment relationship between the Parties shall be governed by the general employment policies and practices of the Company, except that when the terms of this Agreement differ from or are in conflict with the Company's general employment policies or practices, this Agreement shall control.

2. Compensation.

2.1 Salary. Executive shall receive a base salary at the rate of $375,733 per year, subject to standard payroll deductions and withholdings and payable in accordance with the Company's regular payroll schedule.

2.2 Bonus. Executive will be eligible for an annual discretionary bonus of up to forty-percent (40%) of Executive's base salary in effect during the bonus year (the ***"Annual Bonus"***). Whether Executive receives an Annual Bonus for any given year, and the amount of any such Annual Bonus, will be determined by the Company's Board of Directors (the "***Board***") (or the Compensation Committee thereof) in its sole discretion, based upon the Company's and Executive's achievement of objectives and milestones to be determined on an annual basis by the Board (or the Compensation Committee thereof). No Annual Bonus amount is guaranteed and, in addition to the other conditions for earning such Annual Bonus, Executive must remain an employee in good standing of the Company on the scheduled Annual Bonus payment date in order to earn any Annual Bonus.

3. Standard Company Benefits. Executive shall be entitled to participate in all employee benefit programs for which Executive is eligible under the terms and conditions of the benefit plans that may be in effect from time to time and provided by the Company to its employees. The Company reserves the right to cancel or change the benefit plans or programs it offers to its employees at any time. Executive will be included as an insured under the Company's D&O insurance policy to the same extent as other executive officers of the Company.

4. Vacation. Executive shall be entitled to accrue vacation at the rate of four (4) weeks per year (maximum vacation accrual caps will be in accordance with the Company's vacation policy).

5. Expenses. The Company will reimburse Executive for reasonable travel, entertainment or other expenses incurred by Executive in furtherance or in connection with the performance of Executive's duties hereunder, in accordance with the Company's expense reimbursement policy as in effect from time to time.

6. Equity.

6.1 Prior Awards. Any stock, stock options, or other equity awards that Executive has already been granted by the Company shall continue to be governed in all respects by the terms of the applicable grant agreements, grant notices, and plan documents, except as otherwise provided in this agreement.

6.2 Additional Awards. The Board (or the Compensation Committee thereof) may grant additional stock, stock options, or other equity awards to Executive in its sole discretion.

7. Termination of Employment.

7.1 At-Will Employment. Executive's employment relationship is at-will. Either Executive or the Company may terminate the employment relationship at any time, with or without cause or advance notice.

7.2 Termination Benefits. In the event that Executive's employment terminates for any reason, including due to Executive's death or disability, no further payments shall be due under this Agreement, except that Executive shall be entitled to any amounts earned, accrued or owing but not yet paid under Section 2 above, any benefits accrued or earned under the Company's benefit plans and programs or to which Executive is otherwise entitled under applicable law, and any outstanding equity awards vested as of the termination date, which awards must be exercised within 90 days of the termination date or the earlier expiration of such equity award, whichever occurs first. Executive may also be eligible for other post-employment payments and benefits pursuant to the terms and conditions of that certain June 2, 2014 TRACON Pharmaceuticals, Inc. Severance Plan (the "***Severance Plan***"), and the Severance Agreement entered into by and between Executive and the Company concurrently with this Agreement (the "***Severance Agreement***").

8. Section 409A. It is intended that all of the benefits and other payments payable under this Agreement satisfy, to the greatest extent possible, the exemptions from the application of Code Section 409A and this Agreement will be construed to the greatest extent possible as consistent with those provisions, and to the extent not so exempt, this Agreement (and any definitions hereunder) will be construed in a manner that complies with Section 409A.

9. Proprietary Information Obligations.

9.1 Confidential Information Agreement. As a condition of employment, and in consideration for the benefits provided for in this Agreement and the Severance Agreement, Executive shall sign and comply with the Company's Employee Proprietary Information and Inventions Agreement (the "***Confidential Information Agreement***").

9.2 Third-Party Agreements and Information. Executive represents and warrants that Executive's employment by the Company does not conflict with any prior employment or consulting agreement or other agreement with any third party, and that Executive will perform Executive's duties to the Company without violating any such agreement. Executive represents and warrants that Executive does not possess confidential information arising out of prior employment, consulting, or other third party relationships, that would be used in connection with Executive's employment by the Company, except as expressly authorized by that third party. During Executive's employment by the Company, Executive will use in the performance of Executive's duties only information which is generally known and used by persons with training and experience comparable to Executive's own, common knowledge in the industry, otherwise legally in the public domain, or obtained or developed by the Company or by Executive in the course of Executive's work for the Company.

10. Outside Activities During Employment; Non-Competition.

10.1 Outside Activities. During Executive's employment with the Company, Executive may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of Executive's duties hereunder or present a conflict of interest with the Company. Subject to the restrictions set forth herein and in the Confidential Information Agreement, **and only with prior written disclosure to and consent of the Board, Executive may engage in other types of business or public activities**. The Board may rescind such consent if the Board determines, in its reasonable discretion, that such activities compromise or threaten to compromise the Company's business interests or conflict with Executive's duties to the Company. Notwithstanding the foregoing, and so long as such activities (individually or in the aggregate) do not present a time commitment which conflicts with Executive's duties to the Company, (i) Executive shall be permitted to continue his current Board of Director roles with Zogenix, Inc. and SelectION, Inc.; (ii) Executive may continue activities with a maximum of two clients at any one time through his pre-existing consulting business (BioPharma Business Development, LLC) at times other than usual business hours, and (iii) Executive may manage his personal investments.

10.2 Non-Competition During Employment. During Executive's employment with the Company, Executive will not, without the prior written consent of the Board, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company; provided, however, that Executive may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange

11. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with Executive's employment and services for the Company, Executive and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, Executive's employment with and services for the Company, or the termination of Executive's employment with and services for the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §§1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted in San Diego, California (or such other location as mutually agreed by the parties) by JAMS, Inc. (***"JAMS"***) or its successors by a single arbitrator. ***Both Executive and the Company acknowledge that by agreeing to this arbitration procedure, they each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.*** Any such arbitration proceeding will be governed by JAMS' then applicable rules and procedures for employment disputes, which can be found at http://www.jamsadr.com/rules-clauses/ and which will be provided to Executive upon request. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator's essential findings and conclusions and a statement of the award. Executive and the Company each shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or Executive from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of

those that would be required if the dispute were decided in a court of law, and shall pay the arbitrator's fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

12. General Provisions.

12.1 Notices. Any notices provided must be in writing and will be deemed effective upon the earlier of personal delivery (including personal delivery by fax) or the next day after sending by overnight carrier, to the Company at its primary office location and to Executive at the address as listed on the Company payroll.

12.2 Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction to the extent possible in keeping with the intent of the parties.

12.3 Waiver. Any waiver of any breach of any provisions of this Agreement must be in writing to be effective, and it shall not thereby be deemed to have waived any preceding or succeeding breach of the same or any other provision of this Agreement.

12.4 Complete Agreement. This Agreement, together with the Severance Plan, the Severance Agreement, and the Confidential Information Agreement, constitutes the entire agreement between Executive and the Company with regard to this subject matter and is the complete, final, and exclusive embodiment of the Parties' agreement with regard to this subject matter. This Agreement is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties or representations. It cannot be modified or amended except in a writing signed by a duly authorized officer of the Company and Executive.

12.5 Counterparts. This Agreement may be executed in separate counterparts, any one of which need not contain signatures of more than one party, but all of which taken together will constitute one and the same Agreement.

12.6 Headings. The headings of the paragraphs hereof are inserted for convenience only and shall not be deemed to constitute a part hereof nor to affect the meaning thereof.

12.7 Successors and Assigns. This Agreement is intended to bind and inure to the benefit of and be enforceable by Executive and the Company, and their respective successors, assigns, heirs, executors and administrators, except that Executive may not assign any of Executive's duties hereunder and Executive may not assign any of Executive's rights hereunder without the written consent of the Company, which shall not be withheld unreasonably.

12.8 Tax Withholding. All payments and awards contemplated or made pursuant to this Agreement will be subject to withholdings of applicable taxes in compliance with

all relevant laws and regulations of all appropriate government authorities. Executive acknowledges and agrees that the Company has neither made any assurances nor any guarantees concerning the tax treatment of any payments or awards contemplated by or made pursuant to this Agreement. Executive has had the opportunity to retain a tax and financial advisor and fully understands the tax and economic consequences of all payments and awards made pursuant to the Agreement.

12.9 Choice of Law. All questions concerning the construction, validity and interpretation of this Agreement will be governed by the laws of the State of California.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the day and year first written above.

TRACON PHARMACEUTICALS, INC.

By: /s/ Charles P. Theuer, M.D., Ph.D.
Charles P. Theuer, M.D., Ph.D.
Chief Executive Officer

EXECUTIVE

/s/ Mark Wiggins
Mark Wiggins

Amendment #2

Cooperative Research and Development Agreement #12-1-00012

"Clinical Development of TRACON Pharmaceuticals, Inc.'s Compound TRC102 (methoxyamine HCl), a Small Molecule Inhibitor of Base Excision Repair, as an Anti-Cancer Agent"

The purpose of this amendment is to change certain terms of the above-referenced Cooperative Research and Development Agreement (CRADA). These changes are reflected below, and except for these changes, all other provisions of the original CRADA remain in full force and effect. Two originals of this amendment are provided for execution; one is to remain with the National Cancer Institute and the other is to remain with the Collaborator.

The aforementioned CRADA shall be amended as follows:

1. The term of this CRADA is extended three (3) years such that the new expiration date is August 7, 2023.

2. Dr. Fernanda Arnaldez is removed as NIH CRADA Extramural Investigators. Dr. Charles Kunos is added as a NIH CRADA Extramural Investigator.

ACCEPTED AND AGREED TO:

For the National Cancer Institute

/s/ James H. Doroshow
James H. Doroshow, M.D.
Deputy Director, NCI

January 8, 2021
Date

For Tracon Pharmaceuticals:

/s/ Charles P. Theuer, M.D., Ph.D.
Charles P. Theuer, M.D., Ph.D.
President and CEO

January 7, 2021
Date

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

(1)Registration Statement (Form S-8 No. 333-236732) pertaining to the 2015 Equity Incentive Plan and 2015 Employee Stock Purchase Plan of TRACON Pharmaceuticals, Inc.,
(2)Registration Statement (Form S-8 No. 333-201808) pertaining to the 2011 Equity Incentive Plan, 2015 Equity Incentive Plan, and 2015 Employee Stock Purchase Plan of TRACON Pharmaceuticals, Inc.,
(3)Registration Statement (Form S-8 No. 333-209592) pertaining to the 2015 Equity Incentive Plan, and 2015 Employee Stock Purchase Plan of TRACON Pharmaceuticals, Inc.,
(4)Registration Statement (Form S-8 No. 333-216347) pertaining to the 2015 Equity Incentive Plan, and 2015 Employee Stock Purchase Plan of TRACON Pharmaceuticals, Inc.,
(5)Registration Statement (Form S-8 No. 333-223333) pertaining to the 2015 Equity Incentive Plan, and 2015 Employee Stock Purchase Plan of TRACON Pharmaceuticals, Inc.,
(6)Registration Statement (Form S-8 No. 333- 229988) pertaining to the 2015 Equity Incentive Plan, and 2015 Employee Stock Purchase Plan of TRACON Pharmaceuticals, Inc.,
(7)Registration Statement (Form S-1 No. 333-239574) of TRACON Pharmaceuticals, Inc.,
(8)Registration Statement (Form S-1 No. 333-216962) of TRACON Pharmaceuticals, Inc.,
(9)Registration Statement (Form S-1 No. 333- 234651) of TRACON Pharmaceuticals, Inc.,
(10)Registration Statement (Form S-3 No. 333-248593) of TRACON Pharmaceuticals, Inc.;
(11)Registration Statement (Form S-3 No. 333-224809) of TRACON Pharmaceuticals, Inc.; and
(12)Registration Statement (Form S-3 No. 333- 229990) of TRACON Pharmaceuticals, Inc.

of our report dated February 25, 2021, with respect to the consolidated financial statements of TRACON Pharmaceuticals, Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2020.

/s/ Ernst & Young LLP

San Diego, California
February 25, 2021

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Charles P. Theuer, M.D., Ph.D., certify that:

1. I have reviewed this Annual Report on Form 10-K of TRACON Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer 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.

Date: February 25, 2021

/s/ Charles P. Theuer, M.D., Ph.D.
Charles P. Theuer, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Scott B. Brown, CPA, certify that:

1. I have reviewed this Annual Report on Form 10-K of TRACON Pharmaceuticals, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer 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.

Date: February 25, 2021

/s/ Scott B. Brown, CPA
Scott B. Brown, CPA
Chief Financial Officer
(Principal Financial and Accounting Officer)

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

I, Charles P. Theuer, M.D., PhD., President and Chief Executive Officer of TRACON Pharmaceuticals, Inc. (the "Registrant"), do hereby certify in accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) this Annual Report on Form 10-K of the Registrant, to which this certification is attached as an exhibit (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: February 25, 2021

/s/ Charles P. Theuer, M.D., Ph.D.
Charles P. Theuer, M.D., Ph.D.
President and Chief Executive Officer
(Principal Executive Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Scott B. Brown, CPA, Chief Financial Officer of TRACON Pharmaceuticals, Inc. (the "Registrant"), do hereby certify in accordance with 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) this Annual Report on Form 10-K of the Registrant, to which this certification is attached as an exhibit (the "Report"), fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: February 25, 2021

/s/ Scott B. Brown, CPA
Scott B. Brown, CPA
Chief Financial Officer
(Principal Financial and Accounting Officer)

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of the Report or as a separate disclosure document.