

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2024

OR

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

Commission File Number 001-39335

Repare Therapeutics Inc.

(Exact name of Registrant as specified in its Charter)

Québec
(State or other jurisdiction of
incorporation or organization)

7171 Frederick-Banting, Building 2, Suite 270
St-Laurent, Québec, Canada
(Address of principal executive offices)

Not applicable
(I.R.S. Employer
Identification No.)

H4S 1Z9
(Zip Code)

Registrant's telephone number, including area code: (857) 412-7018

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 Shares, no par value	RPTX	The Nasdaq Stock Market LLC

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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

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

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

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

The aggregate market value of the registrant's common shares held by non-affiliates was \$128,954,706 as of June 30, 2024, based on a total of 38,725,137 common shares held by non-affiliates and a closing price of \$3.33 as reported on The Nasdaq Stock Market on June 30, 2024.

The number of shares of registrant's common shares outstanding as of February 21, 2025 was 42,510,708.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for the registrant's 2025 annual meeting of shareholders, which is to be filed within 120 days after the end of the registrant's fiscal year ended December 31, 2024, are incorporated by reference into Part III of this Form 10-K, to the extent described in Part III.

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SUMMARY RISK FACTORS

Investing in our common shares involves numerous risks, including the risks described in “Part I—Item 1A. Risk Factors” of this Annual Report on Form 10-K. Below are some of our principal risks, any one of which could materially adversely affect our business, financial condition, results of operations, and prospects:

- Our corporate restructuring and the associated headcount reduction may not result in anticipated savings, could result in total costs and expenses that are greater than expected, could disrupt our business and could affect our ability to retain employees.
- Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.
- We will require substantial additional funding to finance our operations. If we are unable to raise capital when needed, we could be forced to delay, reduce, or terminate certain of our product development programs or other operations.
- We are very early in our development efforts. If we are unable to advance our product candidates into and through clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.
- Our business substantially depends upon the successful development of product candidates generated through the application of our SNIPRx platform, including RP-3467 and RP-1664. If we or our collaborators, are unable to obtain regulatory approval for, and successfully commercialize, products developed through the application of our SNIPRx platform, our business may be materially harmed.
- The successful development of targeted therapeutics, including our portfolio of synthetic lethality small molecule inhibitors, as well as any related diagnostics, is highly uncertain.
- Our current and future collaborations will be important to our business. If we are unable to enter into new collaborations as appropriate, or if these collaborations are not successful, our business could be adversely affected.
- The regulatory approval processes of the FDA and comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, on a timely basis or at all, our business will be substantially harmed.
- Synthetic lethality represents an emerging class of precision medicine targets, and negative perceptions of the efficacy, safety, or tolerability of this class of targets, including any that we develop, could adversely affect our ability to conduct our business, advance our product candidates or obtain regulatory approvals.
- Difficulty in enrolling patients could delay or prevent clinical trials of our product candidates. We may find it difficult to enroll patients in our ongoing and planned clinical trials with the genomic alterations that these trials are designed to target.
- We face substantial competition, which may result in others developing or commercializing drugs before or more successfully than we do.
- If we fail to develop new products and product candidates or compete successfully with respect to acquisitions, joint ventures, licenses or other collaboration opportunities, our ability to continue to expand our product pipeline and our growth and development would be impaired.
- We rely on third parties to supply and manufacture our product candidates, and we expect to continue to rely on third parties to manufacture our products, if approved. The development of such product candidates and the commercialization of any products, if approved, could be stopped, delayed, or made less profitable if any such third party fails to provide us with sufficient quantities of product candidates or products or fails to do so at acceptable quality levels or prices or fails to maintain or achieve satisfactory regulatory compliance.

- Our success depends in part on our ability to obtain intellectual property rights for our proprietary technologies and product candidates, as well as our ability to protect our intellectual property. It is difficult and costly to protect our proprietary rights and technology, and we may not be able to ensure their protection.
- Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.
- The trading price of our common shares has been and is likely to continue to be volatile and fluctuate substantially.

SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K, or Annual Report, contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements other than statements of historical facts contained in this Annual Report, including statements regarding our strategy, future financial condition, future operations, research and development costs, plans and objectives of management, are forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “design,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “positioned,” “potential,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. Although we believe that we have a reasonable basis for each forward-looking statement contained in this Annual Report, we caution you that these statements are based on a combination of facts and factors currently known by us and our expectations of the future, about which we cannot be certain.

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

- our anticipated savings related to our corporate restructuring and the associated headcount reduction, as well as the potential impacts on employee morale and productivity;
- our ability to identify partnering opportunities for our product candidates;
- the initiation, timing, progress and results of our current and future preclinical studies and clinical trials and related preparatory work and the period during which the results of the trials will become available, as well as our research and development programs;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to obtain regulatory approval of RP-3467, RP-1664, and any of our other future product candidates that we develop;
- the expected impact of the strategic reprioritization of our research and development activities, including with respect to anticipated cost savings;
- our ability to identify and develop additional product candidates;
- business disruptions affecting the initiation, patient enrollment, development and operation of our clinical trials, including a public health emergency or pandemic;
- the evolving impact of macroeconomic events on our operations, supply chains, general economic conditions, our ability to raise additional capital, and the continuity of our business, including our preclinical studies and clinical trials. These events include health pandemics, changes in inflation and foreign exchange rates, the U.S. Federal Reserve raising interest rates, disruptions in access to bank deposits or lending commitments due to bank failures, and the Russia-Ukraine and Middle-East conflicts;
- our ability to enroll patients in clinical trials, to timely and successfully complete those trials and to receive necessary regulatory approvals;
- the timing of completion of enrollment and availability of data from our current preclinical studies and clinical trials, including ongoing clinical trials of RP-3467, RP-1664 and lunresertib;
- the expected timing of filings with regulatory authorities for any product candidates that we develop;
- our expectations regarding the potential market size and the rate and degree of market acceptance for any current or future product candidates that we develop;
- our ability to receive any milestone or royalty payments under our collaboration and license agreements;
- the effects of competition with respect to RP-3467, RP-1664, lunresertib, or any of our other current or future product candidates, as well as innovations by current and future competitors in our industry;
- our ability to fund our working capital requirements;

- our intellectual property position, including the scope of protection we are able to establish, maintain and enforce for intellectual property rights covering our product candidates;
- our financial performance;
- our ability to obtain additional funding for our operations; and
- other risks and uncertainties, including those listed under the section titled “Risk Factors” in this Annual Report.

Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected evolution, and involve known and unknown risks, uncertainties and other factors including, without limitation, risks, uncertainties and assumptions regarding the impact of the macroeconomic events on our business, operations, strategy, goals and anticipated timelines, our ongoing and planned preclinical activities, our ability to initiate, enroll, conduct or complete ongoing and planned clinical trials, our timelines for regulatory submissions and our financial position that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. You are urged to carefully review the disclosures we make concerning these risks and other factors that may affect our business and operating results in this Annual Report. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this document. Except as required by law, we do not intend, and undertake no obligation, to update any forward-looking information to reflect events or circumstances.

PART I

Item 1. Business.

Overview


We are a clinical-stage precision oncology company enabled by our proprietary synthetic lethality approach to the discovery and development of novel therapeutics. Synthetic lethality (SL) represents a clinically validated approach to drug development. We use our proprietary, genome-wide, CRISPR-enabled SNIPRx platform to systematically discover and develop highly targeted cancer therapies that preferentially treat cancers due to mechanisms of genomic instability, including DNA damage repair. SL arises when a deficiency in either of two genes is tolerated in cells, but simultaneous deficiencies in both genes cause cell death. Cancer cells that contain a mutation in one gene of a SL pair are susceptible to therapeutic intervention targeting the other gene pair.

Our Strategy

In January 2025, we announced a re-alignment of resources and a re-prioritization of our clinical portfolio to focus on the continued advancement of our Phase 1 clinical programs, RP-3467 and RP-1664. We also announced our intention to seek partnering opportunities across our portfolio, including for lunresertib and camonsertib, prior to any start of pivotal development. On February 24, 2025, we implemented a reduction of our workforce by approximately 75%, with our remaining employees primarily focused on the continued advancement of RP-3467 and RP-1664.

Our Development Programs

Using our SNIPRx platform, we internally developed four clinical therapeutic candidates.

Program	Tumor lesion	Drug target	Preclinical	Ph 1/2	Pivotal/Ph 3	Next Milestones
RP-3467	BRCA1/2	Polθ ATPase	Monotherapy & PARPi Combination (POLAR)			<ul style="list-style-type: none"> 3Q'25: Initial POLAR topline data
RP-1664	TRIM37-high	PLK4	Monotherapy (LIONS)			<ul style="list-style-type: none"> 3Q'25: Initiate pediatric neuroblastoma Ph1/2 4Q'25: Initial LIONS topline data Mid-2026: LIONS completion and POC readout
Lunresertib / camonsertib	CCNE1, FBXW7 + PPP2R1A	PKMYT1 / ATR	WEE1i Combination Lunre+Cam (MYTHIC)		Seeking partnering opportunities	<ul style="list-style-type: none"> 2Q'25: Complete Lunre+WEE1i enrollment

- (a) **RP-3467** is a potential best-in-class inhibitor of adenosinetriphosphatase (ATPase) activity on the helicase domain of DNA polymerase theta (Polθ). Polθ is a synthetic lethal target associated with homologous recombination deficiency (HRD) tumors, including those with BRCA1/2 mutations or other genomic alterations. Data suggest that RP-3467 works effectively and synergistically with therapies that result in double stranded DNA breaks, such as PARP inhibition, radioligand therapy (RLT) and multiple chemotherapies and antibody-drug conjugates (ADCs). Initial data suggest that Polθ inhibition may interfere with mechanisms central to the development of PARPi resistance, which could be relevant to currently marketed PARP 1/2 inhibitors and the emerging PARP1-selective inhibitors. We reported comprehensive preclinical data for RP-3467 in November 2023, in which RP-3467 demonstrated complete, sustained regressions in combination with PARP inhibitors and compelling anti-tumor activity in combination with RLT and chemotherapy. In June 2024, we further presented our preclinical findings in a plenary session at the AACR Special Conference in Cancer Research: Expanding and Translating Cancer Synthetic Vulnerabilities. We initiated the Phase 1 clinical trial of RP-3467 (POLAR) in the fourth

quarter of 2024, as well as dosed the first patient in the POLAR trial with the combination of RP-3467 and olaparib. Upcoming expected milestones include topline safety, tolerability and early efficacy data from the POLAR trial in monotherapy and in combination with olaparib in the third quarter of 2025.

- (b) **RP-1664** is a potential first-in-class, highly selective, oral PLK4 inhibitor designed to harness the synthetic lethal relationship with TRIM37 amplification or overexpression in solid tumors. Tumors rely on PLK4 for centriole biogenesis in S-phase of the cell cycle when TRIM37, an E3 ligase that reduces pericentriolar material, is high. Preclinical studies demonstrate that RP-1664 selectively inhibits PLK4 and drives potent synthetic lethality in TRIM37-high tumor models, both in vitro and in vivo. Elevated TRIM37 is a feature found across a range of solid tumors and in approximately 80% of high-grade neuroblastoma. RP-1664 is the only selective PLK4 inhibitor known to be in the clinic.

We reported comprehensive preclinical data for RP-1664 in November 2023, including deep tumor growth inhibition and regressions in multiple TRIM37-high solid tumor or neuroblastoma xenograft models. The preclinical in vivo animal model evaluations were performed both internally and in collaboration with Children's Hospital of Philadelphia (CHOP). In February 2024, we dosed the first patient in the LIONS (PLK4 Inhibitor in Advanced Solid Tumors) clinical trial, a multicenter, open-label Phase 1 clinical trial to investigate safety, pharmacokinetics, pharmacodynamics, and the preliminary efficacy of RP-1664. After evaluating safety in adult patients with recurrent solid tumors in the LIONS clinical trial, we expect to move into a Phase 1/2 clinical trial in high risk, recurrent pediatric neuroblastoma, in which children have limited treatment options and high prevalence of TRIM37-altered tumors. Upcoming expected milestones include initiation of a Phase 1/2 expansion trial in pediatric neuroblastoma in the third quarter of 2025; initial topline safety, tolerability and early efficacy data from the LIONS trial in the fourth quarter of 2025; and trial completion and final trial readout for proof-of-concept from the LIONS trial in mid-2026.

- (c) **Lunresertib (RP-6306) and Camonsertib (RP-3500):**

Lunresertib is a potential first-in-class, selective and potent oral small molecule inhibitor of Protein Kinase Membrane-associated tyrosine- and threonine- specific cdc-2 inhibitory kinase (PKMYT1), a cancer target we discovered and identified as synthetic lethal with cyclin E1 (CCNE1) amplification, or deleterious alterations in FBXW7 or PPP2R1A in solid tumors such as gynecological, colorectal and upper gastrointestinal malignancies. Lunresertib was the first PKMYT1 inhibitor to enter into clinical trials and is being evaluated alone and in combinations across several clinical trials in the US, UK/EU4, and Canada.

Camonsertib is a potent and selective oral small molecule inhibitor of Ataxia-Telangiectasia and Rad3-related protein kinase (ATR) in clinical development for the treatment of solid tumors with specific DNA damage repair-related genomic alterations, including those in the ataxia telangiectasia mutated kinase (ATM) gene.

We are currently evaluating lunresertib in combination with Debio 0123, a highly selective, brain-penetrant, clinical WEE1 inhibitor, in patients with advanced solid tumors harboring CCNE1 amplification or FBXW7 or PPP2R1A deleterious alterations as part of an ongoing 50/50 cost sharing collaboration with Debiopharm.

We do not intend to continue to develop lunresertib or camonsertib in other studies, including the ongoing camonsertib non-small cell lung cancer expansion study, absent securing a partnership with a development partner.

Intellectual Property

We strive to protect and enhance the proprietary technologies, inventions, and improvements that we believe are important to our business, including seeking, maintaining, and defending patent rights, whether developed internally or licensed from third parties. Our policy is to seek to protect our proprietary position by, among other methods, pursuing and obtaining patent protection in the United States and in jurisdictions outside of the United States related to our proprietary technology, inventions, improvements, platforms, and our product candidates that are important to the development and implementation of our business.

Expected expiry dates, not including any potentially favorable patent term adjustment, for pending U.S. provisional and non-provisional patent applications, as well as pending international applications under the Patent Cooperation Treaty of 1970, or PCT, directed to our various programs are as follows:

Programs	Expected expiry dates
Polθ inhibitors, including RP-3467	2042-2044
PLK4 inhibitors, including RP-1664	2043
CCNE1-SL inhibitors, including lunresertib	2041-2044
ATR inhibitors, including camonsertib	2039-2044

Individual patents extend for varying periods 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 for regularly filed applications in the United States are granted a term of 20 years from the earliest effective non-provisional filing date. In addition, in certain instances, a patent term can be extended to recapture a portion of the U.S. Patent and Trademark Office, or USPTO, delay in issuing the patent as well as a portion of the term effectively lost as a result of the FDA regulatory review period. However, as to the FDA component, 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 20 years from the earliest effective filing date. 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 regulatory-related extensions, the availability of legal remedies in a particular country and the validity and enforceability of the patent.

The PCT is an international patent law treaty that provides a unified procedure for filing patent applications to protect inventions in each of its contracting states. Thus, a single PCT application can be converted into a patent application in any of the PCT-contracting states, and is considered a simple, cost-effective means for seeking patent protection in numerous regions or countries. This nationalization (converting into an application in any of the contracting states) typically occurs 18 months after the PCT application filing date. An applicant must undertake prosecution within the allotted time in each of the contracting states or on a regional basis if it determines to undertake patent issuance in protection in such country or territory. Pursuant to its PCT application, the Company expects to pursue patent protection in the United States.

In addition, we rely upon trade secrets 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 collaborators, employees and consultants and invention assignment agreements with our employees. We also have confidentiality agreements or invention assignment agreements with our collaborators 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 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.

Our commercial success will also depend in part on not infringing upon the proprietary rights of third parties. It is uncertain whether the issuance of any third-party patent would require us to alter our development or commercial strategies, or our product candidates or processes, obtain licenses or cease certain activities. Our breach of any license agreements or failure to obtain a license to proprietary rights that we may require to develop or commercialize our future product candidates may have an adverse impact on us. For more information, please see “Risk Factors—Risks Related to Intellectual Property.”

Collaborations and License Agreements

Collaboration and License Agreement with Bristol-Myers Squibb Company

In May 2020, we entered into a collaboration and license agreement, or the BMS Agreement, with Bristol-Myers Squibb Company, or Bristol-Myers Squibb, pursuant to which we and Bristol-Myers Squibb agreed to collaborate in the research and development of potential new product candidates for the treatment of cancer. We provided Bristol-Myers Squibb access to a selected number of our existing early SNIPRx screening campaigns and novel campaigns. We were responsible for carrying out early-stage research activities directed to identifying and validating potential targets for licensing by Bristol-Myers Squibb, in accordance with a mutually agreed upon research plan. The collaboration consisted of programs directed to both druggable targets and to targets commonly considered undruggable by traditional small molecule approaches. In the event that Bristol-Myers Squibb elected to obtain an exclusive license for the subsequent development, manufacture and commercialization of a program, Bristol-Myers Squibb would then be solely responsible for all such worldwide activities.

Under the terms of the BMS Agreement, Bristol-Myers Squibb paid us an initial upfront fee payment of \$50.0 million. In connection with entering into the BMS Agreement, we also entered into a warrant agreement with an affiliate of Bristol-Myers Squibb pursuant to which we issued a warrant for total proceeds of \$15.0 million, which was automatically exercised into 750,000 common shares upon closing of our IPO at which time the warrants were cancelled.

Bristol-Myers Squibb has exercised its options for a combined total of five druggable targets and one undruggable target over the course of our collaboration, for which we have received \$1.6 million in option exercise fees, including a specified research milestone following a further development election on an optioned target.

Under the BMS Agreement, we are entitled to receive up to \$301.0 million in total milestones on a program-by-program basis, including \$176.0 million in the aggregate for certain specified research, development, and regulatory milestones and \$125.0 million in the aggregate for certain specified commercial milestones. We are also entitled to a tiered percentage royalty on annual net sales ranging from high-single digits to low-double digits, subject to certain specified reductions. Royalties are payable by Bristol-Myers Squibb on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last valid claim covering the licensed product in such country, expiration of all applicable regulatory exclusivities in such country for such licensed product and the tenth anniversary of the first commercial sale of such licensed product in such country.

On a program-by-program basis, prior to the earlier of such program ceasing to be included under the BMS Agreement and expiration of the last to expire royalty term for such program, we, alone and with third parties, are prohibited from researching, developing, manufacturing and commercializing products that are directed to the applicable target for such program.

We also have provided Bristol-Myers Squibb with certain, limited rights to first negotiate with us if we determine to divest, license, or collaborate with others regarding certain existing programs, including if we received an unsolicited offer to do so. The right to first negotiation expressly excludes any potential Change of Control transaction (as such term is contractually defined in the BMS Agreement).

Although the collaboration term expired in November 2023, the BMS Agreement will not expire until, on a licensed product-by-licensed product and country-by-country basis, the expiration of the applicable royalty term and in its entirety upon expiration of the last royalty term. Either party may terminate the BMS Agreement earlier upon an uncured material breach of the agreement by the other party, or the insolvency of the other party. Additionally, Bristol-Myers Squibb may terminate the BMS Agreement for any or no reason on a program-by-program basis upon specified written notice.

License Agreement with New York University

In December 2016, we entered into a license agreement with New York University pursuant to which we obtained a worldwide, royalty-bearing, exclusive license under certain current and/or future patents and know-how of

New York University to research, develop and commercialize products that are covered by such licensed patents or otherwise modulate Polθ. Upon initial entry into the license agreement, we issued New York University 60,211 common shares in December 2016 as consideration for the license.

In July 2018, we amended and restated our license agreement with NYU. We refer to this amended and restated agreement as the NYU Agreement. Pursuant to the terms of the NYU Agreement, we are obligated to use reasonable diligence in connection with the research, development, and commercialization of the licensed products (as such term is defined in the NYU Agreement), including specified minimum annual spends on research and development.

Under the terms of the NYU Agreement, we are obligated to pay New York University annual license maintenance fees in the low five figures that are creditable against any milestone payments payable in such year. Additionally, in connection with development, regulatory and commercial activities, we have agreed to make milestone payments of (i) \$2.6 million in the aggregate for a product covered by a licensed patent that achieves specified development and sales milestones for the first indication, (ii) \$1.3 million in the aggregate for a product covered by a licensed patent that achieves specified development and sales milestones for a second indication, (iii) \$575,000 in the aggregate for a product covered by a licensed patent that achieves specified development and sales milestones for each of a third and fourth indication, (iv) \$1.3 million in the aggregate for a product that is not covered by a licensed patent that achieves specified development and sales milestones for the first indication, (v) \$650,000 in the aggregate for a product that is not covered by a licensed patent that achieves specified development and sales milestones for a second indication, (vi) \$287,500 in the aggregate for a product that is not covered by a licensed patent that achieves specified development and sales milestones for each of a third and fourth indication. We have the right to reduce these milestone payments by a specified amount of any milestones payable to a third party for a license required for the commercialization of a product candidate.

We are also obligated to pay New York University a low single digit royalty on net sales of any product covered by a licensed patent and a lower single digit royalty on net sales of any product that is not covered by a licensed patent, in each case subject to reduction by a specified amount of any royalties payable to a third party for a license to unblocking intellectual property. Moreover, we are obligated to pay New York University a percentage of any non-royalty consideration received by us from a sublicensee ranging in the low double digits.

Our prior research services, license and collaboration agreement with Ono Pharmaceutical Company Ltd. was considered a sublicensee under the terms of the NYU Agreement. Accordingly, we paid New York University a specified percentage of the approximately \$1.0 million initial upfront fee payment we received from Ono. In October 2024, the dosing of our first patient in the POLAR Phase 1 dose finding clinical trial of RP-3467 alone and in combination with the poly-ADP ribose PARP inhibitor, olaparib, triggered the payment of a \$0.1 million milestone to New York University under the terms of the NYU Agreement.

Payments in respect of net sales or sublicense in a country shall remain in force on a product-by-product, country-by-country basis, with respect to (i) products that are not covered by a licensed patent, for ten years from the date of first commercial sale in such country and (ii) products that are covered by a licensed patent, until the expiration date of the last to expire of the licensed patents covering such product or its manufacture or use in the applicable country.

The NYU Agreement expires on the date of expiration of all royalty obligations. Either party may terminate the NYU Agreement earlier upon an uncured material breach of NYU Agreement by the other party or the insolvency of the other party.

Sales and Marketing

Given our stage of development, we have not yet established a commercial organization or distribution capabilities. We have established a wholly-owned U.S. subsidiary, Repare Therapeutics USA Inc., a Delaware

corporation with operations in Cambridge, Massachusetts, to support our clinical development program and our potential commercialization efforts in the United States.

Manufacturing

We currently rely, and expect to continue to rely for the foreseeable future, on third-party contract manufacturing organizations, or CMOs, to produce our product candidates for preclinical and clinical testing, as well as for future commercial manufacture of any products that we may commercialize.

We require all of our CMOs to conduct manufacturing activities in compliance with current good manufacturing practice, or cGMP, requirements. We have assembled a team of experienced employees and consultants to provide the necessary technical, quality, and regulatory oversight over our CMOs. Currently, we have manufacturing and supply agreements with our CMOs for the manufacture of RP-3467, RP-1664, lunresertib, camonsertib and our preclinical candidates, including the synthesis of the active pharmaceutical ingredient, as well as drug product.

All of our product candidates are small molecules and are manufactured in synthetic processes from available starting materials. The chemistry underlying our product candidates appears amenable to scale up and does not currently require unusual equipment in the manufacturing process. We expect to continue to develop product candidates that can be produced cost-effectively at contract manufacturing facilities.

We plan to continue to rely on third-party manufacturers for all current and future trials and commercialization of RP-3467, RP-1664, lunresertib, and any future product candidates, if approved. We anticipate that these CMOs will have capacity to support commercial scale production, but we do not have any formal agreements in place at this time given our early stages of development. If needed, we believe we can identify and establish additional CMOs to provide active pharmaceutical ingredient and finished drug product without significant disruption to our business or clinical development timelines.

Competition

The biotechnology and pharmaceutical industries are characterized by the rapid evolution of technologies and understanding of disease etiology, intense competition, and a strong emphasis on intellectual property. We believe that our approach, strategy, scientific capabilities, know-how and experience provide us with competitive advantages. However, we expect substantial competition from multiple sources, including major pharmaceutical, specialty pharmaceutical, and existing or emerging biotechnology companies, academic research institutions and governmental agencies and public and private research institutions worldwide. Many of our competitors, either alone or with their collaborations, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient enrollment in clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. As a result, our competitors may discover, develop, license, or commercialize products before or more successfully than we do.

We face competition from segments of the pharmaceutical, biotechnology and other related markets that pursue the development of precision oncology therapies for patients with genetically-defined cancers. Several biopharmaceutical companies, including Loxo Oncology, Inc. (part of Eli Lilly and Company), Blueprint Medicines Corporation, SpringWorks Therapeutics, Inc., Black Diamond Therapeutics, Inc., Deciphera Pharmaceuticals, Inc., Tango Therapeutics, Inc., Zentalis Pharmaceuticals, Inc., Turning Point Therapeutics, Inc. (acquired by Bristol-Myers Squibb), and Exelixis, Inc. are developing precision oncology medicines. In addition, we may face competition from companies developing product candidates that are based on SL, including AstraZeneca, GlaxoSmithKline, Pfizer, Bayer, Merck Serono, Schrodinger, Inc., Exelixis, Inc., Artios Pharma Ltd., IDEAYA Biosciences, Inc, Impact Therapeutics, Aprea Therapeutics, Shanghai De Novo Pharmatech, Tide Pharmaceutical, Acrivon Therapeutics, Biocity Biopharma, Oric Pharmaceuticals, Schrodinger, Treadwell Therapeutics, Varsity Pharma, Breakpoint Therapeutics, Rhizen Pharmaceuticals AG, Sincere Pharmaceutical, Shouyao Holdings, and MOMA Therapeutics.

Furthermore, we also face competition more broadly across the oncology market for cost-effective and reimbursable cancer treatments. The most common methods of treating patients with cancer are surgery, radiation, and drug therapy, including chemotherapy, hormone therapy, biologic therapy, such as monoclonal and bispecific antibodies, immunotherapy, cell-based therapy and targeted therapy, or a combination of any such methods. There are a variety of available drug therapies marketed for cancer. In many cases, these drugs are administered in combination to enhance efficacy. While our product candidates, if any are approved, may compete with these existing drugs and other therapies, to the extent they are ultimately used in combination with or as an adjunct to these therapies, our product candidates may not be competitive with them. Some of these drugs are branded and subject to patent protection, and others are available on a generic basis. Insurers and other third-party payors may also encourage the use of generic products or specific branded products. As a result, obtaining market acceptance of, and gaining significant share of the market for, any of our product candidates that we successfully introduce to the market may pose challenges. In addition, many companies are developing new oncology therapeutics, and we cannot predict what the standard of care will be as our product candidates progress through clinical development.

With respect to our Polθ ATPase inhibitor product candidate, RP-3467, Artios Pharma, IDEAYA Biosciences (in collaboration with GlaxoSmithKline plc), Varsity Pharma, Breakpoint Therapeutics, Rhizen Pharmaceuticals AG, Simcere Pharmaceutical, and MOMA Therapeutics have Polθ programs in various stages of clinical and preclinical development.

With respect to our PLK4 inhibitor product candidate, RP-1664, Exelixis, Inc. and Oric Pharmaceuticals have disclosed PLK4 inhibitor programs in early preclinical development, and Treadwell Therapeutics has a non-selective PLK4 inhibitor program in the clinic.

With respect to our PKMYT1 inhibitor product candidate, lunresertib, Acrivon Therapeutics, Exelixis, Inc, Schrodinger, and Psivant have disclosed PKMYT1 inhibitor programs in preclinical development.

We could see a reduction or elimination in our commercial opportunity if our competitors develop and commercialize drugs that are safer, more effective, have fewer or less severe side effects, are more convenient to administer, are less expensive or with a more favorable label than our product candidates. Our competitors also may compete for available patient pool, slowing our accrual in trials, obtain FDA or other regulatory approval for their drugs more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market. The key competitive factors affecting the success of all of our product candidates, if approved, are likely to be their efficacy, safety, convenience, price, the level of generic competition and the availability of reimbursement from government and other third-party payors.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture, and marketing of pharmaceutical products. These agencies and other federal, state, and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, packaging, recordkeeping, tracking, approval, import, export, distribution, advertising, and promotion of our products.

U.S. Government Regulation of Drug Products

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve a pending New Drug Application, or NDA, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

The process required by the FDA before product candidates may be marketed in the United States generally involves the following:

- nonclinical laboratory and animal tests that must be conducted in accordance with good laboratory practices, or GLPs;
- submission to the FDA of an investigational new drug application, or IND, which must become effective before clinical trials may begin;
- approval by an independent institutional review board, or IRB, for each clinical site or centrally before each trial may be initiated;
- adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed product candidate for its intended use, performed in accordance with good clinical practices, or GCPs;
- submission to the FDA of an NDA and payment of user fees;
- satisfactory completion of an FDA advisory committee review, if applicable;
- pre-approval inspection of manufacturing facilities and selected clinical investigators for their compliance with current good manufacturing practice, or cGMP, and GCPs;
- satisfactory completion of FDA audits of clinical trial sites to assure compliance with GCPs and the integrity of the clinical data;
- FDA review and approval of an NDA to permit commercial marketing for particular indications for use; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy, or REMS, and the potential requirement to conduct post-approval studies.

The testing and approval process requires substantial time, effort, and financial resources.

Preclinical Studies

Preclinical studies include laboratory evaluation of drug substance chemistry, pharmacology, toxicity, and drug product formulation, as well as animal studies to assess potential safety and efficacy. Prior to commencing the first clinical trial with a product candidate, a sponsor must submit the results of the preclinical tests and preclinical literature, together with manufacturing information, analytical data and any available clinical data or literature, among other required information, to the FDA as part of an IND. Some preclinical studies may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises safety concerns or questions about the conduct of the clinical trial and imposes a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in FDA authorization to commence a clinical trial.

Clinical Trials

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCP requirements. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development, as well as amendments to previously submitted clinical trials. Further, an independent IRB for each institution participating in the clinical trial must review and approve the plan for any clinical trial, its informed consent form, and other communications to study subjects before the clinical trial commences at that site. The IRB must continue to oversee the clinical trial while it is being conducted, including any changes to the study plans.

Regulatory authorities, an IRB or the sponsor may suspend or discontinue a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk, the clinical trial is not being conducted in accordance with the FDA's or the IRB's requirements, or if the drug has been associated with unexpected serious harm to subjects. Some studies also include a data safety monitoring board, which receives special

access to unblinded data during the clinical trial and may advise the sponsor to halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy.

In general, for purposes of NDA approval, human clinical trials are typically conducted in three sequential phases that may overlap.

- Phase 1—Studies are initially conducted to test the product candidate for safety, dosage tolerance, structure-activity relationships, mechanism of action, absorption, metabolism, distribution and excretion in healthy volunteers or subjects with the target disease or condition. If possible, Phase 1 clinical trials may also be used to gain an initial indication of product effectiveness.
- Phase 2—Controlled studies are conducted with groups of subjects with a specified disease or condition to provide enough data to evaluate the preliminary efficacy, optimal dosages and dosing schedule and expanded evidence of safety. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expansive Phase 3 clinical trials.
- Phase 3—These clinical trials are generally undertaken in larger subject populations to provide statistically significant evidence of clinical efficacy and to further test for safety in an expanded subject population at multiple clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. These clinical trials may be done at trial sites outside the United States as long as the global sites are also representative of the U.S. population and the conduct of the study at global sites comports with FDA regulations and guidance, such as compliance with GCPs.

The FDA may require, or companies may pursue, additional clinical trials after a product is approved. These so-called Phase 4 studies may be made a condition to be satisfied after approval. The results of Phase 4 studies can confirm the effectiveness of a product candidate and can provide important safety information.

Clinical trials must be conducted under the supervision of qualified investigators in accordance with GCP requirements, which include the requirements that all research subjects provide their informed consent in writing for their participation in any clinical trial, and the review and approval of the study by an IRB. Investigators must also provide information to the clinical trial sponsors to allow the sponsors to make specified financial disclosures to the FDA. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the trial procedures, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated and a statistical analysis plan. Information about some clinical trials, including a description of the trial and trial results, must be submitted within specific timeframes to the National Institutes of Health for public dissemination on their ClinicalTrials.gov website. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if serious adverse events occur.

The manufacture of investigational drugs for the conduct of human clinical trials is subject to cGMP requirements. Investigational drugs and active pharmaceutical ingredients imported into the United States are also subject to regulation by the FDA relating to their labeling and distribution. Further, the export of investigational drug products outside of the United States is subject to regulatory requirements of the receiving country as well as U.S. export requirements under the FDCA. Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and the IRB and more frequently if serious adverse effects occur.

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

Special FDA Expedited Review and Approval Programs

The FDA has various programs, including fast track designation, breakthrough therapy designation, accelerated approval, and priority review, which are intended to expedite or simplify the process for the development and FDA review of drugs that are intended for the treatment of serious or life-threatening diseases or conditions and demonstrate the potential to address unmet medical needs. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

Under the fast track program, the sponsor of a new drug candidate may request that FDA designate the drug candidate for a specific indication as a fast track drug concurrent with, or after, the filing of the IND for the drug candidate. To be eligible for a fast track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if it will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy or safety factors. Fast track designation provides additional opportunities for interaction with the FDA's review team and may allow for rolling review of NDA components before the completed application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA. However, the FDA's time period goal for reviewing an application does not begin until the last section of the NDA is submitted. The FDA may decide to rescind the fast track designation if it determines that the qualifying criteria no longer apply.

In addition, a sponsor can request breakthrough therapy designation for a drug if it is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs designated as breakthrough therapies are eligible for intensive guidance from the FDA on an efficient drug development program, organizational commitment to the development and review of the product including involvement of senior managers, and, like fast track products, are also eligible for rolling review of the NDA. Both fast track and breakthrough therapy products may be eligible for accelerated approval and/or priority review, if relevant criteria are met.

Under the FDA's accelerated approval regulations, the FDA may approve a drug for a serious or life threatening illness that provides meaningful therapeutic benefit to patients over existing treatments based upon a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. A drug candidate approved on this basis is subject to rigorous post marketing compliance requirements, including the completion of Phase 4 or post approval clinical trials to confirm the effect on the clinical endpoint. Failure to conduct required post approval studies and regularly update FDA on their progress, or confirm a clinical benefit during post marketing studies, will allow the FDA to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated approval regulations are subject to prior review by the FDA.

Once an NDA is submitted for a product intended to treat a serious condition, the FDA may assign a priority review designation if FDA determines that the product, if approved, would provide a significant improvement in safety or effectiveness. A priority review means that the goal for the FDA to review an application is six months, rather than the standard review of ten months under the Prescription Drug User Fee Act, or PDUFA, guidelines. Under the current PDUFA performance goals, these six and ten month review periods are measured from the 60-day filing date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review from the date of submission.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. In addition, the manufacturer of an investigational drug for a serious or life-threatening disease is required to make available, such as by posting on its website, its policy on responding to requests for expanded access.

Furthermore, fast track designation, breakthrough therapy designation, accelerated approval and priority review do not change the standards for approval and may not ultimately expedite the development or approval process.

NDA Submission and Review by the FDA

Assuming successful completion of the required clinical and preclinical testing, among other items, the results of product development, including chemistry, manufacture and controls, nonclinical studies and clinical trials are submitted to the FDA, along with proposed labeling, as part of an NDA. The submission of an NDA requires payment of a substantial user fee to the FDA. These user fees must be filed at the time of the first submission of the application, even if the application is being submitted on a rolling basis. Fee waivers or reductions are available in some circumstances.

In addition, under the Pediatric Research Equity Act, an NDA or supplement to an NDA for a new active ingredient, indication, dosage form, dosage regimen or route of administration must contain data that are adequate to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective.

The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults or full or partial waivers from the pediatric data requirements.

The FDA must refer applications for drugs that contain active ingredients, including any ester or salt of the active ingredients, that have not previously been approved by the FDA to an advisory committee or provide in an action letter a summary of the reasons for not referring it to an advisory committee. The FDA may also refer drugs which present difficult questions of safety, purity, or potency to an advisory committee. An advisory committee is typically a panel that includes clinicians and other experts who review, evaluate, and make a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

The FDA reviews applications to determine, among other things, whether a product is safe and effective for its intended use and whether the manufacturing controls are adequate to assure and preserve the product's identity, strength, quality and purity. Before approving an NDA, the FDA will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities, including contract manufacturers and subcontracts, are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical trial sites to assure compliance with GCPs.

Once the FDA receives an application, it has 60 days to review the NDA to determine if it is substantially complete to permit a substantive review, before it accepts the application for filing. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under the goals and policies agreed to by the FDA under PDUFA, the FDA has set the review goal of 10 months from the 60-day filing date to complete its initial review of a standard NDA for a new molecular entity, or NME, and make a decision on the application. For priority review applications, the FDA has set the review goal of reviewing NME NDAs within six months of the 60-day filing date. Such deadlines are referred to as the PDUFA date. The PDUFA date is only a goal and the FDA does not always meet its PDUFA dates. The review process and the PDUFA date may also be extended if the FDA requests or the NDA sponsor otherwise provides additional information or clarification regarding the submission during the review period that amends the original application.

Once the FDA's review of the application is complete, the FDA will issue either a Complete Response Letter, or CRL, or approval letter. A CRL indicates that the review cycle of the application is complete, and the application is not ready for approval. A CRL generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing, or other information or analyses in order for the FDA to reconsider the application in the future. Even with the submission of additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA may issue an approval letter. An

approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

The FDA may delay or refuse approval of an NDA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product, or impose other conditions, including distribution restrictions or other risk management mechanisms. For example, the FDA may require a REMS as a condition of approval or following approval to mitigate any identified or suspected serious risks and ensure safe use of the drug. The FDA may prevent or limit further marketing of a product, or impose additional post-marketing requirements, based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes and additional labeling claims, are subject to further testing requirements, FDA notification and FDA review and approval. Further, should new safety information arise, additional testing, product labeling or FDA notification may be required.

If regulatory approval of a product is granted, such approval may entail limitations on the indicated uses for which such product may be marketed or may include contraindications, warnings, or precautions in the product labeling, which has resulted in a boxed warning. A boxed warning is the strictest warning put in the labeling of prescription drugs or drug products by the FDA when there is reasonable evidence of an association of a serious hazard with the drug. The FDA also may not approve the inclusion of all labeling claims sought by an applicant. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing regulatory standards is not maintained or if problems occur after the product reaches the marketplace. In addition, the FDA may require Phase 4 post-marketing studies to monitor the effect of approved products and may limit further marketing of the product based on the results of these post-marketing studies.

U.S. Post-Approval Requirements

Any products manufactured or distributed by us pursuant to FDA approvals are subject to continuing regulation by the FDA, including periodic reporting, product sampling and distribution, advertising, promotion, drug shortage reporting, compliance with any post-approval requirements imposed as a condition of approval such as Phase 4 clinical trials, REMS and surveillance, recordkeeping and reporting requirements, including adverse experiences.

After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual program fee requirements for approved products, as well as new application fees for supplemental applications with clinical data. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies and to list their drug products and are subject to periodic announced and unannounced inspections by the FDA and these state agencies for compliance with cGMPs and other requirements, which impose procedural and documentation requirements.

Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented, or FDA notification. FDA regulations also require investigation and correction of any deviations from cGMPs and specifications and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in withdrawal of marketing approval, mandatory revisions to the approved labeling to add new safety information or other limitations, imposition of post-market studies or clinical trials to assess new safety risks, or imposition of distribution or other restrictions under a REMS program, among other consequences.

The FDA closely regulates the marketing and promotion of drugs. A company can make only those claims relating to safety and efficacy that are consistent with the FDA approved labeling. Physicians, in their independent professional medical judgement, may prescribe legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. However, manufacturers and third parties acting on their behalf are prohibited from marketing or promoting drugs in a manner inconsistent with

the approved labeling. 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.

Failure to comply with any of the FDA's requirements could result in significant adverse enforcement actions. These include a variety of administrative or judicial sanctions, such as refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, imposition of a clinical hold or termination of clinical trials, warning letters, untitled letters, modification of promotional materials or labeling, product recalls, product seizures or detentions, refusal to allow imports or exports, total or partial suspension of production or distribution, debarment, injunctions, fines, consent decrees, corporate integrity agreements, refusals of government contracts and new orders under existing contracts, exclusion from participation in federal and state healthcare programs, restitution, disgorgement or civil or criminal penalties, including fines and imprisonment. It is also possible that failure to comply with the FDA's requirements relating to the promotion of prescription drugs may lead to investigations alleging violations of federal and state healthcare fraud and abuse and other laws, as well as state consumer protection laws. Any of these sanctions could result in adverse publicity, among other adverse consequences.

U.S. Marketing Exclusivity

The FDA provides periods of non-patent regulatory exclusivity, which provides the holder of an approved NDA limited protection from new competition in the marketplace for the innovation represented by its approved drug for a period of three or five years following the FDA's approval of the NDA. Five years of exclusivity are available to new chemical entities, or NCEs. An NCE is a drug that contains no active moiety that has been approved by the FDA in any other NDA. An active moiety is the molecule or ion, excluding those appended portions of the molecule that cause the drug to be an ester, salt, including a salt with hydrogen or coordination bonds, or other noncovalent, or not involving the sharing of electron pairs between atoms, derivatives, such as a complex (i.e., formed by the chemical interaction of two compounds), chelate (i.e., a chemical compound), or clathrate (i.e., a polymer framework that traps molecules), of the molecule, responsible for the therapeutic activity of the drug substance. During the exclusivity period, the FDA may not accept for review or approve an Abbreviated New Drug Application, or ANDA, a 505(b)(2) NDA submitted by another company that contains the previously approved active moiety. An ANDA or 505(b)(2) application, however, may be submitted one year before NCE exclusivity expires if a Paragraph IV certification is filed.

Regulation outside the United States

We will be subject to similar foreign laws and regulations concerning the development of our product candidates outside of the United States.

Other Healthcare Laws and Regulations

Our business activities, including but not limited to, research, sales, promotion, distribution, medical education and other activities are subject to regulation by numerous regulatory and law enforcement authorities in the United States in addition to the FDA, including the Department of Justice, the Department of Health and Human Services, or HHS, and its various divisions, including Centers for Medicare & Medicaid Services, or CMS, and the Health Resources and Services Administration, the Department of Veterans Affairs, the Department of Defense and state and local governments. Our business activities must comply with numerous healthcare laws and regulations, including those described below.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, the referral of an individual for, or purchasing, leasing, ordering, or arranging for the purchase, lease or order of, any good, facility, item or service reimbursable under Medicare, Medicaid or other federal healthcare programs. The Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers on the other hand. The term remuneration has been interpreted broadly to include anything of value. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Practices that involve

remuneration that may be alleged to be intended to induce prescribing, purchasing, or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Additionally, the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively the ACA), amended the intent requirement of the federal Anti-Kickback Statute, and other healthcare criminal fraud statutes, so that a person or entity no longer needs to have actual knowledge of the federal Anti-Kickback Statute, or the specific intent to violate it, to have violated the statute. The ACA also provided that a violation of the federal Anti-Kickback Statute is grounds for the government or a whistleblower to assert that a claim for payment of items or services resulting from such violation constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act, or FCA.

The federal civil and criminal false claims laws, including the FCA, and civil monetary penalties laws prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the U.S. federal government, including the Medicare and Medicaid programs, or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim or to avoid, decrease or conceal an obligation to pay money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes “any request or demand” for money or property presented to the U.S. government. In addition, manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. The FCA also permits a private individual acting as a “whistleblower” to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. FCA liability is potentially significant in the healthcare industry because the statute provides for treble damages and mandatory penalties. Government enforcement agencies and private whistleblowers have investigated pharmaceutical companies for or asserted liability under the FCA for a variety of alleged promotional and marketing activities, such as providing free products to customers with the expectation that the customers would bill federal programs for the products; providing consulting fees and other benefits to physicians to induce them to prescribe products; engaging in promotion for “off-label” uses; and submitting inflated best price information to the Medicaid Rebate Program.

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

Additionally, the federal Open Payments program pursuant to the Physician Payments Sunshine Act, created under Section 6002 of the ACA and its implementing regulations, requires certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with specified exceptions) to report annually information related to specified payments or other transfers of value provided to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other healthcare professionals (such as physicians assistants and nurse practitioners), and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually specified ownership and investment interests held by physicians and their immediate family members. Failure to submit timely, accurately and completely the required information for all payments, transfers of value and ownership or investment interests may result in civil monetary penalties.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, impose requirements relating to the privacy, security and transmission of individually identifiable health information held by covered entities and their business

associates and covered subcontractors. Among other things, HITECH makes HIPAA's security standards directly applicable to business associates, defined as independent contractors or agents of covered entities that create, receive, maintain, or transmit protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions.

Many states have also adopted laws similar to each of the above federal laws, which may be broader in scope and apply to items or services reimbursed by any third-party payor, including commercial insurers. We may also be subject to state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, and/or 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 and pricing information, 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.

Ensuring that our internal operations and business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations were found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, possible exclusion from government funded healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting obligations and oversight if we become subject to a corporate integrity agreement or other agreement to resolve allegations of non-compliance with these laws, and curtailment of our operations, any of which could substantially disrupt our operations. If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Coverage and Reimbursement

Our ability to commercialize any products successfully will also depend in part on the extent to which coverage and adequate reimbursement for the procedures utilizing our product candidates, performed by health care providers, once approved, will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, determine which procedures, and the products utilized in such procedures, they will cover and establish reimbursement levels. Assuming coverage is obtained for procedures utilizing a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who undergo procedures for the treatment of their conditions, and their treating physicians, generally rely on third-party payors to reimburse all or part of the costs associated with the procedures which utilize our products. Treating physicians are unlikely to use and order our products unless coverage is provided and the reimbursement is adequate to cover all or a significant portion of the cost of the procedures which utilize our products. Therefore, coverage and adequate reimbursement for procedures which utilize new products is critical to the acceptance of such new products. Coverage decisions may depend upon clinical and economic standards that disfavor new products when more established or lower cost therapeutic alternatives are already available or subsequently become available.

Government authorities and other third-party payors are developing increasingly sophisticated methods of cost containment, such as including price controls, restrictions on coverage and reimbursement and requirements for substitution of less expensive products and procedures. Government and other third-party payors are increasingly challenging the prices charged for health care products and procedures, examining the cost effectiveness of procedures, and the products used in such procedures, in addition to their safety and efficacy, and limiting or attempting to limit both coverage and the level of reimbursement. Further, no uniform policy requirement for coverage and reimbursement exists among third-party payors in the United States, which causes significant uncertainty related to

the insurance coverage and reimbursement of newly approved products, and the procedures which may utilize such newly approved products. Therefore, coverage and reimbursement can differ significantly from payor to payor and health care provider to health care provider. As a result, the coverage determination process is often a time-consuming and costly process that requires the provision of scientific and clinical support for the use of new products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

There may be significant delays in obtaining coverage and reimbursement for newly approved products, and coverage may be more limited than the purposes for which the product is approved by the FDA. Moreover, eligibility for coverage and reimbursement does not imply that a product, or the procedures which utilize such product, will be paid for in all cases or at a rate which the health care providers who purchase those products will find cost effective. Additionally, we expect pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, and additional legislative changes.

We cannot be sure that coverage and reimbursement will be available for any product that we commercialize, or the procedures which utilize such product, and, if reimbursement is available, what the level of reimbursement will be. Further, coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

Healthcare Reform Measures

The United States and some foreign jurisdictions are considering or have enacted a number of legislative and regulatory proposals designed to change the healthcare system. Among policy-makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

For example, the pharmaceutical industry in the United States has been affected by the passage of ACA, which was intended to contain healthcare costs, improve quality and expand access to healthcare, and included measures to change healthcare delivery, increase the number of individuals with insurance, ensure access to certain basic healthcare services, and contain the rising cost of care.

There have been executive, judicial and Congressional challenges and amendments to certain aspects of the ACA. For example, on August 16, 2022, the Inflation Reduction Act of 2022 (IRA) was signed into law, which among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA also eliminates the “donut hole” under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and creating a new manufacturer discount program. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and additional healthcare reform measures of the second Trump administration will impact the ACA.

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, included aggregate reductions of Medicare payments to providers of 2.0% per fiscal year, which went into effect in April 2013, and due to subsequent legislative amendments will remain in effect through 2032, unless additional U.S. Congressional action is taken. On March 11, 2021, the American Rescue Plan Act of 2021 was signed into law, which eliminated the statutory Medicaid drug rebate cap, previously set at 100% of a drug’s average manufacturer price, for single source and innovator multiple source drugs, beginning January 1, 2024. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors.

In addition, there has been particular and increasing legislative and enforcement interest in the United States with respect to drug pricing practices in recent years, particularly with respect to drugs that have been subject to relatively large price increases over relatively short time periods. Specifically, there have been several recent U.S. Congressional inquiries, Presidential executive orders 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, reduce the cost of prescription drugs under Medicare and reform government program reimbursement methodologies for pharmaceutical products. For example, the IRA, among other things, (1) directs HHS to negotiate the price of certain high-expenditure, single-source drugs that have been on the market for 7 years and biologics that have been on the market for 11 years covered under Medicare (the "Medicare Price Negotiation Program") and (2) imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation. These provisions began to take effect progressively in fiscal year 2023. On August 15, 2024, HHS announced the agreed-upon price of the first ten drugs that were subject to price negotiations, although the Medicare Drug Price Negotiation Program is currently subject to legal challenges. On January 17, 2025, HHS selected fifteen additional products covered under Part D for price negotiation in 2025. Each year thereafter more Part B and Part D products will become subject to the Medicare Drug Price Negotiation Program. Further, on December 7, 2023, an initiative to control the price of prescription drugs through the use of march-in rights under the Bayh-Dole Act was announced. On December 8, 2023, the National Institute of Standards and Technology published for comment a Draft Interagency Guidance Framework for Considering the Exercise of March-In Rights which for the first time includes the price of a product as one factor an agency can use when deciding to exercise march-in rights. While march-in rights have not previously been exercised, it is uncertain if that will continue under the new framework. It is unclear whether this executive order or similar policy initiatives will be implemented in the future.

The current Trump administration is pursuing policies to reduce regulations and expenditures across government including at HHS, the FDA, CMS and related agencies. These actions, presently directed by executive orders or memoranda from the Office of Management and Budget, may propose policy changes that create additional uncertainty for our business. These actions may include, for example, directives to reduce agency workforce, rescinding a Biden administration executive order tasking the Center for Medicare and Medicaid Innovation ("CMMI") to consider new payment and healthcare models to limit drug spending and eliminating the Biden administration's executive order that directed HHS to establishing an AI task force and developing a strategic plan. Additionally, in its June 2024 decision in *Loper Bright Enterprises v. Raimondo* ("Loper Bright"), the U.S. Supreme Court overturned the longstanding *Chevron* doctrine, under which courts were required to give deference to regulatory agencies' reasonable interpretations of ambiguous federal statutes. The *Loper Bright* decision could result in additional legal challenges to current regulations and guidance issued by federal agencies applicable to our operations, including those issued by the FDA. Finally, Congress may introduce and ultimately pass health care related legislation that could impact the drug approval process and make changes to the Medicare Drug Price Negotiation Program created under the IRA.

In addition, individual states in the United States have become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical 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. For example, on January 5, 2024, the FDA approved Florida's Section 804 Importation Program (SIP) proposal to import certain drugs from Canada for specific state healthcare programs. It is unclear how this program will be implemented, including which drugs will be chosen, and whether it will be subject to legal challenges in the United States or Canada. Other states have also submitted SIP proposals that are pending review by the FDA. Any such approved importation plans, when implemented, may result in lower drug prices for products covered by those programs. In the future, there will likely continue to be proposals relating to the reform of the U.S. healthcare system, some of which could further limit coverage and reimbursement of products.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the companies to maintain books and records that

accurately and fairly reflect all transactions of the companies, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Employees and Human Capital Resources

As of February 10, 2025, we had 129 regular full-time employees. On February 24, 2025, we implemented a reduction of our workforce by approximately 75%, which we anticipate being substantially complete by the fourth quarter of 2025.

None of our employees is represented by a labor union and we consider our employee relations to be good. We are committed to strict policies and procedures to maintain a safe work environment. The health and safety of our employees, patients and communities are of primary concern.

Our Core Values; Culture Drivers

Our core values are as follow:

- Patients come first.
- Respect and trust are core.
- We are empathetic and aim to bring out the best in each other.
- We are open, direct, and authentic.
- We embrace risk and thrive because of our courage to dream.

Our culture is reflected in our five culture drivers: results, resilience, collaboration, transformation and innovation. Through our core values and culture drivers, our employees work to meaningfully improve the lives of cancer patients through our science.

Our Focus and Commitment to Culture, Competitive Compensation and Employee Benefits

We rely on highly skilled and innovative professionals to conduct our research, development and business activities. Our ability to attract, retain and motivate employees is critical to the continued success of our business and it is our goal to offer competitive compensation and benefits, a collaborative and inclusive work environment, ongoing skills development initiatives, attractive career advancement opportunities, and a culture that rewards innovation and exceptional execution.

We are dedicated to building a talented team and strive to offer competitive compensation packages. In addition to competitive base salaries, the other competitive benefits that we provide to all employees include annual equity and cash incentive plans, comprehensive healthcare and insurance benefits, retirement benefits and an employee share purchase plan. The principal purposes of these employee benefits are to attract, retain and reward top talent in order to support our business objectives, assist in the achievement of our strategic goals and align the interests of employees with the interests of our shareholders. Beyond compensation and benefits, we believe that continued growth and development are essential to the professional well-being of our team. We seek to develop our employee talent within the organization through access to training, continuous learning programs, lunch & learn sessions, tuition reimbursement and other development initiatives. As our organization and capabilities grow, we aim to ensure we have provided our team members with the guidance and resources they need to develop as professionals and to support our business.

We routinely assess employee turnover, recruitment initiatives, employee engagement, compensation and benefits programs and other matters relevant to human capital management, and we review results with our Board of Directors on a periodic basis.

Corporate Information

We were incorporated under the Canada Business Corporations Act on September 6, 2016. Immediately prior to completion of our initial public offering on June 23, 2020, we were continued as a corporation under the Business Corporations Act (Québec), or QBCA. Our principal executive offices are located at 7171 Frederick-Banting, Building 2, Suite 270, St-Laurent, Quebec, H4S 1Z9 and our telephone number is 857-412-7018. In June 2017, we incorporated

our wholly-owned subsidiary, Repare Therapeutics USA Inc., a Delaware corporation, which is located at 101 Main Street, Suite 1650, Cambridge, Massachusetts 02142.

Available Information

We maintain an internet website at www.reparerx.com and make available free of charge through our website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Exchange Act of 1934 (the “Exchange Act”). We make these reports available through our website as soon as reasonably practicable after we electronically file such reports with, or furnish such reports to, the Securities and Exchange Commission, or the “SEC”. You can review our electronically filed reports and other information that we file with the SEC on the SEC’s web site at <http://www.sec.gov> and on SEDAR at <http://www.sedarplus.com>. In addition, we regularly use our website to post information regarding our business, product development programs and governance, and we encourage investors to use our website, specifically the sections title “Investors & Media” as a source of information about us.

The information on our website is not incorporated by reference into this Annual Report on Form 10-K and should not be considered to be part of this Annual Report on Form 10-K. Our website address is included in this Annual Report on Form 10-K as an inactive technical reference only.

Item 1A. Risk Factors.

Investing in our common shares involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this Annual Report, including our consolidated financial statements and the related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” before deciding whether to invest in our common shares. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations and prospects. In such an event, the market price of our common shares could decline and you may lose all or part of your investment.

Risks Related to Our Re-Prioritization and Strategic Review Process

Our corporate restructuring and the associated headcount reduction may not result in anticipated savings, could result in total costs and expenses that are greater than expected, could disrupt our business and could affect our ability to retain the employees required to consummate a strategic transaction.

In January 2025, we announced a re-alignment of resources and a re-prioritization of our clinical portfolio to focus on the continued advancement of our Phase 1 clinical programs, RP-3467 and RP-1664. In connection with the evaluation of strategic alternatives and in order to extend our resources, we implemented a restructuring plan in February 2025 that included reducing our workforce by approximately 75%, with remaining employees primarily focused on the continued advancement of RP-3467 and RP-1664.

We estimate that we will incur approximately \$8.7 million for retention, severance and other employee termination-related costs through the fourth quarter of 2025. We may not realize, in full or in part, the anticipated benefits, savings and improvements in our cost structure from our restructuring efforts due to unforeseen difficulties, delays or unexpected costs. If we are unable to realize the expected operational efficiencies and cost savings from the restructuring, our operating results and financial condition would be adversely affected. Furthermore, our restructuring plan may be disruptive to our operations. For example, our headcount reductions could yield unanticipated consequences, such as increased difficulties in implementing our business strategy, including retention of our remaining employees. Employee litigation related to the headcount reduction could be costly and prevent management from fully concentrating on the business.

Our workforce reduction activities may also yield unintended consequences, such as attrition beyond our reduction in workforce and reduced employee morale, which may cause remaining employees to seek alternative employment. Our ability to successfully complete a strategic transaction depends in part on our ability to retain certain of our remaining personnel. If we are unable to successfully retain our remaining personnel, we are at risk of a disruption to our exploration and consummation of a strategic alternative as well as business operations.

Risks Related to Our Financial Position and Capital Needs

Our limited operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.

We are a clinical-stage biopharmaceutical company founded in 2016, and our operations to date have focused primarily on raising capital, organizing and staffing our company, conducting discovery and research activities, identifying potential synthetic lethal, or SL, gene pairs, establishing and protecting our intellectual property portfolio including for our proprietary SNIPRx platform, developing and progressing our product candidates through preclinical studies and clinical development, including our ongoing Phase 1 clinical trials for RP-3467 and RP-1664, and establishing arrangements with third parties for the manufacture of initial quantities of our product candidates and component materials. We do not have any product candidates approved for sale and have not generated any revenue from product sales. Additionally, as an organization, we have not yet demonstrated an ability to successfully complete clinical development, obtain regulatory approvals, manufacture a commercial-scale product, or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful commercialization. Consequently, any predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history.

We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. In time, we will need to transition from a company with a research and

development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

Additionally, we expect our financial condition and operating results to continue to fluctuate from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance.

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

Investment in biopharmaceutical product development is a highly speculative undertaking and entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval and become commercially viable. We have no products approved for commercial sale and have not generated any product revenue to date, and we are devoting substantially all of our financial resources and efforts to research and development of our product candidates including RP-3467 and RP-1664. To date, we have primarily funded our operations through sales of equity securities, including our IPO in June 2020 and our follow-on offering in November 2021, as well as upfront payments from collaboration and research agreements.

We have incurred significant operating losses since our inception in 2016. Our net loss was \$84.7 million, and \$93.8 million for the years ended December 31, 2024 and 2023, respectively. As of December 31, 2024, we had an accumulated deficit of \$417.8 million. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. It could be several years, if ever, before we have a commercialized drug. We anticipate that our expenses will increase substantially if, and as, we:

- continue our ongoing and planned development of our product candidates, including our ongoing Phase 1 clinical trials of RP-3467, RP-1664 and lunresertib;
- initiate preclinical studies and clinical trials for any additional product candidates that we may pursue in the future, including our earlier-stage programs;
- seek to identify novel SL targets, develop small molecule inhibitors of these targets, nominate and develop additional product candidates and further expand our clinical product pipeline;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- build a portfolio of product candidates through the discovery, development, or acquisition or in-license of drugs, product candidates or technologies;
- establish a sales, marketing, manufacturing and distribution capability to commercialize any product candidate for which we may obtain marketing approval;
- maintain, protect and expand our intellectual property portfolio;
- hire additional clinical, regulatory and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts; and
- incur additional legal, accounting and other expenses associated with operating as a public company.

To become and remain profitable, we must succeed in developing and eventually commercializing products that generate significant revenue. This will require us to be successful in a range of challenging activities, including completing clinical trials of any product candidates that we may pursue, obtaining regulatory approval, procuring commercial-scale manufacturing, marketing, and selling any products for which we may obtain regulatory approval, as well as discovering or acquiring and then developing additional product candidates. We are only in the preliminary stages of some of these activities. We may never succeed in these activities and, even if we do, may never generate revenues that are significant enough to achieve profitability.

Because of the numerous risks and uncertainties associated with drug development, we are unable to accurately predict the timing or amount of expenses or when, or if, we will be able to achieve profitability. Our expenses could increase beyond our expectations if we are required by the U.S. Food and Drug Administration, or FDA, the EMA, or other regulatory authorities to perform studies in addition to those we currently expect, or if there are any delays in the initiation and completion of our clinical trials or the development of RP-3467, RP-1664, or any future product candidates.

Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable would decrease the value of our common shares and could impair our ability to raise capital, maintain our research and development efforts, expand our business, or continue our operations. A decline in the value of our common shares could also cause you to lose all or part of your investment.

We will require substantial additional funding to finance our operations. If we are unable to raise capital when needed, we could be forced to delay, reduce, or terminate certain of our product development programs or other operations.

To date, we have primarily funded our operations through sales of equity securities, including our IPO in June 2020 and our follow-on offering in November 2021, as well as upfront payments from collaboration and research agreements. We expect to spend substantial amounts to advance our product candidates into clinical development and to complete the clinical development of, seek regulatory approvals for and commercialize our product candidates, if approved. We will require additional capital, which we may raise through equity offerings, debt financings, marketing and distribution arrangements and other collaborations, milestone and royalty payments under our current or future strategic alliances and licensing arrangements or other sources to enable us to complete the development and potential commercialization of our product candidates. Furthermore, we have incurred and will continue to incur additional costs associated with operating as a public company. Adequate additional financing may not be available to us on acceptable terms, or at all. Weakness and volatility in the capital markets and the economy in general could limit our access to capital markets and increase our costs of borrowing. Our failure to raise capital as and when needed would have a negative effect on our financial condition and our ability to pursue our business strategy. In addition, attempting to secure additional financing may divert the time and attention of our management from day-to-day activities and harm our product candidate development efforts. If we are unable to raise capital when needed or on acceptable terms, we would be forced to delay, reduce, or eliminate certain of our research and development programs.

As of December 31, 2024, our cash and cash equivalents and marketable securities on hand was \$152.8 million. Taking into account the anticipated cost savings associated with the announced realignment of resources and a reprioritization of our portfolio, we believe that our cash, cash equivalents and marketable securities, will enable us to fund our operating expenses and capital expenditure requirements into late-2027. However, we will need to obtain substantial additional funding in connection with our continuing operations and planned activities. Our future capital requirements will depend on many factors, including:

- the continuation of our ongoing and planned development of our product candidates, including our ongoing Phase 1 clinical trials of RP-3467, RP-1664 and lunresertib;
- the timing, costs, progress and results of our ongoing clinical trials, including our ongoing Phase 1 clinical trials of RP-3467, RP-1664 and lunresertib;
- the progress of preclinical development and possible clinical trials of our current earlier-stage programs;
- the scope, progress, results and costs of our research programs and preclinical development of other product candidates that we may pursue;
- the development requirements of other product candidates that we may pursue;
- our headcount growth and associated costs as we expand our research and development and establish a commercial infrastructure;
- the timing and amount of milestone and royalty payments that we are required to make or eligible to receive under our current or future collaboration agreements;

- the cost of establishing a sales, marketing and distribution infrastructure to commercialize any product candidates for which we may obtain marketing approval;
- the outcome, timing and cost of meeting regulatory requirements established by the FDA, EMA and other regulatory authorities;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we receive marketing approval;
- the cost of expanding, maintaining and enforcing our intellectual property portfolio, including filing, prosecuting, defending and enforcing our patent claims and other intellectual property rights;
- the cost of defending potential intellectual property disputes, including patent infringement actions brought by third parties against us or any of our product candidates;
- the effect of competing technological and market developments;
- the cost and timing of completion of commercial-scale manufacturing activities;
- the extent to which we partner our programs, acquire or in-license other product candidates and technologies or enter into additional strategic collaborations;
- the revenue, if any, received from commercial sales of RP-3467, RP-1664 and any future product candidates for which we or our collaborators receive marketing approval;
- the addition of physical infrastructure to support our research and development; and
- the costs of operating as a public company.

Identifying potential product candidates and conducting preclinical testing and clinical trials is a time-consuming, expensive, and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, RP-1664, RP-3467 and any future product candidates, if approved, may not achieve commercial success. Our commercial revenues, if any, will be derived from sales of products that we do not expect to be commercially available for several years, if at all. Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce, or altogether terminate our research and development programs or future commercialization efforts.

Raising additional capital will cause dilution to our shareholders, restrict our operations, or require us to relinquish rights to our product candidates.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through public or private equity or debt financings, third-party funding, marketing, and distribution arrangements, as well as other collaborations, strategic alliances and licensing arrangements, or any combination of these approaches. We do not have any committed external source of funds. 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 of these securities may include liquidation or other preferences that adversely affect your rights as a shareholder. Debt and equity financings, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as redeeming our shares, making investments, incurring additional debt, making capital expenditures, declaring dividends or placing limitations on our ability to acquire, sell or license intellectual property rights.

If we raise additional capital through future collaborations, strategic alliances, or third-party licensing arrangements, we may have to relinquish certain valuable rights to our intellectual property, future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us. If we are unable to raise additional capital when needed, we may be required to delay, limit, reduce or terminate our clinical development or future commercialization efforts, or grant rights to develop and market product candidates that we would otherwise develop and market ourselves.

Risks Related to the Development of Our Product Candidates

We are very early in our development efforts. If we are unable to advance our product candidates into and through clinical development, obtain regulatory approval and ultimately commercialize any of our product candidates, or experience significant delays in doing so, our business will be materially harmed.

We have no products approved for sale and our initial clinical product candidates, RP-1664 and PR-3467 are still in the early stages of clinical development and will require additional clinical development, regulatory review and approval in each jurisdiction in which we intend to market it, access to sufficient commercial manufacturing capacity, and significant sales and marketing efforts before we can generate any revenue from product sales. Our ability to generate product revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful clinical development and eventual commercialization, by us or our collaborators of RP-3467, RP-1664 and one or more of our other product candidates. The success of our product candidates will depend on several factors, including the following:

- successful completion of preclinical studies, including the identification of clinical candidates for each of our preclinical programs;
- approval of investigational new drug, or IND, applications for our planned or future clinical trials;
- acceptance by the FDA, EMA or foreign regulatory authority of our development strategy;
- successful initiation of clinical trials;
- successful patient enrollment in and completion of clinical trials;
- safety, tolerability and efficacy profiles for our product candidates that are satisfactory to the FDA, EMA or any foreign regulatory authority for marketing approval;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- making arrangements with third-party manufacturers, or establishing manufacturing capabilities, for both clinical and commercial supplies of our product candidates, if any product candidates are approved;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- acceptance of our products, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other cancer therapies;
- obtaining and maintaining third-party coverage and adequate reimbursement and patients' willingness to pay out-of-pocket in the absence of such coverage and adequate reimbursement; and
- maintaining a continued acceptable safety profile of products following approval.

There is no guarantee that the results obtained in current preclinical studies, our ongoing open-label Phase 1 clinical trials of RP-3467, RP-1664 or any future clinical trials of any product candidate will be sufficient to obtain regulatory approval or marketing authorization for such product candidate.

Many of these risks are beyond our control, including the risks related to clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing, and sales efforts of any future collaborator. If we are unable to develop, receive regulatory approval for, or successfully commercialize our current or future product candidates, or if we experience delays as a result of any of these risks or otherwise, our business could be materially harmed.

We may not be able to file INDs or IND amendments to commence additional clinical trials on the timelines we expect, and even if we are able to, the FDA may not permit us to proceed.

We have filed INDs for RP-3467 and RP-1664, but we may not be able to file INDs for our other product candidates on the timelines we expect. For example, we may experience manufacturing delays or other delays with IND-enabling studies. Moreover, we cannot be sure that submission of an IND will result in the FDA allowing further clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate clinical trials. Additionally, even if such regulatory authorities agree with the design and implementation of the clinical trials set forth in an IND, we cannot guarantee that such regulatory authorities will not change their requirements in the future. These considerations also apply to new clinical trials we may submit as amendments to existing INDs or to a new IND. Any failure to file INDs on the timelines we expect or to obtain regulatory approvals for our trials may prevent us from completing our clinical trials or commercializing our products on a timely basis, if at all.

The successful development of targeted therapeutics, including our portfolio of SL small molecule inhibitors, as well as any related diagnostics, is highly uncertain.

Successful development of targeted therapeutics, such as our portfolio of SL small molecule inhibitors, as well as any related diagnostics, is highly uncertain and is dependent on numerous factors, many of which are beyond our control. Our SNIPRx platform is based on new technologies and methods relating to precision target and biomarker identification, screening, and validation. While we believe our clinical development approach will eventually provide validation of our SNIPRx platform, we have not, to date, sought regulatory approval for any therapeutics developed through our platform. As such, it is difficult to accurately predict the developmental challenges we may incur for our current and future product candidates as we proceed through product discovery, identification, preclinical studies, and clinical trials.

Our SNIPRx platform is novel and may not be effective at identifying SL targets for product candidates. We therefore cannot provide any assurance that we will be able to successfully identify product candidates, advance any of these additional product candidates or diagnostics for their associated biomarkers through the development process. Most of our proposed targets are unproven in clinical trials and there is no guarantee that the preclinical data will translate into a clinical relevance of such novel biomarkers and targets.

Targeted therapeutics that appear promising in the early phases of development may fail to reach the market for several reasons, including:

- research or preclinical studies may show our targeted small molecule inhibitors or antagonists to be less effective than desired or to have harmful or problematic side effects or toxicities;
- failure to accurately identify, validate or develop clinically relevant biomarkers for our targeted therapeutic product candidates;
- trial results may show our targeted therapeutic small molecule inhibitors to be less effective than expected based on preclinical studies (e.g., a clinical trial could fail to meet its primary endpoint(s)) or to have unacceptable side effects or toxicities;
- the failure to receive the necessary regulatory approvals or a delay in receiving such approvals. Among other things, such delays may be caused by slow enrollment in clinical trials, patients dropping out of trials, length of time to achieve trial endpoints, additional time requirements for data analysis, preparation of IND applications, discussions with the FDA, an FDA request for additional preclinical or clinical data, or unexpected safety or manufacturing issues;
- manufacturing costs, formulation issues, pricing or reimbursement issues, or other factors that may make our targeted therapeutic small molecule inhibitors uneconomical;
- the size of the patient population that have disease with the appropriate biomarkers for which we are developing our product candidates may not be large enough to support commercial viability of our product candidates, if approved;

- proprietary rights of others and their competing products and technologies that may prevent our targeted therapeutic small molecule inhibitors, or the diagnostics for biomarkers associated with such small molecule inhibitors, from being commercialized;
- the development of alternative treatments or evolution in the standard of care for our targets may make our drugs less attractive; and
- our approach of using any of our product candidates in combination with other agents, including standard of care agents, may not materialize due to overlapping toxicity, high cost or an inability to replicate preclinical results in clinical trials.

As a result of these factors, it is more difficult for us to predict the time and cost of product candidate development, and we cannot predict whether the application of our SNIPRx platform will result in the identification, development, and regulatory approval of any products.

We may incur unexpected costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates.

We may not commercialize, market, promote or sell any product candidate without obtaining marketing approval from the FDA, EMA, or other comparable regulatory authority, and we may never receive such approvals. It is impossible to predict when or if any of our product candidates will prove effective or safe in humans and will receive regulatory approval. Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must complete preclinical development and then conduct extensive clinical trials to demonstrate the safety and efficacy of our product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. Competing clinical trials for the same populations targeted as ours may limit our enrollment, or the results of competitors with similar technologies and products may falsely undermine our SNIPRx platform. A failure of one or more clinical trials can occur at any stage of testing. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

We or our collaborators may experience numerous unforeseen events prior to, during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize RP-3467, RP-1664 and any future product candidates, including:

- delays in reaching a consensus with regulatory authorities on design or implementation of our clinical trials;
- regulators or institutional review boards, or IRBs, may not authorize us or our investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site;
- delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate, patients may drop out of these clinical trials at a higher rate than we anticipate or fail to return for post-treatment follow-up or we may fail to recruit suitable patients to participate in a trial;
- delays in our combination trials due to lack of access to the drugs with which we are testing our product candidates;
- clinical trials of our product candidates may produce negative or inconclusive results;
- imposition of a clinical hold by regulatory authorities as a result of a serious adverse event, concerns with a class of product candidates or after an inspection of our clinical trial operations, trial sites or manufacturing facilities;
- occurrence of serious adverse events associated with the product candidate that are viewed to outweigh its potential benefits;

- external business disruptions affecting the initiation, patient enrollment, development and operation of our clinical trials, including a public health emergency, such as the COVID-19 pandemic;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols; or
- we may decide, or regulators may require us, to conduct additional clinical trials or abandon product development programs.

Any inability to successfully complete preclinical and clinical development could result in additional costs to us or impair our ability to generate revenue from future drug sales or other sources. In addition, if we make manufacturing or formulation changes to our product candidates, we may need to conduct additional testing to bridge our modified product candidate to earlier versions. Clinical trial delays could also shorten any periods during which we may have the exclusive right to commercialize our product candidates, if approved, or allow our competitors to bring competing drugs to market before we do, which could impair our ability to successfully commercialize our product candidates and may harm our business, financial condition, results of operations and prospects.

Additionally, if the results of our clinical trials are inconclusive or if there are safety concerns or serious adverse events associated with our product candidates, we may:

- be delayed in obtaining marketing approval, if at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings;
- be subject to additional post-marketing testing requirements;
- be required to perform additional clinical trials to support approval or be subject to additional post-marketing testing requirements;
- have regulatory authorities withdraw, or suspend, their approval of the drug or impose restrictions on its distribution in the form of a modified risk evaluation and mitigation strategy, or REMS;
- be subject to the addition of labeling statements, such as warnings or contraindications;
- be sued; or
- experience damage to our reputation.

Our product development costs will also increase if we experience delays in testing or obtaining marketing approvals. We do not know whether any of our preclinical studies or clinical trials will begin as planned, need to be restructured or be completed on schedule, if at all.

Clinical trials are very expensive, time consuming and difficult to design and implement.

Our product candidates will require clinical testing before we are prepared to submit a new drug application, or NDA, or equivalent application required in another jurisdiction for regulatory approval. We cannot predict with any certainty if or when we might submit an NDA or equivalent application required in another jurisdiction for regulatory approval for any of our product candidates or whether any such application will be approved by the FDA or other comparable regulatory authority, as applicable. Human clinical trials are very expensive and difficult to design and implement, in part because they are subject to rigorous regulatory requirements. For instance, the FDA or other comparable regulatory authority may not agree with our proposed endpoints for any future clinical trial of our product candidates, which may delay the commencement of our clinical trials. In addition, we may not succeed in developing and validating disease-relevant clinical endpoints based on insights regarding biological pathways for the diseases we are studying. The clinical trial process is also time consuming. We estimate that the successful completion of clinical trials for RP-3467, RP-1664, and any future product candidates will take several years to complete. Furthermore, failure can occur at any stage, and we could encounter problems that cause us to abandon or repeat clinical trials.

Success in preclinical studies or earlier clinical trials may not be indicative of results in future clinical trials and we cannot assure you that any ongoing, planned or future clinical trials will lead to results sufficient for the necessary regulatory approvals.

We initiated a Phase 1 clinical trial of RP-1664 in the first quarter of 2024 and initiated a Phase 1 clinical trial of RP-3467 in the fourth quarter of 2024. Success in preclinical testing and earlier clinical trials does not ensure that later clinical trials will generate the same results or otherwise provide adequate data to demonstrate the efficacy and safety of a product candidate. Preclinical tests and Phase 1 and Phase 2 clinical trials are primarily designed to test safety, to study pharmacokinetics and pharmacodynamics and to understand the side effects of product candidates at various doses and schedules. Success in preclinical studies and earlier clinical trials does not ensure that later efficacy trials will be successful, nor does it predict final results. Frequently, product candidates that have shown promising results in early clinical trials have subsequently suffered significant setbacks in later clinical trials. In addition, the design of a clinical trial can determine whether its results will support approval of a product and flaws in the design of a clinical trial may not become apparent until the clinical trial is well advanced. We have limited experience designing clinical trials and may be unable to design and execute a clinical trial to support regulatory approval. There is a high failure rate for drugs and biologic products proceeding through clinical trials. Many companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in late-stage clinical trials even after achieving promising results in preclinical testing and earlier-stage clinical trials. These setbacks have been caused by, among other things, preclinical findings made while clinical trials were underway or safety or efficacy observations made in clinical trials, including previously unreported adverse events.

In addition, differences in trial design between early-stage clinical trials and later-stage clinical trials make it difficult to extrapolate the results of earlier clinical trials to later clinical trials. The early trials will be single arm and not comparing the results with existing (or new) standard of care. Moreover, clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in clinical trials have nonetheless failed to obtain marketing approval of their products or had to withdraw the product after comparator or later stage trials delivered results. The changing regulatory landscape may require larger and randomized trials that will take a longer time to perform.

Additionally, some of our trials may be open-label studies, where both the patient and investigator know whether the patient is receiving the investigational product candidate or an existing approved drug, introducing bias in early interpretation of the results. Most typically, open-label clinical trials test only the investigational product candidate and sometimes do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. In addition, open-label clinical trials may be subject to an “investigator bias” where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. Therefore, it is possible that positive results observed in open-label trials will not be replicated in later placebo-controlled trials. Further, as our trials are in patients who encountered multiple therapy failures previously, interpretation of results may be biased both towards lesser activity and at the same time towards a population that is able to tolerate and possibly benefit from novel therapies. Hence interpretation of any results from this population may not directly translate to our eventual pivotal trial population that will likely be more homogenous and less pretreated.

Data obtained from preclinical and clinical activities are subject to varying interpretations, which may delay, limit, or prevent regulatory approval. Moreover, as the development of the SL pair, ATM-ATR, is still early, any clinical validation of the SL approach to treating cancer may or may not validate our approach. In addition, we may experience regulatory delays or rejections as a result of many factors, including due to changes in regulatory policy during the period of our product candidate development. Any such delays could negatively impact our business, financial condition, results of operations and prospects.

Interim, “top-line” and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim, “top-line” or preliminary data from our ongoing and planned clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical

outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or “top-line” data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Differences between preliminary or interim data and final data could significantly harm our business prospects and may cause the trading price of our common shares to fluctuate significantly.

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

The length of time necessary to complete clinical trials and to submit an application for marketing approval for a decision by a regulatory authority may be difficult to predict for targeted therapeutic small molecule inhibitors, in large part because of the limited regulatory history associated with them. The clinical trial requirements of the FDA and other comparable foreign regulatory authorities and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the product candidate. There is a limited history of multi-tumor indications, and any regulatory approvals may be conditioned upon confirmatory trials with clinical endpoints such as survival. Such trials are not only more expensive to conduct but take several years to complete. Increasing pressure from reimbursement bodies may result in poor (or no) acceptance of early trials for reimbursement. Except for certain PARP inhibitors, no products based on SL have been approved to date by regulators. As a result, the regulatory approval process for product candidates such as ours is uncertain and may be more expensive and take longer than the approval process for product candidates based on other, better known or more extensively studied technologies. It is difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for our product candidates in either the United States or other comparable regions of the world or how long it will take to commercialize our product candidates. Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product candidate to market would adversely affect our business, financial condition, results of operations and prospects.

Our 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 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 our product candidates may not be sufficient to support the submission of an NDA to the FDA 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 significantly change in a manner rendering our clinical data insufficient for approval.

Prior to obtaining approval to commercialize a product candidate in the United States or elsewhere, we or our collaborators must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA or comparable foreign regulatory agencies, that such product candidates are safe and effective for their intended uses. Results from nonclinical studies and clinical trials can be interpreted in different ways. Even if we

believe the nonclinical or clinical data for our product candidates are promising, such data may not be sufficient to support approval by the FDA or comparable foreign regulatory authorities. The FDA may also require us to conduct additional preclinical studies or clinical trials for our product candidates either prior to or post-approval, or it may object to elements of our clinical development program. Depending on the extent of these or any other studies required by the FDA or comparable foreign regulatory authorities, approval of any regulatory approval applications that we submit may be delayed by several years, or may require us to expend significantly more resources than we have available.

Of the large number of potential products in development, only a small percentage successfully complete the FDA or comparable foreign regulatory approval processes and are commercialized. The lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, results of operations and prospects.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may impose significant limitations in the form of narrow indications, warnings, or a post-marketing risk management strategy such as a REMS or the equivalent in another jurisdiction. Regulatory authorities 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 materially harm the commercial prospects for our product candidates.

Synthetic lethality represents an emerging class of precision medicine targets, and negative perceptions of the efficacy, safety, or tolerability of this class of targets, including any that we develop, could adversely affect our ability to conduct our business, advance our product candidates or obtain regulatory approvals.

Aside from PARP inhibitors, such as Lynparza, Rubraca, Zejula and Talzenna, no small molecule inhibitor therapeutics for SL in DNA damage have been approved to date by the FDA or other comparable regulators. Adverse events in future clinical trials of our product candidates or in clinical trials of others developing similar products and the resulting publicity, as well as any other adverse events in the field of SL, or other products that are perceived to be similar to SL, such as those related to gene therapy or gene editing, could result in a decrease in the perceived benefit of one or more of our programs, increased regulatory scrutiny, decreased confidence by patients and CROs in our product candidates, and less demand for any product that we may develop. Our pipeline of SL small molecule inhibitor product candidates could result in a greater quantity of reportable adverse events or other reportable negative clinical outcomes, manufacturing reportable events or material clinical events that could lead to clinical delays or holds by the FDA or applicable regulatory authority or other clinical delays, any of which could negatively impact the perception of one or more of our SL programs, as well as our business as a whole. In addition, responses by U.S. federal or foreign governments to negative public perception may result in new legislation or regulations that could limit our ability to develop any product candidates or commercialize any approved products, obtain, or maintain regulatory approval, or otherwise achieve profitability. More restrictive statutory regimes, government regulations, or negative public opinion would have an adverse effect on our business, financial condition, results of operations, and prospects, and may delay or impair the development of our product candidates and commercialization of any approved products or demand for any products we may develop.

Difficulty in enrolling patients could delay or prevent clinical trials of our product candidates. We may find it difficult to enroll patients in our ongoing and planned clinical trials with the genomic alterations that these trials are designed to target.

Identifying and qualifying patients to participate in clinical trials of our product candidates is critical to our success. The timing of completion of our clinical trials depends in part on the speed at which we can recruit patients to participate in testing our product candidates, and we may experience delays in our clinical trials if we encounter difficulties in enrollment. We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. In particular, because we are focused on patients with specific genomic alterations identified by our STEP² screens, our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. Certain genes identified by our STEP² screens may not yet be included in commercially available panels or CLIA-validated panels used in large academic centers. We cannot be

certain how many patients will have each of the genomic alterations that the applicable product candidate is designed to target or that the number of patients enrolled for each mutation will suffice for regulatory approval and inclusion of each such mutation in the approved label. We may be unsuccessful in our efforts to work with our clinical partners to identify patients who are eligible for our clinical trials.

In addition, some of our competitors have ongoing clinical trials for product candidates that treat the same or similar populations as our product candidates, and patients who would otherwise be eligible for our clinical trials may instead enroll in clinical trials of our competitors' product candidates.

We are engaging third parties to develop patient selection tools for use in our clinical trials, but such third parties may not be successful in developing such tools, furthering the difficulty in identifying patients with the targeted genomic alterations for our clinical trials and risking enrollment into our trials. Next Generation Sequencing panels may not include genes required for screening for our clinical trials or may not be broadly commercially available. The optimal method of diagnosis is not yet known and the availability of third party payment for diagnostic tests may limit our clinical trials as well. Further, if we are unable to include patients with the targeted genomic alterations, this could compromise our ability to seek participation in FDA's expedited review and development programs or otherwise seek to accelerate clinical development and regulatory timelines.

The enrollment of patients further depends on many factors, including:

- the risks and benefits of the product candidate under trial;
- the availability and efficacy of competing therapies and clinical trials;
- the availability of genetic sequencing information for patient tumors so that we can identify patients with the targeted genomic alterations;
- the patient referral practices of physicians;
- the proximity of patients to clinical trial sites;
- the design of the clinical trial;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the ability of any current or future license partner to execute on its development commitments and responsibilities for any product candidate to which it has acquired development rights in a given geography;
- our ability to obtain and maintain patient consents;
- reporting of the preliminary results of any of our clinical trials; and
- the risk that patients enrolled in clinical trials will drop out of the clinical trials before clinical trial completion.

Our clinical trials will compete with other clinical trials for product candidates that are in the same therapeutic areas as our product candidates, and this competition will reduce the number and types of patients available to us because some patients who might have opted to enroll in our clinical trials may instead opt to enroll in a clinical trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we expect to conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical trial sites. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment and because our product candidates have not been tested in humans before, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy, rather than enroll patients in any future clinical trial.

If we experience delays in the completion of, or termination of, any clinical trial of our product candidates, the commercial prospects of our product candidates will be harmed, and our ability to generate product revenue from any of these product candidates could be delayed or prevented.

Our product candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial potential or result in significant negative consequences following any potential marketing approval.

Serious adverse events or undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA, EMA, or other authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects, toxicities, or unexpected characteristics, including death.

If unacceptable side effects or deaths arise in the development of our product candidates, we, the IRBs at the institutions in which our studies are conducted, the FDA or any comparable foreign regulatory authority could suspend or terminate our clinical trials or the FDA or other regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. Undesirable side effects or deaths in clinical trials with our product candidates may cause the FDA or comparable foreign regulatory authorities to place a clinical hold on the associated clinical trials, to require additional studies, or otherwise to delay or deny approval of our product candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our product candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in patient injury or death. Any of these occurrences may harm our business, financial condition, and prospects significantly.

If any of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by any such product, including during any long-term follow-up observation period recommended or required for patients who receive treatment using our products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may suspend, limit or withdraw approvals of such product, or seek an injunction against its manufacture and distribution;
- we may be required to recall a product or change the way such product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product;
- regulatory authorities may require additional warnings on the label, such as a boxed warning or contraindication, or issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings or other safety information about the product;
- we may be required to implement a REMS or create a medication guide outlining the risks of such side effects for distribution to patients;
- the product could become less competitive;
- a strategic collaborator for the product may choose to terminate its agreement and compromise our ability to commercialize such product in the collaborator's geography;
- we may be subject to fines, injunctions, or the imposition of civil or criminal penalties;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

We conduct clinical trials for product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials.

We currently conduct clinical trials outside the United States, including our RP-1664 LIONS trial with a clinical trial site in Denmark and our lunresertib and Debio 0123 combination trial with clinical trial sites in Canada, the United Kingdom and Denmark. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA or comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the U.S. population and U.S. medical practice; and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to good clinical practice, or GCP, regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. Results for our clinical trials may differ by jurisdiction as a result of varying standards of care or local restrictions on reimbursement from third-party payors for clinical trials, thereby affecting the willingness of the FDA or any comparable foreign regulatory authority to accept such data. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which could be costly and time-consuming, and which may result in product candidates that we may develop not receiving approval for commercialization in the applicable jurisdiction.

If it is determined that companion diagnostics are needed, we may be unable to successfully develop companion diagnostics for biomarkers that enable patient selection, or experience significant delays in doing so, we may not realize the full commercial potential of our product candidates.

A key component of our strategy includes the use of diagnostic tools to guide patient selection of our product candidates. In some cases, a diagnostic tool may be commercially available, for example, on a tumor-profiling panel. If not already commercially available, we may be required to seek collaborations with diagnostic companies for the development of diagnostics for biomarkers associated with our product candidates. We may have difficulty in establishing or maintaining such development relationships, and we will face competition from other companies in establishing these collaborations. Furthermore, even if a diagnostic is commercially available, we may not be able to obtain reimbursement for its use without obtaining regulatory approval.

There are also several risks associated with biomarker identification and validation. We, in collaboration with any diagnostic partners, may not be able to identify predictive biomarkers or pharmacodynamic biomarkers for one or more of our programs. We may not be able to validate potential biomarkers (e.g., certain genomic alterations) or their functional relevance preclinically in relevant *in vitro* or *in vivo* models. Data analytics and information from databases that we rely on for identifying or validating some of our biomarker-target relationships may not accurately reflect potential patient populations or may be based on incorrect methodology. Potential biomarkers, even if validated preclinically, may not be functionally validated in human clinical trials.

If it is determined that companion diagnostics are needed, we may, in collaboration with these parties, be unable to successfully develop companion diagnostics for our product candidates, or experience delays in doing so, which may adversely affect the development of our product candidates. The development of companion diagnostic products requires a significant investment of working capital, and may not result in any future income. This could require us to raise additional funds, which could dilute our current investors or impact our ability to continue our operations in the future.

There are also risks associated with diagnostics that are commercially available, including that we may not have access to reliable supply for such diagnostics.

The failure to obtain required regulatory approvals for any companion diagnostic tests that may be required and that we may pursue may prevent or delay approval of our product candidates. Moreover, the commercial success of any of our product candidates may be tied to the regulatory approval, market acceptance and continued availability of a companion diagnostic.

The FDA and other comparable regulatory authorities regulate *in vitro* companion diagnostics as medical devices that will likely be subject to clinical trials in conjunction with the clinical trials for our product candidates, and which will require regulatory clearance or approval prior to commercialization. If it is determined that companion diagnostics are needed, we plan to collaborate with third parties for the development, testing and manufacturing of these companion diagnostics, the application for and receipt of any required regulatory clearances or approvals, and the commercial supply of these companion diagnostics. Our third-party collaborators may fail to obtain the required regulatory clearances or approvals, which could prevent or delay approval of our product candidates. In addition, the commercial success of any of our product candidates may be tied to and dependent upon the receipt of required regulatory clearances or approvals of the companion diagnostic.

For example, the genomic alterations our compounds are addressing, such as ATM loss and CCNE1 amplification, are uncommon genetic alterations in tumors, or their subsets and their prognostic significance has not been fully validated for the patient populations that we are targeting. Such development risk contributes to the costs that we may need to bear in validating the alterations as well as the optimal method of diagnostic screening for our clinical trial populations.

Even if a companion diagnostic is approved, we will rely on the continued ability of any third-party collaborator to make the companion diagnostic commercially available to us on reasonable terms in the relevant geographies. Market acceptance of the companion diagnostic may be low as a result of the cost and complexity of utilizing such companion diagnostic. Furthermore, if commercial tumor profiling panels are not able to be updated to include additional tumor-associated genes, or if clinical oncologists do not incorporate molecular or genetic sequencing into their clinical practice, we may not be successful in developing or commercializing our existing product candidates or any future product candidates.

We intend to pursue the development of certain of our product candidates in combination with other therapies, and regulatory approval, safety or supply issues with these other therapies may delay or prevent the development and approval of our product candidates.

We have explored and may continue to explore the use of our product candidates in combination with other therapies, including those that are not yet approved. For example, our Phase 1 MYTHIC clinical trial is evaluating lunresertib in combination with Debio 0123 as part of an ongoing 50/50 cost sharing collaboration with Debiopharm. If we choose to develop a product candidate for use in combination with an approved therapy, we are subject to the risk that the FDA or comparable foreign regulatory authorities could revoke approval of, or that safety, efficacy, manufacturing, or supply issues could arise with, the therapy used in combination with our product candidate. If the therapies we use in combination with our product candidates are replaced as the standard of care, the FDA or comparable foreign regulatory authorities may require us to conduct additional clinical trials, or we may not be able to obtain adequate reimbursement from third-party payors. The occurrence of any of these risks could result in our product candidates, if approved, being removed from the market or being less successful commercially.

Where we develop a product candidate for use in combination with a therapy that has not been approved by the FDA or comparable foreign regulatory authorities, we will not be able to market our product candidate for use in combination with such an unapproved therapy, unless and until the unapproved therapy receives regulatory approval. These unapproved therapies face the same risks described with respect to our product candidates currently in development, including serious adverse effects and delays in their clinical trials. In addition, other companies may also develop their products or product candidates in combination with the unapproved therapies with which we are developing our product candidates for use in combination. Any setbacks in these companies' clinical trials, including the emergence of serious adverse effects, may delay or prevent the development and approval of our product candidates.

If the FDA or comparable foreign regulatory authorities do not approve or revoke their approval of, or if safety, efficacy, manufacturing, or supply issues arise with, therapies we choose to evaluate in combination with any of our

product candidates, we may be unable to obtain regulatory approval of or to commercialize such product candidates in combination with these therapies.

Risks Related to the Commercialization of Our Product Candidates

We have never commercialized a product candidate and may experience delays or unexpected difficulties in obtaining regulatory approval for our current or future product candidates for our initial or potential additional indications.

We have never obtained regulatory approval for, or commercialized, a drug. It is possible that the FDA may refuse to accept any or all of our planned NDAs for substantive review or may conclude after review of our data that our application is insufficient to obtain regulatory approval for any product candidates. If the FDA does not approve any of our planned NDAs, it may require that we conduct additional costly clinical, nonclinical, or manufacturing validation studies before it will reconsider our applications. Depending on the extent of these or any other FDA-required studies, approval of any NDA or other application that we submit may be significantly delayed, possibly for several years, or may require us to expend more resources than we have available. Any failure or delay in obtaining regulatory approvals would prevent us from commercializing our current or future product candidates, generating revenues, and achieving and sustaining profitability. It is also possible that additional studies, if performed and completed, may not be considered sufficient by the FDA to approve any NDA or other application that we submit. If any of these outcomes occur, we may be forced to abandon the development of our product candidates, which would materially adversely affect our business and could potentially cause us to cease operations. We face similar risks for our applications in foreign jurisdictions.

We currently have no marketing and sales organization and have no experience as a company in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, if approved, we may not be able to generate product revenue.

We currently have no sales, marketing or distribution capabilities and have no experience in marketing products. We intend to develop an in-house marketing organization and sales force, which will require significant capital expenditures, management resources and time. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train, and retain marketing and sales personnel.

If we are unable or decide not to establish internal sales, marketing, and distribution capabilities, we will pursue arrangements with third-party sales, marketing, and distribution collaborators regarding the sales and marketing of our products, if approved. However, there can be no assurance that we will be able to establish or maintain such arrangements on favorable terms or if at all, or if we are able to do so, that these third-party arrangements will provide effective sales forces or marketing and distribution capabilities. Any revenue we receive will depend upon the efforts of such third parties, which may not be successful. We may have little or no control over the marketing and sales efforts of such third parties and our revenue from product sales may be lower than if we had commercialized our product candidates ourselves. We also face competition in our search for third parties to assist us with the sales and marketing efforts of our product candidates.

There can be no assurance that we will be able to develop in-house sales and distribution capabilities or establish or maintain relationships with third-party collaborators to commercialize any product in the United States or overseas.

Due to our limited resources and access to capital, we must, and have in the past decided to, prioritize development of certain product candidates over other potential product candidates. These decisions may prove to have been wrong and may adversely affect our ability to develop our own programs, our attractiveness as a commercial partner and may ultimately have an impact on our commercial success.

Because we have limited resources and access to capital to fund our operations, we must decide which product candidates to pursue and the amount of resources to allocate to each. Our decisions concerning the allocation of research, collaboration, management, and financial resources toward particular proprietary molecules in our library, product candidates or therapeutic areas may not lead to the development of viable commercial products and may divert resources away from better opportunities. Similarly, our decisions to delay, terminate or collaborate with third parties

in respect of certain product development programs may also prove not to be optimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the market potential of our product candidates or misread trends in the biopharmaceutical industry, in particular for our lead product candidate, our business, financial condition and results of operations could be materially adversely affected.

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

The use of precision medicines as a potential cancer treatment is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers and others in the medical community. Various factors will influence whether our product candidates are accepted in the market, including:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, cancer treatment centers and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over current or future alternative treatments;
- our ability to demonstrate the advantages of our product candidates over other cancer medicines;
- the prevalence and severity of any side effects;
- the prevalence and severity of any side effects for other precision medicines and public perception of other precision medicines;
- product labeling or product insert requirements of the FDA or comparable foreign regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or comparable foreign regulatory authorities;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment, including with respect to diagnostic tools for our product candidates, and the availability of testing for patient selection;
- the pricing of our products, if approved, and the availability of adequate coverage and reimbursement by third-party payors and government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage or adequate reimbursement by third-party payors and government authorities;
- 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 our product candidates are approved for commercialization but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue.

In addition, although our product candidates differ in certain ways from other precision medicine approaches, serious adverse events or deaths in other clinical trials involving precision medicines, even if not ultimately attributable to our product or product candidates, could result in increased government regulation, unfavorable public perception and publicity, potential regulatory delays in the testing or licensing of our product candidates, stricter labeling requirements for those product candidates that are licensed, and a decrease in demand for any such product candidates.

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.

The market opportunities for our product candidates may be relatively small as it will be limited to those patients who are ineligible for or have failed prior treatments and our estimates of the prevalence of our target patient populations may be inaccurate.

Cancer therapies are sometimes characterized as first line, second line, or third line, and the FDA often approves new therapies initially only for a particular line of use. When cancer is detected early enough, first line therapy is sometimes adequate to cure the cancer or prolong life without a cure. Whenever first line therapy, usually chemotherapy, antibody drugs, tumor-targeted small molecules, hormone therapy, radiation therapy, surgery, or a combination of these, proves unsuccessful, second line therapy may be administered. Second line therapies often consist of more chemotherapy, radiation, antibody drugs, tumor-targeted small molecules, or a combination of these. Third line therapies can include chemotherapy, antibody drugs and small molecule tumor-targeted therapies, more invasive forms of surgery and new technologies. We expect to initially seek approval of our product candidates in most instances at least as a second or third line therapy. Subsequently, for those product candidates that prove to be sufficiently safe and beneficial, if any, we would expect to seek approval as a second line therapy and potentially as a first line therapy, but there is no guarantee that our product candidates, even if approved as a second or third or subsequent line of therapy, would be approved for an earlier line of therapy, and, prior to any such approvals, we may have to conduct additional clinical trials.

We rely on various sources, including published literature and public or proprietary databases, to ascertain an estimate of the number of patients having particular genomic alterations, such as mutations, deletions or fusions. The determinable prevalence may vary depending on the source and quality of the underlying data and in some cases, insufficient data or poorly curated data may impact our ability to accurately estimate the prevalence of our target patient populations for each indication and in the aggregate across multiple indications both in the clinical trial setting, as well as in the commercial setting, if our product is approved. If the market opportunities for our product candidates are smaller than we estimate, our business, financial position, results of operations and prospects may be harmed. In addition, upon treatment with our product candidates, patients may have or develop resistance to our product candidates, reducing the addressable patient population and duration of treatment.

We face substantial competition, which may result in others developing or commercializing drugs before or more successfully than us.

The biopharmaceutical industry is characterized by intense competition and rapid innovation. Our competitors may be able to develop other compounds or drugs that are able to achieve similar or better results. Our potential competitors include major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies and universities and other research institutions. Many of our competitors have substantially greater financial, technical, and other resources, such as a larger research and development team and experienced marketing and manufacturing organizations and well-established sales forces. Smaller or early-stage companies may also prove to be significant competitors, particularly as they develop novel approaches to treating disease indications that our product candidates are also focused on treating. Established pharmaceutical companies may also invest heavily to accelerate discovery and development of novel therapeutics or to in-license novel therapeutics that could make the product candidates that we develop obsolete. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. 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, either alone or with collaborative partners, may succeed in developing, acquiring, or licensing on an exclusive basis drug or biologic products that are more effective, safer, more easily commercialized or less costly than our product candidates or may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products. We believe the key competitive factors that will affect the development and commercial success of our product candidates are efficacy, safety, tolerability, reliability, convenience of use, price, and reimbursement.

We face competition from segments of the pharmaceutical, biotechnology and other related markets that pursue the development of precision oncology therapies for patients with genetically-defined cancers. Several

biopharmaceutical companies, including Loxo Oncology, Inc. (part of Eli Lilly and Company), Blueprint Medicines Corporation, SpringWorks Therapeutics, Inc., Black Diamond Therapeutics, Inc., Deciphera Pharmaceuticals, Inc., Tango Therapeutics, Inc., Zentalis Pharmaceuticals, Inc., Turning Point Therapeutics, Inc. (acquired by Bristol-Myers Squibb), and Exelixis, Inc. are developing precision oncology medicines. In addition, we may face competition from companies developing product candidates that are based on SL, including AstraZeneca, GlaxoSmithKline, Pfizer, Bayer, Merck Serono, Schrodinger, Inc., Exelixis, Inc., Artios Pharma Ltd., IDEAYA Biosciences, Inc, Impact Therapeutics, Aprea Therapeutics, Shanghai De Novo Pharmatech, Tide Pharmaceutical, Acrivon Therapeutics, Biocity Biopharma, Oric Pharmaceuticals, Schrodinger, Treadwell Therapeutics, Varsity Pharma, Breakpoint Therapeutics, Rhizen Pharmaceuticals AG, Sincere Pharmaceutical, Shouyao Holdings, and MOMA Therapeutics.

We anticipate that we will continue to face intense and increasing competition as new treatments enter the market and advanced technologies become available. There can be no assurance that our competitors are not currently developing, or will not in the future develop, products that are equally or more effective or are more economically attractive than any of our current or future product candidates. Competing products may gain faster or greater market acceptance than our products, if any, and medical advances or rapid technological development by competitors may result in our product candidates becoming non-competitive or obsolete before we are able to recover our research and development and commercialization expenses. If we or our product candidates do not compete effectively, it may have a material adverse effect on our business, financial condition, and results of operations.

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

If any of our product candidates are approved for commercialization, we may seek to enter into agreements with third parties to market them in certain jurisdictions outside the United States. We expect that we would be subject to additional risks related to international pharmaceutical operations, including:

- different regulatory requirements for drug approvals and rules governing drug commercialization in foreign countries;
- reduced protection for intellectual property rights;
- foreign reimbursement, pricing and insurance regimes;
- unexpected changes in tariffs, export controls, sanctions, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenues, and other obligations incident to doing business in another country;
- business interruptions resulting from geopolitical actions, including war, such as the military conflict involving Russia and Ukraine as well as the Middle-East conflicts, and terrorism, natural disasters including earthquakes, typhoons, floods and fires, or from economic or political instability, or public health emergencies, boycotts, curtailment of trade and other business restrictions;
- greater difficulty with enforcing our contracts;
- potential noncompliance with the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act 2010 and similar anti-bribery and anticorruption laws in other jurisdictions; and
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad.

As an organization, we have no prior experience in these areas. In addition, there are complex regulatory, tax, labor and other legal requirements imposed by individual countries in Europe with which we may need to comply. If we are unable to successfully manage the challenges of international expansion and operations, our business and operating results could be harmed.

Coverage and adequate reimbursement may not be available for our product candidates, which could make it difficult for us to sell profitably or at all, if approved.

Market acceptance and sales of any product candidates that we commercialize, if approved, will depend in part on the extent to which reimbursement for these drugs and related treatments will be available from third-party payors, including government health administration authorities, managed care organizations and other private health insurers. Our ability to commercialize any products successfully will also depend in part on the extent to which coverage and adequate reimbursement for the procedures utilizing our product candidates, performed by health care providers, once approved, will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, determine which procedures, and the products utilized in such procedures, they will cover and establish reimbursement levels. Assuming coverage is obtained for procedures utilizing a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who undergo procedures for the treatment of their conditions, and their treating physicians, generally rely on third-party payors to reimburse all or part of the costs associated with the procedures which utilize our products. Treating physicians are unlikely to use and order our products unless coverage is provided and the reimbursement is adequate to cover all or a significant portion of the cost of the procedures which utilize our products. Therefore, coverage and adequate reimbursement for procedures which utilize new products is critical to the acceptance of such new products. Coverage decisions may depend upon clinical and economic standards that disfavor new products when more established or lower cost therapeutic alternatives are already available or subsequently become available.

While no uniform policy for coverage and reimbursement exists in the United States, third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies. However, decisions regarding the extent of coverage and amount of reimbursement to be provided for any product candidates that we develop will be made on a payor-by-payor basis. Therefore, one payor's determination to provide coverage for a drug does not assure that other payors will also provide coverage, and adequate reimbursement, for the drug. Additionally, a third-party payor's decision to provide coverage for a therapy does not imply that an adequate reimbursement rate will be approved. Each payor determines whether or not it will provide coverage for a therapy, what amount it will pay the manufacturer for the therapy, and on what tier of its formulary it will be placed. The position on a payor's list of covered drugs, or formulary, generally determines the co-payment that a patient will need to make to obtain the therapy and can strongly influence the adoption of such therapy by patients and physicians. Patients who are prescribed treatments for their conditions and providers prescribing such services generally rely on third-party payors to reimburse all or part of the associated healthcare costs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products.

Third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. We cannot be sure that coverage and reimbursement will be available for any drug that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Inadequate coverage and reimbursement may impact the demand for, or the price of, any drug for which we obtain marketing approval. Additionally, we or our collaborators may develop companion diagnostic tests for use with our product candidates. Companion diagnostic tests require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological products. Similar challenges to obtaining coverage and reimbursement, applicable to pharmaceutical products, will apply to companion diagnostics. If coverage and adequate reimbursement are not available, or are available only to limited levels, we may not be able to successfully commercialize any product candidates that we develop.

Even if we are successful in obtaining regulatory approval, commercial success of any approved products will also depend in large part on the availability of insurance coverage and adequate reimbursement from third-party payors, including government payors, such as the Medicare and Medicaid programs, and managed care organizations, which may be affected by existing and future healthcare reform measures designed to reduce the cost of healthcare. Third-party payors could require us to conduct additional studies, including post-marketing studies related to the cost-effectiveness of a product, to qualify for reimbursement, which could be costly and divert our resources. Further, coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. If government and other healthcare payors were not to provide adequate insurance coverage and reimbursement levels for any of our products once approved, market acceptance and commercial success would be limited.

We may become exposed to costly and damaging liability claims, either when testing our product candidates in the clinic or at the commercial stage, and our product liability insurance may not cover all damages from such claims.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of biopharmaceutical products. Currently, we have no products that have been approved for commercial sale; however, the current and future use of product candidates by us and our collaborators in clinical trials, and the potential sale of any approved products in the future, may expose us to liability claims. These claims might be made by patients who use the product, healthcare providers, pharmaceutical companies, our collaborators, or others selling such products. Any claims against us, regardless of their merit, could be difficult and costly to defend and could materially adversely affect the market for our product candidates or any prospects for commercialization of our product candidates. Although the clinical trial process is designed to identify and assess potential side effects, it is always possible that a product, even after regulatory approval, may exhibit unforeseen side effects. If any of our product candidates were to cause adverse side effects during clinical trials or after approval of the product candidate, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use our product candidates. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our products due to negative public perception;
- injury to our reputation;
- withdrawal of clinical trial participants or difficulties in recruiting new trial participants;
- initiation of investigations by regulators;
- costs to defend or settle the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenues from product sales; and
- the inability to commercialize any of our product candidates, if approved.

Although we believe we maintain adequate product liability insurance for our product candidates, it is possible that our liabilities could exceed our insurance coverage. We intend to expand our insurance coverage to include the sale of commercial products if we obtain marketing approval for any of our product candidates. However, we may not be able to maintain insurance coverage at a reasonable cost or obtain insurance coverage that will be adequate to satisfy any liability that may arise. If a successful product liability claim or series of claims is brought against us for uninsured liabilities or in excess of insured liabilities, our assets may not be sufficient to cover such claims and our business operations could be impaired.

Should any of the events described above occur, this could have a material adverse effect on our business, financial condition, and results of operations.

Risks Related to Regulatory Matters

Even if we obtain FDA approval for any of our product candidates in the United States, we may never obtain approval for or commercialize any of them in any other jurisdiction, which would limit our ability to realize their full market potential.

In order to market any products in any particular jurisdiction, we must establish and comply with numerous and varying regulatory requirements on a country-by-country basis regarding safety and efficacy.

Approval by the FDA in the United States does not ensure approval by regulatory authorities in other countries or jurisdictions. However, the failure to obtain approval in one jurisdiction may negatively impact our ability to obtain approval elsewhere. In addition, clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not guarantee regulatory approval in any other country.

Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and increased costs for us and require additional preclinical studies or clinical trials which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our products in those countries. We do not have any product candidates approved for sale in any jurisdiction, including in international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approvals in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of any product we develop will be unrealized.

Even if we receive regulatory approval of any 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 our product candidates.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities. In addition, we will be subject to continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA, other marketing application, and previous responses to inspection observations. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, and quality control.

Any regulatory approvals that we receive for our product candidates may be subject to limitations on the approved indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS program as a condition of approval of our product candidates, which could entail requirements for long-term patient follow-up, 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. Comparable foreign regulatory authorities may also have programs similar to REMS. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, we will have to comply with requirements including submissions of safety and other post-marketing information and reports and registration.

The FDA may impose consent decrees or withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with our 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 revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our products, 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 license approvals;
- product seizure or detention or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising, and promotion of products that are placed on the market. Products may be promoted only for the approved indications and in accordance with the provisions of the approved label. 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. The policies of the FDA and of comparable foreign regulatory authorities may change and additional government regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates. For example, the U.S. Supreme Court's June 2024 decision in *Loper Bright Enterprises v. Raimondo* overturned the longstanding *Chevron* doctrine, under which courts were required to give deference to regulatory agencies' reasonable interpretations of ambiguous federal statutes. The *Loper* decision could result in additional legal challenges to regulations and decisions issued by federal agencies, including the FDA, on which we rely. Any such legal challenges, if successful, could have a material impact on our business. Additionally, the *Loper* decision may result in increased regulatory uncertainty, inconsistent judicial interpretations, and other impacts to the agency rulemaking process, any of which could adversely impact our business and operations. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. Certain policies of any administration may impact our business and industry. 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.

Our relationships with customers, physicians, and third-party payors are subject, directly or indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, transparency, health information privacy and security laws, and other healthcare laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties.

Healthcare providers and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, principal investigators, consultants, customers, and third-party payors subject us to various federal and state fraud and abuse laws and other healthcare laws that may constrain the business or financial arrangements and relationships through which we research, sell, market, and distribute our product candidates, if we obtain marketing approval. Such laws include:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce

or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under U.S. federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the U.S. federal civil and criminal false claims laws, including the civil False Claims Act, which can be enforced by private individuals on behalf of the government through civil whistleblower or qui tam actions, and civil monetary penalties laws prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, to the U.S. federal government, claims for payment or approval that are false or fraudulent, knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. federal government. Manufacturers can be held liable under the False Claims Act even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. In addition, the government may assert that a claim including items and services resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the Health Insurance Portability and Accountability Act, or HIPAA, which created additional federal civil and criminal liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items or services. Similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or HITECH, and their implementing regulations, which impose certain obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information without appropriate authorization by covered entities subject to the rule, such as health plans, healthcare clearinghouses and certain healthcare providers and their business associates, independent contractors of a covered entity that perform certain services involving the use or disclosure of individually identifiable health information, as well as their covered subcontractors. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys’ fees and costs associated with pursuing federal civil actions;
- the Federal Food, Drug, and Cosmetic Act, which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices;
- the U.S. Public Health Service Act, which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product;
- the U.S. Physician Payments Sunshine Act and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children’s Health Insurance Program, with specific exceptions, to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to certain payments and other transfers of value to physicians (currently defined to include doctors, dentists, optometrists, podiatrists and chiropractors), other healthcare professionals (such as physicians assistants and nurse practitioners), and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- analogous U.S. state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug

manufacturers to file reports relating to drug pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; 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 often are not preempted by HIPAA, thus complicating compliance efforts; and

- analogous laws in other jurisdictions including, but not limited to, laws relating to interactions with government officials, privacy laws, transparency laws, laws relating to reimbursement, competition, consumer protection laws, laws relating to the marketing of health products and other healthcare-related laws.

In addition, we are also subject to federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm customers.

Ensuring that our business arrangements with third parties comply with applicable healthcare laws and regulations will likely be costly. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participating in government funded healthcare programs, such as Medicare and Medicaid, 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, contractual damages, reputational harm and the curtailment or restructuring of our operations.

If the physicians or other providers or entities with whom we expect to do business are found not to be in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Even if resolved in our favor, litigation or other legal proceedings relating to healthcare laws and regulations may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common shares. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development, manufacturing, sales, marketing, or distribution activities. Uncertainties resulting from the initiation and continuation of litigation or other proceedings relating to applicable healthcare laws and regulations could have a material adverse effect on our ability to compete in the marketplace.

Enacted and future healthcare legislation may increase the difficulty and cost for us to progress our clinical programs and obtain marketing approval of and commercialize our product candidates and may affect the prices we may set.

In the United States and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations. For example, in March 2010, the Patient Protection and Affordable Care Act, or ACA, was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers.

There have been judicial, Congressional and executive branch challenges and amendments to certain aspects of the ACA. For example, on August 16, 2022, the Inflation Reduction Act of 2022, or IRA, was signed into law, which among other things, extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. The IRA also eliminates the “donut-hole” under the Medicare Part D program beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and through a newly established manufacturer discount program. It is possible that the ACA will be subject to judicial or Congressional

challenges in the future. It is also unclear how any such challenges and additional healthcare reform measures of the second Trump administration will impact the ACA and our business.

In addition, 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, led to aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect in April 2013 and, due to subsequent legislative amendments to the statute will remain in effect until 2032 unless additional action is taken by Congress. On March 11, 2021, the American Rescue Plan Act of 2021 was signed into law, which eliminated the statutory Medicaid drug rebate cap, previously set at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, beginning January 1, 2024. These new laws or any other similar laws introduced in the future may result in additional reductions in Medicare and other health care funding, which could negatively affect our customers and accordingly, our financial operations.

Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several U.S. Congressional inquiries and proposed and enacted federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, and review the relationship between pricing and manufacturer patient programs. In addition, the IRA, among other things, (1) directs HHS to negotiate the price of certain high-expenditure, single-source drugs that have been on the market for at least 7 years and biologics that have been on the market for at least 11 years covered under Medicare (the "Medicare Drug Price Negotiation Program") and (2) imposes rebates under Medicare Part B and Medicare Part D to penalize price increases that outpace inflation. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. HHS has and will continue to issue and update guidance as these programs are implemented. These provisions began to take effect progressively starting in fiscal year 2023. On August 15, 2024, HHS announced the agreed-upon reimbursement price for the first ten drugs that were subject to price negotiations, although the Medicare Drug Price Negotiation Program is currently subject to legal challenges. On January 17, 2025, HHS selected fifteen additional products covered under Part D for price negotiations in 2025. Each year thereafter more Part B and Part D products will become subject to the Medicare Drug Price Negotiation Program. Further, on December 7, 2023, an initiative to control the price of prescription drugs through the use of march-in rights under the Bayh-Dole Act was announced. On December 8, 2023, the National Institute of Standards and Technology published for comment a Draft Interagency Guidance Framework for Considering the Exercise of March-In Rights which for the first time includes the price of a product as one factor an agency can use when deciding to exercise march-in rights. While march-in rights have not previously been exercised, it is uncertain if that will continue under the new framework. It is unclear whether the models will be utilized in any health reform measures in the future.

The current Trump administration is pursuing policies to reduce regulations and expenditures across government including at HHS, the FDA, CMS and related agencies. These actions, presently directed by executive orders or memoranda from the Office of Management and Budget, may propose policy changes that create additional uncertainty for our business. These actions may, for example, include directives to reduce agency workforce, rescinding a Biden administration executive order tasking the Center for Medicare and Medicaid Innovation ("CMMI") to consider new payment and healthcare models to limit drug spending and eliminating the Biden administration's executive order that directed HHS to establishing an AI task force and developing a strategic plan. Additionally, in its June 2024 decision in *Loper Bright Enterprises v. Raimondo* ("Loper Bright"), the U.S. Supreme Court overturned the longstanding *Chevron* doctrine, under which courts were required to give deference to regulatory agencies' reasonable interpretations of ambiguous federal statutes. The *Loper Bright* decision could result in additional legal challenges to current regulations and guidance issued by federal agencies applicable to our operations, including those issued by the FDA. Congress may introduce and ultimately pass health care related legislation that could impact the drug approval process and make changes to the Medicare Drug Price Negotiation Program created under the IRA.

We expect additional U.S. federal healthcare reform measures will be adopted in the future, any of which could limit the amounts that the U.S. federal government will pay for healthcare products and services, which could result in reduced demand for our product candidates or additional pricing pressures.

We may face potential liability if we obtain identifiable patient health information from clinical trials sponsored by us.

Most healthcare providers, including certain research institutions from which we may obtain patient health information, are subject to privacy and security regulations promulgated under HIPAA, as amended by the HITECH. We are not currently classified as a covered entity or business associate under HIPAA and thus are not directly subject to its requirements or penalties. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding-and-abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a HIPAA-covered healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information. In addition, in the future, we may maintain sensitive personally identifiable information, including health information, that we receive throughout the clinical trial process, in the course of our research collaborations, and directly from individuals (or their healthcare providers) who may enroll in patient assistance programs if we choose to implement such programs. As such, we may be subject to state laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health information protected by HIPAA.

The EU General Data Protection Regulation, or GDPR, also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross-border data transfers. The GDPR may increase our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR will be a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European activities. Further, the United Kingdom's decision to leave the European Union, referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear how data transfers to and from the United Kingdom will be regulated now that the United Kingdom has left the European Union.

Furthermore, certain health privacy laws, data breach notification laws, consumer protection laws and genetic testing laws may apply directly to our operations and/or those of our collaborators and may impose restrictions on our collection, use and dissemination of individuals' health information. Patients about whom we or our collaborators may obtain health information, as well as the providers who may share this information with us, may have statutory or contractual rights that limit our ability to use and disclose the information. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws. Claims that we have violated individuals' privacy rights or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

If we or third-party CMOs, CROs or other contractors or consultants fail to comply with applicable federal, state/provincial or local regulatory requirements, we could be subject to a range of regulatory actions that could affect our or our contractors' ability to develop and commercialize our therapeutic candidates and could harm or prevent sales of any affected therapeutics that we are able to commercialize, or could substantially increase the costs and expenses of developing, commercializing and marketing our therapeutics. Any threatened or actual government enforcement action could also generate adverse publicity and require that we devote substantial resources that could otherwise be used in other aspects of our business. Increasing use of social media could give rise to liability, breaches of data security or reputational damage.

Additionally, we are subject to state and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope and may apply regardless of the payor.

If we or our third-party manufacturers and suppliers fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our research and development activities involve the use of biological and hazardous materials and produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance. In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development, or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties, or other sanctions.

Although we maintain workers' compensation insurance to cover us for costs and expenses, we may incur due to injuries to our employees resulting from the use of hazardous materials or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific biological waste or hazardous waste insurance coverage, workers compensation or property and casualty and general liability insurance policies that include coverage for damages and fines arising from biological or hazardous waste exposure or contamination.

We are subject to U.S. and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws, and anti-money laundering laws and regulations. Compliance with these legal standards could impair our ability to compete in domestic and international markets. We can face criminal liability and other serious consequences for violations, which can harm our business.

We are subject to export control and import, anti-corruption, and anti-money laundering laws and regulations, including the U.S. Export Administration Regulations, U.S. Customs regulations, various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Controls, the U.S. Foreign Corrupt Practices Act of 1977, as amended, or FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Trade controls may restrict or prohibit altogether the sale or supply of certain products and services to certain governments, persons, entities, countries, and territories, including those that are the target of comprehensive sanctions, unless there are license exceptions that apply or specific licenses are obtained. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, contractors, and other collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. We may engage third parties for clinical trials outside of the United States, to sell our products abroad once we enter a commercialization phase, and/or to obtain necessary permits, licenses, patent registrations, and other regulatory approvals. We may also have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities, and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of such activities. Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm, and other consequences.

Risks Related to Our Dependence on Third Parties

We rely, and expect to continue to rely, on third parties, including independent clinical investigators, contracted laboratories and CROs, to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We have relied upon and plan to continue to rely upon third parties, including independent clinical investigators, contracted laboratories and third-party CROs, to conduct our preclinical studies and clinical trials in accordance with applicable regulatory requirements and to monitor and manage data for our ongoing preclinical and clinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies and trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on these third parties does not relieve us of our regulatory responsibilities. We and our third party contractors and CROs are required to comply with good laboratory practices, or GLPs, as applicable, and GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for all of our products in clinical development. Regulatory authorities enforce these GLPs and GCPs through periodic inspections of laboratories conducting GLP studies, trial sponsors, principal investigators, and trial sites. If we, our investigators, or any of our CROs or contracted laboratories fail to comply with applicable GLPs and GCPs, 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 preclinical studies or clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our preclinical studies or clinical trials comply with applicable GLP or GCP regulations. In addition, our clinical trials must be conducted with product, including biologic product, produced in compliance with applicable cGMP regulations. Our failure to comply with these regulations may require us to repeat preclinical studies or clinical trials, which would delay the regulatory approval process.

Further, these laboratories, investigators and CROs are not our employees and we will not be able to control, other than by contract, the amount of resources, including time, which they devote to our product candidates and clinical trials. If independent laboratories, investigators or CROs fail to devote sufficient resources to the development of our product candidates, or if their performance is substandard, it may delay or compromise the prospects for approval and commercialization of any product candidates that we develop. In addition, the use of third-party service providers requires us to disclose our proprietary information to these parties, which could increase the risk that this information will be misappropriated.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if we make a general assignment for the benefit of our creditors or if we are liquidated.

If any of our relationships with these third-party laboratories, CROs or clinical investigators terminate, we may not be able to enter into arrangements with alternative laboratories, CROs or investigators or to do so in a timely manner or on commercially reasonable terms. If laboratories, CROs or clinical investigators 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 preclinical or clinical protocols, regulatory requirements or for other reasons, our preclinical or clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. As a result, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenues could be delayed.

Switching or adding additional laboratories or CROs (or investigators) involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new laboratory or CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our contracted laboratories and CROs, there can be no assurance that we will not encounter similar challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition, and results of operations.

In addition, clinical investigators may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the preclinical study or clinical trial, the integrity of the data generated at the applicable preclinical study or clinical trial site may be questioned and the utility of the preclinical study or clinical trial itself may be jeopardized, which could result in the delay or rejection by the FDA. Any such delay or rejection could prevent us from commercializing our clinical-stage product candidate or any future product candidates.

We rely on third parties to supply and manufacture our product candidates, and we expect to continue to rely on third parties to manufacture our products, if approved. The development of such product candidates and the commercialization of any products, if approved, could be stopped, delayed, or made less profitable if any such third party fails to provide us with sufficient quantities of product candidates or products or fails to do so at acceptable quality levels or prices or fails to maintain or achieve satisfactory regulatory compliance.

We do not currently have the infrastructure or capability internally to manufacture all our product candidates for use in the conduct of our preclinical studies and clinical trials or for commercial supply, if our products are approved. We rely on, and expect to continue to rely on, contract manufacturing organizations (CMOs). Any replacement of our CMOs could require significant effort and expertise because there may be a limited number of qualified CMOs. This could be particularly problematic where we rely on a single-source supplier. Reliance on third-party providers may expose us to more risk than if we were to manufacture our product candidates ourselves. We are dependent on our CMOs for the production of our product candidates in accordance with relevant regulations, such as cGMP, which includes, among other things, quality control, quality assurance and the maintenance of records and documentation. Moreover, many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting product development activities that could harm our competitive position.

Our third-party manufacturers may be subject to damage or interruption from, among other things, fire, natural or man-made disaster, war, disease outbreaks or public health pandemics, power loss, telecommunications failure, unauthorized entry, computer viruses, denial-of-service attacks, acts of terrorism, human error, vandalism or sabotage, financial insolvency, bankruptcy, and similar events. For example, the COVID-19 pandemic impacted our supply chain, in particular our vendors' ability to find staff, and may in the future impact our manufacturing activities.

If we were to experience an unexpected loss of supply of or if any supplier were unable to meet our demand for any of our product candidates, we could experience delays in our research or ongoing and planned clinical trials or commercialization. We could be unable to find alternative suppliers of acceptable quality, in the appropriate volumes who could meet our timelines at an acceptable cost. Moreover, our suppliers are often subject to strict manufacturing requirements and rigorous testing requirements, which could limit or delay production. The long transition periods necessary to switch manufacturers and suppliers, if necessary, could significantly delay our preclinical studies, our clinical trials, and the commercialization of our products, if approved, which could materially adversely affect our business, financial condition, and results of operation.

In complying with the applicable manufacturing regulations of the FDA and comparable foreign regulatory authorities, we and our third-party suppliers must spend significant time, money, and effort in the areas of design and development, testing, production, record-keeping, and quality control to assure that the products meet applicable specifications and other regulatory requirements. The failure to comply with these requirements could result in an enforcement action against us, including the seizure of products and shutting down of production. We and any of these third-party suppliers may also be subject to audits by the FDA and comparable foreign regulatory authorities. If any of our third-party suppliers fails to comply with cGMP or other applicable manufacturing regulations, our ability to develop and commercialize the products could suffer significant interruptions. We face risks inherent in relying on CMOs, as any disruption, such as a fire, natural hazards, vandalism, or an outbreak of contagious disease affecting the CMO or any supplier of the CMO could significantly interrupt our manufacturing capability. In case of a disruption, we will have to establish alternative manufacturing sources. This would require substantial capital on our part, which we may not be able to obtain on commercially acceptable terms or at all. Additionally, we would likely experience months of manufacturing delays as the CMO builds or locates replacement facilities and seeks and obtains necessary regulatory approvals. If this occurs, we will be unable to satisfy manufacturing needs on a timely basis, if at all.

Our current and future collaborations will be important to our business. If we are unable to enter into new collaborations as appropriate, or if these collaborations are not successful, our business could be adversely affected.

A part of our strategy is to strategically evaluate and, as deemed appropriate, enter into partnerships in the future when strategically attractive, including potentially with major biotechnology or pharmaceutical companies. We have limited capabilities for product development and do not yet have any capability for commercialization. Accordingly, we may enter into collaborations with other companies to provide us with important technologies and funding for our programs and technology. If we fail to enter into or maintain collaborations on reasonable terms or at all, our ability to develop our existing or future research programs and product candidates could be delayed, the commercial potential of our product could change, and our costs of development and commercialization could increase. Furthermore, we may find that our programs require the use of intellectual property rights held by third parties, and the evolution of our business may depend in part on our ability to acquire or in-license these intellectual property rights.

Any collaborations we enter into may pose a number of risks, including, but not limited to, the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of any product candidates that achieve regulatory approval or may elect not to continue or renew development or commercialization programs or license arrangements based on clinical trial results, changes in the collaborators' strategic focus or available funding, or external factors, such as a strategic transaction that may divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products and product candidates if the collaborators believe that the competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- product candidates discovered in collaboration with us may be viewed by our collaborators as competitive with their own product candidates or products, which may cause collaborators to cease to devote resources to the commercialization of our product candidates;
- collaborators may fail to comply with applicable regulatory requirements regarding the development, manufacture, distribution or marketing of a product candidate or product;
- collaborators with marketing and distribution rights to one or more of our product candidates that achieve regulatory approval may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, contract interpretation or the preferred course of development, might cause delays or terminations of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability;
- a collaborator may choose to deemphasize the development or commercialization of a product candidate licensed to it by us;

- if a collaborator of ours is involved in a business combination, the collaborator might deemphasize or terminate the development or commercialization of any product candidate licensed to it by us; and
- collaborations may be terminated by the collaborator, and, if terminated, we could be required to raise additional capital to pursue further development or commercialization of the applicable product candidates.

If our collaborations do not result in the successful discovery, development, and commercialization of product candidates or if one of our collaborators terminates its agreement with us, we may not receive any future research funding or milestone or royalty payments under such collaboration. Moreover, we may not receive all of the milestone or royalty payments we are entitled to receive under our current and future collaboration agreements. For example, pursuant to the terms of our collaboration and license agreement with Bristol-Myers Squibb, we are entitled to receive up to \$301.0 million in total milestones per each program subject to the agreement. However, given the overlapping nature of the triggers for these milestone payments, as well as the uncertainty associated with achieving any of such milestones, it is unlikely that we will receive the entire \$301.0 million in milestone payments with respect to each program subject to the agreement.

All of the risks relating to product development, regulatory approval and commercialization described in this Annual Report also apply to the activities of our therapeutic collaborators. Additionally, if one of our collaborators terminates its agreement with us, we may find it more difficult to attract new collaborators and our perception in the business and financial communities could be adversely affected.

We face significant competition in seeking appropriate collaborative partners. Our ability to reach a definitive agreement for a partnership will depend, among other things, upon an assessment of the collaborator's resources and expertise, the terms and conditions of the proposed partnership and the proposed collaborator's evaluation of a number of factors. These factors may include the design or results of preclinical studies or clinical trials, the likelihood of regulatory approval, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of any uncertainty with respect to our ownership of technology (which can exist if there is a challenge to such ownership regardless of the merits of the challenge) and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a partnership could be more attractive than the one with us.

We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization, reduce the scope of any sales or marketing activities or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop product candidates or bring them to market and generate product revenue.

Risks Related to Our Intellectual Property

Our success depends in part on our ability to obtain intellectual property rights for our proprietary technologies and product candidates, as well as our ability to protect our intellectual property. It is difficult and costly to protect our proprietary rights and technology, and we may not be able to ensure their protection.

Our commercial success will depend in large part on obtaining and maintaining patent, trademark and trade secret protection of our proprietary technologies and our product candidates, their respective components, formulations, combination therapies, methods used to manufacture them and methods of treatment, as well as successfully defending these patents against third-party challenges. Our ability to stop unauthorized third parties from making, using, selling, offering to sell, or importing our product candidates is dependent upon the extent to which we have rights under valid and enforceable patents that cover these activities. If we are unable to secure and maintain patent protection for any product or technology we develop, or if the scope of the patent protection secured is not sufficiently broad, our competitors could develop and commercialize products and technology similar or identical to

ours, and our ability to commercialize any product candidates we may develop may be adversely affected. Moreover, we may not be able to obtain intellectual property protection with respect to the SL pairs that we identify which are the targets of our current and future product candidates. Although we expect that the compounds underlying our product candidates will be protectable through intellectual property rights, our competitors could develop their own inhibitors based on the SL pairs we identify that might not be protected by our intellectual property rights.

The patenting process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. In addition, we may not pursue or obtain patent protection in all relevant markets. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or license to third parties and are reliant on our licensors or licensees.

The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates or uses thereof in the United States or in other foreign countries. Even if the patents do successfully issue, third parties may challenge the validity, enforceability, or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable. 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. If the breadth or strength of protection provided by the patent applications we hold with respect to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our ability to commercialize, our product candidates. Further, if we encounter delays in our clinical trials, the period of time during which we could market our product candidates under patent protection would be reduced.

Since patent applications in the United States and most other countries are confidential for a period of time after filing, we cannot be certain that we were the first to file any patent application related to our product candidates. Furthermore, for United States applications in which all claims are entitled to a priority date before March 16, 2013, an interference proceeding can be provoked by a third-party or instituted by the United States patent office, or USPTO, to determine who was the first to invent any of the subject matter covered by the patent claims of our applications.

We cannot be certain that we are the first to invent the inventions covered by pending patent applications and, if we are not, we may be subject to priority disputes. We may be required to disclaim part or all of the term of certain patents or all of the term of certain patent applications. There may be prior art of which we are not aware that may affect the validity or enforceability of a patent claim. There also may be prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim. No assurance can be given that if challenged, our patents would be declared by a court to be valid or enforceable or that even if found valid and enforceable, a competitor's technology or product would be found by a court to infringe our patents. We may analyze patents or patent applications of our competitors that we believe are relevant to our activities and consider that we are free to operate in relation to our product candidates, but our competitors may achieve issued claims, including in patents we consider to be unrelated, which block our efforts or may potentially result in our product candidates or our activities infringing such claims. The possibility exists that others will develop products which have the same effect as our products on an independent basis which do not infringe our patents or other intellectual property rights, or will design around the claims of patents that we have had issued that cover our products.

Recent or future patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. Under the enacted Leahy-Smith America Invents Act, or America Invents Act, enacted in 2013, the United States moved from a "first to invent" to a "first-to-file" system. Under a "first-to-file" system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to a patent on the invention regardless of whether another inventor had made the invention earlier. The America Invents Act includes a number of other significant changes to U.S. patent law, including provisions that affect the way patent applications are prosecuted, redefine prior art and establish a new post-grant review system. The effects of these changes are currently unclear as the USPTO only recently developed new regulations and procedures in connection with the America Invents Act and many of the substantive changes to patent law, including the "first-to-file" provisions, only became effective in March 2013. In

addition, the courts have yet to address many of these provisions and the applicability of the act and new regulations on specific patents discussed herein have not been determined and would need to be reviewed. However, the America Invents 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.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to make or use compounds or cells that are similar to the biological compositions of our product candidates but that are not covered by the claims of our patents;
- the active biological ingredients in our current product candidates will eventually become commercially available in biosimilar drug products, and no patent protection may be available with regard to formulation or method of use;
- we or our licensors, as the case may be, may fail to meet our obligations to the U.S. government in regards to any in-licensed patents and patent applications funded by U.S. government grants, leading to the loss of patent rights;
- we or our licensors, as the case may be, might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- it is possible that our pending patent applications will not result in issued patents;
- it is possible that there are prior public disclosures that could invalidate our or our licensors' patents, as the case may be, or parts of our or their patents;
- it is possible that others may circumvent our owned or in-licensed patents;
- it is possible that there are unpublished applications or patent applications maintained in secrecy that may later issue with claims covering our products or technology similar to ours;
- the laws of foreign countries may not protect our or our licensors', as the case may be, proprietary rights to the same extent as the laws of the United States;
- the claims of our owned or in-licensed issued patents or patent applications, if and when issued, may not cover our product candidates;
- our owned or in-licensed issued patents may not provide us with any competitive advantages, may be narrowed in scope, or be held invalid or unenforceable as a result of legal challenges by third parties;
- the inventors of our owned or in-licensed patents or patent applications may become involved with competitors, develop products or processes which design around our patents, or become hostile to us or the patents or patent applications on which they are named as inventors;
- it is possible that our owned or in-licensed patents or patent applications omit individual(s) that should be listed as inventor(s) or include individual(s) that should not be listed as inventor(s), which may cause these patents or patents issuing from these patent applications to be held invalid or unenforceable;
- we have engaged in scientific collaborations in the past, and will continue to do so in the future. Such collaborators may develop adjacent or competing products to ours that are outside the scope of our patents;
- we may not develop additional proprietary technologies for which we can obtain patent protection;
- it is possible that product candidates or diagnostic tests we develop may be covered by third parties' patents or other exclusive rights; or
- the patents of others may have an adverse effect on our business.

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

The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance fees, renewal fees, annuity fees and various other government fees on patents and/or applications will have to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned patents and/or applications and any patent rights we may own or license in the future. We rely on our outside counsel to pay these fees due to non-U.S. patent agencies. The USPTO and various non-U.S. government patent agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we fail to maintain the patents and patent applications covering our products or technologies, we may not be able to stop a competitor from marketing products that are the same as or similar to our product candidates, which would have a material adverse effect on our business. 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. There are situations, however, 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, potential competitors might be able to enter the market and this circumstance could harm our business.

We rely in part on trade secrets to protect our technology, and our failure to obtain or maintain trade secret protection could harm our business.

We rely on trade secrets to protect some of our technology and proprietary information, especially where we believe patent protection is not appropriate or obtainable as is the case for our SNIPRx platform. However, trade secrets are difficult to protect. Litigating a claim that a third party had illegally obtained and was using our trade secrets would be expensive and time consuming, and the outcome would be unpredictable. Moreover, if our competitors independently develop similar knowledge, methods, and know-how, it will be difficult for us to enforce our rights and our business could be harmed.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the United States and, if available, in other countries where we are prosecuting patents. In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their drug earlier than might otherwise be the case.

Patent term extensions in other countries may also be subject to certain procedural or administrative requirements including adherence to certain strict timelines. A failure to meet such requirements may result in a loss of the extension in those countries.

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

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business. The following examples are illustrative:

- others may be able to make compounds or formulations that are similar to our product candidates but that are not covered by the claims of any patents, should they issue, that we own or control;
- we or any strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or control;
- we might not have been the first to file patent applications covering certain of our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own or control may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges;
- our competitors might conduct research and development activities in the United States and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive drugs for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable; and
- the patents of others may have an adverse effect on our business.

Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations and prospects.

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

Competitors may infringe our issued patents, future trademarks, copyrights, or other intellectual property. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming and divert the time and attention of our management and scientific personnel. Any claims we assert against perceived infringers could provoke these parties to assert counterclaims against us alleging that we infringe their patents, trademarks, copyrights, or other intellectual property. In addition, in a patent infringement proceeding, there is a risk that a court will decide that a patent of ours is invalid or unenforceable, in whole or in part, and that we do not have the right to stop the other party from using the invention at issue. There is also a risk that, even if the validity of such patents is upheld, the court will construe the patent's claims narrowly or decide that we do not have the right to stop the other party from using the invention at issue on the grounds that our patents do not cover the invention. An adverse outcome in a litigation or proceeding involving our patents could limit our ability to assert our patents against those parties or other competitors, and may curtail or preclude our ability to exclude third parties from making and selling similar or competitive products. Similarly, if we assert trademark infringement claims, a court may determine that the marks we have asserted are invalid or unenforceable, or that the party against whom we have asserted trademark infringement has superior rights to the marks in question. In this case, we could ultimately be forced to cease use of such trademarks.

In any infringement litigation, any award of monetary damages we receive may not be commercially valuable. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common shares. Moreover, there can be no assurance that we will have sufficient financial or other resources to file and pursue such infringement claims, which typically last for years before they are concluded. Some of our competitors may be able to sustain the costs of such litigation or proceedings more

effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Even if we ultimately prevail in such claims, the monetary cost of such litigation and the diversion of the attention of our management and scientific personnel could outweigh any benefit we receive as a result of the proceedings. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing, misappropriating or successfully challenging our intellectual property rights. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a negative impact on our ability to compete in the marketplace.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a negative impact on the success of our business.

Our commercial success depends, in part, upon our ability and the ability of future collaborators, if any, to develop, manufacture, market and sell our product candidates and use our proprietary technologies without infringing the proprietary rights and intellectual property of third parties. The biotechnology and pharmaceutical industries are characterized by extensive and complex litigation regarding patents and other intellectual property rights. We may in the future become party to, or be threatened with, adversarial proceedings or litigation regarding intellectual property rights with respect to our product candidates and technology, including interference proceedings, post grant review and inter partes review before the USPTO or equivalent foreign regulatory authority. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future, regardless of their merit. There is a risk that third parties may choose to engage in litigation with us to enforce or to otherwise assert their patent rights against us. Even if we believe such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable, and infringed, which could have a negative impact on our ability to commercialize our current and any future product candidates. In order to successfully challenge the validity of any such U.S. patent in federal court, we would need to overcome a presumption of validity. As this burden is a high one requiring us to present clear and convincing evidence as to the invalidity of any such U.S. patent claim, there is no assurance that a court of competent jurisdiction would invalidate the claims of any such U.S. patent. Foreign courts will have similar burdens to overcome in order to successfully challenge a third party claim of patent infringement. If we are found to infringe a third party's valid and enforceable intellectual property rights, we could be required to obtain a license from such third party to continue developing, manufacturing, and marketing our product candidate(s) and technology. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors and other third parties access to the same technologies licensed to us, and it could require us to make substantial licensing and royalty payments. We could be forced, including by court order, to cease developing, manufacturing, and commercializing the infringing technology or product candidate. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent or other intellectual property right. A finding of infringement could prevent us from manufacturing and commercializing our product candidates or force us to cease some or all of our business operations, which could materially harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business, financial condition, results of operations and prospects.

We may need to license intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property rights, including patent rights, that are important or necessary to the development of our product candidates. It may be necessary for us to use the patented or proprietary technology of third parties to commercialize our product candidates, in which case we would be required to obtain a license from these third parties. Such a license may not be available on commercially reasonable terms, or at all, and we could be forced to accept unfavorable contractual terms. If we are unable to obtain such licenses on commercially reasonable terms, our business could be harmed.

We depend on intellectual property licensed from a third party and termination of this license could result in the loss of significant rights, which would harm our business.

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. In particular, we are dependent on our license agreement with New York University. Any termination of this license could result in the loss of significant rights and could harm our ability to commercialize our product candidates.

Disputes may also arise between us and our current licensor or future licensors regarding intellectual property subject to a license agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates, and what activities satisfy those diligence obligations; and
- the ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current or future licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates.

We are generally also subject to all of the same risks with respect to protection of intellectual property that we license, as we are for intellectual property that we own, which are described below. If we, New York University or any future licensors fail to adequately protect any licensed intellectual property, our ability to commercialize products could suffer.

We may be subject to claims asserting that our employees, consultants, or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting ownership of what we regard as our own intellectual property.

Many of our employees, consultants or advisors are currently, or were previously, employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that these individuals or we have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, we may in the future be subject to claims by our former employees or consultants asserting an ownership right in our patents or patent applications, as a result of the work they performed on our behalf. Although it is our policy to require our employees and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own, and we cannot be certain that our agreements with such parties will be upheld in the face of a potential challenge or that they will not be breached, for which we may not have an adequate remedy. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property.

Changes in U.S. patent law or the patent law of other countries or jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our future product candidates.

The United States has recently enacted and implemented wide ranging patent reform legislation. The U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created

uncertainty with respect to the value of patents, once obtained. Depending on actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could weaken our ability to obtain new patents or to enforce patents that we have licensed or that we might obtain in the future. Similarly, changes in patent law and regulations in other countries or jurisdictions, changes in the governmental bodies that enforce them or changes in how the relevant governmental authority enforces patent laws or regulations may weaken our ability to obtain new patents or to enforce patents that we have licensed or that we may obtain in the future.

We may not be able to protect our intellectual property rights throughout the world, which could negatively impact our business.

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 could be less extensive than those in the United States. In some cases, we may not be able to obtain patent protection for certain technology outside 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, even in jurisdictions where we do pursue patent protection. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, even in jurisdictions where we do pursue patent protection or from selling or importing products made using our inventions in and into the United States or other jurisdictions.

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, which could make it difficult for us to stop the infringement of our patents, if pursued and obtained, 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.

Reliance on third parties requires us to share our proprietary information, which increases the possibility that such information will be misappropriated or disclosed.

Because we rely on third parties to develop and manufacture our product candidates, or if we collaborate with third parties for the development or commercialization of our future product candidates, we must, at times, share proprietary information with them. We seek to protect our proprietary technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors, and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information. Despite the contractual provisions employed when working with third parties, the need to share confidential information increases the risk that such information become known by our competitors, is inadvertently incorporated into the technology of others, or is disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how, a competitor's discovery of our know-how or other unauthorized use or disclosure could have an adverse effect on our business and results of operations.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors, and consultants to publish data potentially relating to our know-how. Despite our efforts to protect our know-how, we may not be able to prevent the unauthorized disclosure or use of our technical know-how by the parties to these agreements. Moreover, we cannot guarantee that we have entered into such agreements with each party that may have or have had access to our confidential information or proprietary technology and processes. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our proprietary technologies will be effective. If any of the collaborators, scientific advisors, employees, contractors, and consultants who are parties to these agreements breaches or violates the terms of any of these agreements, we may not have adequate remedies for any such breach or violation. Moreover, if confidential information that is licensed or disclosed

to us by our partners, collaborators, or others is inadvertently disclosed or subject to a breach or violation, we may be exposed to liability to the owner of that confidential information. Enforcing a claim that a third-party illegally obtained and is using our proprietary information, like patent litigation, is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect proprietary information.

Any trademarks we may obtain may be infringed or successfully challenged, resulting in harm to our business.

We expect to rely on trademarks as one means to distinguish any of our product candidates that are approved for marketing from the products of our competitors. While we have a registered trademark for our SNIPRx platform and SNIPDX biomarker platform technology, we have not yet selected trademarks or begun the process of applying to register trademarks for our product candidates. Once we select trademarks and apply to register them, our trademark applications may not be approved. Third parties may oppose our trademark applications or otherwise challenge our use of the trademarks. In the event that our trademarks are successfully challenged, we could be forced to rebrand our products, which could result in loss of brand recognition and could require us to devote resources to advertising and marketing new brands. Our competitors may infringe our trademarks, and we may not have adequate resources to enforce our trademarks.

In addition, any proprietary name we propose to use with product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of the potential for confusion with other product names. If the FDA objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable proprietary product name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Comparable foreign regulators may have similar requirements, and it is possible that different proprietary or non-proprietary names may be required in different jurisdictions.

If we are unable to protect the confidentiality of our proprietary information, our business and competitive position would be harmed.

In addition to seeking patent and trademark protection for our product candidate, we also rely on unpatented know-how, technology, and other proprietary information, to maintain our competitive position. We seek to protect our proprietary information, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information. Monitoring unauthorized uses and disclosures of our intellectual property is difficult, and we do not know whether the steps we have taken to protect our intellectual property will be effective. In addition, we may not be able to obtain adequate remedies for any such breaches. Enforcing a claim that a party illegally disclosed or misappropriated proprietary information is difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets.

Moreover, our competitors may independently develop knowledge, methods, and know-how equivalent to our proprietary information. Competitors could purchase our products and replicate some or all of the competitive advantages we derive from our development efforts for technologies on which we do not have patent protection. If any of our proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our proprietary information were to be disclosed to or independently developed by a competitor, our competitive position would be harmed.

We also seek to preserve the integrity and confidentiality of our data and other confidential information by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in these individuals, organizations and systems, agreements or security measures may be breached and detecting the disclosure or misappropriation of confidential information and enforcing a claim

that a party illegally disclosed or misappropriated confidential information is difficult, expensive, and time-consuming, and the outcome is unpredictable. Further, we may not be able to obtain adequate remedies for any breach. In addition, our confidential information may otherwise become known or be independently discovered by competitors, in which case we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us.

If we do not obtain patent term extension for patents covering our product candidates, our business may be materially harmed, and in any case, the terms of our patents may not be sufficient to effectively protect our product candidates and business.

Patents have a limited term. In most countries, including the United States, the expiration of a patent is generally 20 years after its first effective non-provisional filing date. However, depending upon the timing, duration, and specifics of FDA marketing approval of our product candidates, one or more of any U.S. patents we may be issued or have licensed may be eligible for limited patent term restoration under the Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Amendments.

The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. The Hatch-Waxman Act allows a maximum of one patent to be extended per FDA-approved product as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. Patent term extension may also be available in certain foreign countries upon regulatory approval of our product candidates. However, we may not be granted an extension because of, for example, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our competitive position, business, financial condition, results of operations, and prospects could be harmed, possibly materially.

If there are delays in obtaining regulatory approvals or other additional delays, the period of time during which we can market our product candidates under patent protection could be further reduced. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. Once the patent term has expired, we may be open to competition from similar or generic products. The launch of a generic version of one of our products in particular would be likely to result in an immediate and substantial reduction in the demand for that product, which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Risks Related to Our Business Operations, Employee Matters and Managing Growth

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

We are highly dependent on our management team. Each of them may currently terminate their employment with us at any time. The loss of the services of any of these persons could impede the achievement of our research, development, and commercialization objectives. We do not currently maintain “key person” life insurance on the lives of our executives or any of our employees.

Recruiting and retaining qualified scientific and clinical personnel and, if we progress the development of any of our product candidates, commercialization, manufacturing and sales and marketing personnel, will be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval of and commercialize our product

candidates. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high-quality personnel, our ability to pursue our growth strategy will be limited.

Our internal computer systems, or those of our collaborators or other contractors or consultants, may fail or suffer security breaches, which could result in a significant disruption of our product development programs and our ability to operate our business effectively.

Our internal computer systems and those of our current and any future collaborators and other contractors or consultants are vulnerable to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Cyber-attacks are increasing in their frequency, sophistication, and intensity, and have become increasingly difficult to detect. Cyber-attacks could include the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering, and other means to affect service reliability and threaten the confidentiality, integrity, and availability of information. Cyber-attacks also could include phishing attempts or e-mail fraud to cause payments or information to be transmitted to an unintended recipient.

While we have not experienced any significant system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other proprietary information or other similar disruptions. For example, the loss of clinical trial data from completed or future clinical trials by us or our CROs could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Additionally, any such event that leads to unauthorized access, use or disclosure of personal information, including personal information regarding our patients or employees, could harm our reputation, cause us not to comply with federal and/or state breach notification laws and foreign law equivalents and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information. Security breaches and other inappropriate access can be difficult to detect, and any delay in identifying them may lead to increased harm of the type described above. While we have implemented security measures to protect our information technology systems and infrastructure, such measures may not prevent service interruptions or security breaches that could adversely affect our business and to the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, our competitive position could be harmed and the further development and commercialization of our product candidates could be delayed.

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

Our operations, and those of our CROs, CMOs and other contractors and consultants, 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. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses. We rely on third-party manufacturers to produce our product candidates. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers are affected by a man-made or natural disaster or other business interruption.

Our international operations pose currency risks, which may adversely affect our operating results.

Our reporting and functional currency is the U.S. dollar. Assets and liabilities denominated in currencies other than the U.S. dollar are translated into U.S. dollars at exchange rates in effect at each balance sheet date. Income items and expenses are translated using the average exchange rate in effect for the relevant period.

Our operating results may be affected by volatility in currency exchange rates and our ability to manage effectively our currency transaction risks. Although we report, and will continue to report, our results in U.S. dollars, a portion our expenses are incurred in Canadian dollars as a result of our operations in Canada, as well as other currencies to a lesser extent.

In addition, we maintain a significant portion of our cash in Canadian dollar-denominated reserves. We do not currently manage our foreign currency exposure in a manner that would eliminate the effects of changes in foreign exchange rates. For example, we have not engaged in any active hedging techniques, and we have not employed any derivative instruments to date. Therefore, unfavorable fluctuations in the exchange rate between the Canadian dollar and U.S. dollar could have a negative impact on our business and financial results. We do, however, keep expected Canadian dollar cash requirements in Canadian dollars to form a natural hedge.

Failure to comply with health and data protection laws and regulations could lead to government enforcement actions, including civil or criminal penalties, private litigation, and adverse publicity and could negatively affect our operating results and business.

We and any current and future collaborators may be subject to federal, state/provincial, municipal and foreign data protection laws and regulations, such as laws and regulations that address privacy and data security. In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws, including Section 5 of the Federal Trade Commission Act, that govern the collection, use, disclosure and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties, including research institutions from which we obtain clinical trial data, that are subject to privacy and security requirements under HIPAA, as amended by HITECH. Depending on the facts and circumstances, we could be subject to civil, criminal, and administrative penalties if we violate HIPAA.

Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal, and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees, and other individuals about whom we or our current or future collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

Data collection is governed by restrictive regulations governing the use, processing, and cross-border transfer of personal information.

In the event we decide to conduct clinical trials or continue to enroll subjects in our ongoing or future clinical trials, we may be subject to additional privacy restrictions. The collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the European Union, including personal health data, is subject to the GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the European Union, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR includes restrictions on cross-border data transfers. The GDPR increased our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR,

and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries. Compliance with the GDPR will be a rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our European activities. Further, the United Kingdom's vote in favor of exiting the European Union, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the United Kingdom. In particular, it is unclear how data transfers to and from the United Kingdom will be regulated.

In addition, California recently enacted the California Consumer Privacy Act (CCPA), which creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling personal data of consumers or households. The CCPA requires covered companies to provide new disclosure to consumers about such companies' data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action. The CCPA went into effect on January 1, 2020, and the California Attorney General may bring enforcement actions for violations beginning July 1, 2020. The CCPA was amended on September 23, 2018, and it remains unclear what, if any, further modifications will be made to this legislation or how it will be interpreted. As currently written, the CCPA may impact our business activities and exemplifies the vulnerability of our business to the evolving regulatory environment related to personal data and protected health information.

Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with U.S. and international data protection laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our current or future collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend and could result in adverse publicity that could harm our business.

Our employees, principal investigators, consultants, and commercial partners may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements and insider trading.

We are exposed to the risk of fraud or other misconduct by our employees, principal investigators, consultants, and commercial partners. Misconduct by these parties could include intentional failures to comply with FDA regulations or the regulations applicable in other jurisdictions, provide accurate information to the FDA and other regulatory authorities, comply with healthcare fraud and abuse laws and regulations in the United States and abroad, report financial information or data accurately or disclose unauthorized activities to us. In particular, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Such misconduct also could involve the improper use of information obtained in the course of clinical trials or interactions with the FDA or other regulatory authorities, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter employee misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from government investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. If any such actions are instituted against us and we are not successful in defending ourselves or asserting our rights, those actions could result in significant civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participating in government funded healthcare programs, such as Medicare and Medicaid, 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, contractual damages, reputational harm and the curtailment or restructuring of our operations, any of which could have a negative impact on our business, financial condition, results of operations and prospects.

Risks Related to Ownership of Our Common Shares

We are a “smaller reporting company” and we cannot be certain if the reduced reporting requirements applicable to smaller reporting companies will make our common shares less attractive to investors.

Because the market value of our common shares held by non-affiliates was less than \$200 million as of June 30, 2024, we qualify as a “smaller reporting company” under the Exchange Act as of June 30, 2024. We may continue to be a smaller reporting company if either (i) the market value of our common shares held by non-affiliates is less than \$250 million or (ii) our annual revenue was less than \$100 million during the most recently completed fiscal year and the market value of our common shares held by non-affiliates is less than \$700 million. As a smaller reporting company, we may rely on exemptions from certain disclosure requirements that are available to smaller reporting companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. For so long as we remain a smaller reporting company, we are permitted and intend to rely on such exemptions from certain disclosure and other requirements that are applicable to other public companies that are not smaller reporting companies.

We cannot predict if investors will find our common shares less attractive because we may rely on the exemptions and reduced disclosure obligations applicable to smaller reporting companies. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

The trading price of our common shares has been and is likely to continue to be volatile and fluctuate substantially.

The trading price of our common shares has been and is likely to continue to be highly volatile. Furthermore, the stock market in general and the market for biopharmaceutical and pharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, our shareholders may not be able to sell their common shares at or above the price they paid for their common shares. The market price of our common shares may be influenced by many factors, including:

- evolving macroeconomic events and their impact on the global markets;
- the commencement, enrollment, timing and results of our ongoing clinical trials of RP-3467, RP-1664 and any future product candidates or those of our competitors;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we or our collaborators receive marketing approval;
- our success or failure in identifying new drug candidates to pursue in clinical development;
- the success of competitive drugs, therapies or technologies;
- development of new product candidates that may address our markets and make our product candidates less attractive;
- failure or discontinuation of any of our research or development programs;
- developments related to any existing or future collaborations;
- regulatory or legal developments in the United States and other countries;
- the success of competitive products or technologies;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- the level of expenses related to RP-3467, RP-1664 and any future product candidates or clinical development programs;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates;

- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- our inability to obtain or delays in obtaining adequate drug supply for any approved drug or inability to do so at acceptable prices;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or shareholder litigation;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems, including coverage and adequate reimbursement for any approved drug;
- sales of common shares by us, our executive officers, directors or principal shareholders, or others;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, political, and market conditions and overall fluctuations in the financial markets in the United States and abroad;
- investors' general perception of us and our business; and
- the other factors described in this "Risk Factors" section and elsewhere in this Annual Report.

Some companies that have experienced volatility in the trading price of their shares have been the subject of securities class action litigation. Any lawsuit to which we are a party, with or without merit, may result in an unfavorable judgment. We also may decide to settle lawsuits on unfavorable terms. Any such negative outcome could result in payments of substantial damages or fines, damage to our reputation or adverse changes to our business practices. Defending against litigation is costly and time-consuming, and could divert our management's attention and our resources. Furthermore, during the course of litigation, there could be negative public announcements of the results of hearings, motions or other interim proceedings or developments, which could have a negative effect on the market price of our common shares.

Concentration of ownership of our common shares among our existing executive officers, directors and principal shareholders may prevent new investors from influencing significant corporate decisions.

Based upon our common shares outstanding as of December 31, 2024, our executive officers, directors, and shareholders who owned more than 5% of our outstanding common shares beneficially own shares, in the aggregate, representing approximately 53% of our common shares. If our executive officers, directors, and shareholders who owned more than 5% of our outstanding common shares acted together, they would be able to significantly influence all matters requiring shareholder approval, including the election and removal of directors and approval of any merger, consolidation, or sale of all or substantially all of our assets. The concentration of voting power and transfer restrictions could delay or prevent an acquisition of our company on terms that other shareholders may desire or result in the management of our company in ways with which other shareholders disagree.

If research analysts do not publish research or reports, or publish unfavorable research or reports, about us, our business or our market, our share price and trading volume could decline.

The trading market for our common shares will be influenced by the research and reports that industry or financial analysts publish about us or our business. We will not have any control over these equity research analysts or the content and opinions included in their reports. The price of our shares could decline if one or more equity research analysts downgrade our shares or issue other unfavorable commentary or research about us. If one or more equity research analysts ceases coverage of us or fails to publish reports on us regularly, demand for our shares could decrease, which in turn could cause the trading price or trading volume of our common shares to decline.

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

Sales of a substantial number of our common shares in the public market could occur at any time. If our shareholders sell, or the market perceived that our shareholders intend to sell, substantial amounts of our common shares in the public market, the market price of our common shares could decline significantly.

We have filed registration statements on Form S-8 to register our common shares that are issuable pursuant to our equity incentive plans. Shares registered under these registration statements on Form S-8 will be available for sale in the public market subject to vesting arrangements and exercise of options, as well as, in the case of our affiliates, the restrictions of Rule 144 under the Securities Act. Furthermore, in November 2024, we entered into a Common Shares Sale Agreement, or the 2024 Sales Agreement, with TD Securities (USA) LLC as sales agent, pursuant to which we may issue and sell from time to time, subject to the restrictions of Form S-3, common shares up to a maximum aggregate amount of \$100.0 million in sales deemed to be an “at the market offering,” as defined by the Securities Act.

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

You should not rely on an investment in our common shares to provide dividend income. We have never declared or paid cash dividends on our share capital. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of any future debt agreements or preferred equity may preclude us from paying dividends. As a result, capital appreciation, if any, of our common shares will be your sole source of gain for the foreseeable future. Investors seeking cash dividends should not purchase our common shares.

Our articles of continuance permit us to issue an unlimited number of common shares and preferred shares without additional shareholder approval.

Our articles of continuance permit us to issue an unlimited number of common shares. We anticipate that we will, from time to time, issue additional common shares in the future. Any further issuances of common shares will result in immediate dilution to existing shareholders and may have an adverse effect on the value of their holdings.

Our articles of continuance also permit us to issue an unlimited number of preferred shares, issuable in one or more series and, subject to the provisions of the Business Corporations Act (Québec), or QBCA, having such designations, rights, privileges, restrictions and conditions, including dividend and voting rights, as our board of directors may determine and which may be superior to those of the common shares. The issuance of preferred shares, while providing flexibility in connection with possible acquisitions, financings, and other corporate purposes, could, among other things, have the effect of delaying, deferring, or preventing a change in control of Repare and might adversely affect the market price of our common shares and the voting and other rights of the holders of common shares. We have no current or immediate plans to issue any preferred shares.

Subject to Nasdaq listing rules, we will not be required to obtain the approval of shareholders for the issuance of additional common shares and preferred shares.

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, shareholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common shares.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as amended and the rules and regulations of The Nasdaq Global Market. Pursuant to Section 404(a) of the Sarbanes-Oxley Act, we are now required to perform system and process evaluation and testing of our internal control over financial reporting to allow our management to report on the effectiveness of our internal control over financial reporting. Furthermore, at such time we no longer

qualify as a "smaller reporting company", our independent registered public accounting firm will be required to issue an annual report that attests the effectiveness of our internal control over financial reporting.

During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. Further, we may in the future discover weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our financial statements. Moreover, our internal controls over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are unable to assert that our internal control over financial reporting is effective, investors could lose confidence in the reliability of our financial statements, the market price of our common shares could decline and we could be subject to sanctions or investigations by The Nasdaq Global Market, the SEC or other regulatory authorities.

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

We are subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make any related party transaction disclosures. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

If we are a passive foreign investment company, there could be adverse U.S. federal income tax consequences to U.S. Holders.

Under the Internal Revenue Code of 1986, as amended, or the Code, we will be a passive foreign investment company, or PFIC, for any taxable year in which (1) 75% or more of our gross income consists of passive income or (2) 50% or more of the average quarterly value of our assets consists of assets that produce, or are held for the production of, passive income, including cash. For purposes of these tests, passive income includes dividends, interest, gains from the sale or exchange of investment property and certain rents and royalties. In addition, for purposes of the above calculations, a non-U.S. corporation that directly or indirectly owns at least 25% by value of the shares of another corporation is treated as if it held its proportionate share of the assets and received directly its proportionate share of the income of such other corporation.

Based on the nature of our activities and the composition of our income and assets, we believe we were classified as a PFIC for the taxable year ended December 31, 2024. No assurances regarding our PFIC status can be provided for any past, current, or future taxable years. The determination of whether we are a PFIC is a fact-intensive determination made on an annual basis and the applicable law is subject to varying interpretation. In particular, the characterization of our assets as active or passive may depend in part on our current and intended future business plans, which are subject to change. In addition, the total value of our assets for PFIC testing purposes may be determined in part by reference to the market price of our common shares from time to time, which may fluctuate considerably. Under the income test, our status as a PFIC depends on the composition of our income which will depend on the transactions we enter into in the future and our corporate structure. The composition of our income and assets is also affected by how, and how quickly, we spend the cash we raise in any offering. Accordingly, our U.S. counsel expresses no opinion with respect to our PFIC status.

For each year we are treated as a PFIC with respect to U.S. Holders, U.S. Holders will be subject to adverse U.S. federal income tax consequences, such as ineligibility for any preferential tax rates for individuals on capital gains or on actual or deemed dividends, interest charges on certain taxes treated as deferred, and additional reporting requirements under U.S. federal income tax laws and regulations, unless such U.S. Holder makes a “qualified electing fund” election, or QEF Election, with respect to all taxable years during such U.S. Holder’s holding period in which we are a PFIC, or our common shares constitute “marketable stock” and such U.S. Holder makes a mark-to-market election.

If a U.S. Holder makes an effective QEF Election, the U.S. Holder will be required to include in gross income each year, whether or not we make distributions, as capital gains, such U.S. Holder’s pro rata share of our net capital gains and, as ordinary income, such U.S. Holder’s pro rata share of our earnings in excess of our net capital gains. However, a U.S. Holder can only make a QEF election with respect to common shares in a PFIC if such company agrees to furnish such U.S. Holder with certain tax information annually. For the taxable year ending December 31, 2024, we intend to make available, upon request, certain information to enable U.S. Holders to make a QEF Election with respect to our common shares. However, we cannot guarantee that we will make such information available for all years in which we are a PFIC or that the information will be available at the time required for any particular U.S. Holder to make a QEF Election.

If we are a PFIC and our common shares are “marketable stock,” U.S. Holders can avoid the interest charge on excess distributions or gain relating to the common shares by making a mark-to-market election on our common shares. Common shares will be marketable stock if they are “regularly traded” on certain stock exchanges (including Nasdaq). A U.S. Holder that makes a mark-to-market election must include in ordinary income for each year an amount equal to the excess, if any, of the fair market value of the common shares at the close of the taxable year over the U.S. Holder’s adjusted tax basis in the common shares. An electing holder may also claim an ordinary loss deduction for the excess, if any, of the U.S. Holder’s adjusted basis in the common shares over the fair market value of the common shares at the close of the taxable year, but this deduction is allowable only to the extent of any net mark-to-market gains for prior years. Gains from an actual sale or other disposition of the common shares will be treated as ordinary income, and any losses incurred on a sale or other disposition of the shares will be treated as an ordinary loss to the extent of any net mark-to-market gains for prior years. Once made, the election cannot be revoked without the consent of the IRS unless the common shares cease to be marketable stock.

Each U.S. Holder should consult its own tax advisors with respect to the potential adverse U.S. tax consequences to it if we are or were to become a PFIC and any elections (including a QEF Election or mark-to-market election) that may be available to such U.S. Holder that relate to our status as a PFIC.

A “U.S. Holder” is a holder who, for U.S. federal income tax purposes, is a beneficial owner of our common shares and is:

- (1) a citizen or individual resident of the United States;
- (2) a corporation, or other entity taxable as a corporation, created or organized in or under the laws of the United States, any state therein or the District of Columbia;
- (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or
- (4) a trust that (a) is subject to the primary supervision of a U.S. court and the control of one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code) or (b) has a valid election in effect to be treated as a United States person for U.S. federal income tax purposes.

If we are a controlled foreign corporation, there could be materially adverse U.S. federal income tax consequences to certain U.S. Holders of our common shares.

If a U.S. Holder is treated as owning (directly, indirectly or constructively) at least 10% of the value or voting power of our common shares, such U.S. Holder may be treated as a “United States shareholder” with respect to each “controlled foreign corporation” in our group (if any) as such term is defined in the Code. We refer to this holder as a “Ten Percent Shareholder”.

Each “Ten Percent Shareholder” in a non-U.S. corporation that is classified as a controlled foreign corporation, or CFC, for U.S. federal income tax purposes generally is required to include in income for U.S. federal tax purposes such Ten Percent Shareholder’s pro rata share of the CFC’s “Subpart F income,” global intangible low taxed income, and investment of earnings in U.S. property, even if the CFC has made no distributions to its shareholders. Subpart F income generally includes dividends, interest, rents, royalties, gains from the sale of securities and income from certain transactions with related parties. In addition, a Ten Percent Shareholder that realizes gain from the sale or exchange of shares in a CFC may be required to classify a portion of such gain as dividend income rather than capital gain. An individual that is a Ten Percent Shareholder with respect to a CFC generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a Ten Percent Shareholder that is a U.S. corporation. Failure to comply with these reporting obligations may subject a Ten Percent Shareholder to significant monetary penalties and may prevent the statute of limitations with respect to such Ten Percent Shareholder’s U.S. federal income tax return for the year for which reporting was due from starting.

A non-U.S. corporation generally will be classified as a CFC for U.S. federal income tax purposes if Ten Percent Shareholders own, directly or indirectly, more than 50% of either the total combined voting power of all classes of stock of such corporation entitled to vote or of the total value of the stock of such corporation. A “Ten Percent Shareholder” is a United States person (as defined by the Code) who owns or is considered to own 10% or more of the total combined voting power of all classes of stock entitled to vote or 10% or more of the total value of all classes of stock of such corporation.

Each U.S. Holder should consult its own tax advisors with respect to the potential adverse U.S. tax consequences of becoming a Ten Percent Shareholder in a CFC. If we are classified as both a CFC and a PFIC, we generally will not be treated as a PFIC with respect to those U.S. Holders that meet the definition of a Ten Percent Shareholder during the period in which we are a CFC.

Our ability to use our non-capital loss carryforwards to offset future taxable income may be subject to certain limitations.

In general, where control of a corporation has been acquired by a person or group of persons, subsection 111(5) of the Income Tax Act (Canada), or Canadian Tax Act, and equivalent provincial income tax legislation restrict the corporation’s ability to carry forward non-capital losses from preceding taxation years. We have not performed a detailed analysis to determine whether an acquisition of control for the purposes of subsection 111(5) of the Canadian Tax Act has occurred after each of our previous issuances of common shares or preferred shares. In addition, if we undergo an acquisition of control, our ability to utilize non-capital losses could be limited by subsection 111(5) of the Canadian Tax Act. As of December 31, 2024, we had Canadian federal and provincial non-capital loss carry forwards of \$352.2 million, which expire beginning in 2037 through 2044. In addition, we also have scientific research and experimental development expenditures of approximately \$83.1 million for Canadian federal and provincial income tax purposes, which have not been deducted. These expenditures are available to reduce future taxable income and have an unlimited carry-forward period. We also have scientific research and experimental development tax credit carry forwards of approximately \$13.8 million for Canadian federal income tax purposes, which expire beginning in 2036 through 2044. Research and development tax credits and expenditures are subject to verification by the tax authorities, and, accordingly, these amounts may vary. Future changes in our share ownership, some of which are outside of our control, could result in an acquisition of control for the purposes of subsection 111(5) of the Canadian Tax Act. Furthermore, our ability to utilize non-capital losses (or U.S. equivalents) of companies that we may acquire in the future may be subject to limitations. As a result, even if we attain profitability, we may be unable to use a material portion of our non-capital losses and other tax attributes, which could negatively impact our future cash flows.

Changes to the tax treatment of research and experimental expenditures as a result of U.S. federal tax legislative changes could increase our tax burden and adversely affect our business and financial condition.

In December 2017, the U.S. government enacted comprehensive tax legislation, the Tax Cuts and Jobs Act of 2017, or TCJA, significantly reformed the Code. As a result of this legislation, U.S.-based specified research and experimental expenditures are required to be capitalized and amortized ratably over a five-year period. Any such expenditures attributable to research conducted outside the United States must be capitalized and amortized over a 15-year period. Prior to the enactment of the TCJA, research and experimental expenditures were deductible in the year they were incurred for U.S. tax purposes. Various legislative proposals have been advanced to restore current-year

deductions for research and experimental expenditures, but no such legislation has been enacted despite bipartisan support.

On September 8, 2023, the Department of Treasury and the Internal Revenue Service issued interim guidance on IRC Section 174 in view of forthcoming regulations which supports the deduction of certain expenses that would otherwise be treated as specified research and experimental expenditures. Treasury regulations addressing the capitalization and amortization of specified research or experimental expenditures could differ from the interim guidance issued by the Department of Treasury and the Internal Revenue Service which could increase our tax burden and adversely affect our business and financial condition. Changes in our tax provisions or an increase in our tax liabilities, whether due to changes in applicable laws and regulations or our interpretation or application thereof, could have a material adverse effect on our financial position, results of operations and/or cash flows.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, resulting in unanticipated costs, taxes, or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken, which could result in increased tax liabilities. For example, the Canada Revenue Agency, the U.S. Internal Revenue Service, or another tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies pursuant to our intercompany arrangements and transfer pricing policies, including amounts paid with respect to our intellectual property development. Similarly, a tax authority could assert that we are subject to tax in a jurisdiction where we believe we have not established a taxable connection, often referred to as a “permanent establishment” under international tax treaties, and such an assertion, if successful, could increase our expected tax liability in one or more jurisdictions. A tax authority may take the position that material income tax liabilities, interest and penalties are payable by us, in which case, we expect that we might contest such assessment. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could increase our anticipated effective tax rate, where applicable.

Our deductions and credits in respect of scientific research and experimental development expenditures may be challenged by tax authorities.

Tax authorities in Canada and the United States may not necessarily agree with our determinations of the expenses and tax credits claimed by us, including scientific research and experimental development expenses and related tax credits. If tax authorities successfully challenge such expenses or the correctness of such income tax credits claimed, our operating results could be adversely affected. Furthermore, if the tax authorities reduce the tax credit by reducing either the rate of the credit or the eligibility of some scientific research and experimental development expenses in the future, our operating results could be adversely affected.

From time to time, we may become subject to income tax audits or similar proceedings, and as a result we may incur additional costs and expenses or owe additional taxes, interests and penalties.

Our determination of our tax liability is subject to review by the Canada Revenue Agency, the U.S. Internal Revenue Service, and other local tax authorities. We are currently under income tax audit by the Canada Revenue Agency for taxation years December 31, 2022 through 2023 and the taxing authorities in the Province of Quebec for taxation years December 31, 2021 through 2023. To the extent the Canada Revenue Agency or any other relevant tax authority determines that we owe additional taxes, our financial position, results of operations and/or cash flows could be adversely impacted.

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

As a public company, we have and will continue to incur significant legal, accounting, and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the Nasdaq Stock Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need

to devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain and maintain director and officer liability insurance and we may be required to incur substantial costs to maintain sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees, or as executive officers. The increased costs may require us to reduce costs in other areas of our business or increase the prices of our services. Moreover, these rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Our amended and restated bylaws designate specific courts in Canada and the United States as the exclusive forum for certain litigation that may be initiated by our shareholders, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our amended and restated bylaws, unless we consent in writing to the selection of an alternative forum, the courts of the Province of Québec and the appellate courts therefrom shall, to the fullest extent permitted by law, be the sole and exclusive forum for: (a) any derivative action or proceeding brought on our behalf; (b) any action or proceeding asserting a claim for breach of fiduciary duty owed to us by any of our directors, officers or other employees; (c) any action or proceeding asserting a claim arising out of any provision of the Business Corporations Act (Québec) or the articles or our bylaws (as either may be amended from time to time); or (d) any action or proceeding asserting a claim otherwise related to our affairs, or the Canadian Forum Provision. The Canadian Forum Provision will not apply to any causes of action arising under the Securities Act or the Exchange Act. Our amended and restated bylaws further provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, or the U.S. Federal Forum Provision. In addition, our amended and restated bylaws provide that any person or entity holding, owning, or otherwise acquiring any interest in any of our securities is deemed to have notice of and consented to the Canadian Forum Provision and the U.S. Federal Forum Provision.

The Canadian Forum Provision and the U.S. Federal Forum Provision in our amended and restated bylaws may impose additional litigation costs on shareholders in pursuing any such claims. Additionally, the forum selection clauses in our amended and restated bylaws may limit our shareholders' ability to bring a claim in a judicial forum that they find favorable for disputes with us or our directors, officers or employees, which may discourage the filing of lawsuits against us and our directors, officers and employees, even though an action, if successful, might benefit our shareholders. In addition, while the Delaware Supreme Court ruled in March 2020 that federal forum selection provisions purporting to require claims under the Securities Act be brought in federal court are "facially valid" under Delaware law, there is uncertainty as to whether other courts, including courts in Canada and other courts within the United States, will enforce our U.S. Federal Forum Provision. If the U.S. Federal Forum Provision is found to be unenforceable, we may incur additional costs associated with resolving such matters. The U.S. Federal Forum Provision may also impose additional litigation costs on shareholders who assert that the provision is not enforceable or invalid. The courts of the Province of Québec and the federal district courts of the United States of America may also reach different judgments or results than would other courts, including courts where a shareholder considering an action may be located or would otherwise choose to bring the action, and such judgments may be more or less favorable to us than our shareholders.

Because we are a Canadian company, it may be difficult to serve legal process or enforce judgments against us.

We are incorporated and have our corporate headquarters in Québec, Canada. In addition, while many of our directors and officers reside in the United States, several of them reside outside of the United States. Accordingly, service of process upon us may be difficult to obtain within the United States. Furthermore, because substantially all of our assets are located outside the United States, any judgment obtained in the United States against us, including

one predicated on the civil liability provisions of the U.S. federal securities laws, may not be collectible within the United States. Therefore, it may not be possible to enforce those actions against us.

In addition, it may be difficult to assert U.S. securities law claims in original actions instituted in Canada. Canadian courts may refuse to hear a claim based on an alleged violation of U.S. securities laws against us or these persons on the grounds that Canada is not the most appropriate forum in which to bring such a claim. Even if a Canadian court agrees to hear a claim, it may determine that Canadian law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Canadian law. Furthermore, it may not be possible to subject foreign persons or entities to the jurisdiction of the courts in Canada. Similarly, to the extent that our assets are located in Canada, investors may have difficulty collecting from us any judgments obtained in the U.S. courts and predicated on the civil liability provisions of U.S. securities provisions.

We are governed by the corporate laws of Québec, which in some cases have a different effect on shareholders than the corporate laws of Delaware.

We are governed by the QBCA and other relevant laws, which may affect the rights of shareholders differently than those of a company governed by the laws of a U.S. jurisdiction, and may, together with our charter documents, have the effect of delaying, deferring, or discouraging another party from acquiring control of us by means of a tender offer, a proxy contest or otherwise, or may affect the price an acquiring party would be willing to offer in such an instance. The material differences between the QBCA and Delaware General Corporation Law, or the DGCL, that may have the greatest such effect include but are not limited to the following: (i) for material corporate transactions (such as mergers and amalgamations, other extraordinary corporate transactions or amendments to our articles), the QBCA generally requires a two-thirds majority vote by shareholders, whereas the DGCL generally only requires a majority vote; and (ii) under the QBCA, a holder of 10% or more of our common shares can requisition a special meeting of shareholders, whereas such right does not exist under the DGCL.

Our amended and restated bylaws and certain Canadian legislation contain provisions that may have the effect of delaying or preventing certain change in control transactions or shareholder proposals.

Certain provisions of our amended and restated bylaws and certain Canadian legislation, together or separately, could discourage or delay certain change in control transactions or shareholder proposals.

Our amended and restated bylaws contain provisions that establish certain advance notice procedures for nomination of candidates for election as directors at shareholders' meetings. The QBCA requires that any shareholder proposal that includes nominations for the election of directors must be signed by one or more holders of shares representing in the aggregate not less than 5% of the shares or 5% of the shares of a class or series of shares of the corporation entitled to vote at the meeting to which the proposal is to be presented.

The Investment Canada Act requires that a non-Canadian must file an application for review with the Minister responsible for the Investment Canada Act and obtain approval of the Minister prior to acquiring control of a "Canadian business" within the meaning of the Investment Canada Act, where prescribed financial thresholds are exceeded. Furthermore, limitations on the ability to acquire and hold our common shares may be imposed by the Competition Act (Canada). This legislation permits the Commissioner of Competition, or Commissioner, to review any acquisition or establishment, directly or indirectly, including through the acquisition of shares, of control over or of a significant interest in our company. Otherwise, there are no limitations either under the laws of Canada or Québec, or in our articles on the rights of non-Canadians to hold or vote our common shares.

Any of these provisions may discourage a potential acquirer from proposing or completing a transaction that may have otherwise presented a premium to our shareholders.

Our business is affected by macroeconomic conditions.

Various macroeconomic factors could adversely affect our business and the results of our operations and financial condition, including health pandemics, changes in inflation, interest rates, or foreign currency exchange rates,

banking crises or disruptions in access to bank deposits or lending commitments, natural disasters, geopolitical instability resulting from war, terrorism and other violence, supply chain disruptions, and overall economic conditions and uncertainties, including those resulting from the current and future conditions in the global financial markets and volatility and disruptions in the equity and debt markets. For example, inflation (such as that recently observed in the United States and elsewhere) has increased our business costs and could become more significant in the future. Interest rates, the liquidity of the credit markets and the volatility of the capital markets could also affect the value of our investments and our ability to liquidate our investments in order to fund our operations. Similarly, these macroeconomic factors could affect the ability of our contract manufacturers, sole-source or single-source suppliers to remain in business or otherwise manufacture or supply product.

In addition, because some of our manufacturers and suppliers are located in China, we are exposed to the possibility of product supply disruption and increased costs in the event of changes in the policies, laws, rules and regulations of the United States or Chinese governments, as well as political unrest or unstable economic conditions in China. The U.S. government has indicated its intent to adopt a new approach to trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements. For example, on February 1, 2025, President Donald Trump signed executive orders imposing a 25% tariff on certain imports from Mexico and Canada, and a 10% tariff on certain imports from China, which were to take effect on February 4, 2025. A 30-day pause was granted to Canada and Mexico. However, these newly proposed and imposed tariffs have resulted in threatened and actual retaliatory tariffs against U.S. goods. Our components may in the future be subject to these tariffs, which could increase our manufacturing costs and could make our products, if successfully developed and approved, less competitive than those of our competitors whose inputs are not subject to these tariffs. We may otherwise experience supply disruptions or delays, and although we carefully manage our supply and lead-times, our suppliers may not continue to provide us with clinical supply in our required quantities, to our required specifications and quality levels or at attractive prices. In addition, certain Chinese biotechnology companies and CMOs may become subject to trade restrictions, sanctions, other regulatory requirements, or proposed legislation by the U.S. government, which could restrict or even prohibit our ability to work with such entities, thereby potentially disrupting the supply of material to us. Such disruption could have adverse effects on the development of our product candidates and our business operations.

We may become involved in litigation, including securities class action litigation, that could divert management's attention and harm the company's business, and insurance coverage may not be sufficient to cover all costs and damages.

In the past, litigation, including securities class action litigation, has often followed certain significant business transactions, such as announcement of a strategic transaction, or the announcement of negative events, such as negative results from clinical trials. These events may also result in investigations by the SEC. We may be exposed to such litigation even if no wrongdoing occurred. Litigation is usually expensive and diverts management's attention and resources, which could adversely affect our business and cash resources and our ability to consummate a potential strategic transaction or the ultimate value our shareholders receive in any such transaction.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

Risk Management and Strategy

We have implemented and maintain various information security processes designed to identify, assess and manage material risks from cybersecurity threats to our critical computer networks, third party hosted services, communications systems, hardware and software, and our critical data, including intellectual property, confidential information that is proprietary, strategic or competitive in nature, and other data related to our ongoing research and development initiatives, which we refer to as Information Systems and Data.

Our information technology function helps identify, assess and manage our cybersecurity threats and risks. Our information technology function identifies and assesses risks from cybersecurity threats by monitoring and evaluating our threat environment using various methods including, for example, automated vulnerability scanning tools of the threat environment, third-party cybersecurity audits, and use of external intelligence feeds.

Depending on the environment, we implement and maintain various technical, physical, and organizational measures, processes, standards and policies designed to manage and mitigate material risks from cybersecurity threats to our Information Systems and Data, including, for example, vulnerability management, disaster recovery and business continuity plan, Incident response policy, system monitoring, data encryption and access controls.

Our assessment and management of material risks from cybersecurity threats are integrated into our overall risk management processes. For example, our information technology function works with management to prioritize our risk management processes and mitigate cybersecurity threats that are more likely to lead to a material impact to our business and our senior management evaluates material risks from cybersecurity threats against our overall business objectives and reports to the board of directors, which evaluates our overall enterprise risk.

We use third-party service providers to assist us from time to time in identifying, assessing, and managing material risks from cybersecurity threats, including for example threat intelligence providers, cybersecurity software providers, managed cybersecurity service providers and cybersecurity testing firms.

We use third-party service providers to perform a variety of functions throughout our business, such as application providers, hosting companies and contract research organizations. We manage cybersecurity risks associated with our use of these providers using several approaches, as deemed necessary, including security questionnaires, review of compliance reports, audits and the imposition of information security contractual obligations on vendors.

For a description of the risks from cybersecurity threats that may materially affect us and how they may do so, see our risk factors under Part 1. Item 1A. Risk Factors in this Annual Report.

Governance

Our board of directors addresses our cybersecurity risk management as part of its general oversight function. The board of directors' audit committee is responsible for overseeing our cybersecurity risk management processes, including oversight and mitigation of risks from cybersecurity threats.

Our cybersecurity risk assessment and management processes are implemented and maintained by certain Company management, including our Executive Vice-President and Chief Financial Officer, our Vice-President of Finance and Corporate Controller and our Vice-President of Information Technology, who each have over 20 years of relevant experience.

Management is responsible for hiring appropriate personnel, helping to integrate cybersecurity risk considerations into our overall risk management strategy, and communicating key priorities to relevant personnel. Our management and audit committee are responsible for approving budgets, helping prepare for cybersecurity incidents, approving cybersecurity processes, and reviewing security assessments and other security-related reports.

Our cybersecurity incident response and vulnerability management policies are designed to escalate certain cybersecurity incidents to members of management depending on the circumstances, including our Executive Vice-President and Chief Financial Officer and President and Chief Executive Officer. Our Executive Vice-President and Chief Financial Officer is part of our incident response team to help us mitigate and remediate cybersecurity incidents of which they are notified. In addition, our incident response and vulnerability management policies include reporting to the audit committee of the board of directors for certain cybersecurity incidents.

The audit committee receives periodic reports from our information technology function concerning our significant cybersecurity threats and risks and the processes we have implemented to address them. The board of directors also has access to various reports, summaries or presentations related to cybersecurity threats, risk and mitigation.

Item 2. Properties.

Our headquarters is currently located in Montréal, Québec, Canada and consists of 24,039 square feet of combined laboratory and office space under a lease agreement that expires in August 2025. This facility provides the laboratory capacity for our CRISPR-enabled genome-wide synthetic lethal target platform, SNIPRx[®], including dedicated space for work related to accelerating our preclinical assets. We also lease 11,312 square feet of office space in Cambridge, Massachusetts for our U.S.-based employees under a lease which expires in January 2026. In line with the announced realignment of resources and strategic reprioritization of our research and development activities to focus our efforts on the advancement of our Phase 1 clinical programs, RP-3467 and RP-1664, we are currently exploring our lease options.

Item 3. Legal Proceedings.

From time to time, we may become involved in legal proceedings arising in the ordinary course of our business. We are not currently a party to any material legal proceedings, and we are not aware of any pending or threatened legal proceeding against us that we believe could have an adverse effect on our business, operating results or financial condition.

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 for our Common Shares

Our common shares are traded on The Nasdaq Global Select Market under the symbol “RPTX” and began trading on June 20, 2020. Prior to this time, there was no public market for our common shares.

Holders

As of December 31, 2024, there were approximately 10 holders of record of our common shares. This number does not reflect the beneficial holders of our common shares for whom shares are held in “nominee” or “street” name through brokerage accounts or other nominees.

Dividends

We have never declared or paid cash dividends on our share capital, and we do not currently intend to pay any cash dividends on our share capital in the foreseeable future. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business. Any future determination related to dividend policy will be made at the discretion of our board of directors, subject to applicable laws, and will depend upon, among other factors, our results of operations, financial condition, contractual restrictions, and capital requirements. In addition, our ability to pay cash dividends on our share capital in the future may be limited by the terms of any future debt or preferred securities we issue or any credit facilities we enter into.

Recent Sales of Unregistered Equity Securities

In November 2024, we issued a warrant to purchase 35,000 of our common shares at an exercise price of \$3.61 per common share to a service provider in consideration for certain corporate advisory services provided by the service provider. The warrant is exercisable in whole or in part through November 7, 2029. The warrant was issued in reliance on the exemption from registration requirements thereof provided by Section 4(a)(2) of the Securities Act as a transaction by an issuer not involving a public offering.

Issuer Purchases of Equity Securities

None.

Item 6. [Reserved]

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

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

Overview

We are a clinical-stage precision oncology company enabled by our proprietary synthetic lethality approach to the discovery and development of novel therapeutics. Synthetic lethality, or SL, represents a clinically validated approach to drug development. We use our proprietary, genome-wide, CRISPR-enabled SNIPRx platform to systematically discover and develop highly targeted cancer therapies that preferentially treat cancers due to mechanisms of genomic instability, including DNA damage repair. SL arises when a deficiency in either of two genes is tolerated in cells, but simultaneous deficiencies in both genes cause cell death. Cancer cells that contain a mutation in one gene of a SL pair are susceptible to therapeutic intervention targeting the other gene pair.

Strategic Re-Prioritization

In January 2025, we announced a re-alignment of resources and a re-prioritization of our clinical portfolio to focus on the continued advancement of our Phase 1 clinical programs, RP-3467 and RP-1664. We also announced our intention to seek partnering opportunities across our portfolio, including for lunresertib and camonsertib, prior to any start of pivotal development. Effective February 24, 2025, we reduced our workforce by approximately 75%, with our remaining employees primarily focused on the continued advancement of our Phase 1 clinical programs, RP-3467 and RP-1664.

Liquidity Overview

Since our inception in September 2016, we have focused primarily on raising capital, organizing and staffing our company, conducting discovery and research activities, identifying potential SL gene pairs, establishing and protecting our intellectual property portfolio including for our proprietary SNIPRx platform, developing and progressing our product candidates through preclinical studies and preparing for clinical trials and establishing arrangements with third parties for the manufacture of initial quantities of our product candidates and component materials.

As of December 31, 2024, we had cash and cash equivalents and marketable securities on hand of \$152.8 million. We believe that our cash, cash equivalents, and marketable securities will be sufficient to fund our anticipated operating and capital expenditure requirements into late-2027, after taking into account the realignment of resources and reprioritization of our clinical portfolio announced in January 2025 and our reduction in workforce announced in February 2025. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our capital resources sooner than we expect.

Since inception, we have incurred significant operating losses. Our net losses were \$84.7 million, and \$93.8 million for the years ended December 31, 2024 and 2023, respectively. As of December 31, 2024, we had an accumulated deficit of \$417.8 million.

We expect to continue to incur significant expenses and operating losses for the foreseeable future, as we advance our product candidates through preclinical and clinical development and seek regulatory approvals, manufacture drug product and drug supply, as well as maintain and expand our intellectual property portfolio. Our net losses are also expected to be impacted as we pay for accounting, audit, legal, regulatory and consulting services, and pay costs associated with maintaining compliance with Nasdaq listing rules and the SEC requirements, directors and officers, or D&O, insurance, investor and public relations activities and other expenses associated with operating as a public company. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on

the timing of our preclinical studies, our clinical trials, our expenditures on other research and development activities, our revenue and expenses recognized from collaboration and license agreements, as well as restructuring initiatives we undertake.

We do not have any products approved for sale. We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for our product candidates, if ever. As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of public or private equity offerings and debt financings or other sources, such as potential collaboration agreements, strategic alliances and licensing arrangements. We may be unable to raise additional funds or enter into such other agreements or arrangements when needed on acceptable terms, or at all. Our failure to raise capital or enter into such agreements as, and when, needed, could have a negative effect on our business, results of operations and financial condition.

Macroeconomic Considerations and Other Global Uncertainties

Unfavorable conditions in the economy in the United States, Canada and abroad may negatively affect the growth of our business and our results of operations. For example, macroeconomic events, including health pandemics, changes in inflation and interest rates as well as foreign currency exchange rates, global trade restrictions and the potential imposition of tariffs, natural disasters, supply chain disruptions and the Russia-Ukraine and Middle-East conflicts, have led to economic uncertainty globally and could impact our overall business operations. The effect of macroeconomic conditions may not be fully reflected in our results of operations until future periods. If, however, economic uncertainty increases or the global economy worsens, our business, financial condition and results of operations may be harmed. For further discussion of the potential impacts of macroeconomic events on our business, financial condition, and operating results, see the section titled “Risk Factors.”

In addition, because some of our manufacturers and suppliers are located in China, we are exposed to the possibility of product supply disruption and increased costs in the event of changes in the policies, laws, rules and regulations of the United States or Chinese governments, as well as political unrest or unstable economic conditions in China. The U.S. government has indicated its intent to adopt a new approach to trade policy and in some cases to renegotiate, or potentially terminate, certain existing bilateral or multi-lateral trade agreements. For example, on February 1, 2025, President Donald Trump signed executive orders imposing a 25% tariff on certain imports from Mexico and Canada, and a 10% tariff on certain imports from China, which were to take effect on February 4, 2025. A 30-day pause was granted to Canada and Mexico. However, these newly proposed and imposed tariffs have resulted in threatened and actual retaliatory tariffs against U.S. goods. Our components may in the future be subject to these and additional tariffs, which could increase our manufacturing costs and could make our products, if successfully developed and approved, less competitive than those of our competitors whose inputs are not subject to these tariffs. We may otherwise experience supply disruptions or delays, and although we carefully manage our supply and lead-times, our suppliers may not continue to provide us with clinical supply in our required quantities, to our required specifications and quality levels or at attractive prices. In addition, certain Chinese biotechnology companies and CMOs may become subject to trade restrictions, sanctions, other regulatory requirements, or proposed legislation by the U.S. government, which could restrict or even prohibit our ability to work with such entities, thereby potentially disrupting the supply of material to us. Such disruption could have adverse effects on the development of our product candidates and our business operations.

Components of Results of Operations

Revenue

To date, we have not recognized any revenue from product sales, and we do not expect to generate any revenue from the sale of products in the foreseeable future. If our development efforts for our product candidates are successful and result in regulatory approval, or license agreements with third parties, we may generate revenue in the future from product sales. However, there can be no assurance as to when we will generate such revenue, if at all.

The following table presents revenue from collaboration agreements:

	December 31,	
	2024	2023
	(in thousands)	
Roche Collaboration and License Agreement	\$ 50,888	\$ 14,545
Bristol-Myers Squibb Collaboration and License Agreement	2,589	26,115
Ono Collaboration Agreement	—	10,473
Total revenue	\$ 53,477	\$ 51,133

Collaboration and License Agreement with Hoffmann-La Roche Inc. and F. Hoffmann-La Roche Ltd.

On June 1, 2022, we entered into a collaboration and license agreement (the Roche Agreement) with Hoffmann-La Roche Inc. and F. Hoffmann-La Roche Ltd (collectively, Roche) regarding the development and commercialization of our product candidate camonsertib (also known as RP-3500) and specified other ATR (Ataxia-Telangiectasia and Rad3-related protein kinase) inhibitors, which we refer to as the Licensed Products.

Under the Roche Agreement, we granted Roche a worldwide, perpetual, exclusive, sublicensable license to develop, manufacture, and commercialize the Licensed Products. Roche assumed all subsequent development of camonsertib with the potential to expand development into additional tumors and multiple combination studies. We agreed to complete specified ongoing clinical trials in accordance with the development plan in the Roche Agreement, as well as ongoing investigator sponsored trials, or together, the Continuing Trials, at our expense. We also retained the right to conduct specified clinical trials of camonsertib in combination with our PKMYT1 compound (also known as lunresertib).

We determined that the transaction price at the onset of the Roche Agreement was \$134.6 million, being (i) the total non-refundable upfront payment received of \$125.0 million, (ii) the additional \$4.0 million payment received, negotiated with Roche for revisions to the clinical development plan under the Roche Agreement as agreed at the time of the effective date of the Roche Agreement, and (iii) the \$5.6 million received for the transfer of clinical trial materials.

In February 2023, we received an additional payment of \$4.0 million negotiated with Roche for additional revisions to the clinical development plan. In March 2024, we received a further payment of \$4.0 million for revisions to the clinical development plan under the Roche Agreement, of which \$2.1 million was recorded as collaboration revenue receivable at December 31, 2023. The transaction price was updated for the additional consideration received, as well as other adjustments of \$0.5 million pursuant to the termination of the agreement.

Performance obligation		Transaction price (in thousands)
Combined licenses	\$	105,327
Completion of Continuing Trials		34,035
Transfer of clinical trial materials		2,714
Total transaction price	\$	142,076
Deferred revenue pertaining to the Roche Agreement		Completion of Continuing Trials (in thousands)
Balance as of December 31, 2023	\$	9,463
Increase in collaboration revenue receivable		41,425
Recognition as revenue, as the result of performance obligations satisfied		(50,888)
Balance as of December 31, 2024	\$	—

We recognized \$50.9 million for the year ended December 31, 2024 as revenue associated with the Roche Agreement in relation to (i) the recognition of revenue from a \$40.0 million milestone payment from Roche in February 2024 upon dosing of the first patient with camonsertib in Roche's Phase 2 TAPISTRY trial, as well as (ii) the recognition of all remaining deferred revenue for research and development services performed towards the

completion of the Continuing Trials during the period. As of December 31, 2024, there was nil deferred revenue related to the Roche Agreement.

Over the course of the Roche camonsertib collaboration, we received a cumulative total of \$182.6 million, including the upfront payment, the milestone payment, as well as additional reimbursements from Roche. On February 7, 2024, we received written notice from Roche of their election to terminate the Roche collaboration agreement following a review of Roche's pipeline and evolving external factors. The termination became effective on May 7, 2024, at which time we regained global development and commercialization rights for camonsertib from Roche. Following May 7, 2024, there is no other material relationship between us and Roche.

We recognized \$14.5 million for the year ended December 31, 2023 in recognition of research and development services performed towards the completion of the Continuing Trials under the Roche Agreement during the year. As of December 31, 2023, there was \$9.4 million of deferred revenue related to the Roche Agreement, of which \$7.7 million was classified as current and \$1.7 million was classified as non-current in the consolidated balance sheet based on the period the services to complete the Continuing Trials were expected to be performed.

Collaboration and License Agreement with Bristol-Myers Squibb Company

In May 2020, we entered into a collaboration and license agreement, or the BMS Agreement, with the Bristol-Myers Squibb Company, or Bristol-Myers Squibb, pursuant to which we and Bristol-Myers Squibb agreed to collaborate in the research and development of potential new product candidates for the treatment of cancer. We provided Bristol-Myers Squibb access to a selected number of our existing screening campaigns and novel campaigns. We were responsible for carrying out early-stage research activities directed to identifying potential targets for potential licensing by Bristol-Myers Squibb. The collaboration consisted of programs directed to both druggable targets and to targets commonly considered undruggable to traditional small molecule approaches. In the event that Bristol-Myers Squibb elected to obtain an exclusive license for the subsequent development, manufacturing and commercialization of a program, Bristol-Myers Squibb will then be solely responsible for all such worldwide activities.

Although the collaboration term expired in November 2023, the BMS Agreement will not expire until, on a licensed product-by-licensed product and country-by-country basis, the expiration of the applicable royalty term and in its entirety upon expiration of the last royalty term. Either party may terminate earlier upon an uncured material breach of the agreement by the other party, or the insolvency of the other party. Additionally, Bristol-Myers Squibb may terminate the BMS Agreement for any or no reason on a program-by-program basis upon specified written notice. We are eligible to receive up to \$301.0 million in total milestones on a program-by-program basis, subject upon the achievement of certain specified research, development, regulatory and commercial milestones. We are further entitled to a tiered percentage royalty on annual net sales ranging from high-single digits to low-double digits, subject to certain specified reductions.

As part of the BMS Agreement, Bristol-Myers Squibb paid us an initial upfront fee of \$50.0 million and made an equity investment of \$15.0 million in our company.

The \$50.0 million upfront payment was recorded as deferred revenue on our consolidated balance sheet and was partially recognized at the point in time when option licenses were exercised by Bristol-Myers Squibb, with the remainder being recognized on a proportional performance basis over the period of service for research services.

Performance obligation	Transaction price	
	(in thousands)	
Research activities	\$	6,405
Options to license druggable targets		31,148
Options to license undruggable targets		12,447
Total transaction price	\$	50,000

Deferred revenue pertaining to the BMS Agreement	Research activities	Options to license druggable targets	Options to license undruggable targets	Total
	(in thousands)			
Balance as of December 31, 2023	\$ —	\$ —	\$ 2,489	\$ 2,489
Increase in collaboration revenue receivable	—	—	100	100
Recognition as revenue, as the result of performance obligations satisfied	—	—	(2,589)	(2,589)
Balance as of December 31, 2024	\$ —	\$ —	\$ —	\$ —

We recognized nil as revenue for the year ended December 31, 2024 and \$2.4 million for the year ended December 31, 2023, in recognition of deferred revenue for research activities performed under the BMS Agreement.

We recognized nil as revenue for the year ended December 31, 2024 and \$13.7 million for the year ended December 31, 2023, related to druggable targets.

We completed the discovery portion of the BMS Agreement in November 2023. With the completion of our performance obligations under the BMS Agreement in the fourth quarter of 2023, we recognized \$10.0 million as revenue for the year ended December 31, 2023 related to options to license undruggable targets as these options expired upon completion of the discovery portion of the BMS Agreement. As of December 31, 2023, Bristol-Myers Squibb retained its right to exercise one option to an undruggable target.

In March 2024, Bristol-Myers Squibb exercised its one remaining option for an undruggable target. As a result, we recognized \$2.6 million as revenue related to undruggable targets, including the option fee payment of \$0.1 million, for the year ended December 31, 2024.

As of December 31, 2023, there was \$2.5 million of deferred revenue related to the BMS Agreement, which was classified as current on the consolidated balance sheet based on the period the services are expected to be performed and the expected timing of potential option exercises. As of December 31, 2024, there was no deferred revenue related to the BMS Agreement.

Over the course of our collaboration, Bristol-Myers Squibb has exercised its options for a combined total of five druggable targets and one undruggable target.

Collaboration Agreement with Ono Pharmaceutical Company Ltd.

In January 2019, we entered into a research services, license and collaboration agreement (the Ono Agreement) with Ono Pharmaceutical Company Ltd. (Ono), pursuant to which we and Ono agreed to collaborate in the research of potential product candidates targeting Polθ and the development of our small molecule Polθ ATPase inhibitor program. Pursuant to the terms of the agreement, we received initial upfront payments of approximately \$8.1 million. These upfront payments were recorded as deferred revenue on our consolidated balance sheet as per our revenue recognition accounting policy and were to be recognized as revenue at the point in time when a product candidate was licensed to Ono pursuant to the terms of the agreement.

In October 2021 and December 2022, we achieved specified research triggers amounting to ¥100 million (\$0.9 million) and ¥200 million (\$1.5 million), respectively, as research service payments provided for in the Ono Agreement. These amounts were added to the transaction price as the consideration was no longer constrained.

In June 2023, we and Ono determined not to further extend the term of the Ono Agreement. As a result, no product candidate would be licensed to Ono pursuant to the terms of the Ono Agreement. We recognized revenue of \$10.5 million for the year ended December 31, 2023 with regards to the performance obligation under the Ono Agreement. In July 2023, Ono provided us with a formal notice to terminate the Ono Agreement without cause as defined in the Ono Agreement. As a result of this termination, all rights to the Polθ program have reverted back to us.

Operating Expenses

Debiopharm Collaborative Arrangement

In January 2024, we entered into a clinical study and collaboration agreement, or the Debio Collaboration Agreement, with Debiopharm International S.A., or Debiopharm, a privately-owned, Swiss-based biopharmaceutical company, with the aim to explore the synergy between our compound, lunresertib, and Debiopharm's compound, Debio 0123, a WEE1 inhibitor. We are collaborating with Debiopharm on the development of a combination therapy, with us sponsoring the global study, and will share all costs equally. Both parties are each supplying their respective drugs and retain all commercial rights to their respective compounds, including as monotherapy or as combination therapies. The activities associated with the Debio Collaboration Agreement are coordinated by a joint steering committee, which is comprised of an equal number of representatives from both parties. Based on the terms of the Debio Collaboration Agreement, we concluded that the Debio Collaboration Agreement meets the requirements of a collaboration within the guidance of ASC 808, "Collaborative Arrangements", as both parties are active participants in the combination trial and are exposed to significant risks and rewards depending on the success of the combination trial. Accordingly, the net costs associated with the co-development are expensed as incurred and recognized within research and development expenses in our consolidated statement of operations and comprehensive loss. During the year ended December 31, 2024, we recognized \$3.2 million in net research and development costs with regards to the Debiopharm portion of the 50/50 cost sharing terms in the Debio Collaboration Agreement.

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our drug discovery efforts and the development of our product candidates, partially offset by fully refundable Canadian research and development tax credits. We expense research and development costs as incurred, which include:

- external research and development expenses incurred under agreements with contract research organizations, or CROs, as well as investigative sites and consultants that conduct our clinical trials, preclinical studies and other scientific development services;
- employee-related expenses, including salaries, bonuses, benefits, share-based compensation, and other related costs for those employees involved in research and development efforts;
- costs related to manufacturing material for our preclinical studies and clinical trials, including fees paid to contract manufacturing organizations, or CMOs;
- laboratory supplies and research materials;
- upfront, milestone and maintenance fees incurred under license, acquisition and other third-party agreements;
- costs related to compliance with regulatory requirements; and
- facilities, depreciation, scientific advisory board and other allocated expenses, which include direct and allocated expenses for rent, maintenance of facilities and equipment, insurance, equipment and software.

Costs for certain activities are recognized based on an evaluation of the progress to completion of specific tasks using data such as information provided to us by our vendors and analyzing the progress of our studies or other services performed. Significant judgment and estimates are made in determining the accrued expense or prepaid balances at the end of any reporting period.

We characterize research and development costs incurred prior to the identification of a product candidate as discovery costs. We characterize costs incurred once a product candidate has been identified as development costs.

Our direct external research and development expenses consist primarily of fees paid to outside consultants, CROs, CMOs and research laboratories in connection with our preclinical development, process development, manufacturing and clinical development activities. Our direct external research and development expenses also

include fees incurred under license, acquisition, and option agreements. We track these external research and development costs on a program-by-program basis once we have identified a product candidate.

We do not allocate employee costs, costs associated with our discovery efforts, laboratory supplies, and facilities, including depreciation or other indirect costs, to specific programs because these costs are deployed across multiple programs and, as such, are not separately classified. We use internal resources primarily to conduct our research and discovery activities as well as for managing our preclinical development, process development, manufacturing, and clinical development activities.

The following table summarizes our research and development costs:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Discovery costs		
Direct external costs	\$ 5,293	\$ 7,717
Laboratory supplies and research materials	3,357	3,881
Personnel related costs	10,833	11,710
Facilities related costs	1,640	1,523
Other costs	3,366	3,913
	<u>24,489</u>	<u>28,744</u>
Development costs		
Direct external costs		
Camonsertib program	14,321	23,420
Lunresertib program	29,071	29,848
RP-1664 program	6,937	6,337
RP-3467 and Polθ program	4,878	6,500
Personnel related costs	34,478	34,187
Facilities related costs	898	867
Other costs	5,043	5,154
Debiopharm development cost reimbursement	(3,242)	—
	<u>92,384</u>	<u>106,313</u>
R&D tax credits	(932)	(1,464)
Total research and development costs	<u>\$ 115,941</u>	<u>\$ 133,593</u>

The successful development of our product candidates is highly uncertain. We expect our research and development expenses to decrease in the short term as a result of the cost savings initiatives we implemented in connection with strategic reprioritization activities implemented in August 2024 and January 2025. 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 our 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. 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. Our clinical development costs are expected to increase significantly as we commence clinical trials. We anticipate that our expenses will increase substantially, particularly due to the numerous risks and uncertainties associated with developing product candidates, including the uncertainty of:

- the scope, rate of progress, and expenses of our ongoing research activities as well as any preclinical studies, clinical trials and other research and development activities;

- establishing an appropriate safety profile;
- successful enrollment in and completion of clinical trials;
- whether our product candidates show safety and efficacy in our clinical trials;
- receipt of marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities or making arrangements with third-party manufacturers;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for our product candidates;
- commercializing product candidates, if and when approved, whether alone or in collaboration with others; and
- continued acceptable safety profile of products following any regulatory approval.

Any changes in the outcome of any of these variables with respect to the development of our product candidates in preclinical and clinical development could mean a significant change in the costs and timing associated with the development of these product candidates. We may never succeed in achieving regulatory approval for any of our product candidates. We may obtain unexpected results from our clinical trials. We may elect to discontinue, delay or modify clinical trials of some product candidates or focus on other product candidates. For example, if the U.S. Food and Drug Administration, or FDA, the European Medicines Agency, or EMA, or another regulatory authority were to delay our planned start of clinical trials or require us to conduct clinical trials or other testing beyond those that we currently expect or if we experience significant delays in enrollment in any of our ongoing and planned clinical trials, we could be required to expend significant additional financial resources and time on the completion of clinical development of that product candidate.

General and Administrative Expenses

General and administrative expense consists primarily of employee related costs, including salaries, bonuses, benefits, share-based compensation and other related costs, as well as expenses for outside professional services, including legal, accounting and audit services and other consulting fees, rent expense, directors and officers insurance expenses, investor and public relations expenses and other general administrative expenses.

We anticipate that we will continue to incur significant accounting, audit, legal, regulatory, compliance and directors' and officers' insurance costs as well as investor and public relations expenses. We also anticipate that our general and administrative expenses may increase in the future as we explore partnering alternatives for our portfolio, including potential legal, accounting and advisory expenses and other related charges.

Restructuring Expenses

In August 2024, we announced a strategic reprioritization of our research and development activities to focus our efforts on the advancement of our portfolio of clinical-stage oncology programs. As part of this strategic refocus, we reduced our overall workforce by approximately 25%, with a majority of the headcount reductions from our preclinical group. For the year ended December 31, 2024, we incurred approximately \$1.4 million in costs as part of this strategic refocus, comprised primarily of severance and termination benefits.

In January 2025, we announced a further realignment of resources and a reprioritization of our clinical portfolio to focus on the continued advancement of our Phase 1 clinical programs, RP-3467 and RP-1664. Effective February 24, 2025, we also reduced our workforce by approximately 75%. We estimate that we will incur approximately \$8.7 million for retention, severance and other employee termination-related costs through the fourth quarter of 2025.

Other Income (Expense), Net

Other income (expense), net consists primarily of realized and unrealized gains and losses on foreign exchange, interest income earned on cash and cash equivalents and marketable securities, and other expenses such as interest and bank charges.

Realized and unrealized gains and losses on foreign exchange consist of realized and unrealized gains and losses from holding cash and foreign currency denominated other receivables, accounts payable, accrued expenses and other current liabilities as well as operating lease liabilities.

Results of Operations

Comparison of the Years Ended December 31, 2024 and 2023

The following table summarizes our results of operations for the years ended December 31, 2024 and 2023:

	Year Ended December 31,		Change
	2024	2023 (in thousands)	
Revenue:			
Collaboration agreements	\$ 53,477	\$ 51,133	\$ 2,344
Operating expenses:			
Research and development, net of tax credits	115,941	133,593	(17,652)
General and administrative	29,680	33,764	(4,084)
Restructuring	1,379	—	1,379
Total operating expenses	147,000	167,357	(20,357)
Loss from operations	(93,523)	(116,224)	22,701
Other income (expense), net:			
Realized and unrealized loss on foreign exchange	(2)	(170)	168
Interest income	10,391	13,334	(2,943)
Other expense, net	(115)	(119)	4
Total other income, net	10,274	13,045	(2,771)
Loss before income taxes	(83,249)	(103,179)	19,930
Income tax (expense) benefit	(1,440)	9,383	(10,823)
Net loss	\$ (84,689)	\$ (93,796)	\$ 9,107

Revenue

Revenue was \$53.5 million for the year ended December 31, 2024, compared to \$51.1 million for year ended December 31, 2023. The increase of \$2.3 million was due to:

- a \$36.3 million increase in revenue recognized under the Roche Agreement as a result of the \$40.0 million milestone achievement in the first quarter of 2024 and higher deferred revenue recognized for the completion of the Continuing Trials. The Roche Agreement was terminated in May 2024;
- a \$23.5 million decrease in revenue recognized under the BMS Agreement which expired in November 2023; and
- a \$10.5 million decrease in revenue recognized under the Ono Agreement which expired in June 2023.

Research and Development Expenses, Net of Tax Credits

Research and development expenses were \$115.9 million for the year ended December 31, 2024, compared to \$133.6 million for the year ended December 31, 2023. The decrease of \$17.7 million in research and development expenses was primarily due to:

- a \$9.1 million decrease in direct external costs of the camonsertib program due to end of Phase 1/2 TRESR and ATTACC;
- a \$3.2 million increase in Debiopharm development cost reimbursement;
- a \$2.4 million decrease in other direct external costs related to discovery programs;
- a \$1.6 million decrease in the direct external costs of the RP-3467 & Polθ program;
- a \$0.8 million decrease in direct external costs of the lunresertib program;
- a \$0.6 million increase in the RP-1664 program as a result of the LIONS clinical trial underway; and
- a \$0.6 million decrease in personnel costs; and
- a \$0.6 million decrease in other research and material expenses including IT related costs and tax credits.

General and Administrative Expenses

General and administrative expenses were \$29.7 million for the year ended December 31, 2024, compared to \$33.8 million for the year ended December 31, 2023. The decrease of \$4.1 million in general and administrative expenses consisted of:

- a \$2.4 million decrease in personnel related costs, including a \$2.1 million decrease in share-based compensation;
- a \$1.2 million decrease in our D&O insurance premium due to lower renewal premiums; and
- a \$0.5 million decrease in professional fees associated with lower renewal of legal and finance services.

Restructuring Expenses

Restructuring expenses was \$1.4 million and nil for the years ended December 31, 2024 and 2023, respectively, as a result of costs incurred as part of our strategic refocus announced in August 2024, comprised primarily of severance and termination benefits.

Other Income (Expense), Net

Other income, net was \$10.3 million for the year ended December 31, 2024, compared to \$13.0 million for the year ended December 31, 2023. The decrease of \$2.8 million in other income was primarily attributable to lower sums in cash and cash equivalents and marketable securities.

Income Tax (Expense) Benefit

Income tax provision of \$1.4 million for the year ended December 31, 2024 primarily due to taxable income in our U.S. subsidiary and utilization of federal and state research and development tax credit carry forwards.

Income tax benefit was \$9.4 million for the year ended December 31, 2023, primarily due to taxable income in our U.S. subsidiary and utilization of federal and state research and development tax credit carry forwards offset by a favorable adjustment related to IRC Section 174 guidance issued in September 2023 prior to filing U.S. income tax returns for the prior period.

The decrease of \$10.8 million in the income tax benefit was primarily driven by a favorable adjustment in the prior period U.S. income taxes related to IRC Section 174 guidance, offset by the utilization of federal and state research and development tax credit carry forwards.

Liquidity and Capital Resources

Since our inception, we have not recognized any revenue from product sales and have incurred operating losses and negative cash flows from our operations. We have not yet commercialized any product and we do not expect to generate revenue from sales of any products for several years, if at all. We have funded our operations to date with proceeds received from equity financings, including net proceeds of \$232.0 million from our IPO in June 2020 and net proceeds of \$94.3 million from a follow-on offering in November 2021. We have also received initial upfront and additional payments of approximately \$243.1 million in the aggregate from our collaboration and license agreements.

In August 2022, we entered into a Common Shares Sale Agreement, or the 2022 Sales Agreement, with Cowen and Company, LLC pursuant to which we may sell up to \$125.0 million in common shares. In November 2024, we entered into a Common Shares Sale Agreement, or the 2024 Sales Agreement, with TD Securities (USA) LLC to replace the 2022 Sales Agreement, pursuant to which we may sell up to \$100.0 million in common shares. During the years ended December 31, 2024 and 2023, we did not issue or sell shares under the 2022 Sales Agreement or 2024 Sales Agreement.

In August 2024, we announced a strategic reprioritization of our research and development activities to focus our efforts on the advancement of our portfolio of clinical-stage oncology programs. As part of this strategic refocus, we reduced our overall workforce by approximately 25%, with a majority of the headcount reductions from our preclinical group. Furthermore, in January 2025, we announced a realignment of resources and a reprioritization of our clinical portfolio to focus on the continued advancement of our Phase 1 clinical programs, RP-3467 and RP-1664, and in February 2025 we reduced our workforce by 75%. We also announced our intention to seek partnering opportunities across our portfolio, including for lunresertib and camonsertib prior to the start of any pivotal development.

We expect to incur significant expenses and operating losses for the foreseeable future as we advance our product candidates through preclinical and clinical development, seek regulatory approval and pursue commercialization of any approved product candidates and we will continue to incur additional costs associated with operating as a public company, including with our transition from smaller reporting company status at the end of 2024. We expect that our research and development and general and administrative costs will increase in connection with our planned research and development activities.

Beginning in 2022, the Tax Cuts and Jobs Act of 2017 eliminated the option to deduct certain U.S.-based research and development expenditures in the current fiscal year and required taxpayers to amortize them over five years pursuant to Section 174 of the Internal Revenue Code of 1986, as amended, or IRC. This provision increased our 2023 and 2022 cash payments of income taxes significantly as compared to 2021 in compliance with IRC Section 174. In September 2023, new interim guidance was issued by the Department of Treasury and the Internal Revenue Service on IRC Section 174 that supports the deduction of such expenses. An income tax receivable in the amount of \$11.6 million as of December 31, 2024 reflects the overpayment of tax installments by our U.S. subsidiary. Any changes to tax legislation may materially affect our cash flows. Changes in our tax provisions or an increase in our tax liabilities, whether due to changes in applicable laws and regulations or our interpretation or application thereof, could have a material adverse effect on our financial position, results of operations and/or cash flows.

As of December 31, 2024, our cash and cash equivalents and marketable securities on hand was \$152.8 million. Taking into account the anticipated cost savings associated with the announced realignment of resources and a reprioritization of our portfolio, we believe that our cash, cash equivalents, and marketable securities will be sufficient

to fund our anticipated operating and capital expenditure requirements into late-2027. We have based this estimate on assumptions that may prove to be wrong, and we could exhaust our capital resources sooner than we expect.

Because of the numerous risks and uncertainties associated with research, development, and commercialization of our product candidates, we are unable to estimate the exact amount of our working capital requirements. Our future capital requirements will depend on many factors, including:

- the initiation, timing, costs, progress and results of our product candidates, including our ongoing Phase 1 clinical trials of lunresertib;
- the progress of preclinical development and possible clinical trials of our current earlier-stage programs;
- the scope, progress, results and costs of our research programs and preclinical development of any additional product candidates that we may pursue;
- the development requirements of other product candidates that we may pursue;
- our headcount growth and associated costs as we expand our research and development and establish a commercial infrastructure;
- the timing and amount of milestone and royalty payments that we are required to make or eligible to receive under our current or future collaboration agreements;
- the outcome, timing and cost of meeting regulatory requirements established by the FDA, EMA and other regulatory authorities;
- the costs and timing of future commercialization activities, including product manufacturing, marketing, sales and distribution, for any of our product candidates for which we or our collaborators receive marketing approval;
- the cost of expanding, maintaining and enforcing our intellectual property portfolio, including filing, prosecuting, defending and enforcing our patent claims and other intellectual property rights;
- the cost of defending potential intellectual property disputes, including patent infringement actions brought by third parties against us or any of our product candidates;
- the effect of competing technological and market developments;
- the cost and timing of completion of commercial-scale manufacturing activities;
- the extent to which we partner our programs, acquire or in-license other product candidates and technologies or enter into additional strategic collaborations;
- the revenue, if any, received from commercial sales of RP-3467, RP-1664, lunresertib, camonsertib and any future product candidates for which we or our collaborators receive marketing approval; and
- the costs of operating as a public company.

Until such time, if ever, as we can generate substantial product revenues to support our cost structure, we expect to finance our cash needs through a combination of equity offerings, debt financings, collaborations and other similar arrangements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our shareholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common shareholders. Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise funds through collaborations, or other similar arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us and/or may reduce the value of our common shares. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market our product candidates even if we would otherwise prefer to develop and market such product candidates ourselves.

Cash Flows

Comparison of the Years Ended December 31, 2024 and 2023

The following table summarizes our cash flows for each of the years presented:

	2024	Year ended December 31, 2023 (in thousands)	CHANGE
Net cash used in operating activities	\$ (76,445)	\$ (127,158)	\$ 50,713
Net cash provided by investing activities	49,468	78,041	(28,573)
Net cash provided by financing activities	542	842	(300)
Effect of exchange rate fluctuations on cash held	(116)	22	(138)
Net Decrease In Cash And Cash Equivalents	\$ (26,551)	\$ (48,253)	\$ 21,702

Operating Activities

Net cash used in operating activities was \$76.4 million for the year ended December 31, 2024, reflecting a net loss of \$84.7 million, a net decrease of \$14.1 million in our net operating assets offset by a net change in non-cash charges of \$22.3 million. The non-cash charges primarily consist of share-based compensation for option grants to employees, as well as depreciation expense and non-cash lease expense offset by the net accretion/amortization of marketable securities. The change in our net operating assets was primarily due to \$12.0 million of deferred revenue being recognized with the satisfaction of performance obligations and by a net decrease of \$2.1 million in accounts payable and accrued expenses, prepaid expenses, operating leases, other current liabilities and other current and non-current assets.

Net cash used in operating activities was \$127.2 million for the year ended December 31, 2023, reflecting a net loss of \$93.8 million, a net decrease of \$55.2 million in our net operating assets offset by a net change in non-cash charges of \$21.8 million. The non-cash charges primarily consist of share-based compensation for option grants to employees, as well as depreciation expense and non-cash lease expense offset by the net accretion/amortization of marketable securities. The change in our net operating assets was primarily due to \$43.8 million of deferred revenue being recognized with the satisfaction of performance obligations and \$14.3 million income tax recovery, offset by an increase of \$4.3 million in account payable and accrued expenses and other current liabilities.

The \$50.7 million decrease in cash used in operating activities for the year ended December 31, 2024 compared to December 31, 2023 is primarily due to the \$40.0 million milestone payment received from Roche in the first quarter of 2024.

Investing Activities

Net cash provided by investing activities was \$49.5 million for the year ended December 31, 2024 and resulted primarily from proceeds from maturities of marketable securities offset by purchases of marketable securities.

Net cash provided by investing activities was \$78.0 million for the year ended December 31, 2023 and resulted primarily from proceeds from maturities of marketable securities offset by purchases of marketable securities.

Financing Activities

Net cash provided by financing activities was \$0.5 million for the year ended December 31, 2024, consisting of net proceeds from the exercise of stock options and issuance of common shares under the ESPP.

Net cash provided by financing activities was \$0.8 million for the year ended December 31, 2023, consisting of net proceeds from the exercise of stock options and issuance of common shares under the ESPP.

Material Cash Requirements

As of December 31, 2024, we anticipate the aggregate of our cash and cash equivalents and marketable securities will be sufficient to fund our contractual obligations, as well as cash requirements to support our ongoing operations and capital expenditures. Our contractual obligations as of December 31, 2024 primarily consist of:

Operating Leases

We have certain lease agreements for office and laboratory space in Montréal, Quebec, and office space in Cambridge, Massachusetts, under which we are obligated to make lease payments of \$2.0 million as of December 31, 2024.

Purchase and Other Obligations

In the normal course of business, we enter into contracts with CROs and other third parties for preclinical studies and clinical trials, research and development supplies and other testing and manufacturing services. These contracts generally do not contain minimum purchase commitments and provide for termination 30 to 90 days' prior written notice, and therefore are cancellable contracts. The amount and timing of such payments are not known as of December 31, 2024.

In the normal course of business, we enter into non-cancellable purchase obligations for services and subscriptions in support of our activities. As of December 31, 2024, future estimated payments under such obligations are \$1.2 million for fiscal year 2025 and \$0.1 million for fiscal year 2026.

We have further entered into license agreements under which we are obligated to make milestone and royalty payments and incur annual maintenance fees. The future milestone or royalty payment obligations under the agreement are contingent upon future events, such as achieving certain clinical and commercial milestones or generating product sales. As of December 31, 2024, we were unable to estimate the timing or likelihood of achieving these clinical and commercial milestones or generating future product sales. See the section titled "License and Collaboration Agreements" elsewhere in this Annual Report as well as Note 9 to our annual consolidated financial statements appearing elsewhere in this Annual Report for a description of our license agreements.

Indemnification agreements

In the ordinary course of business, we may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, we have entered into indemnification agreements with members of our board of directors and executive officers that will require us, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments we could be required to make under these indemnification agreements is, in many cases, unlimited. To date, we have not incurred any material costs as a result of such indemnifications. We are not aware of any indemnification arrangements could have a material effect on our financial position, results of operations or cash flows, and we have not accrued any liabilities related to such obligations in our consolidated financial statements as of December 31, 2024.

Critical Accounting Estimates

This management's discussion and analysis is based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The preparation of these consolidated financial statements requires us to make judgments and estimates that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reported periods. We base our estimates on historical experience, known trends and events, and various other factors that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. On an ongoing basis, we evaluate our judgments and estimates in light of changes in circumstances, facts, and experience. The effects of material revisions in estimates, if any, will be reflected in the consolidated financial statements prospectively from the date of change in estimates.

While our accounting policies are described in more detail in the notes to our consolidated financial statements appearing elsewhere in this Annual Report, we believe the following accounting policies used in the preparation of our consolidated financial statements require the most significant judgments and estimates. See Note 2 to our annual consolidated financial statements included elsewhere in this Annual Report for a description of our other significant accounting policies.

Revenue Recognition

In the year ended December 31, 2024, our revenue was generated from the Bristol-Myers Squibb collaboration agreement and the Roche collaboration and license agreement.

We recognize revenue in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 606, Revenue from Contracts with Customers, or ASC 606. We enter into collaboration and license agreements, which are within the scope of ASC 606, to discover, develop, manufacture, and commercialize product candidates. The terms of these agreements typically contain multiple promises or obligations, which may include: (i) licenses to compounds directed to specific targets (referred to as “exclusive licenses”) and (ii) research and development activities to be performed on behalf of the collaboration partner related to the licensed targets. Payments to us under these agreements may include non-refundable license fees, customer option exercise fees, payments for research activities, reimbursement of certain costs, payments based upon the achievement of certain milestones and royalties on any resulting net product sales.

Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, we perform the following five steps: (i) we identify the contract(s) with a customer; (ii) we identify the performance obligations in the contract; (iii) we determine the transaction price; (iv) we allocate the transaction price to the performance obligations in the contract; and (v) we recognize revenue when (or as) we satisfy a 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 we transfer to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, we assess the goods or services promised within each contract and determine those that are performance obligations and assess whether each promised good or service 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 arrangements, we must use significant judgment to determine: a) the number of performance obligations based on the determination under step (ii) above and whether those performance obligations are distinct from other performance obligations in the contract; b) the transaction price under step (iii) above; and c) the stand-alone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above. We use judgment to determine whether milestones or other variable consideration, except for sales-based royalties, should be included in the transaction price as described further below. The transaction price is 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. In determining the stand-alone selling price of a license to our proprietary technology or a material right provided by a customer option, we consider market conditions as well as entity-specific factors, including those factors contemplated in negotiating the agreements as well as internally developed estimates that include assumptions related to the market opportunity, estimated development costs, probability of success and the time needed to commercialize a product candidate pursuant to the license. In validating estimated stand-alone selling price, we evaluate whether changes in the key assumptions used to determine estimated stand-alone selling price will have a significant effect on the allocation of arrangement consideration between performance obligations.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within one year following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within one year following the balance sheet date are classified as deferred revenue, net of current portion. Amounts recognized as revenue, but not yet received or invoiced are generally recognized as contract assets.

Exclusive Licenses – If the license to our intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, which generally include research and development services, we recognize revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. In assessing whether a license is distinct from the other promises, we consider relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, we consider whether the collaboration partner can benefit from the license for its intended purpose without the receipt of the remaining promises, whether the value of the license is dependent on the unsatisfied promises, whether there are other vendors that could provide the remaining promises and whether it is separately identifiable from the remaining promises. For licenses that are combined with other promises, we utilize judgment to assess the nature of the combined performance obligation and whether the license is the predominant promise within 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. If the license is the predominant promise, and it is determined that the license represents functional intellectual property, revenue is recognized at the point in time when control of the license is transferred. If it is determined that the license does not represent functional intellectual property, revenue is recognized over time using an appropriate method of measuring progress. We have recognized revenue related to such licenses from our Roche collaboration and license agreement.

Research and Development Services – The obligations under our collaboration and license agreements generally include research and development services to be performed by us to benefit the collaboration partner. For performance obligations that include research and development services, we generally recognize revenue allocated to such performance obligations based on an appropriate measure of progress. We utilize judgment to determine the appropriate method of measuring progress for purposes of recognizing revenue, which is generally an input measure such as costs incurred. We evaluate the measure of progress each reporting period and, if necessary, adjust the measure of performance and related revenue recognition. The measure of progress, and thereby periods of which revenue should be recognized, are subject to estimates by management and may change over the course of the contract. Reimbursements from the partner that are the result of a collaborative relationship with the partner, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense. We have recognized revenue related to such research and development services from our Bristol-Myers Squibb collaboration agreement and our Roche collaboration and license agreement.

Customer Options – Our arrangements may provide a collaborator with the right to acquire additional goods or services in the future. Under these agreements, fees may be due to us (i) at the inception of the arrangement as an upfront fee or payment or (ii) upon the exercise of the customer option. If an arrangement is determined to contain customer options that allow the customer to acquire additional goods or services, the goods and services underlying the customer options are not considered to be performance obligations at the outset of the arrangement, as they are contingent upon option exercise. We evaluate the customer options for material rights, or options to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the inception of the arrangement. We allocate the transaction price to material rights based on the relative stand-alone selling price, which is determined based on the identified discount and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised or expires. We have recognized revenue related to such customer options from our Bristol-Myers Squibb collaboration agreement.

Milestone Payments – At the inception of each arrangement that includes development milestone payments, we evaluate whether the milestones are considered probable of being achieved and estimate the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within our control or the control of the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. We evaluate factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, we reevaluate the probability of achievement of all milestones subject to 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. If a milestone or

other variable consideration relates specifically to our efforts to satisfy a single performance obligation or to a specific outcome from satisfying the performance obligation, we generally allocate the milestone amount entirely to that performance obligation once it is probable that a significant revenue reversal would not occur.

Royalties – For arrangements that include sales-based royalties, including milestone payments based on a 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 licensing arrangements.

Accrued and Prepaid Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued and prepaid research and development expenses as of each balance sheet date. This process involves reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf, and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. The majority of our service providers invoice us monthly in arrears for services performed or when contractual milestones are met. We make estimates of our accrued and prepaid expenses as of each balance sheet date based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary.

We base our expenses related to research and development activities on our estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid balance accordingly. Non-refundable advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

Although we do not expect our estimates to be materially different from amounts incurred, if our estimates of the status and timing of services performed differ from the actual status and timing of services performed, it could result in us reporting amounts that are too high or too low in any particular period.

Share-Based Compensation

We measure share-based compensation based on the grant date fair value of the share-based awards and recognize share-based compensation expense on a straight-line basis over the requisite service period of the awards, which is generally the vesting period of the respective award. For non-employee awards, compensation expense is recognized as the services are provided, which is generally ratably over the vesting period.

Share-based compensation expense is classified in our consolidated statements of operations and comprehensive loss based on the function to which the related services are provided. We recognize share-based compensation expense for the portion of awards that have vested. Forfeitures are accounted for as they occur.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model, which requires inputs based on certain subjective assumptions, including the expected share price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option, and our expected dividend yield. The fair value of each restricted share unit is estimated on the date of grant based on the fair value of our common share on that same date. Prior to our IPO, as there was no public market for our common shares, we determined the volatility for awards granted based on an analysis of reported data for a group of guideline companies that issued options with substantially similar terms. The expected volatility has been determined using a weighted-average of the historical volatility measures of this group of guideline companies blended

with the historical volatility of our common shares. We expect to continue using such methodology until we have adequate historical data regarding the volatility of the trading price of our common shares on Nasdaq. The expected term of our options granted to employees has been determined utilizing the “simplified” method for awards that qualify as “plain-vanilla” options. With the adoption of ASU 2018-07, we applied the nonpublic entity practical expedient for calculating the expected term of non-employee awards, using the midpoint between the vesting date and the contractual term, which is consistent with the method used for employee awards. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. We have not paid, and do not anticipate paying, cash dividends on our common shares; therefore, the expected dividend yield is assumed to be zero.

Recent Accounting Pronouncements

See note 2 to our annual consolidated financial statements appearing elsewhere in this Annual Report for a description of recently adopted accounting pronouncements and recently issued accounting pronouncements not yet adopted.

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

Under SEC rules and regulations, because we are considered to be a “smaller reporting company”, we are not required to provide the information required by this item in this report.

Item 8. Financial Statements and Supplementary Data.

REPAIRE THERAPEUTICS INC.
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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of **Repare Therapeutics Inc.**

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Repare Therapeutics Inc. (the “Company”) as of December 31, 2024 and 2023, the related consolidated statements of operations and comprehensive loss, shareholders’ equity, and cash flows for each of the two years in the period ended December 31, 2024, 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, 2024 and 2023 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2024, 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) (the “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 included 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 disclosures to which it relates.

Accrued and Prepaid Research and Development Expenses

Description of the matter

As described in note 2 to the consolidated financial statements, the Company has entered into various research and development contracts with third parties and is required to record its accrued and prepaid research and development expenses resulting from these contracts at the end of each reporting period. When evaluating the adequacy of the accrued liabilities and prepaid expenses, the Company analyzes progress of the studies, including the phase or

completion of events, invoices received and contracted costs. As of December 31, 2024, the Company has recorded \$13.4 million of accrued research and development expenses and has also recorded total prepaid expenses of \$6.0 million, which included amounts for prepayments of research and development expenses. The Company's determination of the amount of accrued or prepaid expenses at each reporting period requires significant judgment and estimates by management in certain circumstances, as estimates are based on management's knowledge of the services provided by the third parties to date but not yet invoiced.

Auditing the Company's accrued and prepaid research and development expenses is challenging and required significant auditor effort in performing appropriate procedures to evaluate the completeness and accuracy of the information management utilizes in these estimates.

How we addressed the matter in our audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of internal controls over the Company's process used in accounting for accrued and prepaid research and development expenses.

To test the accrued and prepaid research and development expenses, our audit procedures included, among others, testing the accuracy and completeness of the underlying data used by management to estimate the accrual or prepaid balance. To corroborate management's estimates, we inspected a sample of contracts with third parties, obtained information regarding the progress of clinical trials from the Company's research and development personnel that oversee the clinical trials and inspected a sample of data obtained from the third parties. We confirmed information directly with a sample of the third parties, such as the services provided and costs incurred, and the number of sites in the clinical trials. We also inspected subsequent invoices received from the third parties and cash disbursements made to these parties, to the extent such invoices were received, or payments were made prior to the date that the consolidated financial statements were issued.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2017.

Montréal, Canada
March 3, 2025

Repare Therapeutics Inc.
Consolidated Balance Sheets
(In thousands of U.S. dollars, except share data)

	As of December 31,	
	2024	2023
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 84,717	\$ 111,268
Marketable securities	68,074	112,359
Income tax receivable	10,600	10,813
Other current receivables	1,746	4,499
Prepaid expenses	6,012	4,749
Total current assets	171,149	243,688
Property and equipment, net	2,294	4,215
Operating lease right-of-use assets	1,924	3,326
Income tax receivable	960	2,276
Other assets	179	396
TOTAL ASSETS	\$ 176,506	\$ 253,901
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 3,623	\$ 2,400
Accrued expenses and other current liabilities	19,819	24,057
Operating lease liabilities, current portion	1,845	2,400
Deferred revenue, current portion	—	10,222
Total current liabilities	25,287	39,079
Operating lease liabilities, net of current portion	88	1,010
Deferred revenue, net of current portion	—	1,730
TOTAL LIABILITIES	25,375	41,819
Commitments and Contingencies		
SHAREHOLDERS' EQUITY:		
Preferred shares, no par value per share; unlimited shares authorized as of December 31, 2024 and December 31, 2023; 0 shares issued and outstanding as of December 31, 2024 and December 31, 2023	—	—
Common shares, no par value per share; unlimited shares authorized as of December 31, 2024 and December 31, 2023; 42,510,708 and 42,176,041 shares issued and outstanding as of December 31, 2024 and December 31, 2023, respectively	486,674	483,350
Warrants	10	—
Additional paid-in capital	82,191	61,813
Accumulated other comprehensive income	54	28
Accumulated deficit	(417,798)	(333,109)
TOTAL SHAREHOLDERS' EQUITY	151,131	212,082
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 176,506	\$ 253,901

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

Repare Therapeutics Inc.
Consolidated Statements of Operations and Comprehensive Loss
(In thousands of U.S. dollars, except share and per share data)

	Year Ended December 31,	
	2024	2023
Revenue:		
Collaboration agreements	\$ 53,477	\$ 51,133
Operating expenses:		
Research and development, net of tax credits	115,941	133,593
General and administrative	29,680	33,764
Restructuring	1,379	—
Total operating expenses	147,000	167,357
Loss from operations	(93,523)	(116,224)
Other income (expense), net		
Realized and unrealized loss on foreign exchange	(2)	(170)
Interest income	10,391	13,334
Other expense, net	(115)	(119)
Total other income, net	10,274	13,045
Loss before income taxes	(83,249)	(103,179)
Income tax (expense) benefit	(1,440)	9,383
Net loss	\$ (84,689)	\$ (93,796)
Other comprehensive income:		
Unrealized gain on available-for-sale marketable securities	26	456
Total other comprehensive income	\$ 26	\$ 456
Comprehensive loss	\$ (84,663)	\$ (93,340)
Net loss per share attributable to common shareholders—basic and diluted	\$ (2.00)	\$ (2.23)
Weighted-average common shares outstanding—basic and diluted	42,411,085	42,093,293

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

Repare Therapeutics Inc.
Consolidated Statements of Shareholders' Equity
(In thousands of U.S. dollars, except share data)

	Common Shares		Warrants	Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Shareholders' Equity
	Shares	Amount					
Balance, January 1, 2023	42,036,193	\$ 482,032	\$ —	\$ 37,226	\$ (428)	\$ (239,313)	\$ 279,517
Exercise of vested stock options	64,240	241	—	(88)	—	—	153
Share-based compensation expense	—	—	—	25,063	—	—	25,063
Issuance of common shares under the 2020 Employee Share Purchase Plan	75,608	1,077	—	(388)	—	—	689
Other comprehensive income	—	—	—	—	456	—	456
Net loss	—	—	—	—	—	(93,796)	(93,796)
Balance, December 31, 2023	<u>42,176,041</u>	<u>\$ 483,350</u>	<u>\$ —</u>	<u>\$ 61,813</u>	<u>\$ 28</u>	<u>\$ (333,109)</u>	<u>\$ 212,082</u>
Exercise of vested stock options	8,612	27	—	(10)	—	—	17
Share-based compensation expense	—	—	—	23,160	—	—	23,160
Issuance of common shares under the 2020 Employee Share Purchase Plan	125,793	810	—	(285)	—	—	525
Issuance of common shares on vesting of restricted share units	200,262	2,487	—	(2,487)	—	—	—
Non-employee warrant expense	—	—	10	—	—	—	10
Other comprehensive income	—	—	—	—	26	—	26
Net loss	—	—	—	—	—	(84,689)	(84,689)
Balance, December 31, 2024	<u>42,510,708</u>	<u>\$ 486,674</u>	<u>\$ 10</u>	<u>\$ 82,191</u>	<u>\$ 54</u>	<u>\$ (417,798)</u>	<u>\$ 151,131</u>

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

Repare Therapeutics Inc.
Consolidated Statements of Cash Flows
(In thousands of U.S. dollars)

	Year Ended December 31,	
	2024	2023
Cash Flows From Operating Activities:		
Net loss for the year	\$ (84,689)	\$ (93,796)
Adjustments to reconcile net loss to net cash used in operating activities:		
Share-based compensation expense	23,170	25,063
Depreciation expense	1,921	1,951
Non-cash lease expense	2,359	2,194
Foreign exchange loss	8	78
Net accretion of marketable securities	(5,157)	(7,465)
Changes in operating assets and liabilities:		
Prepaid expenses	(1,263)	969
Other current receivables	2,716	(216)
Other non-current assets	217	101
Accounts payable	1,229	1,934
Accrued expenses and other current liabilities	(4,222)	2,412
Operating lease liabilities, current portion	(986)	151
Income taxes	1,529	(14,329)
Operating lease liabilities, net of current portion	(1,325)	(2,373)
Deferred revenue	(11,952)	(43,832)
Net cash used in operating activities	(76,445)	(127,158)
Cash Flows From Investing Activities:		
Purchase of property and equipment	—	(1,938)
Proceeds from maturities of marketable securities	182,823	259,000
Purchase of marketable securities	(133,355)	(179,021)
Net cash provided by investing activities	49,468	78,041
Cash Flows From Financing Activities:		
Proceeds from exercise of stock options	17	153
Proceeds from issuance of common shares under the 2020 Employee Share Purchase Plan	525	689
Net cash provided by financing activities	542	842
Effect of exchange rate fluctuations on cash held	(116)	22
Net Decrease In Cash And Cash Equivalents	(26,551)	(48,253)
Cash and cash equivalents cash at beginning of year	111,268	159,521
Cash and cash equivalents at end of year	<u><u>\$ 84,717</u></u>	<u><u>\$ 111,268</u></u>
Supplemental Disclosure Of Cash Flow Information:		
Cash interest received	\$ 2,380	\$ 3,089
Cash taxes paid, net	\$ 139	\$ 4,945
Right-of-use assets obtained in exchange for new operating lease liability	\$ 957	\$ 149

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

REPARE THERAPEUTICS INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in U.S. dollars, except per share data, unless otherwise specified)

1. Organization and Nature of Business

Repare Therapeutics Inc. (“Repare” or the “Company”) is a precision medicine oncology company focused on the development of synthetic lethality-based therapies to patients with cancer. The Company was incorporated under the *Canada Business Corporations Act* on September 6, 2016. On June 23, 2020, immediately prior to the completion of its initial public offering (the “IPO”), the Company was continued as a corporation under the *Business Corporations Act (Québec)*.

Since inception, the Company has incurred operating losses. As of December 31, 2024, the Company had an accumulated deficit of \$417.8 million. The Company does not have any products approved for sale and has financed its operations primarily through equity financings and funding from its collaboration and license agreements. Based on its current operating plan, the Company expects that its existing cash and cash equivalents and marketable securities on hand will be sufficient to fund its operating and capital expenditures for at least one year from the date of the issuance of these consolidated financial statements.

There can be no assurance that the Company will be able to obtain additional debt or equity financing, or generate product revenue or revenue from collaboration agreements, on a timely basis or at all. The failure of the Company to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on the Company’s business, results of operations and financial condition.

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States of America (“U.S. GAAP”). Any reference in these notes to applicable guidance is meant to refer to the authoritative U.S. GAAP as found in the Accounting Standards Codification (“ASC”) and as amended by Accounting Standards Updates (“ASU”) of the Financial Accounting Standards Board (“FASB”).

Principles of Consolidation

The accompanying consolidated financial statements of the Company include the accounts of the Company and its wholly-owned subsidiary, Repare Therapeutics USA Inc. (“Repare USA”), which was incorporated under the laws of Delaware on June 1, 2017. The financial statements of Repare USA are prepared for the same reporting period as the parent company, using consistent accounting policies. All intra-group transactions, balances, income, and expenses are eliminated in full upon consolidation.

Smaller Reporting Company

Repare qualified as a “smaller reporting company” under the Exchange Act as of June 30, 2024 because the market value of its common shares held by non-affiliates was less than \$200 million as of June 30, 2024. As a smaller reporting company, Repare may rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. For so long as the Company remains a smaller reporting company, it is permitted and intends to rely on such exemptions from certain disclosure and other requirements that are applicable to other public companies that are not smaller reporting companies.

Foreign Currencies

The functional currency for the Company and Repare USA is the U.S. dollar (“USD”). Accordingly, transactions denominated in currencies other than the functional currency are measured and recorded in the functional currency at the exchange rate in effect on the date of the transactions. At each consolidated balance sheet date, monetary assets

and liabilities denominated in currencies other than the functional currency are remeasured using the exchange rate in effect at that date. Non-monetary assets and liabilities are not remeasured. Any gains or losses arising on remeasurement are included in the consolidated statement of operations.

Segment Information

Operating segments refer to components of a company that engage in activities for which separate financial information is available and reviewed regularly by the Chief Operating Decision Maker (CODM) in deciding how to allocate resources and assessing performance. The CODM is the Company's Chief Executive Officer. The Company manages its operations as a single operating segment, which is the research, development and eventual commercialization of precision oncology drugs targeting specific vulnerabilities of tumors in genetically defined patient populations.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in consolidated financial statements and accompanying notes. Significant estimates and assumptions reflected in these consolidated financial statements include, but are not limited to, estimates related to revenue recognition, accrued and prepaid research and development expenses, share-based compensation, and income taxes. The Company bases its estimates on historical experience and other market specific or other relevant assumptions that it believes to be reasonable under the circumstances. Actual results could differ from those estimates. Estimates are periodically reviewed in light of changes in circumstances, facts and experience. Changes in estimates are recorded in the period in which they become known.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with original maturities of 90 days or less at acquisition to be cash equivalents. Cash and cash equivalents include cash held in banks, amounts held in money market funds and commercial paper with original maturities less than 90 days.

Marketable Securities

The Company classifies marketable debt securities with a remaining maturity of greater than three months when purchased as available-for-sale. Marketable debt securities with a remaining maturity date greater than one year from the consolidated balance sheet date are classified as non-current where the Company has the intent and ability to hold these securities for at least the next 12 months.

The Company's marketable securities consist of U.S. treasury securities, government-sponsored enterprises securities, corporate debt securities and commercial paper with original maturities greater than 90 days. All of the Company's marketable securities have a contractual maturity of one year or less. The Company considers its investment portfolio of U.S. treasury securities, government-sponsored enterprises securities, and commercial paper to be available-for-sale. Accordingly, these investments are recorded at fair value, which is based on observable inputs, other than quoted market prices. Unrealized gains and losses are reported in accumulated other comprehensive items in shareholders' equity. Amortization and accretion of premiums and discounts are recorded in interest income (expense). Realized gains or losses on debt securities are included in other income (expense).

The Company reviews investments whenever the fair value of an investment is less than the amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. In connection therewith, the Company evaluates whether the decline in fair value has resulted from credit losses or other factors, considering the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security is compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded for the credit loss on the consolidated balance sheet, limited by the amount that the fair value is less than the amortized cost basis. Any

impairment that is not related to credit is recognized in other comprehensive loss. Changes in the allowance for credit losses are recorded as a provision for (or reversal of) credit loss expense in other income (expense), net within the consolidated statement of operations. Losses are charged against the allowance when the Company believes the uncollectibility of an available-for-sale security is confirmed or when either of the criteria regarding intent or requirement to sell is met.

Concentrations of Credit Risk and Off-Balance Sheet Risk

Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash and cash equivalents and marketable securities. Our investment portfolio comprises money market funds, U.S. treasury securities, government-sponsored enterprises securities, corporate debt securities and commercial paper. Our investment policy limits investment instruments to investment-grade securities with the objective to preserve capital and to maintain liquidity until the funds can be used in business operations.

The Company maintains deposits in accredited financial institutions which exceed insured limits. The Company deposits its cash in financial institutions that it believes have high credit quality and has not experienced any losses on such accounts and does not believe it is exposed to any unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

The Company's exposure to foreign exchange risk is primarily related to fluctuations between the Canadian dollar and the U.S. dollar. There are balances in Canadian dollars which are subject to foreign currency fluctuations relating to the impact of translating to U.S. dollars for financial statement presentation.

As of December 31, 2024 and 2023, the Company had no significant off-balance sheet risk, such as foreign exchange contracts, option contracts or other foreign hedging arrangements.

Comprehensive Loss

Comprehensive loss includes net loss as well as other changes in shareholders' equity that result from transactions and economic events other than those with shareholders. Other comprehensive income consists of unrealized gains and losses on available-for-sale marketable securities. Total comprehensive loss for all periods presented has been disclosed in the consolidated statements of operations and comprehensive loss.

Fair Value Measurements

Certain assets of the Company are carried at fair value under U.S. GAAP. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1 – Quoted prices in active markets for identical assets or liabilities.
- Level 2 – Observable inputs (other than Level 1 quoted prices), such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3 – Unobservable inputs that are supported by little or no market activity that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement.

The estimated fair values of the Company's cash and cash equivalents, other current receivables, other assets, accounts payable, and accrued expenses and other current liabilities approximate their carrying values.

The Company's marketable securities are carried at fair value, determined according to Level 2 inputs in the fair value hierarchy described above.

Property and Equipment, Net

Property and equipment is stated at historical cost, net of accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, which are as follows:

Asset Category	Estimated Useful Lives
Computer equipment	3 years
Office equipment	5 years
Laboratory equipment	5 years
Leasehold improvements	the shorter of the lease term and the useful life

When assets are retired or disposed of, the assets and related accumulated depreciation are derecognized from the accounts, and any resulting gain or loss is included in the determination of net loss. Expenditures for maintenance and repairs are recorded to expense as incurred.

Impairment of Long-Lived Assets

The Company evaluates its finite-lived assets for impairment whenever events or changes in circumstances indicate that the carrying value of assets may not be recoverable. Recoverability of these assets is measured by comparing their carrying value to the future net undiscounted cash flows the assets are expected to generate over their remaining economic life. If such assets are considered impaired, the impairment to be recognized is measured by the amount by which the carrying value of the assets exceeds their fair value. Indefinite-lived intangible assets are tested for impairment annually, or more frequently if indicators of impairment are present. To date, no such impairment losses have been recorded.

Leases

At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present in the arrangement. Leases with a term greater than one year are recognized on the consolidated balance sheet as a right-of-use asset and current and non-current lease liabilities, as applicable.

Operating lease liabilities and their corresponding right-of-use assets are initially recorded based on the present value of lease payments over the expected remaining lease term. Certain adjustments to the right-of-use asset may be required for items such as incentives received. The interest rate implicit in lease contracts is typically not readily determinable. As a result, the Company utilizes its incremental borrowing rate to discount lease payments, which reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment. Prospectively, the Company will adjust the right-of-use assets for straight-line rent expense or any incentives received and remeasure the lease liability at the net present value using the same incremental borrowing rate that was in effect as of the lease commencement or transition date.

The Company typically only includes an initial lease term in its assessment of a lease arrangement. Options to renew a lease are not included in the Company's assessment unless there is reasonable certainty that the Company will renew.

Assumptions made by the Company at the commencement date are re-evaluated upon occurrence of certain events, including a lease modification. A lease modification results in a separate contract when the modification grants the lessee an additional right of use not included in the original lease and when lease payments increase commensurate with the standalone price for the additional right of use. When a lease modification results in a separate contract, it is accounted for in the same manner as a new lease.

In accordance with ASC 842, components of a lease should be split into three categories: lease components, non-lease components and non-components. The fixed and in-substance fixed contract consideration (including any consideration related to non-components) must be allocated based on the respective relative fair values to the lease components and non-lease components.

Entities may elect not to separate lease and non-lease components. The Company has elected to account for lease and non-lease components together as a single lease component for all underlying assets and allocate all of the contract consideration to the lease component only.

Revenue Recognition

The Company recognizes revenue in accordance with ASC 606, Revenue from Contracts with Customers ("ASC 606"). This standard applies to all contracts with customers, except for contracts that are within the scope of other standards, such as leases, insurance, collaboration arrangements and financial instruments. Under ASC 606, an entity recognizes revenue when its customer obtains control of promised goods or services, in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration it is entitled to in exchange for the goods or services it transfers to the customer. At contract inception, once the contract is determined to be within the scope of ASC 606, the Company assesses the goods or services promised within each contract and determines those that are performance obligations and assesses whether each promised good or service 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.

The Company enters into collaboration and license agreements, which are within the scope of ASC 606, to discover, develop, manufacture, and commercialize product candidates. The terms of these agreements typically contain multiple promises or obligations, which may include: (i) licenses to compounds directed to specific targets (referred to as "exclusive licenses") and (ii) research and development activities to be performed on behalf of the collaboration partner related to the licensed targets. Payments to the Company under these agreements may include non-refundable license fees, customer option exercise fees, payments for research activities, reimbursement of certain costs, payments based upon the achievement of certain milestones and royalties on any resulting net product sales.

The Company first evaluates license and/or collaboration arrangements to determine whether the arrangement (or part of the arrangement) represents a collaborative arrangement pursuant to ASC 808, Collaborative Arrangements ("ASC 808"), based on the risks and rewards and activities of the parties pursuant to the contractual arrangement. The Company accounts for collaborative arrangements (or elements within the contract that are deemed part of a collaborative arrangement), which represent a collaborative relationship and not a customer relationship, outside the scope of ASC 606, pursuant to ASC 808.

The Company's collaborations primarily represent revenue arrangements. For the arrangements or arrangement components that are subject to revenue accounting guidance, in determining the appropriate amount of revenue to be recognized as it fulfills its obligations under each of its agreements, the Company applies the five-step model. As part of the accounting for these arrangements, the Company must use significant judgment to determine: a) the number of performance obligations based on the determination under step (ii) above and whether those performance obligations are distinct from other performance obligations in the contract; b) the transaction price under step (iii) above; and c) the stand-alone selling price for each performance obligation identified in the contract for the allocation of transaction price in step (iv) above. The Company uses judgment to determine whether milestones or other variable consideration, except for sales-based royalties, should be included in the transaction price as described further below. The transaction price is allocated to each performance obligation on a relative stand-alone selling price basis, for which the Company recognizes revenue as or when the performance obligations under the contract are satisfied. In determining the stand-alone selling price of a license to the Company's proprietary technology or a material right provided by a customer option, the Company considers market conditions as well as entity-specific factors, including those factors contemplated in negotiating the agreements as well as internally developed estimates that include assumptions related to the market opportunity, estimated development costs, probability of success and the time needed to commercialize

a product candidate pursuant to the license. In validating its estimated stand-alone selling price, the Company evaluates whether changes in the key assumptions used to determine its estimated stand-alone selling price will have a significant effect on the allocation of arrangement consideration between performance obligations.

Amounts received prior to revenue recognition are recorded as deferred revenue. Amounts expected to be recognized as revenue within one year following the balance sheet date are classified as current portion of deferred revenue in the accompanying consolidated balance sheets. Amounts not expected to be recognized as revenue within one year following the balance sheet date are classified as deferred revenue, net of current portion. Amounts recognized as revenue, but not yet received or invoiced are recognized as contract assets.

Exclusive Licenses – If the license to the Company’s intellectual property is determined to be distinct from the other promises or performance obligations identified in the arrangement, which generally include research and development services, the Company recognizes revenue from non-refundable, upfront fees allocated to the license when the license is transferred to the customer and the customer is able to use and benefit from the license. In assessing whether a license is distinct from the other promises, the Company considers relevant facts and circumstances of each arrangement, including the research and development capabilities of the collaboration partner and the availability of the associated expertise in the general marketplace. In addition, the Company considers whether the collaboration partner can benefit from the license for its intended purpose without the receipt of the remaining promises, whether the value of the license is dependent on the unsatisfied promises, whether there are other vendors that could provide the remaining promises and whether it is separately identifiable from the remaining promises. For licenses that are combined with other promises, the Company utilizes judgment to assess the nature of the combined performance obligation and whether the license is the predominant promise within 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. If the license is the predominant promise, and it is determined that the license represents functional intellectual property (“IP”), revenue is recognized at the point in time when control of the license is transferred. If it is determined that the license does not represent functional IP, revenue is recognized over time using an appropriate method of measuring progress.

Research and Development Services – The obligations under the Company’s collaboration and license agreements generally include research and development services to be performed by the Company to benefit the collaboration partner. For performance obligations that include research and development services, the Company generally recognizes revenue allocated to such performance obligations based on an appropriate measure of progress. The Company utilizes judgment to determine the appropriate method of measuring progress for purposes of recognizing revenue, which is generally an input measure such as costs incurred. The Company evaluates the measure of progress each reporting period and, if necessary, adjusts the measure of performance and related revenue recognition. The measure of progress, and thereby periods of which revenue should be recognized, are subject to estimates by management and may change over the course of the contract. Reimbursements from the partner that are the result of a collaborative relationship with the partner, instead of a customer relationship, such as co-development activities, are recorded as a reduction to research and development expense.

Customer Options – The Company’s arrangements may provide a collaborator with the right to acquire additional goods or services in the future. Under these agreements, fees may be due to the Company (i) at the inception of the arrangement as an upfront fee or payment or (ii) upon the exercise of the customer option. If an arrangement is determined to contain customer options that allow the customer to acquire additional goods or services, the goods and services underlying the customer options are not considered to be performance obligations at the outset of the arrangement, as they are contingent upon option exercise. The Company evaluates the customer options for material rights, or options to acquire additional goods or services for free or at a discount. If the customer options are determined to represent a material right, the material right is recognized as a separate performance obligation at the inception of the arrangement. The Company allocates the transaction price to material rights based on the relative stand-alone selling price, which is determined based on the identified discount and the probability that the customer will exercise the option. Amounts allocated to a material right are not recognized as revenue until, at the earliest, the option is exercised or expires.

Milestone Payments – At the inception of each arrangement that includes development milestone payments, the Company evaluates whether the milestones are considered probable of being achieved and estimates the amount to be included in the transaction price using the most likely amount method. If it is probable that a significant revenue

reversal would not occur, the associated milestone value is included in the transaction price. Milestone payments that are not within the control of the Company or the licensee, such as regulatory approvals, are not considered probable of being achieved until those approvals are received. The Company evaluates factors such as the scientific, clinical, regulatory, commercial, and other risks that must be overcome to achieve the particular milestone in making this assessment. There is considerable judgment involved in determining whether it is probable that a significant revenue reversal would not occur. At the end of each subsequent reporting period, the Company reevaluates the probability of achievement of all milestones subject to 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. If a milestone or other variable consideration relates specifically to the Company's efforts to satisfy a single performance obligation or to a specific outcome from satisfying the performance obligation, the Company generally allocates the milestone amount entirely to that performance obligation once it is probable that a significant revenue reversal would not occur.

Royalties – For arrangements that include sales-based royalties, including milestone payments based on a 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 licensing arrangements.

For a complete discussion of accounting for collaboration revenues, see Note 15.

Research and Development Expenses

Research and development costs are expensed as incurred. The Company's research and development expenses consist primarily of costs incurred in performing research and development activities, including salaries and other compensation, share-based compensation, fees paid to external service providers, laboratory supplies and costs for facilities and equipment, partially offset by fully refundable research and development tax credits.

Accrued and Prepaid Research and Development Expenses

The Company has entered into various research and development contracts with research institutions, outside consultants, contract research organizations and clinical manufacturing organizations that conduct and manage preclinical studies and clinical trials on the Company's behalf based on actual time and expenses incurred. The payments for these vendors are recorded as research and development expenses as incurred. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense.

The Company records accrued liabilities and prepaid expenses for the estimated costs of research and development activities based upon the estimated services provided but not yet invoiced. When evaluating the adequacy of the accrued liabilities and prepaid expenses, the Company analyzes progress of the studies, including the phase or completion of events, invoices received and contracted costs. The Company accrues the expenses for its clinical trial activities performed by third-party vendors, including contract research organizations and clinical sites, based upon estimates of the proportion of work completed over the life of the individual clinical trial, activities performed by patient and patient enrollment rates in accordance with associated agreements. Significant judgements and estimates are made in determining the accrued and prepaid balances at the end of any reporting period. Actual results could differ from the Company's estimates.

Share-Based Compensation

The Company accounts for all share-based awards granted to employees and non-employees as share-based compensation expense at fair value.

The measurement date for employee and non-employee awards is the date of grant, and share-based compensation costs are recognized over the employees' requisite service period, which is the vesting period, on a straight-line basis. Forfeitures are accounted for as they occur.

The fair value of each restricted share unit is estimated on the date of grant based on the fair value of the Company's common share on that same date. The fair value of each stock option grant or purchases under the Company's 2020 Employee Share Purchase Plan ("ESPP") is estimated on the date of grant using the Black-Scholes option-pricing model, which requires inputs based on certain subjective assumptions, including the expected share price volatility, the expected term of the option, the risk-free interest rate for a period that approximates the expected term of the option and the Company's expected dividend yield. As there was no public market for its common shares prior to its IPO in June 2020, the Company determined the volatility for stock option awards granted based on an analysis of reported data for a group of guideline companies that issued options with substantially similar terms. The expected volatility has been determined using a weighted-average of the historical volatility measures of this group of guideline companies blended with the historical volatility of the Company's common shares. The Company expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded share price. For purchases under our ESPP, only the historical volatility of the Company's common shares is used when developing an estimate of expected volatility. The expected term of the Company's stock options granted to employees and non-employees has been determined utilizing the "simplified" method for awards that qualify as "plain-vanilla" options. In connection with the adoption of ASU No. 2018-07, Compensation—Stock Compensation ("ASU No. 2018-07"), the Company calculated the expected term of non-employee awards using the midpoint between the vesting date and the contractual term, which is consistent with the method used for employee awards. For purchases under our ESPP, the expected term is based on the length of the offering period. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award, for time periods approximately equal to the expected term of the award. The Company has not paid, and does not anticipate paying, cash dividends on its common shares; therefore, the expected dividend yield is assumed to be zero.

Share-based compensation is classified in the accompanying consolidated statements of operations and comprehensive loss based on the function to which the related services are provided. Any consideration paid by employees on exercising stock options or the purchases under our ESPP and the corresponding portion previously credited to additional paid-in capital are credited to share capital.

Share Issuance Costs

Share issuance costs applicable to the issuance of equity instruments are recorded as a reduction of the financing equity proceeds.

Net Loss per Share

Basic net loss per share attributable to common shareholders is computed by dividing the net loss attributable to common shareholders by the weighted-average number of common shares outstanding during the reporting period, without consideration for potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss attributable to common shareholders by the weighted-average number of common shares and potentially dilutive securities outstanding during the period determined using the treasury-stock and if-converted methods. For purposes of the diluted net loss per share calculation, options to purchase common shares, restricted share units and shares issuable under the ESPP considered to be potentially dilutive securities were excluded from the calculation of diluted net loss per share because their effect would be anti-dilutive and therefore, basic and diluted net loss per share were the same for all reporting periods presented.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's consolidated financial statements. Under this method, deferred tax assets and liabilities are determined based on differences between the consolidated financial statement carrying amounts and the tax bases of the assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance against deferred tax assets is recorded if, based on the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed

more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

Research and Development Tax Credits

The Company recognizes the benefit of refundable Canadian research and development tax credits as a reduction of research and development costs when there is reasonable assurance that the amount claimed will be recovered.

Recently Adopted Accounting Pronouncements

In November 2023, the FASB amended the guidance in ASU 280, Segment Reporting, to require a public entity to disclose significant segment expenses and other segment items on an annual and interim basis and provide in interim periods all disclosures about a reportable segment's profit or loss and assets that are currently required annually. Public entities with a single reportable segment are required to provide the new disclosures and all the disclosures currently required under ASC 280. The new guidance is effective for public entities in fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. The Company adopted this amendment as of January 1, 2024 and amended its consolidated financial statements and disclosures accordingly.

Recently Issued Accounting Pronouncements Not Yet Adopted

In December 2023, the FASB amended the guidance in ASU 740, Income Taxes, to provide disaggregated income tax disclosures on the rate reconciliation and income taxes paid. The new guidance is effective for public entities in fiscal years beginning after 15 December 2024. Early adoption is permitted. The Company is currently assessing the impact of this amendment on its consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, Income Statement-Reporting Comprehensive Income-Expense Disaggregation Disclosures (Subtopic 220-40): Disaggregation of Income Statement Expenses, requiring public business entities to provide additional disclosures on specific expense categories in the notes to financial statements for both interim and annual reporting periods. While the amendments don't change current disclosure requirements, they change where this information must be presented, requiring certain disclosures to be in a tabular format alongside other disaggregation details. This ASU is effective for annual periods starting after December 15, 2026, and interim periods after December 15, 2027, with early adoption permitted. The Company is currently evaluating the impact of the adoption of this ASU on its consolidated financial statements.

3. Cash and Cash Equivalents and Marketable Securities

As of December 31, 2024 and 2023, cash and cash equivalents and marketable securities were comprised of the following:

	<u>Amortized Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>
		<u>(in thousands)</u>		
As at December 31, 2024				
Cash and cash equivalents:				
Cash	\$ 43,762	\$ —	\$ —	\$ 43,762
Money market funds	25,522	—	—	25,522
Commercial paper	15,430	3	—	15,433
Total cash and cash equivalents	<u>\$ 84,714</u>	<u>\$ 3</u>	<u>\$ —</u>	<u>\$ 84,717</u>
Marketable securities:				
U.S. Treasury and government-sponsored enterprises	\$ 3,013	\$ 1	\$ —	\$ 3,014
Commercial paper	40,688	39	(1)	40,726
Corporate debt securities	24,322	13	(1)	24,334
Total marketable securities	<u>\$ 68,023</u>	<u>\$ 53</u>	<u>\$ (2)</u>	<u>\$ 68,074</u>
As at December 31, 2023				
Cash and cash equivalents:				
Cash	\$ 44,462	\$ —	\$ —	\$ 44,462
Money market funds	36,991	—	—	36,991
Commercial paper	29,811	4	—	29,815
Total cash and cash equivalents	<u>\$ 111,264</u>	<u>\$ 4</u>	<u>\$ —</u>	<u>\$ 111,268</u>
Marketable securities:				
U.S. Treasury and government-sponsored enterprises	\$ 22,434	\$ —	\$ (25)	\$ 22,409
Commercial paper	89,901	60	(11)	89,950
Total marketable securities	<u>\$ 112,335</u>	<u>\$ 60</u>	<u>\$ (36)</u>	<u>\$ 112,359</u>

Interest receivable was \$0.4 million and \$0.4 million as of December 31, 2024 and 2023, respectively, and is included in other current receivables.

The Company held available-for-sale marketable securities with an aggregate fair value of \$7.8 million and \$58.6 million that were in an unrealized loss position as of December 31, 2024 and 2023, respectively. These marketable securities have been in an unrealized loss position for less than twelve months. The unrealized losses as of December 31, 2024 were not attributed to credit risk but were primarily associated with changes in interest rates and market liquidity. The Company does not intend to sell these securities and it is more likely than not that it will hold these investments for a period of time sufficient to recover the amortized cost. As a result, the Company did not record an allowance for credit losses or other impairment charges for its marketable securities for the year ended December 31, 2024.

The Company recognized nil and \$0.5 million net unrealized gain in other comprehensive income for the years ended December 31, 2024 and 2023, respectively.

The maturities of the Company's marketable securities as of December 31, 2024 and 2023 are less than one year.

4. Fair Value Measurements

The following table presents information about the Company's financial assets measured at fair value on a recurring basis and indicates the level of the fair value hierarchy utilized to determine such fair values:

Description	Financial Assets	Level 1	Level 2	Level 3
(in thousands)				
As at December 31, 2024				
Assets				
Cash equivalents:				
Money market funds	\$ 25,522	\$ 25,522	\$ —	\$ —
Commercial paper	15,433	—	15,433	—
Total cash equivalents	40,955	25,522	15,433	—
Marketable securities:				
U.S. Treasury and government-sponsored enterprises	3,014	—	3,014	—
Commercial paper	40,726	—	40,726	—
Corporate debt securities	24,334	—	24,334	—
Total marketable securities	68,074	—	68,074	—
Total financial assets	\$ 109,029	\$ 25,522	\$ 83,507	\$ —
As at December 31, 2023				
Assets				
Cash equivalents:				
Money market funds	\$ 36,991	\$ 36,991	\$ —	\$ —
Commercial paper	29,815	—	29,815	—
Total cash equivalents	66,806	36,991	29,815	—
Marketable securities:				
U.S. Treasury and government-sponsored enterprises	22,409	—	22,409	—
Commercial paper	89,950	—	89,950	—
Total marketable securities	112,359	—	112,359	—
Total financial assets	\$ 179,165	\$ 36,991	\$ 142,174	\$ —

When developing fair value estimates, the Company maximizes the use of observable inputs and minimizes the use of unobservable inputs. When available, the Company uses quoted market prices to measure the fair value. In determining the fair values at each date presented above, the Company relied on quoted prices for similar securities in active markets or using other inputs that are observable or can be corroborated by observable market data.

During the years ended December 31, 2024 and 2023, there were no transfers between fair value measure levels.

5. Other Current Receivables

Other current receivables as of December 31, 2024 and 2023 consisted of the following:

	December 31,	
	2024	2023
	(in thousands)	
Research and development tax credits receivable	\$ 820	\$ 1,319
Collaboration revenue receivable	—	2,050
Sales tax and other receivables	926	1,130
Total other current receivables	\$ 1,746	\$ 4,499

6. Property and Equipment, Net

Property and equipment, net as of December 31, 2024 and 2023 consisted of the following:

	December 31,	
	2024	2023
	(in thousands)	
Computer equipment	\$ 473	\$ 473
Office equipment	514	514
Laboratory equipment	7,964	7,985
Leasehold improvements	2,547	2,547
Total	11,498	11,519
Less: Accumulated depreciation	(9,204)	(7,304)
Property and equipment, net	\$ 2,294	\$ 4,215

Depreciation expense recognized was allocated as follows:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Research and development	\$ 1,818	\$ 1,835
General and administration	103	116
Depreciation expense	\$ 1,921	\$ 1,951

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities as of December 31, 2024 and 2023 consisted of the following:

	December 31,	
	2024	2023
	(in thousands)	
Accrued research and development expense	\$ 13,360	\$ 16,251
Accrued compensation and benefits	5,617	6,981
Accrued professional services	502	631
Accrued restructuring expenses	174	—
Other	166	194
Total accrued expenses and other current liabilities	\$ 19,819	\$ 24,057

8. Restructuring Expense

In August 2024, the Company announced a strategic reprioritization of the Company's research and development activities to focus its efforts on the advancement of its portfolio of clinical-stage oncology programs. As part of this strategic refocus, the Company reduced its overall workforce by approximately 25 %, with a majority of the headcount reductions from the Company's preclinical group. For the twelve months ended December 31, 2024, the Company incurred approximately \$1.4 million (nil - 2023) in costs as part of this strategic refocus, comprised primarily of severance and termination benefits.

9. License Agreements

In December 2016, as further amended in February 2017 and amended and restated in July 2018, the Company entered into a license agreement (the "NYU Agreement") with New York University, pursuant to which the Company obtained a worldwide, royalty-bearing, exclusive license under certain patents and know-how of New York University to research, develop and commercialize products covered by such licensed patents. The Company is required to pay New

York University an annual non-refundable license fee, which is creditable against future milestone and royalty payments. The Company is required to pay amounts up to approximately \$6.7 million in the aggregate upon achievement of certain clinical and commercial milestones and pay a low single digit royalty on future net sales of any product covered by a licensed product and a lower-single digit royalty on future net sales of any product not covered by a licensed product. The NYU Agreement expires on the date of expiration of all royalty obligations.

In October 2024, the dosing of the first patient in the Company's POLAR Phase 1 dose finding clinical trial of RP-3467 alone and in combination with the poly-ADP ribose PARP inhibitor, olaparib, triggered the payment of a \$0.1 million milestone to New York University under the terms of the NYU Agreement.

Any potential future milestone or royalty payment amounts have not been accrued at December 31, 2024 and 2023 due to the uncertainty related to the successful achievement of these milestones.

10. Leases

The Company has historically entered into lease arrangements for its facilities and certain equipment. As of December 31, 2024, the Company had four operating leases with required future minimum payments. The Company's leases generally do not include termination or purchase options.

Operating Leases

In June 2017, and as further amended in 2021, the Company entered into a lease agreement for office and laboratory space in Montréal, Québec, for a four-year term, ending in July 2021. In August 2021, the lease was extended through July 2025.

In November 2017, and as further amended throughout 2018, 2019, 2020, 2021 and 2022, the Company entered into a lease agreement for office and laboratory space located in Montréal, Québec, for a three-year term ending in October 2020, which was extended through December 2022. In January 2023, and as further amended in April 2023, the Company entered into a lease renewal agreement for a thirty-two month term, ending in August 2025.

In July 2021, the Company entered into a lease agreement for office space in Cambridge, Massachusetts, for a three-year term ended December 2024, which commenced in December 2021. The Company had an option for a three year renewal, which was not recognized in the Company's right-of-use asset or lease liability. In August 2024, the Company entered into a twelve-month renewal agreement for the space, ending in January 2026, which will result in additional minimum lease payments of \$1.1 million over the twelve-month extended lease term.

In November 2019, and as further amended in July 2021, the Company entered into a lease agreement for office and laboratory space for a five-year term located in Montréal, Québec which commenced in September 2020. The Company has an option for a five year renewal, which has not been recognized in the Company's right-of-use asset or lease liability.

During the third quarter of 2024, the Company determined the carrying value of the right-of-use asset related to the office and laboratory space in Montréal, Québec was no longer recoverable and wrote the balance down to its estimated fair value of nil. The resulting impairment loss of \$0.1 million is reflected within research and development expenses.

The following tables contains a summary of the lease costs recognized under ASC 842 and other information pertaining to the Company's operating leases for the years ended December 31, 2024 and 2023:

	December 31,	
	2024	2023
	(in thousands)	
Operating Leases		
Lease Cost		
Operating lease cost	\$ 2,484	\$ 2,372
Short-term lease cost	95	122
Variable lease cost	321	249
Total lease cost	\$ 2,900	\$ 2,743
	December 31,	
	2024	2023
	(in thousands, except as specified otherwise)	
Other Operating Lease Information		
Operating cash flows for operating leases	\$ 2,441	\$ 2,405
Right-of-use assets obtained in exchange for lease obligations	\$ 957	\$ 149
Weighted-average remaining lease term (in years)	0.90	1.46
Weighted-average discount rate	7.9 %	4.2 %

Variable lease costs for the years ended December 31, 2024 and 2023 include contingent rental usage, common area maintenance and other operating charges.

Future minimum lease payments under the Company's operating leases as of December 31, 2024 were as follows:

	December 31,
	2024
	(in thousands)
Maturity of Lease Liabilities	
2025	\$ 1,913
2026	88
Thereafter	—
Total lease payments	<u>\$ 2,001</u>
Less: interest	<u>(68)</u>
Total lease liabilities	<u>\$ 1,933</u>

11. Shareholders' Equity

Preferred Shares

Effective upon the closing of the IPO, the Company authorized for issue an unlimited number of preferred shares, issuable in series, having such designations, rights, privileges, restrictions and conditions, including dividend and voting rights as the board of directors of the Company may determine, and such rights and privileges, including dividend and voting rights, may be superior to those of the common shares. No preferred shares were issued and outstanding as of December 31, 2024 and 2023.

Common Shares

The articles of continuance of the Company authorize an unlimited number of common shares, voting and participating, without par value.

Each common share entitles the holder to one vote on all matters submitted to the shareholders for a vote. The holders of common shares are entitled to receive dividends, as may be declared by the board of directors, if any. Through December 31, 2024, no dividends have been declared or paid.

In August 2022, the Company entered into a sale agreement (the “2022 Sales Agreement”), with Cowen and Company, LLC. acting as agent. In November 2024, the Company entered into a Common Shares Sale Agreement (the “2024 Sales Agreement”), with TD Securities (USA) LLC to replace the 2022 Sales Agreement, pursuant to which we may sell up to \$100.0 million in common shares. During the years ended December 31, 2024 and 2023, the Company did not issue or sell shares under the 2022 Sales Agreement or 2024 Sales Agreement.

12. Share-Based Compensation

2020 Employee Share Purchase Plan

In June 2020, the Company’s board of directors adopted, and the Company’s shareholders approved the 2020 Employee Share Purchase Plan (“ESPP”). The number of shares reserved and available for issuance under the ESPP will automatically increase each January 1, beginning on January 1, 2021 and each January 1 thereafter through January 31, 2030, by the lesser of (1) 1.0% of the total number of common shares outstanding on December 31 of the preceding calendar year, (2) 3,300,000 common shares, or (3) such smaller number of common shares as the Company’s board of directors may designate. As of January 1, 2025, the number of common shares that may be issued under the ESPP is 2,132,500.

The ESPP enables eligible employees to purchase common shares of the Company at the end of each offering period at a price equal to 85% of the fair market value of the shares on the first business day or the last business day of the offering period, whichever is lower. Participation in the ESPP is voluntary. Eligible employees become participants in the ESPP by enrolling in the plan and authorizing payroll deductions. At the end of each offering period, accumulated payroll deductions are used to purchase the Company’s shares at the discounted price. The Company makes no contributions to the ESPP. A participant may withdraw from the ESPP or suspend contributions to the ESPP. If the participant elects to withdraw during an offering, all contributions are refunded as soon as administratively practicable. If a participant elects to withdraw or suspend contributions, they will not be able to re-enroll in the current offering but may elect to participate in future offerings. A participant may only purchase whole shares of the Company’s common shares in the ESPP. ESPP offering periods are offered on a rolling six-month basis.

For the years ended December 31, 2024 and 2023 the Company issued 125,793 and 75,608 common shares under the ESPP, respectively, at an average price per share of \$4.17 and \$9.11, respectively. Cash received from purchases under the ESPP for the years ended December 31, 2024 and 2023 was \$0.5 million and \$0.7 million, respectively. In February 2025, the Company issued 73,239 common shares under the ESPP at an average price per share of \$1.08.

The assumptions that the Company used in the Black Scholes option-pricing model to determine the grant date fair value under the ESPP offering were as follows:

	Year Ended December 31,	
	2024	2023
Risk-free interest rate	5.13 %	5.29 %
Expected term (in years)	0.50	0.50
Expected volatility	76.32 %	58.38 %
Expected dividend yield	0.00 %	0.00 %

The weighted average grant date fair value of common shares offered and issued under the ESPP during the years ended December 31, 2024 and 2023 was \$1.66 and \$3.27, respectively.

Option Plan and 2020 Plan

In December 2016, as further amended in December 2017 and September 2019, the Company adopted the Repare Therapeutics Inc. Option Plan (the “Option Plan”) for the issuance of stock options and other share-based awards to

directors, officers, employees or consultants. The Option Plan authorized up to 4,074,135 shares of the Company's common shares to be issued.

In June 2020, the Company's board of directors adopted, and the Company's shareholders approved the 2020 Equity Incentive Plan (the "2020 Plan"). The 2020 Plan became effective on the effective date of the IPO, at which time the Company ceased making awards under the Option Plan. The 2020 Plan allows the Company's compensation committee to make equity-based and cash-based incentive awards to the Company's officers, employees, directors and consultants including but not limited to stock options and restricted share units. The aggregate number of common shares reserved and available for issuance under the 2020 Plan has automatically increased on January 1 of each year beginning on January 1, 2021 and will continue to increase on January 1 of each year through and including January 1, 2030, by 5% of the outstanding number of common shares on the immediately preceding December 31, or such lesser number of shares as determined by the Company's board of directors. As of January 1, 2025, the number of common shares reserved for issuance under the 2020 Plan is 14,269,641.

The exercise price per share of stock option must be at least equal to the fair value of the common shares on the date of grant, as determined by the Company's compensation committee or the Company's board of directors. Stock options awarded under the 2020 Plan expire 10 years after the grant. Unless otherwise stated in a stock option agreement, options generally have vesting conditions of 25% of the shares subject to an option grant typically vesting upon the first anniversary of the vesting start date and thereafter at the rate of one forty-eighth of the option shares per month as of the first day of each month after the first anniversary.

Inducement Grant and Inducement Plan

In May 2023, the compensation committee of the Company's board of directors approved the grant of an inducement award to a newly hired member of the senior leadership team. The equity award, which was granted outside of the 2020 Plan, was an inducement material to such executive entering into employment with the Company, in accordance with Nasdaq Listing Rule 5635(c)(4). The stock option award to purchase an aggregate of 240,000 of the Company's common shares has a ten-year term and an exercise price of \$9.83 per share. The award has terms and conditions consistent with those set forth under the 2020 Plan and vests under the similar vesting schedules as stock option awards granted under the 2020 Plan. The inducement grant is included in the stock options table below.

In April 2024, the Company's board of directors approved the adoption of the 2024 Inducement Plan (the "Inducement Plan"), to be used exclusively for grants of awards to individuals who were not previously employees or directors (or following a bona fide period of non-employment) as a material inducement to such individual's entry into employment with the Company, pursuant to Nasdaq Listing Rule 5635(c)(4). The terms and conditions of the Inducement Plan are substantially similar to those of the 2020 Plan. 350,000 common shares were reserved for issuance under the Inducement Plan. As of December 31, 2024, the number of common shares that may be issued under the Inducement Plan is 335,300.

Warrants

In November 2024, the Company issued a warrant, as compensation for services to a consultant, to purchase up to 35,000 common shares of the Company at an exercise price of \$3.61 per share, vesting in equal quarterly installments over a two-year period. The warrant expires 5 years after the grant date. Total share-based compensation expense of \$0.07 million will be recognized over the two-year vesting period under general and administrative expenses.

Stock Options

The assumptions that the Company used in the Black Scholes option-pricing model to determine the grant date fair value of stock options granted to employees and non-employees were as follows, presented on a weighted-average basis:

	Year Ended December 31,	
	2024	2023
Risk-free interest rate	4.21 %	3.73 %
Expected term (in years)	5.97	6.01
Expected volatility	83.07 %	81.50 %
Expected dividend yield	0.00 %	0.00 %

The weighted average grant date fair value of stock options granted during the years ended December 31, 2024 and 2023 was \$4.70 and \$8.18, respectively.

The following table summarizes the Company's stock options activity:

	Number of shares	Weighted average exercise price	Weighted average remaining contractual term (in years)	Intrinsic value (in thousands)
Outstanding, January 1, 2024	10,097,771	\$ 13.77	7.41	\$ 13,502
Granted	1,636,182	\$ 6.45		
Exercised	(8,612)	\$ 1.99		
Cancelled or forfeited	(841,437)	\$ 12.41		
Outstanding, December 31, 2024	10,883,904	\$ 12.79	6.72	\$ —
Options exercisable, December 31, 2024	7,941,719	\$ 13.64	6.09	\$ —
Options unvested, December 31, 2024	2,942,185	\$ 10.48	8.42	\$ —

The aggregate intrinsic value of stock options is calculated as the difference between the exercise price of the stock options and the fair value of the Company's common shares for those stock options that had an exercise price lower than the fair value of the Company's common shares.

The aggregate intrinsic value of options exercised during the years ended December 31, 2024 and 2023 was nil and \$0.5 million, respectively.

The total fair value of options vested during the years ended December 31, 2024 and 2023 was \$22.6 million and \$24.4 million, respectively.

During the year ended December 31, 2024, an aggregate of 8,612 options were exercised at a weighted-average exercise price of \$1.99 per share, for aggregate proceeds of \$0.02 million. As a result, an amount of \$0.01 million previously included in additional paid-in-capital related to the exercised options has been credited to common shares and deducted from additional paid-in-capital.

Restricted Share Units

The following table summarizes the Company's restricted share unit activity:

	Number of shares	Weighted average grant date fair value	Weighted average remaining contractual term (in years)	Intrinsic value (in thousands)
Outstanding, January 1, 2024	603,685	\$ 12.42	2.09	\$ 4,407
Awarded	527,273	\$ 6.95		
Vested and released	(200,262)	\$ 12.42		
Cancelled or forfeited	(166,537)	\$ 9.80		
Outstanding, December 31, 2024	764,159	\$ 9.22	1.59	\$ —

The fair value of each restricted share unit is estimated on the date of grant based on the fair value of our common shares on that same date.

Share-Based Compensation

Share-based compensation expense for all awards was allocated as follows:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Research and development	\$ 13,378	\$ 13,239
General and administrative	9,782	11,824
Total share-based compensation expense	\$ 23,160	\$ 25,063

Share-based compensation expense by type of award was as follows:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Stock options	\$ 20,056	\$ 22,422
Restricted share units	2,871	2,298
ESPP	233	343
Total share-based compensation expense	\$ 23,160	\$ 25,063

As of December 31, 2024, there was \$19.9 million and \$4.5 million of unrecognized share-based compensation expense to be recognized over a weighted-average remaining vesting period of 1.0 years and 1.6 years related to unvested stock options and unvested restricted share units, respectively.

13. Employee Savings Plan

The Company offers its employees in the United States the ability to participate in a 401(k) savings plan and offers its employees in Canada the ability to participate in a registered retirement savings plan. The Company makes non-matching employer contributions into both of these plans on behalf of participants equal to 3% of their base salary. The Company has recorded an expense of \$0.8 million and \$0.9 million in matching contributions for the years ended December 31, 2024 and 2023.

14. Collaboration Arrangements

Debiopharm Clinical Study and Collaboration Agreement

In January 2024, the Company entered into a clinical study and collaboration agreement with Debiopharm International S.A. (“Debiopharm”), a privately-owned, Swiss-based biopharmaceutical company, with the aim to explore the synergy between the Company’s compound, lunresertib, and Debiopharm’s compound, Debio 0123, a WEE1 inhibitor (the “Debio Collaboration Agreement”). The Company and Debiopharm are collaborating on the development of a combination therapy, with the Company sponsoring the global study, and will share all costs equally. The Company and Debiopharm are each supplying their respective drugs and retain all commercial rights to their respective compounds, including as monotherapy or as combination therapies. The activities associated with the Debio Collaboration Agreement are coordinated by a joint steering committee, which is comprised of an equal number of representatives from the Company and Debiopharm.

Based on the terms of the Debio Collaboration Agreement, the Company concluded that the Debio Collaboration Agreement meets the requirements of a collaboration within the guidance of ASC 808, Collaborative Arrangements, as both parties are active participants in the combination trial and are exposed to significant risks and rewards depending on the success of the combination trial. Accordingly, the net costs associated with the co-development are expensed as incurred and recognized within research and development expenses in the condensed consolidated statement of operations and comprehensive loss.

During the year ended December 31, 2024, the Company recognized \$3.2 million (nil - 2023), in net research and development costs with regards to the Debiopharm portion of the 50/50 cost sharing terms in the Debio Collaboration Agreement.

15. Revenue recognition from Collaboration and License Agreements

The following table presents revenue from collaboration agreements:

	December 31,	
	2024	2023
	(in thousands)	
Roche Collaboration and License Agreement	\$ 50,888	\$ 14,545
Bristol-Myers Squibb Collaboration and License Agreement	2,589	26,115
Ono Collaboration Agreement	—	10,473
Total revenue	\$ 53,477	\$ 51,133

Roche

In June 2022, the Company entered into a collaboration and license agreement (the “Roche Agreement”) with Hoffmann-La Roche Inc. and F. Hoffmann-La Roche Ltd (collectively, “Roche”) regarding the development and commercialization of the Company’s product candidate camonsertib (also known as RP-3500) and specified other Ataxia-Telangiectasia and Rad3-related protein kinase (“ATR”) inhibitors (the “Licensed Products”). Pursuant to the Roche Agreement, the Company granted Roche a worldwide, perpetual, exclusive, sublicensable license to develop, manufacture, and commercialize the Licensed Products, as well as a non-exclusive, sublicensable license to certain related companion diagnostics. The Company agreed to complete specified ongoing clinical trials in accordance with the development plan in the Roche Agreement, as well as ongoing investigator sponsored trials (together, the “Continuing Trials”) at the Company’s expense. Roche assumed all subsequent development of camonsertib with the potential to expand development into additional tumors and multiple combination studies. The Company retained the right to conduct specified clinical trials (the “Repare Trials”) of camonsertib in combination with the Company’s PKMYT1 compound (also known as lunresertib).

The Company assessed the Roche Agreement in accordance with ASC 606, *Revenue from Contracts with Customers*, and concluded that Roche is a customer within the context of the agreement. At inception, the Company identified several performance obligations under the agreement, being (i) the combination of the exclusive perpetual license to the Licensed Products and the non-exclusive license to certain companion diagnostics, (ii) the research and development activities related to the completion of the Continuing Trials, as well as (iii) the transfer of clinical trial materials on hand. The Company determined that the exclusive license to the Licensed Products and the non-exclusive license to certain companion diagnostics should be combined into one distinct performance obligation as they were not capable of being distinct from each other within the context of the agreement given both are highly interdependent of each other. The Company determined that the combined licenses, the completion of the Continuing Trials and the

transfer of clinical trial materials were all capable of being distinct and were distinct within the context of the Roche Agreement given such activities are independent of each other and Roche could benefit from either separately.

The Company determined that the transaction price at the onset of the agreement was \$134.6 million, being (i) the total non-refundable upfront payment received of \$125.0 million, (ii) the additional \$4.0 million payment received, negotiated with Roche for revisions to the clinical development plan under the Roche Agreement as agreed at the time of the effective date of the Roche Agreement, and (iii) the \$5.6 million received for the transfer of clinical trial materials. Additional consideration was to be paid to the Company upon the achievement of multiple clinical, regulatory and sales milestones. The Company utilized the most likely method approach and concluded that these amounts were constrained based on the probability of achievement. As such, the Company excluded such additional consideration from the transaction price.

The Company allocated the transaction price at the onset of the agreement of \$134.6 million to each performance obligation based on the relative stand-alone selling price of each performance obligation at inception. The Company determined the estimated stand-alone selling price at contract inception of the combined licenses by applying a probability adjusted discounted cashflow model which forecasts future cash flows related to the licenses. The Company considered applicable market conditions and relevant entity-specific factors, including those factors contemplated in negotiating the agreement, probability of success, discount rate and the time needed to commercialize a product pursuant to the license. The Company determined the estimated stand-alone selling price at contract inception of the research and development activities required to complete the Continuing Trials based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant inputs used to determine the total costs to complete the Continuing Trials included the length of time required, the internal hours as well as external costs expected to be incurred, the number of patients and the number of clinical and investigator sponsored trials. The Company determined the stand-alone selling price of the clinical trial materials transferred based on the purchase price from external vendors, without applying a markup as the materials have a built-in margin from the external vendors.

In February 2023, the Company received an additional payment of \$4.0 million negotiated with Roche for additional revisions to the clinical development plan. In March 2024, the Company received a further payment of \$4.0 million for revisions to the clinical development plan under the Roche Agreement, of which \$2.1 million was previously recorded as a receivable at December 31, 2023. The Company determined that the scope and the price of the contract had increased as a result of these additional changes and thus reflected a contract modification under ASC 606. The additional services were assessed to be not distinct from the ongoing performance obligation related to the completion of the Continuing Trials but distinct from the other performance obligations. The transaction price was updated for the additional consideration received of \$8.0 million, as well as other adjustments of \$0.5 million pursuant to the termination of the agreement, which were fully allocated to the completion of the Continuing Trials performance obligation.

Based on the relative stand-alone selling price, the allocation of the transaction price to the separate performance obligations is as follows:

Performance obligation	Transaction price (in thousands)
Combined licenses	\$ 105,327
Completion of Continuing Trials	34,035
Transfer of clinical trial materials	2,714
Total transaction price	<u>\$ 142,076</u>

Revenue associated with the combined licenses was recognized at a point in time upon the transfer of the licenses to Roche on the effective date of the Roche Agreement as the Company concluded that the combined licenses were a functional intellectual property license that Roche could benefit from as of the time of grant. Revenue associated with the transfer of clinical trial materials was recognized at a point in time upon delivery of the clinical trial materials to Roche in the year ended December 31, 2022. Revenue associated with the completion of the Continuing Trials was deferred, to be recognized on a proportional performance basis over the period of time to complete the Continuing Trials, using input-based measurements of total costs of research and development incurred to estimate the proportion performed. Progress towards completion is remeasured at the end of each reporting period.

Deferred revenue pertaining to the Roche Agreement	Completion of Continuing Trials	
	(in thousands)	
Balance as of December 31, 2023	\$	9,463
Increase in collaboration revenue receivable		41,425
Recognition as revenue, as the result of performance obligations satisfied		(50,888)
Balance as of December 31, 2024	\$	—

The Company recognized \$14.5 million for the year ended December 31, 2023 as revenue associated with the Roche Agreement, in recognition of deferred revenue for research and development services performed towards the completion of the Continuing Trials during the period. As of December 31, 2023, there was \$9.4 million of deferred revenue related to the Roche Agreement, of which \$7.7 million was classified as current and \$1.7 million was classified as non-current in the consolidated balance sheet based on the period the services to complete the Continuing Trials were expected to be performed.

In February 2024, the Company received a \$40 million milestone payment from Roche upon dosing of the first patient with camonsertib in Roche's Phase 2 TAPISTRY trial.

The Company recognized \$50.9 million as revenue for the year ended December 31, 2024 in relation to (i) the recognition of revenue from the \$40.0 million milestone achievement in the first quarter of 2024, as well as (ii) the recognition of all remaining deferred revenue for research and development services performed towards the completion of the Continuing Trials during the period. As of December 31, 2024, there was nil deferred revenue related to the Roche Agreement.

Over the course of the Roche camonsertib collaboration, the Company received a cumulative total of \$182.6 million, including the upfront payment, the milestone payment, as well as additional reimbursements from Roche. On February 7, 2024, the Company received written notice from Roche of their election to terminate the Roche collaboration agreement following a review of Roche's pipeline and evolving external factors. The termination became effective May 7, 2024, at which time the Company regained global development and commercialization rights for camonsertib from Roche. Following May 7, 2024, there is no other material relationship between the Company and Roche.

Bristol-Myers Squibb

In May 2020, the Company entered into a collaboration and license agreement (the "BMS Agreement") with Bristol-Myers Squibb Company (Bristol-Myers Squibb), pursuant to which the Company and Bristol-Myers Squibb agreed to collaborate in the research and development of potential new product candidates for the treatment of cancer. The Company provided Bristol-Myers Squibb access to a selected number of its existing screening campaigns and novel campaigns. The Company was responsible for carrying out early-stage research activities directed to identifying potential targets for potential licensing by Bristol-Myers Squibb, in accordance with a mutually agreed upon research plan and was solely responsible for such costs. The collaboration consists of programs directed to both druggable targets and to targets commonly considered undruggable to traditional small molecule approaches. Upon Bristol-Myers Squibb's election to exercise its option to obtain exclusive worldwide licenses for the subsequent development, manufacturing and commercialization of a program, Bristol-Myers Squibb will then be solely responsible for all such worldwide activities and costs.

The collaboration term expired in November 2023, being 42 months after the effective date of the BMS Agreement. The BMS Agreement will expire, assuming that Bristol-Myers Squibb has exercised at least one option for a program, on a licensed product-by-licensed product and country-by-country basis on expiration of the applicable royalty term and in its entirety upon expiration of the last royalty term. Either party may terminate earlier upon an uncured material breach of the agreement by the other party, or the insolvency of the other party. Additionally, Bristol-Myers Squibb may terminate the BMS Agreement for any or no reason on a program-by-program basis upon specified written notice.

Under the terms of the BMS Agreement, Bristol-Myers Squibb paid the Company an initial non-refundable upfront fee payment of \$50.0 million in June 2020. The Company is entitled to receive, on a program-by-program basis, option exercise fees ranging in the low six figures depending on the nature of the applicable program. Bristol-Myers Squibb

also has the right to retain rights to certain back-up programs in exchange for a one-time payment in the low eight figures per program. The Company is also entitled to receive up to \$301.0 million in total milestones on a program-by-program basis, consisting of \$176.0 million in the aggregate for certain specified research, development and regulatory milestones and \$125.0 million in the aggregate for certain specified commercial milestones. The Company is further entitled to a tiered percentage royalty on annual net sales ranging from high-single digits to low-double digits, subject to certain specified reductions. Royalties are payable by Bristol-Myers Squibb on a licensed product-by-licensed product and country-by-country basis until the later of the expiration of the last valid claim covering the licensed product in such country, expiration of all applicable regulatory exclusivities in such country for such licensed product and the tenth anniversary of the first commercial sale of such licensed product in such country.

On a program-by-program basis, prior to the earlier of such program ceasing to be included under the BMS Agreement and expiration of the last to expire royalty term for such program, the Company, alone and with third parties, is prohibited from researching, developing, manufacturing and commercializing products that are directed to the applicable target for such program.

The Company provided Bristol-Myers Squibb with certain, limited rights to first negotiation if the Company determines to divest, license or collaborate with others regarding certain existing programs, including in the event that the Company receives an unsolicited offer to do so. The right of first negotiation expressly excludes any potential change of control transaction, as defined in the agreement.

The Company assessed the BMS Agreement in accordance with ASC 606, Revenue from Contracts with Customers, and concluded that Bristol-Myers Squibb is a customer based on the agreement structure. At inception, the Company identified several performance obligations under the BMS Agreement, being (i) research activities for each campaign over the collaboration term, as well as (ii) a selected number of material rights associated with options to obtain exclusive development, manufacturing, and commercial licenses to targets identified. The Company determined that the options to obtain the exclusive development, manufacturing and commercialization licenses were material rights under ASC 606 because there are minimal amounts to be paid to the Company upon exercise of such options.

The Company determined that the transaction price at the onset of the BMS Agreement was the total non-refundable upfront payment received of \$50.0 million. Additional consideration was to be paid to the Company upon the exercise of options to license targets and future milestone payments. The Company utilized the most likely method approach and concluded that these amounts were constrained as they represent option fees and milestone payments that can only be achieved subsequent to option exercises. As such, the Company excluded this additional consideration from the transaction price.

The Company allocated the transaction price of \$50.0 million to each performance obligation based on the relative stand-alone selling price of each performance obligation at inception, which was determined based on each performance obligation's estimated stand-alone selling price. The Company determined the estimated stand-alone selling price at contract inception of the research activities based on internal estimates of the costs to perform the services, inclusive of a reasonable profit margin. Significant inputs used to determine the total costs to perform the research activities included the length of time required, the internal hours expected to be incurred on the services and the number and costs of various studies that will be performed to complete the research plan. The Company determined the estimated stand-alone selling price at contract inception of the material rights associated with options to obtain exclusive licenses to druggable targets and undruggable targets based on the fees Bristol-Myers Squibb would pay to exercise these options, the probability-weighted value of expected future cash flows associated with each license related to each target and the probability that these options would be exercised by Bristol-Myers Squibb. In developing such estimates, the Company also considered applicable market conditions and relevant entity-specific factors, including those factors contemplated in negotiating the agreement, probability of success and the time needed to commercialize a product candidate pursuant to the associated license. Based on the relative stand-alone selling price, the allocation of the transaction price to the separate performance obligations was as follows:

Performance obligation	Transaction price (in thousands)	
Research activities	\$	6,405
Options to license druggable targets		31,148
Options to license undruggable targets		12,447
Total transaction price	\$	50,000

Revenue associated with the options was deferred and recognized at the point in time when options to license are exercised by Bristol-Myers Squibb or upon expiry of such options. Revenue associated with the research activities was deferred and recognized on a proportional performance basis over the period of service for research activities, being the collaboration term, using input-based measurements of total costs of research incurred to estimated proportion performed. Progress towards completion is remeasured at the end of each reporting period.

Deferred revenue pertaining to the BMS Agreement	Research activities	Options to license druggable targets	Options to license undruggable targets	Total
	(in thousands)			
Balance as of December 31, 2023	\$ —	\$ —	\$ 2,489	\$ 2,489
Increase in collaboration revenue receivable	—	—	100	100
Recognition as revenue, as the result of performance obligations satisfied	—	—	(2,589)	(2,589)
Balance as of December 31, 2024	\$ —	\$ —	\$ —	\$ —

The Company recognized nil as revenue for the year ended December 31, 2024 and \$2.4 million for the year ended December 31, 2023, in recognition of deferred revenue for research activities performed under the BMS Agreement.

In fiscal 2023, Bristol-Myers Squibb exercised its option for a druggable target and also waived its right to exercise an option for another druggable target. As a result, the Company recognized \$12.7 million as revenue related to druggable targets for the year ended December 31, 2023, including the option fee payment of \$0.25 million. Bristol-Myers Squibb also triggered a \$1.0 million further development election for a previously exercised druggable target. As such, the Company recognized \$1.0 million for this specified research milestone as revenue for the year ended December 31, 2023.

The Company completed the discovery portion of the BMS Agreement in November 2023. With the completion of its performance obligations under the BMS Agreement in the fourth quarter of 2023, the Company recognized \$10.0 million as revenue for the year ended December 31, 2023 related to options to license undruggable targets as these options expired upon completion of the discovery portion of the BMS Agreement.

In March 2024, Bristol-Myers Squibb exercised its one remaining option for an undruggable target. As a result, the Company recognized \$2.6 million as revenue related to undruggable targets, including the option fee payment of \$0.1 million, for the year ended December 31, 2024.

As of December 31, 2024, there was nil (December 31, 2023 - \$2.5 million) of deferred revenue related to the BMS Agreement, of which nil (December 31, 2023 - \$2.5 million) was classified as current on the consolidated balance sheet based on the period the services are expected to be performed and the expected timing of potential option exercises.

Ono

In January 2019, the Company entered into a research services, license and collaboration agreement (the “Ono Agreement”) with Ono Pharmaceutical Company, Ltd. (“Ono”), pursuant to which the Company and Ono agreed to collaborate in the research of potential product candidates targeting Polθ and the development of the Company’s small molecule Polθ ATPase inhibitor program. The Company was primarily responsible for carrying out research activities to identify a product candidate, to be licensed to Ono, in accordance with a mutually agreed upon research plan during a research term that will end upon the earlier of the date of the first submission of an Investigational New Drug

application (“IND”) in the United States or Japan, or the end of the research term. In the event that Ono elected to collaborate on the subsequent development and commercialization of the proposed product candidate, Ono would then have been responsible for such activities in Japan, South Korea, Taiwan, Hong-Kong, Macau and the Association of Southeast Asian Nations (collectively, the “Ono territory”), and the Company would have been responsible for all such activities in the rest of the world outside the Ono territory, including the United States, Canada and European Union. In such instance, Ono would have been responsible for a specified percentage of research and developments costs for the IND-enabling studies of the selected product candidate.

In October 2021, the Company and Ono entered into an amendment to the Ono Agreement whereby the Research Term, as defined in the Ono Agreement, was extended by one year. In January 2023, the Company and Ono entered into a second amendment to the Ono Agreement whereby the Research Term, as defined in the Ono Agreement, was extended until July 31, 2023.

Under the terms of the Ono Agreement, the Company received non-refundable upfront payments of ¥900 million (\$8.1 million), consisting of an initial upfront fee payment of ¥110 million (\$1.0 million) and an initial upfront research service payment of ¥790 million (\$7.1 million).

The Company assessed the arrangement in accordance with ASC 606 and concluded that Ono is a customer based on the arrangement structure. The Company identified a single performance obligation under the arrangement consisting of the combination of the license to develop and commercialize a selected product candidate targeting Polθ and associated research services.

The Company determined that the license and research services are not distinct within the context of the contract, and the license is the predominant good or service. Accordingly, revenue is recognized in accordance with guidance for licenses, and because the license represents functional IP, it is recognized at the point in time control of the license is transferred.

The Company determined that the transaction price at the onset of the arrangement is the total upfront payments received in the aggregate amount of \$8.1 million which was recorded as deferred revenue. The future milestone payments represent variable consideration that is fully constrained at inception of the arrangement as the achievement of the milestone events are highly uncertain. In October 2021 and December 2022, the Company achieved specified research triggers amounting to ¥100 million (\$0.9 million) and ¥200 million (\$1.5 million), respectively, as research service payments provided for in the Ono Agreement. The ¥200 million (\$1.5 million) is included in the collaboration revenue receivable at December 31, 2022 and was subsequently received in January 2023.

In June 2023, the Company and Ono determined not to further extend the Term of the Ono Agreement. As a result, no product candidate was licensed to Ono pursuant to the terms of agreement. The Company recognized as revenue nil for the year ended December 31, 2024 (\$10.5 million for the year ended December 31, 2023) with regards to the performance obligation under the Ono Agreement. In July 2023, Ono provided the Company with a formal notice to terminate the Ono Agreement without cause as defined in the Ono Agreement. As a result of this termination, all rights to the Polθ program have reverted to the Company.

16. Income Taxes

Loss before the provision for income taxes consisted of the following:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Canada	\$ (88,974)	\$ (108,362)
Foreign	5,725	5,183
Loss before provision for income taxes	<u>\$ (83,249)</u>	<u>\$ (103,179)</u>

The components of the provision for income taxes are as follows:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Current income tax provision (benefit) - foreign	\$ 1,440	\$ (9,383)
Deferred income tax - foreign	—	—
Total provision (benefit) for income taxes	<u>\$ 1,440</u>	<u>\$ (9,383)</u>

A reconciliation between tax expense and the product of accounting income multiplied by the statutory income tax rate is as follows:

	Year Ended December 31,	
	2024	2023
	(in thousands)	
Loss before income taxes	\$ (83,249)	\$ (103,179)
Income tax at statutory rate	26.5 %	26.5 %
Computed income tax recovery	(22,061)	(27,342)
Effect on income tax resulting from:		
Federal investment tax credit	(6,694)	(6,648)
Accounting charges not deductible for tax purposes	3,234	5,132
Capital gain income	(5,300)	—
Equity compensation	4,072	4,292
State taxes	65	643
Other	(157)	26
Change in valuation allowance	28,281	14,514
Tax (benefit) expense	<u>\$ 1,440</u>	<u>\$ (9,383)</u>

The Company's applicable statutory tax rate is the Canadian combined rate applicable in the jurisdictions in which the Company operates.

Income tax receivable in the amount of \$11.6 million as of December 31, 2024 reflects the overpayment of tax installments by the Company's U.S. subsidiary, which resulted from its compliance with the requirement to capitalize and amortize certain specified research and experimental expenditures subject to Section 174 of the Internal Revenue Code of 1986, as amended ("IRC") (as per the Tax Cuts and Jobs Act of 2017), prior to the issuance of interim guidance on September 8, 2023 by the Department of Treasury and the Internal Revenue Service on IRC Section 174 that supports the deduction of certain expenses that would otherwise be treated as specified research and experimental expenditures. The current portion of the income tax receivable is approximately \$10.6 million, which primarily consists of an overpayment of tax installments by the Company's U.S. subsidiary for the 2022 fiscal year, and the long-term portion is approximately \$1.0 million.

As of December 31, 2024, the Company had Federal and Quebec tax losses of approximately \$352.2 million and \$346.5 million respectively, which are available to offset future taxable income in Canada. The Company has not recognized the tax benefit of these losses. These losses expire as follows:

	<u>Federal</u>	<u>Quebec</u>
	(in thousands)	
2044	\$ 88,666	\$ 88,666
2043	115,862	114,489
2042	34,460	33,153
2041	93,833	92,674
2040	—	—
2039	11,394	10,442
2038	7,111	7,066
2037	883	6
Total	<u>\$ 352,209</u>	<u>\$ 346,496</u>

As of December 31, 2024, the Company had Scientific Research and Experimental Development (“SR&ED”) expenditures of approximately \$83.1 million for Canadian federal and \$88.1 million for Quebec purposes, which have not been deducted. These expenditures are available to reduce future taxable income and have an unlimited carryforward period. SR&ED expenditures are subject to verification by the tax authorities and, accordingly, the amounts may vary.

As of December 31, 2024, the Company had non-refundable Canadian federal investment tax credits of approximately \$13.8 million, which may be utilized to reduce Canadian federal income taxes payable. The Company has not recognized the tax benefits related to the non-refundable investment tax credits. The investment tax credits expire as follows:

	(in thousands)
2044	\$ 2,164
2043	2,652
2042	2,433
2041	2,253
2040	1,702
2039	1,362
2038	776
2037	455
2036	24
Total	<u>\$ 13,821</u>

The Company's deferred tax assets as of December 31, 2024 and 2023 consisted of the following:

	2024	2023
	(in thousands)	
Net operating loss carryforwards	\$ 92,678	\$ 69,894
Net research and development expenditures	22,591	18,724
Share issuance costs	44	1,200
Net federal investment tax credits	10,159	8,567
U.S. research and development tax credits	7,430	4,565
Tax basis of property and equipment in excess of carrying values	226	39
Operating lease right-of-use assets	(505)	(883)
Operating lease liability	506	906
Accrued expense and other liabilities	956	1,134
Deferred revenue	—	3,167
Share-based compensation	5,672	4,240
Total deferred tax assets	139,757	111,553
Valuation allowance	(139,757)	(111,553)
Net deferred tax assets	\$ —	\$ —

Management has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets and has determined that it is more likely than not that the Company will not recognize the benefit of its net deferred tax assets, and as a result, a valuation allowance of \$139.8 million and \$111.6 million has been established at December 31, 2024 and December 31, 2023, respectively.

The Company has incurred net operating losses in Canada since inception and the Company's U.S. subsidiary operated profitably in the United States since its inception. As of December 31, 2024, the Company had U.S. federal and state research and development tax credit carry forwards of \$7.2 million.

The Company files income tax returns in Canada and in the United States. In the normal course of business, the Company could be subject to examination by federal and provincial or state jurisdictions, where applicable. The Company is currently under audit in Canada for tax years 2022-2023 and in Quebec for tax years 2021-2023. The Company may be subject to tax examination for fiscal years 2016 to 2024 due to unexpired statute of limitation periods.

The calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax laws and regulations for both federal taxes and the provinces and states in which the Company operates or does business in. ASC 740 states that a tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, on the basis of the technical merits.

The Company records uncertain tax positions as liabilities in accordance with ASC 740 and adjusts these liabilities when the Company's judgment changes as a result of the evaluation of new information not previously available. Because of the complexity of some of these uncertainties, the ultimate resolution may result in a payment that is materially different from the current estimate of the unrecognized tax benefit liabilities. These differences will be reflected as increases or decreases to income tax expense in the period in which new information is available. As of December 31, 2024 and 2023, no uncertain tax positions have been recorded in the consolidated financial statements.

The Company recognizes interest and penalties related to unrecognized tax benefits on the income tax expense line in the accompanying consolidated statement of operations and comprehensive loss. As of December 31, 2024 and 2023, no accrued interest or penalties are included on the related tax liability line in the consolidated balance sheet.

17. Net Loss per Share

The following table summarizes the computation of basic and diluted net loss per share attributable to common shareholders of the Company:

	Year Ended December 31,	
	2024	2023
	(in thousands, except share and per share data)	
Numerator:		
Net loss	\$ (84,689)	\$ (93,796)
Denominator:		
Weighted-average number of common shares outstanding—basic and diluted	42,411,085	42,093,293
Net loss per share—basic and diluted	\$ (2.00)	\$ (2.23)

The Company's potentially dilutive securities, which include options to purchase common shares, restricted share units, and shares issuable under the ESPP, have been excluded from the computation of diluted net loss per share attributable to common shareholders as the effect would be to reduce the net loss per share attributable to common shareholders. Therefore, the weighted average number of common shares outstanding used to calculate both basic and diluted net loss per share attributable to common shareholders is the same.

The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share attributable to common shareholders for the periods indicated because including them would have had an anti-dilutive effect:

	Year Ended December 31,	
	2024	2023
Options to purchase common shares	10,883,904	10,097,771
Restricted share units	764,159	603,685
Estimated shares issuable under the ESPP	82,119	55,327

18. Government Assistance

The Company incurred research and development expenditures which are eligible for refundable investment tax credits. The refundable investment tax credits recorded are based on management's estimates of amounts expected to be recovered and are subject to audit by the taxation authorities. These amounts have been recorded as a reduction of research and development expenditures in the amounts of \$0.9 million, and \$1.5 million for the years ended December 31, 2024 and 2023, respectively.

19. Commitments and Contingencies

The following table summarizes the Company's commitments to settle contractual obligations at December 31, 2024, other than leases which are recognized as operating lease liabilities in the consolidated balance sheet.

Year Ending December 31,	(in thousands)
2025	\$ 1,247
2026	163
2027	32
2028	40
2029	32
Following years	140
Total	\$ 1,654

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts.

Collaboration and Research Agreements

Collaboration and research agreement obligations primarily relate to a strategic collaboration agreement that was entered into with the University of Texas M. D. Anderson Cancer Center (“MDACC”) in March 2020. The collaboration consists of preclinical studies and clinical trials designed by the Company and MDACC with the research to be completed by MDACC. The Company agreed to commit \$10.0 million in funding for various studies over a period of five years, which has been fully paid as of December 31, 2024.

The Company entered into an agreement with the Broad Institute, Inc. (“Broad”), in July 2022, under which Broad will perform specialty screening services at the Company’s request over the course of a three-year term in exchange for payments of \$0.8 million per year, beginning in July 2022, totaling \$2.3 million in the aggregate, which has been fully paid as of December 31, 2024.

Purchase and Other Obligations

In the normal course of business, the Company enters into contracts with Contract Research Organizations (“CROs”) and other third parties for preclinical studies and clinical trials, research and development supplies and other testing and manufacturing services. These contracts generally do not contain minimum purchase commitments and provide for termination on 30 to 90 days’ prior written notice, and therefore are cancellable contracts. These payments are not included in the table above as the amount and timing of such payments are not known as of December 31, 2024.

In the normal course of business, the Company enters into non-cancellable purchase obligations for services and subscriptions in support of its activities. As of December 31, 2024, future estimated payments under such obligations are \$1.2 million for the fiscal year 2025 and \$0.1 million for the fiscal year 2026, which are included in the table above.

The Company has further entered into license agreements under which it is obligated to make milestone and royalty payments and incur annual maintenance fees. The future milestone or royalty payments under these agreements have not been included in the table above since the payment obligations are contingent upon future events, such as achieving certain clinical and commercial milestones or generating product sales. As of December 31, 2024, the Company is unable to estimate the timing or likelihood of achieving these clinical and commercial milestones or generating future product sales (see Note 9).

Indemnification Agreements

In the ordinary course of business, the Company may provide indemnification of varying scope and terms to vendors, lessors, business partners and other parties with respect to certain matters including, but not limited to, losses arising out of breach of such agreements or from intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with members of its board of directors and executive officers that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is, in many cases, unlimited. To date, the Company has not incurred any material costs as a result of such indemnifications. The Company is not aware of any indemnification arrangements that could have a material effect on its financial position, results of operations or cash flows, and it has not accrued any liabilities related to such obligations in these consolidated financial statements as at December 31, 2024.

20. Currency Risk

The Company is exposed to the financial risk related to the fluctuation of foreign exchange rates and the degree of volatility of those rates. The foreign currency risk is limited to the portion of the Company’s business transactions denominated in currency other than U.S. dollars.

The Company incurs a portion of its expenses in Canadian dollars, as well as other currencies to a lesser extent. A change in the currency exchange rates between the U.S. dollars relative to the Canadian dollar could have a significant effect on the Company’s consolidated results of operations, financial position, or cash flows. The Company does not enter into arrangements to hedge its currency risk exposure, although it maintains expected Canadian dollar cash requirements in Canadian dollars to form a natural hedge.

The Company is exposed to currency risk through its cash, other current receivables, accounts payable, accrued expenses and other current liabilities, as well as right-of-use lease liabilities denominated in Canadian dollars as follows:

	December 31,	
	2024	2023
	(in thousands)	
Cash	\$ 1,481	\$ 3,120
Other current receivables	486	743
Accounts payable	(112)	(290)
Accrued expenses and other current liabilities	(2,374)	(4,310)
Lease liabilities	(1,216)	(2,971)
Net financial position exposure	<u>\$ (1,735)</u>	<u>\$ (3,708)</u>

Based on the above net exposure at December 31, 2024, and assuming that all other variables remain constant, a 10% depreciation of the U.S. dollar against the Canadian dollar would result in an increase of \$0.1 million in the Company’s net loss for the year ended December 31, 2024.

21. Segment Information

The Company operates and manages its business as a single reporting and operating segment, which is the research and development of precision oncology drugs targeting specific vulnerabilities of tumors in genetically defined patient populations. The Company's CODM is the Chief Executive Officer. The CODM assesses performance for the segment and decides how to allocate resources based on consolidated net loss that is reported on the consolidated statement of operations and comprehensive loss. Managing and allocating resources on a consolidated basis enables to CODM to assess the overall level of resources available and how to be deploy these resources across functions and programs that are in line with the Company's long-term company-wide strategic goals.

The following table presents reportable segment net loss, including significant expense categories, attributable to the Company's reportable segment for the years ended December 31, 2024 and 2023.

	December 31,	
	2024	2023
	(in thousands)	
Revenue:		
Collaboration agreements	\$ 53,477	\$ 51,133
Operating expenses:		
Discovery costs		
Direct external costs	5,293	7,717
Laboratory supplies and research materials	3,357	3,881
Personnel related costs	10,833	11,710
Facilities related costs	1,640	1,523
Other costs	3,366	3,913
Development costs		
Direct external costs		
Camonsertib program	14,321	23,420
Lunresertib program	29,071	29,848
RP-1664 program	6,937	6,337
RP-3467 and Polθ program	4,878	6,500
Personnel related costs	34,478	34,187
Facilities related costs	898	867
Other costs	5,043	5,154
Debiopharm development cost reimbursement	(3,242)	—
R&D tax credits	(932)	(1,464)
Total research and development costs	\$ 115,941	\$ 133,593
Personnel related costs	18,580	21,010
Other general administrative costs ⁽¹⁾	11,100	12,754
Total general and administrative costs	\$ 29,680	\$ 33,764
Restructuring costs	1,379	—
Loss from operations	\$ (93,523)	\$ (116,224)
Other income, net ⁽²⁾	10,274	13,045
Income tax (expense) benefit	(1,440)	9,383
Net Loss	\$ (84,689)	\$ (93,796)

(1) Includes professional fees, directors and officers insurance costs, public company operating costs, information technology related costs, and other administrative costs.

(2) Includes interest income and other expenses.

The following presents segment revenue and long lived assets by geographic location, along with major collaborator information.

Revenue by location is as follows:

	December 31,	
	2024	2023
	(in thousands)	
Switzerland	\$ 50,888	\$ 14,545
United States	2,589	26,115
Japan	—	10,473
Total revenue	\$ 53,477	\$ 51,133

The Company's property and equipment, net by country of domicile (Canada) and its subsidiary in the United States are as follows:

	December 31,	
	2024	2023
	(in thousands)	
Canada	\$ 2,143	\$ 3,469
United States	151	746
Total property and equipment, net	\$ 2,294	\$ 4,215

The Company's right-of-use assets by country of domicile (Canada) and its subsidiary in the United States are as follows:

	December 31,	
	2024	2023
	(in thousands)	
Canada	\$ 891	\$ 2,376
United States	1,033	950
Total right-of-use assets, net	\$ 1,924	\$ 3,326

Major Customers

The Company had one customer (a major collaborator) that represents more than 10% of total revenue. The amount of revenue derived from this customer for the year ended December 31, 2024, was \$50.9 million.

22. Subsequent Events

On January 9, 2025, the Company announced a re-alignment of resources and a re-prioritization of its clinical portfolio to focus on the continued advancement of its Phase 1 clinical programs, RP-3467 and RP-1664. The Company also announced its intention to seek partnering opportunities across its portfolio, including lunresertib and camonsertib prior to the start of any pivotal development. Effective February 24, 2025, the Company implemented a reduction of its workforce by approximately 75% to extend its cash runway into late-2027. The Company estimates that it will incur approximately \$8.7 million for retention, severance and other employee termination-related costs through the fourth quarter of 2025.

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 that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in 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, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, no evaluation of controls and procedures can provide absolute assurance that all control issues and misstatements due to error or fraud may occur and not be, if any, have been detected.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act) as of December 31, 2024. Based on the evaluation of our disclosure controls and procedures as of December 31, 2024, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our consolidated financial statements; providing reasonable assurance that receipts and expenditures of company assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use, or disposition of company assets that could have a material effect on our consolidated financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our consolidated financial statements would be prevented or detected.

Our management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2024 based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) (2013 framework). This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion on this evaluation. Based on the results of its assessment, our management believes that our internal control over financial reporting was effective as of December 31, 2024.

This Annual Report on Form 10-K does not include an attestation report of our registered public accounting firm regarding the effectiveness of internal control over financial reporting as required by Section 404(b) of the Sarbanes-Oxley Act of 2002. Management's report was not subject to attestation by our registered public accounting firm pursuant to rules of the SEC that permit smaller reporting companies to provide only management's report in this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(f) and 15d-15(f) of the Exchange Act that occurred during the last fiscal quarter of 2024 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

During the quarter ended December 31, 2024, none of our directors or officers (as defined in Rule 16a-1(f) under the Exchange Act) adopted, terminated or modified a Rule 10b5-1 trading arrangement or non-Rule 10b5-1 trading arrangement (as such terms are defined in Item 408 of Regulation S-K).

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

None

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information required by this item is incorporated by reference to the information set forth in the sections titled “Information about Our Board of Directors” and “Information about Our Executive Officers”, “Corporate Governance”, “Delinquent Section 16(a) Reports”, and “Corporate Governance – Committees of the Board of Directors” in our definitive proxy statement to be filed with the SEC on Schedule 14A in connection with our 2025 Annual Meeting of Shareholders, or the Proxy Statement, which is expected to be filed no later than 120 days after December 31, 2024.

Our board of directors has adopted the Repare Therapeutics Inc. Code of Business Conduct and Ethics that applies to all officers, directors and employees. This includes our principal executive officer, principal financial officer and principal accounting officer or controller or persons performing similar functions. The nominating and corporate governance committee is responsible for overseeing the Code of Business Conduct and Ethics and must approve any waivers of the Code of Ethics for our employees, executive officers and directors. The Code of Business Conduct and Ethics is available on our website at ir.reparerx.com. If we make any substantive amendments to the Code of Business Conduct and Ethics or grant any waiver from a provision of the Code of Business Conduct and Ethics to the principal executive officer, principal financial officer and principal accounting officer or controller or persons performing similar functions, we will promptly disclose the nature of the amendment or waiver on our website. Information contained on, or that can be accessed through, our website is not incorporated by reference into this Annual Report on Form 10-K, and you should not consider information on our website to be part of this Annual Report on Form 10-K.

Item 11. Executive Compensation.

Information required by this item is incorporated by reference to the information set forth in the sections titled “Executive Compensation” and “Director Compensation” in the Proxy Statement.

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

Information required by this item is incorporated by reference to the information set forth in the sections titled “Securities Authorized for Issuance Under Equity Compensation Plans” and “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement.

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

Information required by this item is incorporated by reference to the information set forth in the sections titled “Information Regarding the Board of Directors and Corporate Governance – Independence of the Board of Directors” and “Transactions with Related Persons” in the Proxy Statement.

Item 14. Principal Accounting Fees and Services.

Information required by this item is incorporated by reference to the information set forth in the section titled “Independent Registered Public Accounting Firm Fees and Services” in the Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

(a) The following documents are filed as a part of this Annual Report:

(1) Consolidated Financial Statements:

Our Consolidated Financial Statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report.

(2) Financial Statement Schedules:

All financial statement schedules have been omitted because the information required to be set forth therein is not applicable or is shown in the financial statements or notes herein.

(3) Exhibits:

The documents listed in the following Exhibit Index of this Annual Report are incorporated by reference or are filed with this Annual Report on Form 10-K, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

Exhibit Index

Exhibit Number	Description	Incorporated by Reference			
		Schedule Form	File Number	Exhibit	Filing Date
3.1	Articles of Continuance of Repare Therapeutics Inc.	8-K	001-39335	3.1	June 23, 2020
3.2	Amended and Restated Bylaws of Repare Therapeutics Inc.	8-K	001-39335	3.2	June 23, 2020
4.1	Form of Common Share Certificate of the registrant.	S-1	333-238822	4.1	June 15, 2020
4.2*	Warrant to Purchase Common Shares issued to Astr Partners LLC, dated November 7, 2024.				
4.3	Description of Registrant's Securities.	10-K	001-39335	4.4	March 4, 2021
10.1+	Repare Therapeutics Inc. Amended and Restated Option Plan.	S-1	333-238822	10.1	May 29, 2020
10.2+	Form of Option Agreement under the Repare Therapeutics Inc. Amended and Restated Option Plan.	S-1	333-238822	10.2	May 29, 2020
10.3+	Form of 2020 Equity Incentive Plan.	S-1	333-238822	10.3	June 15, 2020
10.4+	Form of Share Option Grant Notice and Share Option Agreement under the 2020 Equity Incentive Plan.	S-1	333-238822	10.4	June 15, 2020
10.5+	Form of Restricted Share Unit Grant Notice and Restricted Share Unit Award Agreement under the 2020 Equity Incentive Plan.	S-1	333-238822	10.5	June 15, 2020
10.6+	Form of 2020 Employee Share Purchase Plan.	S-1	333-238822	10.6	June 15, 2020
10.7+	Repare Therapeutics Inc. 2024 Inducement Plan.	S-8	333-279721	99.1	May 24, 2024
10.8+	Form of Stock Option Grant Notice and Stock Option Agreement for the Repare Therapeutics Inc. 2024 Inducement Plan.	S-8	333-279721	99.2	May 24, 2024
10.9+	Form of Restricted Stock Unit Grant Notice and Award Agreement for the Repare Therapeutics Inc. 2024 Inducement Plan.	S-8	333-279721	99.3	May 24, 2024
10.10+	Form of Indemnity Agreement by and between the registrant and its directors and officers.	S-1	333-238822	10.7	June 15, 2020
10.11+	Employment Agreement between the registrant and Lloyd M. Segal, dated June 12, 2020.	S-1	333-238822	10.8	June 15, 2020
10.12+	Employment Agreement between the registrant and Michael Zinda, dated June 12, 2020.	S-1	333-238822	10.9	June 15, 2020

10.13+	<u>Employment Agreement between the registrant and Maria Koehler, dated June 12, 2020.</u>	S-1	333-238822	10.10	June 15, 2020
10.14+	<u>Employment Agreement between the registrant and Steve Forte, dated June 12, 2020.</u>	10-K	001-39335	10.11	March 1, 2022
10.15++	<u>Lease Agreement by and between the registrant and NEOMED Institute, dated November 26, 2019, as amended June 5, 2020.</u>	S-1	333-238822	10.14	June 15, 2020
10.16†	<u>Amended and Restated License Agreement by and between the registrant and New York University, dated July 9, 2018.</u>	S-1	333-238822	10.16	May 29, 2020
10.17†	<u>Collaboration and License Agreement by and between the registrant, Repare Therapeutics USA Inc. and Bristol-Myers Squibb Company, dated May 26, 2020.</u>	S-1	333-238822	10.17	May 29, 2020
10.18†	<u>First Amendment to Collaboration and License Agreement by and between the registrant, Repare Therapeutics USA Inc. and Bristol-Myers Squibb Company, dated July 22, 2020.</u>	10-Q	001-39335	10.1	August 13, 2020
10.19	<u>Second Amendment to Collaboration and License Agreement by and between the registrant, Repare Therapeutics USA Inc. and Bristol-Myers Squibb Company, dated September 24, 2020.</u>	10-Q	333-238822	10.1	November 12, 2020
10.20	<u>Second Amendment to Lease Agreement by and between the registrant, the registrant and NEOMED Institute, dated June 11, 2020.</u>	10-Q	333-238822	10.2	November 12, 2020
10.21†	<u>Third Amendment to Collaboration and License Agreement by and between the registrant, Repare Therapeutics USA Inc. and Bristol-Myers Squibb Company, dated November 20, 2020.</u>	10-K	001-39335	10.20	March 4, 2021
10.22++	<u>Addendum to Lease Agreement by and between the registrant, Repare Therapeutics Inc. and NEOMED Institute, dated June 1, 2021.</u>	10-Q	001-39335	10.1	August 12, 2021
10.23++	<u>Third Amendment to Lease Agreement by and between the registrant, Repare Therapeutics Inc. and NEOMED Institute, dated June 1, 2021.</u>	10-Q	001-39335	10.2	August 12, 2021
10.24	<u>Fourth Amendment to Lease Agreement by and between the registrant, Repare Therapeutics Inc. and The Manufacturers Life Insurance Company, dated June 22, 2021.</u>	10-Q	001-39335	10.3	August 12, 2021
10.25++	<u>Lease Agreement by and between the registrant, Repare Therapeutics Inc. and</u>	10-Q	001-39335	10.4	August 12, 2021

	<u>RREEF America REIT II Corp. PPP, dated July 31, 2021.</u>				
10.26	<u>Fifth Amendment to Lease Agreement by and between the registrant, Repare Therapeutics Inc. and The Manufacturers Life Insurance Company, dated January 17, 2022.</u>	10-K	001-39335	10.27	March 1, 2022
10.27	<u>Commencement Date Memorandum to the Lease Agreement by and between the registrant, Repare Therapeutics Inc. and RREEF America REIT II Corp. PPP, dated February 25, 2022.</u>	10-K	001-39335	10.28	March 1, 2022
10.28	<u>Lease Amending Agreement by and between the registrant, Repare Therapeutics Inc. and NEOMED Institute, dated October 27, 2022.</u>	10-K	001-39335	10.31	February 28, 2023
10.29++	<u>Lease Agreement by and between the registrant, Repare Therapeutics Inc. and NEOMED Institute, dated January 1, 2023.</u>	10-K	001-39335	10.32	February 28, 2023
10.30++	<u>Lease Amendment Agreement No.1 by and between the registrant Repare Therapeutics Inc. and NEOMED Institute dated April 1, 2023</u>	10-Q	001-39335	10.1	May 9, 2023
10.31†	<u>Fourth Amendment to Collaboration and License Agreement by and between the registrant and Repare Therapeutics USA Inc. and Bristol-Myers Squibb Company, dated May 12, 2023</u>	10-Q	001-39335	10.1	August 9, 2023
10.32+	<u>Form of Amendment to Executive Employment Agreement</u>	10-Q	001-39335	10.2	August 9, 2023
10.33†	<u>Fifth Amendment to Collaboration and License Agreement by and between the registrant and Repare Therapeutics USA Inc. and Bristol-Myers Squibb Company dated March 14, 2024</u>	10-Q	001-39335	10.1	May 7, 2024
10.34	<u>First Amendment to the Lease Agreement by and between the registrant, Repare Therapeutics Inc. and RREEF America REIT II Corp. PPP, dated August 26, 2024</u>	10-Q	001-39335	10.1	November 7, 2024
10.35	<u>Common Shares Sales Agreement, dated November 4, 2024, by and between Repare Therapeutics Inc. and TD Securities (USA) LLC</u>	10-Q	001-39335	10.2	November 7, 2024
19.1*	<u>Repare Therapeutics Inc. Insider Trading Policy</u>				
21.1	<u>Subsidiaries of the registrant.</u>	S-1	333-238822	21.1	May 29, 2020
23.1*	<u>Consent of Ernst & Young LLP, an Independent Registered Public Accounting Firm</u>				

24.1*	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).				
31.1*	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1**	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
97	Incentive Compensation Recoupment Policy of Repare Therapeutics Inc.	10-K	001-39335	97	February 28, 2024
101.INS*	Inline XBRL Instance Document				
101.SCH*	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents				
104	Inline Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)				

* Filed herewith.

** This certification is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended.

† Certain portions of this exhibit (indicated by asterisks) have been omitted because they are not material and would likely cause competitive harm to Repare Therapeutics Inc. if publicly disclosed.

+ Indicates management contract or compensatory plan.

++ Certain schedules and exhibits to this exhibit have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or exhibit will be furnished to the SEC upon request.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

Date: March 3, 2025

REPARE THERAPEUTICS INC.

By: /s/ Lloyd M. Segal
Lloyd M. Segal
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Lloyd Segal and Steve Forte, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution for him or her, and in his or her name in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the U.S. 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 therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, and either of them, his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ Lloyd M. Segal</u> Lloyd M. Segal	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	March 3, 2025
<u>/s/ Steve Forte</u> Steve Forte	Executive Vice President, Chief Financial Officer <i>(Principal Financial Officer and Principal Accounting Officer)</i>	March 3, 2025
<u>/s/ Thomas Civik</u> Thomas Civik	Chair of the Board of Directors	March 3, 2025
<u>/s/ David Bonita, M.D.</u> David Bonita, M.D.	Director	March 3, 2025
<u>/s/ Samarth Kulkarni, Ph.D.</u> Samarth Kulkarni, Ph.D.	Director	March 3, 2025
<u>/s/ Susan M. Molineaux, Ph.D.</u> Susan M. Molineaux, Ph.D.	Director	March 3, 2025
<u>/s/ Ann D. Rhoads</u> Ann D. Rhoads	Director	March 3, 2025
<u>/s/ Carol A. Schafer</u> Carol A. Schafer	Director	March 3, 2025
<u>/s/ Steven H. Stein, M.D.</u> Steven H. Stein	Director	March 3, 2025

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “ACT”). THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AS TO SUCH SECURITIES UNDER THE ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

**REPARE THERAPEUTICS INC. WARRANT TO PURCHASE
COMMON SHARES**

CSW-#1

November 7, 2024

VOID AFTER NOVEMBER 7, 2029

THIS CERTIFIES THAT, for value received, ASTR PARTNERS LLC (the “**Holder**”), is entitled to subscribe for and purchase from REPARE THERAPEUTICS INC., a corporation existing under the laws of the province of Québec, with its principal office at 7171 Frederick-Banting, Building 2, Suite 270, St-Laurent, Québec, Canada H4S 1Z9 (the “**Company**”), an aggregate of 35,000 Exercise Shares at the Exercise Price (each subject to adjustment as provided herein). This Warrant is being issued to the Holder in full satisfaction of the Company’s obligation to provide the Holder an equity award for corporate advisory and investor access services pursuant to that certain engagement letter, dated August 25, 2024, between the Company and the Holder.

1. DEFINITIONS. As used herein, the following terms shall have the following respective meanings:

(a) “**Common Shares**” shall mean the Company’s common shares, no par

value.

(b) “**Exercise Period**” shall mean the period commencing with the date hereof

and ending at 5:00 p.m., New York time on November 7, 2029.

(c) “**Exercise Price**” shall initially mean \$3.61 per Exercise Share subject to adjustment pursuant to Section 6 below.

(d) “**Exercise Shares**” shall mean the Common Shares issuable upon exercise of this Warrant.

(e) “**Trading Market**” means whichever of the New York Stock Exchange, NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market or OTC Bulletin Board on which the Common Shares are listed or quoted for trading on the date in question.

(f) “**Trading Day**” shall mean (i) a day on which the Common Stock is traded or quoted on a Trading Market, or (ii) if the Shares are is not traded or quoted on any Trading Market, a day on which the Common Shares are quoted in the over-the-counter market as reported by the Pink Sheets LLC (or any similar organization or agency succeeding to its functions of

reporting prices); provided, that in the event that the Shares are not traded or quoted as set forth in (i) or (ii) hereof, then Trading Day shall mean a Business Day.

2. VESTING. Notwithstanding anything to the contrary contained herein, this Warrant shall only be exercisable with respect to those Exercise Shares which have vested as of the date of exercise. The Exercise Shares shall vest, if at all, in equal quarterly installments over a two year period commencing on the date hereof.

3. EXERCISE OF WARRANT.

3.1 Subject to the terms and conditions hereof, the rights represented by this Warrant may be exercised in whole or in part at any time during the Exercise Period, by delivery of the following to the Company at its address set forth above (or at such other address as it may designate by notice in writing to the Holder):

- (a) An executed Notice of Exercise in the form attached hereto;
- (b) Payment of the Exercise Price either (i) in cash or by check, or (ii) by cancellation of indebtedness; and
- (c) This Warrant.

Upon the exercise of the rights represented by this Warrant, a certificate or certificates for the Exercise Shares so purchased, registered in the name of the Holder or persons affiliated with the Holder, if the Holder so designates, shall be issued and delivered to the Holder within a reasonable time after the rights represented by this Warrant shall have been so exercised. In the event that this Warrant is being exercised for less than all of the then-current number of Exercise Shares purchasable hereunder, the Company shall, concurrently with the issuance by the Company of the number of Exercise Shares for which this Warrant is then being exercised, issue a new Warrant exercisable for the remaining number of Exercise Shares purchasable hereunder.

The person in whose name any certificate or certificates for Exercise Shares are to be issued upon exercise of this Warrant shall be deemed to have become the holder of record of such shares on the date on which this Warrant was surrendered and payment of the Exercise Price was made, irrespective of the date of delivery of such certificate or certificates, except that, if the date of such surrender and payment is a date when the share transfer books of the Company are closed, such person shall be deemed to have become the holder of such shares at the close of business on the next succeeding date on which the share transfer books are open.

3.2 Net Exercise. Notwithstanding any provisions herein to the contrary, if the fair market value of one Exercise Share is greater than the Exercise Price (at the date of calculation as set forth below), in lieu of exercising this Warrant pursuant to Section 3.1, the Holder may elect to receive Exercise Shares equal to the value (as determined below) of this Warrant (or the portion thereof being cancelled pursuant to this Section 3.2) by surrender of this Warrant at the principal office of the Company together with the properly endorsed Notice of Exercise in which event the Company shall issue to the Holder a number of Exercise Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where X = the number of Exercise Shares to be issued to the Holder

Y = the number of Exercise Shares purchasable under the Warrant or, if only a portion of the Warrant is being exercised, that portion of the Warrant being cancelled pursuant to this Section 3.2 (at the date of such calculation)

A = the arithmetic average of the closing sales prices of a Common Share for the five consecutive Trading Days ending on the date immediately preceding the date of the Notice of Exercise

B = Exercise Price (as adjusted to the date of such calculation)

4. COVENANTS AS TO EXERCISE SHARES. The Company covenants and agrees that all Exercise Shares that may be issued upon the exercise of the rights represented by this Warrant will, upon issuance, be validly issued and outstanding, fully paid and nonassessable, and free from all taxes, liens and charges with respect to the issuance thereof. The Company further covenants and agrees that the Company will at all times during the Exercise Period, have authorized and reserved, a sufficient number of Common Shares to provide for the exercise of the rights represented by this Warrant.

5. REPRESENTATIONS OF HOLDER.

5.1 Acquisition of Warrant for Personal Account. The Holder represents and warrants that it is acquiring the Warrant and the Exercise Shares solely for its account for investment and not with a view to or for sale or distribution of said Warrant or Exercise Shares or any part thereof. The Holder also represents that the entire legal and beneficial interests of the Warrant and Exercise Shares the Holder is acquiring is being acquired for, and will be held for, its account only.

5.2 Information and Sophistication. Holder hereby: (i) acknowledges that it has received all the information it has requested from the Company and it considers necessary or appropriate for deciding whether to acquire this Warrant and the Exercise Shares, (ii) represents that it has had an opportunity to ask questions and receive answers from the Company regarding the financial condition of the Company and the risks associated with the acquisition of this Warrant and the Exercise Shares and (iii) further represents that it has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risk of this investment.

5.3 Ability to Bear Economic Risk. Holder acknowledges that investment in the securities of the Company involves a high degree of risk, and represents that it is able, without materially impairing its financial condition, to hold the Exercise Shares for an indefinite period of time and to suffer a complete loss of its investment.

5.4 Securities Are Not Registered.

(a)The Holder understands that the Warrant and the Exercise Shares have not been registered under the Securities Act of 1933, as amended (the “**Act**”), on the basis that no distribution or public offering of the shares of the Company is to be effected. The Holder realizes that the basis for the exemption may not be present if, notwithstanding its representations, the Holder has a present intention of acquiring the securities for a fixed or determinable period in the future, selling (in connection with a distribution or otherwise), granting any participation in, or otherwise distributing the securities. The Holder has no such present intention.

(b)The Holder recognizes that the Warrant and the Exercise Shares must be held indefinitely unless they are subsequently registered under the Act or an exemption from such registration is available. The Holder recognizes that the Company has no obligation to register the Warrant or the Exercise Shares of the Company, or to comply with any exemption from such registration.

(c)The Holder is aware that neither the Warrant nor the Exercise Shares may be sold pursuant to Rule 144 adopted under the Act unless certain conditions are met, including, among other things, the existence of a public market for the shares, the availability of certain current public information about the Company, the resale following the required holding period under Rule 144 and the number of shares being sold during any three month period not exceeding specified limitations. Holder is aware that the conditions for resale set forth in Rule 144 have not been satisfied and that the Company presently has no plans to satisfy these conditions in the foreseeable future.

5.5 Disposition of Warrant and Exercise Shares.

(a)The Holder further agrees not to make any disposition of all or any part of the Warrant or Exercise Shares in any event unless and until:

(i) The Company shall have received a letter secured by the Holder from the Securities and Exchange Commission (the “**Commission**”) stating that no action will be recommended to the Commission with respect to the proposed disposition;

(ii) There is then in effect a registration statement under the Act covering such proposed disposition and such disposition is made in accordance with said registration statement; or

(iii) The Holder shall have notified the Company of the proposed disposition and shall have furnished the Company with a statement of the circumstances surrounding the proposed disposition, and if reasonably requested by the Company, the Holder shall have furnished the Company with an opinion of counsel, reasonably satisfactory to the Company, for the Holder to the effect that such disposition will not require registration of such Warrant or Exercise Shares under the Act or any applicable state securities laws. The Company agrees that it will not require an opinion of counsel with respect to transactions under Rule 144 of the Act, except in unusual circumstances.

(b)The Holder understands and agrees that all certificates evidencing the shares to be issued to the Holder may bear the following legend:

THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “**ACT**”). THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT AS TO THE SECURITIES UNDER THE ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED.

5.6 Accredited Investor Status. The Holder is an “accredited investor” as defined in Regulation D promulgated under the Act.

6. ADJUSTMENTS.

6.1 In case the Company shall at any time subdivide its issued and outstanding Exercise Shares into a greater number of shares, the Exercise Price in effect immediately prior to such subdivision shall be proportionately reduced and the number of Exercise Shares purchasable under the Warrants shall be proportionately increased. Conversely, in case the issued and outstanding Exercise Shares shall be consolidated into a smaller number of shares, the Exercise Price in effect immediately prior to such consolidation shall be proportionately increased and the number of Exercise Shares purchasable under the Warrants shall be proportionately decreased.

6.2 If at any time or from time to time the Holder (or any shares or other securities at the time receivable upon the exercise of the Warrants) shall have received or become entitled to receive, without payment therefor.

(a) the Exercise Shares or any shares or other securities which are at any time directly or indirectly convertible into or exchangeable for the Exercise Shares, or any rights or options to subscribe for, purchase or otherwise acquire any of the foregoing by way of dividend or other distribution;

(b) any cash paid or payable otherwise than as a cash dividend paid or payable out of the Company’s current or retained earnings;

(c) any evidence of the Company’s indebtedness or rights to subscribe for or purchase the Company’s indebtedness; or

(d) the Exercise Shares or additional shares or other securities or property (including cash) by way of spinoff, split-up, reclassification, consolidation of shares or similar corporate reorganization (other than Exercise Shares issued as a share split or adjustments in respect of which shall be covered by the terms of Section 6.1 above),

then and in each such case, the Holder shall, upon the exercise of the Warrant, be entitled to receive, in addition to the number of Exercise Shares receivable thereupon, and without payment of any additional consideration therefore, the amount of shares and other securities and property (including cash and indebtedness or rights to subscribe for or purchase indebtedness) which the Holder would hold on the date of such exercise had the Holder been the holder of record of such Exercise Shares as of the date on which holders of the Exercise Shares received or became entitled to receive such shares or all other additional shares and other securities and property..

6.3 In case of (i) any reclassification, capital reorganization, or change in the Exercise Shares (other than as a result of a subdivision, consolidation, or stock dividend provided for in Section 6.1 or Section 6.2 above), (ii) share exchange, amalgamation, merger or similar transaction of the Company with or into another person or entity (other than a share exchange, amalgamation, merger or similar transaction in which the Company is the acquiring or surviving corporation and which does not result in any change in the Exercise Shares other than the issuance of additional Exercise Shares) or (iii) the sale, exchange, lease, transfer or other disposition of all or substantially all of the properties and assets of the Company as an entirety (in any such case, a “**Reorganization Event**”), then, as a condition of such Reorganization Event, lawful provisions shall be made, and duly executed documents evidencing the same from the Company, its successor or assignee shall be delivered to the Holder, so that the Holder shall have the right at any time prior to the expiration of the Warrants to purchase, at a total price equal to that payable upon the exercise of the Warrants, the kind and amount of shares and other securities and property receivable in connection with such Reorganization Event by a holder of the same number of Exercise Shares as were purchasable by the holders of the Warrants immediately prior to such Reorganization Event. In any such case appropriate provisions shall be made with respect to the rights and interests of the holders of the Warrants so that the provisions hereof shall thereafter be applicable with respect to any shares or other securities and property deliverable upon exercise the Warrants, and appropriate adjustments shall be made to the Exercise Price payable hereunder provided the aggregate purchase price shall remain the same. In the case of any transaction described in clauses (ii) or (iii) above (other than in the case of an amalgamation in accordance with the *Business Corporations Act* (Québec), the Company shall thereupon be relieved of any further obligation hereunder or under the Warrants, and the Company as the predecessor corporation may thereupon or at any time thereafter be dissolved, wound up or liquidated. Such successor or assuming entity thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Warrants issuable hereunder which heretofore shall not have been signed by the Company, and may execute and deliver securities in its own name, in fulfillment of its obligations to deliver Exercise Shares upon exercise of the Warrants. All the Warrants so issued shall in all respects have the same legal rank and benefit under this Agreement as the Warrants theretofore or thereafter issued in accordance with the terms of this Agreement as though all of such Warrants had been issued at the date of the execution hereof. In any case of any such Reorganization Event, such changes in phraseology and form (but not in substance) may be made in the Warrants thereafter to be issued as may be appropriate. The Warrant Agent may receive a written opinion of legal counsel as conclusive evidence that any such Reorganization Event complies with the provisions of this Section 6.

6.4 The Company may, at its option, at any time until the Expiration Date, reduce the then current Exercise Price to any amount deemed appropriate by the Board for any period not exceeding twenty consecutive days (as evidenced in a resolution adopted by such Board), but only upon giving the notices required this Warrant at least ten days prior to taking such action.

6.5 Except as herein otherwise expressly provided, no adjustment in the Exercise Price shall be made by reason of the issuance of Exercise Shares, or securities convertible into or exchangeable for Exercise Shares, or securities carrying the right to purchase any of the foregoing or for any other reason whatsoever.

6.6 No fractional Exercise Shares shall be issued upon the exercise of Warrants. If more than one Warrant shall be exercised at one time by the Holder, the number of whole Exercise Shares, which shall be issuable upon such exercise, shall be computed on the basis of the aggregate number of Exercise Shares purchased pursuant to the Warrants so exercised. Instead of any fractional Exercise Share which would otherwise be issuable upon exercise of any Warrant, the Company shall pay a cash adjustment in respect of such fraction in an amount equal to the same fraction of the last reported sale price (or bid price if there were no sales) per Exercise Share, in either case as reported on the principal registered national securities exchange on which the Exercise Shares are listed or admitted to trading on the business day that next precedes the day of exercise or, if the Exercise Shares are not then listed or admitted to trading on any registered national securities exchange, the average of the closing high bid and low asked prices as reported on the OTC Bulletin Board Service (the “**OTC Bulletin Board**”) operated by the Financial Industry Regulatory Authority, Inc. (“**FINRA**”) or, if not available on the OTC Bulletin Board, then the average of the closing high bid and low asked prices as reported on any other U.S. quotation medium or inter-dealer quotation system on such date, or if on any such date the Exercise Shares are not listed or admitted to trading on a registered national securities exchange, are not included in the OTC Bulletin Board, and are not quoted on any other U.S. quotation medium or inter-dealer quotation system, an amount equal to the same fraction of the average of the closing bid and asked prices as furnished by any FINRA member firm selected from time to time by the Company for that purpose at the close of business on the business day that next precedes the day of exercise.

6.7 Whenever the Exercise Price then in effect is adjusted as herein provided, the Company shall mail to the Holder of the Warrants at the Holder’s address as it shall appear on the books of the Company a statement setting forth the adjusted Exercise Price then and thereafter effective under the provisions hereof, together with the facts, in reasonable detail, upon which such adjustment is based.

6.8 Notwithstanding anything to the contrary herein, in no event shall the Exercise Price, as adjusted in accordance with the terms hereof, be less than the nominal value per Exercise Share.

7.FRACTIONAL SHARES. No fractional shares shall be issued upon the exercise of this Warrant as a consequence of any adjustment pursuant hereto. All Exercise Shares (including fractions) to be issued upon exercise of this Warrant shall be aggregated for purposes of determining whether the exercise would result in the issuance of any fractional share. If, after aggregation, the exercise would result in the issuance of a fractional share, the Company shall, in lieu of issuance of any fractional share, pay the Holder otherwise entitled to such fraction a sum in cash equal to the product resulting from multiplying the then current fair market value of one Exercise Share by such fraction.

8.NO SHAREHOLDER RIGHTS. This Warrant in and of itself shall not entitle the Holder to any voting rights or other rights as a shareholder of the Company.

9.TRANSFER OF WARRANT. Subject to applicable laws and the restriction on transfer set forth on the first page and Section 5.5 of this Warrant, this Warrant and all rights hereunder are transferable, by the Holder in person or by duly authorized attorney, upon delivery of this Warrant and the form of assignment attached hereto to any transferee designated by Holder (along with a medallion signature guarantee if requested by the Company) and funds sufficient to pay any

transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued..

10.LOST, STOLEN, MUTILATED OR DESTROYED WARRANT. If this Warrant is lost, stolen, mutilated or destroyed, the Company may, on such terms as to indemnity or otherwise as it may reasonably impose (which shall, in the case of a mutilated Warrant, include the surrender thereof), issue a new Warrant of like denomination and tenor as the Warrant so lost, stolen, mutilated or destroyed. Any such new Warrant shall constitute an original contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated or destroyed Warrant shall be at any time enforceable by anyone.

11.CHARGES, TAXES, AND EXPENSES. Issuance of certificates for Exercise Shares upon the exercise of this Warrant shall be made without charge to the Holder for any United States or state of the United States documentary stamp tax or other incidental expense within respect to the issuance of such certificate, all of which taxes and expenses shall be paid by the Company (other than income or similar taxes), and such certificates shall be issued in the name of the Holder.

12.AMENDMENT. Any term of this Warrant may be amended or waived only with the written consent of the Company and the Holder.

13.NOTICES, ETC. All notices required or permitted hereunder shall be in writing and shall be deemed effectively given: (a) upon personal delivery to the party to be notified, (b) when sent by electronic mail if sent during normal business hours of the recipient, if not, then on the next business day, (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one day after deposit with a nationally recognized overnight courier, specifying next day delivery, with written verification of receipt. All communications shall be sent to the Company and the Holder at their respective addresses listed on the signature page, or at such other address as the Company or Holder may designate by 10 days advance written notice to the other parties hereto.

14.ACCEPTANCE. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

15.GOVERNING LAW. This Warrant and all rights, obligations and liabilities hereunder shall be governed by and construed under the laws of the Province of Québec, Canada, without giving effect to conflicts of laws principles, except that Canadian Federal law shall also apply to the extent relevant.

[Signature Page Follows]

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its duly authorized officer as of the date first written above.

REPARE THERAPEUTICS INC.

By: /s/ Lloyd Segal

Name: Lloyd Segal

Title: Chief Executive Officer

Address:

7171 Frederick-Banting, Building 2, Suite 270 St
Laurent, Québec, Canada H4S 1Z9

Acknowledged and Accepted by:

ASTR PARTNERS LLC

By : /s/ Brian Korb

Name: Brian Korb

Title : Co Founder & Managing Partner

Address:

NOTICE OF EXERCISE

TO: REPARE THERAPEUTICS INC.

(1) ☐ The undersigned hereby elects to purchase ____ Common Shares (the “*Exercise Shares*”) of **Repare Therapeutics Inc.** (the “*Company*”) pursuant to the terms of the attached Warrant, and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

☐ The undersigned hereby elects to purchase ____ Common Shares (the “*Exercise Shares*”) of **Repare Therapeutics Inc.** (the “*Company*”) pursuant to the terms of the net exercise provisions set forth in Section 3.2 of the attached Warrant, and shall tender payment of all applicable transfer taxes, if any.

(2) Please issue a certificate or certificates representing said Exercise Shares in the name of the undersigned or in such other name as is specified below:

(Name)

(Address)

(Date)

(Signature)

(Print name)

ASSIGNMENT FORM

(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name: _____
(Please Print)

Address: _____
(Please Print)

Dated: _____, 20

Holder's
Signature: _____

Holder's
Address: _____

NOTE: The signature to this Assignment Form must correspond with the name as it appears on the face of the Warrant, without alteration or enlargement or any change whatever. Officers of corporations and those acting in a fiduciary or other representative capacity should file proper evidence of authority to assign the foregoing Warrant.

REPARE THERAPEUTICS INC. INSIDER TRADING POLICY

INTRODUCTION

During the course of your relationship with **REPARE THERAPEUTICS INC.** (the “**Company**”), you may receive material information that is not yet publicly available (“**material nonpublic information**”) about the Company or about other publicly traded companies with which the Company has business relationships with. Material nonpublic information may give you, or someone you pass that information on to, a leg up over others when deciding whether to buy, sell or otherwise transact in the Company’s securities or the securities of another publicly traded company.

This Insider Trading Policy (this “**Policy**”) sets forth guidelines with respect to transactions in the Company’s securities and in the securities of other applicable publicly traded companies, in each case by our employees, directors as well as consultants who are advised that they are subject to this Policy (“**designated consultants**”) and the other persons subject to this Policy as described below.

STATEMENT OF POLICY

It is the Company’s policy that an employee, director or designated consultant of the Company (or any other person subject to this Policy) who is aware of material nonpublic information relating to the Company **may not**, directly or indirectly:

1. engage in any transactions in the Company’s securities, except as otherwise specified under the heading “Exceptions to this Policy” below;
2. recommend the purchase or sale of any the Company’s securities;
3. disclose material nonpublic information to persons within the Company whose jobs do not require them to have that information, or outside of the Company to other persons, such as family, friends, business associates and investors, unless the disclosure is made in accordance with the Company’s policies regarding the protection or authorized external disclosure of information regarding the Company; or
4. assist anyone engaged in the above activities.

The prohibition against insider trading is absolute. It applies **even if** the decision to trade is not based on such material nonpublic information. It also applies to transactions that may be necessary or justifiable for independent reasons (such as the need to raise money for an emergency expenditure) and also to very small transactions. All that matters is whether you are aware of **any** material nonpublic information relating to the Company at the time of the transaction.

The U.S. federal securities laws and Canadian securities laws do not recognize any mitigating circumstances to insider trading. In addition, even the appearance of an improper transaction must be avoided to preserve the Company’s reputation for adhering to the highest standards of conduct. In some circumstances, you may need to forgo a planned transaction even if you planned it before becoming aware of the material nonpublic information. So, even if you believe you may suffer an economic loss or sacrifice an anticipated profit by waiting to trade, you must wait.

It is also important to note that the laws prohibiting insider trading are not limited to trading by the insider alone; advising others to trade on the basis of material nonpublic information is illegal and squarely prohibited by this Policy. Liability in such cases can extend both to the “tippee”—the person to whom the

insider disclosed material nonpublic information—and to the “tipper,” the insider himself or herself. In such cases, you can be held liable for your own transactions, as well as the transactions by a tippee and even the transactions of a tippee’s tippee. Furthermore, it is important that the appearance of insider trading in securities be avoided.

For these and other reasons, it is the Company’s policy that no employee, director or designated consultant of the Company (or any other person subject to this Policy) may either (a) recommend to another person that they buy, hold or sell the Company’s securities **at any time** or (b) disclose material nonpublic information to persons within the Company whose jobs do not require them to have that information, or outside of the Company to other persons (unless the disclosure is made in accordance with the Company’s policies regarding the protection or authorized external disclosure of information regarding the Company); provided that, a director may disclose such information to his or her affiliates so long as such affiliates have established their own insider trading controls and procedures in compliance with applicable securities laws.

In addition, it is the policy of the Company that no employee, director or designated consultant of the Company (or any other person subject to this Policy) who, in the course of his or her relationship with the Company, learns of or is otherwise aware of material nonpublic information about another publicly traded company with which the Company does business, including a partner, collaborator or supplier of the Company may trade in that other company’s securities until the information becomes public or is no longer material to that other company.

There are no exceptions to this Policy, except as specifically noted herein in this Policy.

TRANSACTIONS SUBJECT TO THIS POLICY

This Policy applies to all transactions in securities issued by the Company, as well as related financial instruments or derivative securities that are not issued by the Company, such as exchange-traded put or call options or swaps relating to the Company’s securities. For purposes of this Policy, the terms “*trade*,” “*trading*” and “*transactions*” include not only purchases and sales of the Company’s shares in the public market, but also engaging in short sales, transactions in put or call options, hedging transactions, other inherently speculative transactions, making any other purchases, sales, transfers, gifts or other acquisitions and dispositions of common or preferred equity, options (including certain exercises of options, as described in more detail below), warrants and other securities (including debt securities) and other arrangements or transactions that affect economic exposure to changes in the prices of these securities. For the purposes of this Policy, a “*related financial instrument*” means (i) an instrument, agreement, security or exchange contract the value, market price or payment obligations of which are derived from, referenced to or based on the value, market price or payment obligations of a security or (ii) any other instrument, agreement, or understanding that affects, directly or indirectly, a person or company’s economic interest in a security or a futures contract or an option traded on an exchange.

PERSONS SUBJECT TO THIS POLICY

The provisions outlined in this Policy apply to you and all other employees, directors and designated consultants of the Company and its subsidiaries. You are responsible for making sure that members of your immediate family, persons with whom you share a household, persons who are your economic dependents and any other individuals or entities whose trading or transactions in securities you influence, direct or control (including, e.g., a venture or other investment fund, if you influence, direct or control transactions by the fund) comply with this Policy. However, this Policy does not apply to any entity that invests in securities in the ordinary course of its business (e.g., a venture or other investment fund) if (and only if) such entity has certified to the Company that it has established its own insider trading controls and

procedures in compliance with applicable securities laws. The foregoing persons who are deemed subject

to this Policy are referred to in this Policy as “**Related Persons**.” You are responsible for making sure that your Related Persons comply with this Policy.

MATERIAL NONPUBLIC INFORMATION

Material information

It is not always easy to figure out whether you are aware of material nonpublic information. But there is one important factor to determine whether nonpublic information you know about a public company is material: whether dissemination of the information would reasonably be expected to affect the market price or value of the company’s shares or would likely be considered important, or “material,” by investors who are considering trading in that company’s shares. Certainly, if the information makes you want to trade, it would probably have the same effect on others. Remember, both positive and negative information can be material. There is no bright-line standard for assessing materiality; rather, materiality is based on an assessment of all of the facts and circumstances, and is often evaluated by relevant enforcement authorities with the benefit of hindsight.

If you possess material nonpublic information, you may not trade in a company’s shares, advise anyone else to do so or communicate the information to anyone else until you know that the information has been publicly disseminated (as described in more detail below). This means that in some circumstances, you may have to forego a proposed transaction in a company’s securities even if you planned to execute the transaction prior to learning of the material nonpublic information and even though you believe you may suffer an economic loss or sacrifice an anticipated profit by waiting.

Furthermore, you are prohibited under Canadian securities laws from communicating the information to anyone else unless (a) you are justified in believing that the information is generally known or known to the other party or (b) you must disclose the information in the course of the Company’s business (in accordance with the Company’s Corporate Disclosure Policy) and have no grounds to believe it will be used or disclosed by the other party contrary to Canadian securities laws.

You may not participate in “chat rooms” or other electronic discussion groups or contribute to blogs, bulletin boards or social media forums on the Internet concerning the activities of the Company or other companies with which the Company does business, even if you do so anonymously, unless doing so is part of your job responsibilities and you have explicit authorization from the individual designated by the Company’s board of directors as the clearing officer or his or her designee (each, a “**Clearing Officer**”) and your actions are in accordance with the Company’s Corporate Disclosure Policy.

Depending on the specific details, the following items may be considered material nonpublic information until publicly disclosed within the meaning of this Policy. There may be other types of information that would qualify as material information as well; use this list merely as a non-exhaustive guide:

- (a) financial results or forecasts, and any changes, revisions or withdrawals thereof;
- (b) status of and new developments related to product or product candidate development or regulatory approvals;
- (c) clinical data relating to products or product candidates;
- (d) detailed regarding timelines, progress or results for preclinical studies or clinical trials;

- (e) communications with the U.S. Food and Drug Administration or any comparable foreign government agencies;
- (f) potential mergers, amalgamations, acquisitions or dispositions of assets, divisions or companies;
- (g) public or private sales of debt or equity securities;
- (h) changes in the capital structure of the Company, share splits, dividends or changes in dividend policy;
- (i) the establishment of a repurchase program for the Company's securities;
- (j) major contract awards or cancellations;
- (k) establishment of, or developments in, strategic partnerships, collaborations, joint ventures or similar collaborations;
- (l) changes or new corporate partner relationships or collaborations;
- (m) notice of issuance or denial of patents, the acquisition of other material intellectual property rights or notice of a material adverse change in intellectual property or patents owned by Company;
- (n) regulatory developments;
- (o) board, management or control changes;
- (p) employee layoffs;
- (q) a disruption in the Company's operations or breach or unauthorized access of its property or assets, including its facilities and information technology infrastructure;
- (r) tender offers or proxy fights;
- (s) accounting restatements;
- (t) litigation or settlements, including significant litigation exposure due to actual or threatened litigation;
- (u) events of default under financing or other agreements; and
- (v) impending bankruptcy or financial liquidity problems.

When information is considered public

For information to be considered publicly disseminated, it must be widely disclosed through a press release, a public filing on EDGAR (in the United States) and SEDAR+ (in Canada) or another widely disseminated announcement. Additionally, once disseminated, a sufficient amount of time must have passed to allow the information to be fully disclosed. Generally speaking, information will be considered publicly disseminated after two full trading days have elapsed since the information was publicly disclosed. For example, if an announcement of material nonpublic information of which you were aware was made prior to trading on Wednesday, then you may execute a trade or other transaction in the Company's securities on Friday; if an announcement of material nonpublic information of which you were aware was made after

trading ends on Wednesday, then you may execute a trade or other transaction in the Company's securities on Monday. Depending on the particular circumstances, the Company may determine that a longer or shorter waiting period should apply to the release of specific material nonpublic information.

QUARTERLY TRADING BLACKOUTS

Because our workplace culture tends to be open, odds are that the vast majority of our employees, directors and designated consultants will possess material nonpublic information at certain points during the year. To minimize even the appearance of insider trading among our employees, directors and designated consultants we have established "quarterly trading blackout periods" during which the Company's employees, directors, designated consultants and their Related Persons—regardless of whether they are aware of material nonpublic information or not—may not conduct any trades in the Company's securities. That means that, except as described in this Policy, all Company employees, directors, designated consultants and their Related Persons will be able to trade in Company securities only during limited open trading window periods that generally will begin after two full trading days have elapsed since the public dissemination of the Company's annual or quarterly financial results and end at the beginning of the next quarterly trading blackout period. Of course, even during an open trading window period, you may not (unless an exception applies) conduct any trades in Company securities if you are otherwise in possession of material nonpublic information.

For purposes of this Policy, each "*quarterly trading blackout period*" will generally begin at the end of the day that the last trading day of each fiscal quarter and end after two full trading days have elapsed since the public dissemination of the Company's financial results for such quarter. Please note that the quarterly trading blackout period may commence early or may be extended if, in the judgment of the Clearing Officer, there exists undisclosed information that would make trades by Company employees, directors and designated consultants inappropriate. It is important to note that the fact that the quarterly trading blackout period has commenced early or has been extended should be considered material nonpublic information that should not be communicated to any other person.

An employee, director or designated consultant who believes that special circumstances require him or her to trade during a quarterly trading blackout period should consult with the Clearing Officer. Permission to trade during a quarterly trading blackout period will be granted only where the circumstances are extenuating, the Clearing Officer concludes that the person is not in fact aware of any material nonpublic information relating to the Company or its securities, and there appears to be no significant risk that the trade may subsequently be questioned.

EVENT-SPECIFIC TRADING BLACKOUTS

From time to time, an event may occur that is material to the Company and is known by only a few directors, officers and/or employees. So long as the event remains material and nonpublic, the persons designated by the Clearing Officer may not trade in Company securities. In that situation, the Clearing Officer will notify the designated individuals that neither they nor their Related Persons may trade in Company securities. The existence of an event-specific trading blackout should also be considered material nonpublic information and should not be communicated to any other person. Even if you have not been designated as a person who should not trade due to an event-specific trading blackout, you should not trade while aware of material nonpublic information. Exceptions will not be granted during an event-specific trading blackout.

The quarterly and event-driven trading blackouts do not apply to those transactions to which this policy does not apply, as described under the heading "Exceptions to this Policy" below.

EXCEPTIONS TO THIS POLICY

This Policy does not apply in the case of the following transactions, except as specifically noted:

1. **Option Exercises.** This Policy does not apply to the exercise of options granted under the Company's equity compensation plans for cash or, where permitted under the option, by a net exercise transaction with the Company; provided that, at the time of exercise or withholding, they are not in possession of material nonpublic information about the Company. This Policy does, however, apply to any sale of shares as part of a broker-assisted cashless exercise or any other market sale, whether or not for the purpose of generating the cash needed to pay the exercise price or pay taxes.

2. **Tax Withholding Transactions.** This Policy does not apply to the surrender of shares directly to the Company to satisfy tax withholding obligations as a result of the issuance of shares upon vesting or exercise of restricted stock units, options or other equity awards granted under the Company's equity compensation plans; provided that, at the time of surrender, the individual is not in possession of material nonpublic information about the Company. Of course, any market sale of the shares received upon exercise or vesting of any such equity awards remains subject to all provisions of this Policy whether or not for the purpose of generating the cash needed to pay the exercise price or pay taxes.

3. **ESPP.** Employees who are eligible to do so may purchase shares under the Company's Employee Share Purchase Plan ("**ESPP**") on periodic designated dates in accordance with the ESPP without restriction to any particular period. This Policy does, however, apply to an employee's initial election to participate in the ESPP, changes to an employee's election to participate in the ESPP for any enrollment period, or to the subsequent sale of the shares acquired pursuant to the ESPP.

4. **10b5-1 Automatic Trading Programs.** In addition, purchases or sales of the Company's securities made pursuant to, and in compliance with, a written plan established by a director, officers, other employee or consultant that meets the requirements of Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") and Canadian securities laws (a "**10b5-1 Trading Plan**") may be made without restriction to any particular period; provided that (i) the Trading Plan was established in compliance with the requirements of Rule 10b5-1 of the Exchange Act, Canadian securities laws and the Company's 10b5-1 trading plan guidelines, at a time when the Company was not in a trading blackout period and such individual was not otherwise aware of any material nonpublic information relating to the Company or the securities subject to the 10b5-1 Trading Plan. Moreover, all 10b5-1 Trading Plans must be reviewed and approved by the Company before being established to confirm that the 10b5-1 Trading Plan complies with all pertinent policies of the Company and applicable securities laws.

SPECIAL AND PROHIBITED TRANSACTIONS

1. **Speculative or Short-Term Trading.** No employee, director or designated consultant may engage in short sales, transactions in put options, call options or other derivative securities on an exchange or in any other organized market, or in any other inherently speculative transactions with respect to the Company's shares.

2. **Hedging Transactions.** Hedging or monetization transactions can be accomplished through a number of possible mechanisms, including through the use of financial instruments such as prepaid variable forwards, equity swaps, collars and exchange funds. Such hedging transactions may permit a Company director, employee or designated consultant to continue to own the Company's securities or hold related financial instruments, whether obtained through employee benefit plans or otherwise, but

without the full risks and rewards or economic exposure of ownership. When that occurs, the Company employee, director or designated consultant may no longer have the same objectives as the Company's other shareholders. Therefore, Company employees, directors and designated consultants are prohibited from engaging in any such transactions.

3. ***Margin Accounts and Pledged Securities.*** Securities held in a margin account as collateral for a margin loan may be sold by the broker without the customer's consent if the customer fails to meet a margin call. Similarly, securities pledged (or hypothecated) as collateral for a loan may be sold in foreclosure if the borrower defaults on the loan. Because a margin sale or foreclosure sale may occur at a time when the pledgor is aware of material nonpublic information or otherwise is not permitted to trade in the Company's securities, directors, employees and designated consultants are prohibited from holding Company securities in a margin account or otherwise pledging the Company's securities as collateral for a loan.

4. ***Standing and Limit Orders.*** Standing and limit orders (except standing and limit orders under approved 10b5-1 Trading Plans, as discussed above) create heightened risks for insider trading violations similar to the use of margin accounts. There is no control over the timing of purchases or sales that result from standing instructions to a broker, and as a result the broker could execute a transaction when a director, employee or designated consultant is in possession of material nonpublic information. The Company therefore discourages placing standing or limit orders on the Company's securities. If a person subject to this Policy determines that they must use a standing order or limit order (other than under an approved 10b5-1 Trading Plan as discussed above), the order should be limited to short duration and the person using such standing order or limit order is required to cancel such instructions immediately in the event restrictions are imposed on their ability to trade pursuant to the "Quarterly Trading Blackouts" and "Event-Specific Trading Blackouts" provisions above.

PRE-CLEARANCE AND ADVANCE NOTICE OF TRANSACTIONS

In addition to the requirements listed above, officers, directors and all employees are subject to pre-clearance requirements and face a further restriction:

Even during an open trading window, they may not engage in any transaction in or trade of the Company's securities or related financial instruments, including any purchase or sale in the open market, loan or other transfer of beneficial ownership without first obtaining pre-clearance of the transaction from the Clearing Officer at least two (2) business days in advance of the proposed transaction. The Clearing Officer will then determine whether the transaction may proceed and, if so, will direct the Compliance Coordinator (as identified in the Company's Memorandum Regarding Insider Reporting Compliance Program) to assist, if applicable, in complying with the reporting requirements of Canadian "reporting insiders" under Canadian securities laws and under Section 16(a) of the Exchange Act, if any. Pre-cleared transactions not completed within five (5) business days shall require new pre-clearance under the provisions of this paragraph. The Company may, at its discretion, shorten such period of time.

Persons subject to pre-clearance must also give advance notice of their plans to exercise an outstanding share option to the Clearing Officer.

Upon completion of any trade, the director or Section 16 officer or Canadian "reporting insider," must immediately notify the Compliance Coordinator and any other individual(s) identified in Section 1 of the Company's Memorandum Regarding Insider Reporting Compliance Program so that the Company may assist in any Section 16 and Canadian insider reporting obligations.

SHORT-SWING TRADING/CONTROL SHARE/SECTION 16 REPORTS

Officers and directors subject to the reporting obligations under Section 16 of the Exchange Act should take care not to violate the prohibition on short-swing trading (within the meaning of Section 16(b) of the Exchange Act) and the restrictions on sales by control persons (Rule 144 under the Securities Act of 1933, as amended), and should file all appropriate Section 16(a) reports (Forms 3, 4 and 5), which are enumerated and described in the Company's Memorandum Regarding Insider Reporting Compliance Program, and any notices of sale required by Rule 144.

PROHIBITION OF TRADING DURING PENSION FUND BLACKOUTS

In accordance with Regulation BTR under the Exchange Act, no director or officer of the Company shall, directly or indirectly, purchase, sell or otherwise acquire or transfer any equity security of the Company (other than an exempt security) during any "blackout period" (as defined in Regulation BTR) with respect to such equity security, if such director or officer acquires or previously acquired such equity security in connection with his or her service or employment as a director or officer. This prohibition shall not apply to any transactions that are specifically exempted from Section 306(a)(1) of the Sarbanes-Oxley Act of 2002 (as set forth in Regulation BTR), including but not limited to: purchases or sales of the Company's securities made pursuant to, and in compliance with, a 10b5-1 Trading Plan; compensatory grants or awards of equity securities pursuant to a plan that, by its terms, permits officers and directors to receive automatic grants or awards and specifies the terms of the grants and awards; acquisitions or dispositions of equity securities involving a *bona fide* gift or by will or the laws of descent or pursuant to a domestic relations order; etc. The Company shall timely notify each director and officer of any blackout periods in accordance with the provisions of Regulation BTR.

DURATION OF POLICY'S APPLICABILITY

This Policy continues to apply to your transactions in the Company's securities or the securities of other public companies engaged in business transactions with the Company even after your employment, consultancy or directorship with the Company has ended. If you are in possession of material nonpublic information when your relationship with the Company concludes, you may not trade in the Company's securities or the securities of such other company until the material nonpublic information has been publicly disseminated (as described in this Policy) or is no longer material.

INDIVIDUAL RESPONSIBILITY

Persons subject to this Policy have ethical and legal obligations to maintain the confidentiality of information about the Company and to not engage in transactions in the Company's securities or the securities of other applicable public companies while aware of material nonpublic information. Each individual is responsible for making sure that he or she complies with this Policy, and that any family member, household member or other person or entity whose transactions are subject to this Policy, as discussed under the heading "Persons Subject to this Policy" above, also comply with this Policy. In all cases, the responsibility for determining whether an individual is aware of material nonpublic information rests with that individual, and any action on the part of the Company or any employee or director of the Company pursuant to this Policy (or otherwise) does not in any way constitute legal advice or insulate an individual from liability under applicable securities laws. You could be subject to severe legal penalties and disciplinary action by the Company for any conduct prohibited by this Policy or applicable securities laws. See "Penalties" below.

PENALTIES

Anyone who effects transactions in the Company's securities or the securities of other public companies engaged in business transactions with the Company (or provides information to enable others to do so) on the basis of material nonpublic information is subject to both civil liability and criminal penalties, as well as disciplinary action by the Company. An employee, director or consultant who has questions about this Policy should contact his or her own attorney or the Clearing Officer. Please also see the "Frequently Asked Questions, which are attached hereto as **EXHIBIT A**.

AMENDMENTS

The Company is committed to continuously reviewing and updating its policies and procedures. The Company therefore reserves the right to amend, alter or terminate this Policy at any time and for any reason. A current copy of the Company's policies regarding insider trading may be obtained by contacting the Clearing Officer.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-3 No. 333-281298) of Repare Therapeutics Inc.;
- (2) Registration Statement (Form S-8 No. No 333-279721) pertaining to the 2024 Inducement Plan of Repare Therapeutics Inc.;
- (3) Registration Statement (Form S-8 Nos. 333-277451, 333-270170, 333-239400, 333-255048 and 333-263469) pertaining to the 2020 Equity Incentive Plan and the 2020 Employee Share Purchase Plan of Repare Therapeutics Inc.; and
- (4) Registration Statement (Form S-8 No. No 333-272269) pertaining to the New Hire Inducement Stock Option Grant of Repare Therapeutics Inc.;

of our report dated March 3, 2025, with respect to the consolidated financial statements of Repare Therapeutics Inc. included in this Annual Report (Form 10-K) for the year ended December 31, 2024.

/s/ Ernst & Young LLP

Montreal, Canada
March 3, 2025

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lloyd M. Segal, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2024 of Repare Therapeutics Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15(d)-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 3, 2025

By: /s/ Lloyd M. Segal
Lloyd M. Segal
President and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Steve Forte, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2024 of Repare Therapeutics Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15(d)-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 3, 2025

By: /s/ Steve Forte
Steve Forte
Executive Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Lloyd M. Segal, as President and Chief Executive Officer of Repare Therapeutics Inc. (the “Company”), and Steve Forte, as Executive Vice President and Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

- (1) The Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2024 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 3, 2025

By: /s/ Lloyd M. Segal

Lloyd M. Segal
President and Chief Executive Officer
(Principal Executive Officer)

Date: March 3, 2025

By: /s/ Steve Forte

Steve Forte
Executive Vice President, Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)
