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 001-32001

Aptose Biosciences Inc.

(Exact name of Registrant as specified in its Charter)

Canada	**98-1136802**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
66 Wellington Street West Suite 5300, TD Bank Tower Box 48 Toronto, Ontario, Canada	**M5K 1E6**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (647) 479-9828

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	APTO	Nasdaq Capital Market

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

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

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

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

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

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

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

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

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

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 voting stock and nonvoting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked prices of such common equity, as of June 28, 2024 was $22,075,799.

As of March 28, 2025, the registrant had 2,552,429 Common Shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

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This Annual Report on Form 10-K contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and is subject to the safe harbor created by those sections. For more information, see "Part I. Item 1. Business — Cautionary Note Regarding Forward-Looking Statements."

As used in this report, the terms "Aptose," "Aptose Biosciences," the "Company," "we," "us," "our" and similar references refer to Aptose Biosciences Inc. (formerly known as Lorus Therapeutics Inc.) and our consolidated subsidiaries, and the term "Common Shares" refers to our common shares, no par value. On February 18, 2025, we effected a 1-for-30 reverse stock split of our Common Shares (the "Reverse Stock Split"). All historical share and per share amounts reflected throughout this Annual Report on Form 10-K have been adjusted to reflect the Reverse Stock Split.

Aptose had historically qualified as a "foreign private issuer" for purposes of reporting under the Exchange Act, and filing registration statements under the Securities Act of 1933, as amended. Effective December 31, 2018, however, Aptose ceased qualifying as a foreign private issuer and began filing reports with the United States Securities and Exchange Commission ("SEC") as a "domestic issuer." As a result, Aptose changed the accounting standards by which it prepares its financial statements from International Financial Reporting Standards to generally accepted accounting principles in the United States, or "U.S. GAAP." All financial statements contained in this Annual Report are presented in accordance with U.S. GAAP. This report contains the following trademark, trade name and service mark of ours: Aptose. This report also contains trademarks, trade names and service marks that are owned by other persons or entities. All references to "dollar" or the use of the symbol "$" are to United States dollars, unless otherwise indicated.

PART I.

ITEM 1. BUSINESS

Overview

Aptose is a science-driven clinical stage biotechnology company committed to the development and commercialization of precision medicines addressing unmet clinical needs in oncology, with an initial focus on hematology. The Company's small molecule cancer therapeutics pipeline includes products designed to provide single agent efficacy and to enhance the efficacy of other anti-cancer therapies and regimens without overlapping toxicities. The Company's executive offices are located in San Diego, California, and our head office is located in Toronto, Canada.

Our Programs

We are advancing oral targeted agents to treat life-threatening hematologic cancers that require immediate treatment. We have two clinical-stage oral kinase inhibitors under active development for the treatment of hematologic malignancies: tuspetinib (HM43239) and luxeptinib (CG-806). A third molecule (APTO-253) is not undergoing active clinical development and will not be discussed further.

Tuspetinib, Aptose's lead asset, is being developed for frontline combination therapy (tuspetinib + the BCL-2 inhibitor venetoclax + hypomethylating agent; TUS+VEN+HMA) in newly diagnosed AML patients to unlock the most significant patient impact and greatest commercial opportunity. Tuspetinib is a once-daily oral kinase inhibitor, targeting a select group of kinases operative in myeloid malignancies, such as acute myeloid leukemia ("AML") and the higher risk myelodysplastic syndromes ("hr-MDS"), and known to be involved in tumor proliferation, resistance to therapy, and differentiation. However, tuspetinib avoids kinases that typically cause toxicities associated with other kinase inhibitors and is consequently a well-tolerated antileukemic agent.

Tuspetinib-based triplet frontline combination therapy (tuspetinib + the BCL-2 inhibitor venetoclax + the hypomethylating agent azacitidine; TUS+VEN+AZA) in newly diagnosed AML patients at the 40 mg starting dose of TUS already has achieved complete responses (CRs) in difficult-to-treat AML patients, and patients have experienced no significant safety concerns or dose limiting toxicities (DLTs) to date. Enrollment has begun for patients to receive the 80 mg dose level of TUS with the TUS+VEN+AZA triplet.

The clinical development path with tuspetinib-based TUS+VEN+HMA triplet combination therapy in newly diagnosed AML patients began with demonstration of safety and activity of tuspetinib as a single agent ("TUS") and then with the TUS+VEN doublet combination therapy in relapsed or refractory ("R/R") AML patients.

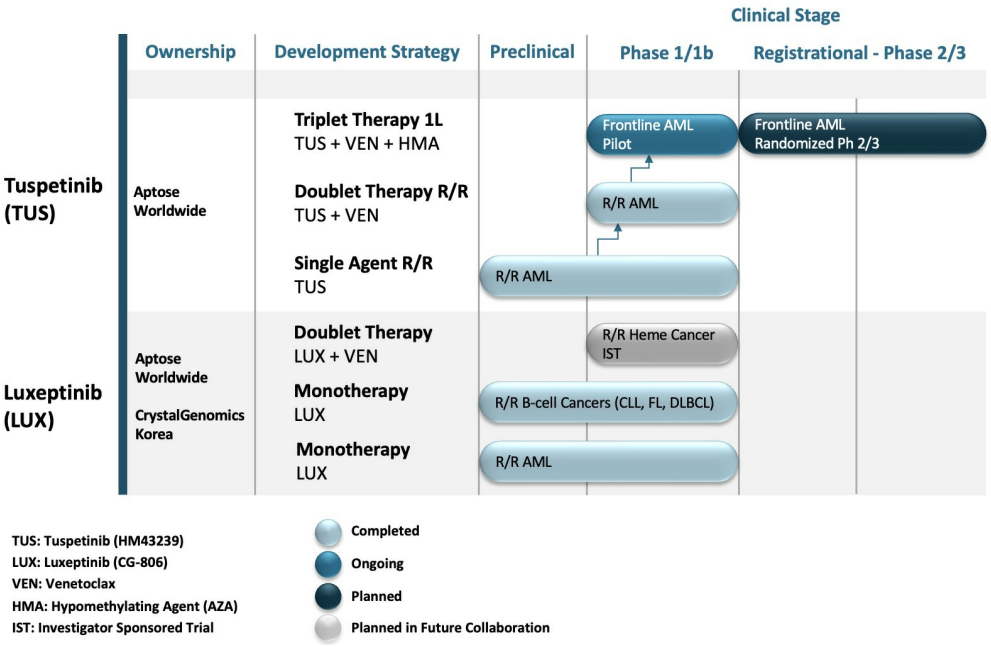
Tuspetinib monotherapy dose escalation and dose exploration activities have been completed as part of an international Phase 1/2 clinical trial designed to assess the safety, tolerability, pharmacokinetics, pharmacodynamic responses, and efficacy as a single agent in patients with R/R AML. Complete responses ("CRs") without dose limiting toxicities were achieved at four dose levels across a broad diversity of mutationally-defined AML populations and with a highly favorable safety profile. Tuspetinib to date has demonstrated a favorable safety profile and has caused no drug-related QTc prolongations, liver or kidney toxicities, muscle damage, differentiation syndrome, and no myelosuppression with continuous dosing of patients in remission. A recommended phase 2 dose ("RP2D") of 80 mg tuspetinib once daily as an oral tablet was selected and approved by the U.S. FDA for use as a single agent in patients with R/R AML. At the RP2D, tuspetinib demonstrated notable response rates in R/R AML patients that had never been treated with venetoclax (VEN-naive AML): CR/CRh=36% among all-comers, CR/CRh=50% among patients with mutated FLT3, and CR/CRh=25% in patients with wildtype FLT3.

Following completion of the single agent dose escalation and exploration trial, tuspetinib advanced into the APTIVATE expansion trial of the Phase 1/2 program in R/R AML patient populations treated with tuspetinib combined with the BCL-2 inhibitor venetoclax (TUS+VEN doublet), with the intent to position tuspetinib for triple combination studies in frontline therapy for newly diagnosed AML patients. The TUS+VEN doublet combination therapy (with both 40mg and 80mg TUS) maintained a favorable safety profile: no new or unexpected safety signals were observed, and there were no reported drug-related adverse events of QTc prolongation, differentiation syndrome, or deaths. Also, the TUS/VEN doublet combination (with 80mg TUS) achieved responses in heavily pretreated R/R AML patients, including those with wildtype or mutated FLT3, and those who failed prior therapy with venetoclax (Prior-VEN) or FLT3 inhibitors (Prior-FLT3i).

Based on the safety and efficacy profile of tuspetinib, we believe that tuspetinib, if approved, could 1) become the preferred kinase inhibitor for inclusion in triplet combination for front line AML patients with FLT3 mutations and for patients with wild type FLT3, 2) become the preferred kinase inhibitor for inclusion in combination with venetoclax for second line AML patients, 3) serve as an effective agent for maintenance therapy to prevent relapse in patients who achieved a complete remission through a stem cell transplant or through drug-based therapy, 4) serve as an effective agent for the treatment of third line FLT3 mutated patients failed by prior therapy with other FLT3 inhibitors and 5) serve in front line triplet combinations, second line doublet combinations, and maintenance therapy for hr-MDS patients. These beliefs related to the potential commercial opportunity are based on management's current assumptions and estimates, which are subject to change, and there can be no assurance that tuspetinib will ever be approved or successfully commercialized and, if approved and commercialized, that it will ever generate significant revenues. See our "Risk Factors – "We are an early-stage development company with no revenues from product sales." and "We have a history of operating losses. We expect to incur net losses and we may never achieve or maintain profitability." in this Annual Report on Form 10-K.

Luxeptinib, Aptose's second agent, is an oral, highly potent kinase inhibitor that selectively targets defined kinases operative in myeloid and lymphoid hematologic malignancies. This small molecule has been evaluated in a Phase 1a/b study for the treatment of patients having R/R B-cell leukemias and lymphomas (dose escalation from 150mg-900mg BID) and in a Phase 1a/b study for the treatment of patients with R/R AML or hr-MDS (dose escalation from 450 mg-900mg BID). These clinical studies demonstrated tumor shrinkage among B-cell cancer patients, including a complete response ("CR") in a DLBCL patient who received the original G1 formulation. Likewise, an MRD-negative CR in one R/R AML patient occurred with 450mg BID dosing of the original G1 formulation. Because absorption of the original G1 formulation hampered effectiveness of luxeptinib, a new G3 formulation was developed. Enrollment of patients in the B-cell malignancy trial and the AML trial have been completed, and the initial clinical evaluation of the G3 formulation with continuous BID dosing has been completed. The G3 formulation delivered superior plasma exposure levels relative to the original G1 formulation. Regarding potential next steps with luxeptinib, a molecularly defined subgroup of hematologic malignancy patients was recently identified that may benefit from treatment with luxeptinib in combination with venetoclax. An investigator-sponsored trial is being considered while non-clinical studies are underway to support the use of LUX+VEN for the treatment of these patients. In parallel, efforts are underway to identify sources of capital to support such a trial.

The following figure presents the clinical stage agents in our pipeline and their respective stages of development.



Tuspetinib Program

Licensing Overview

On November 4, 2021, we entered into a licensing agreement (the "Tuspetinib Licensing Agreement") with the South Korean company Hanmi Pharmaceutical Co Ltd. (“Hanmi”) for the clinical and commercial development of tuspetinib (formerly HM43239). Under the terms of the Tuspetinib Licensing Agreement, Hanmi granted us exclusive worldwide rights to tuspetinib for all indications. Hanmi received an upfront payment of $12.5 million, including $5 million in cash and $7.5 million in Common Shares. Also pursuant to the Tuspenitib Licensing Agreement, Hanmi is entitled to receive up to $407.5 million in future milestone payments, which are contingent upon achieving certain clinical, regulatory and sales milestones across several potential indications, as well as tiered royalties on net sales. The term of the Tuspenitib Licensing Agreement will continue on a product-by-product and country-by-country basis until the expiration of the royalty period for such product in such country. The licenses granted to us will survive and become non-exclusive, perpetual, irrevocable and fully paid-up on a product-by-product and country-by-country basis, upon their natural expiration under the terms of the Tuspenitib Licensing Agreement.

Preclinical Profile

Tuspetinib is an oral, once-daily, highly potent myeloid kinome inhibitor designed to target key kinases operative in myeloid malignancies. In preclinical studies, tuspetinib demonstrated potent *in vitro* and *in vivo* activity against FLT3 ITD mutated as well as D835 and gatekeeper (F691) tyrosine kinase domain ("TKD") mutated AML that confer resistance to other agents. Additionally, tuspetinib inhibited phosphorylation of the SYK kinase, known to be highly activated in AML and associated with resistance to FLT3 targeted therapy. Tuspetinib also was designed to inhibit several kinases involved in tumor cell proliferation and/or differentiation, including mutant forms of c-KIT, JAK1, JAK2, and RSK, all with half maximal inhibitory concentration ("IC50") values < 10 nM.

Tuspetinib induced *in vitro* cytotoxicity in AML and Ba/F3 cell lines expressing FLT3 WT, ITD, and/or TKD point mutations. Tuspetinib showed greater inhibitory activity compared to quizartinib on Ba/F3 cells expressing resistance-conferring ITD/TKD double mutations (ITD/F691L and ITD/D835Y). Thus, tuspetinib may overcome clinically relevant ITD/TKD double mutations, which may result from sustained FLT3 inhibition. Moreover, target modulation was shown as tuspetinib inhibited FLT3 phosphorylation and downstream signaling molecules such as phospho-ERK and phospho-STAT5.

The *in vivo* anti-tumor efficacy of tuspetinib was demonstrated in murine xenograft models using MV-4-11 and MOLM-13 human AML cells having the ITD mutant form of FLT3 and using the MOLM-14 model having the ITD and F691L dual mutations of FLT3 with dosing regimens that match those currently under investigation. Tuspetinib exhibited dose-dependent tumor growth inhibition of models of FLT3 ITD mutant AML with complete tumor regression observed in some groups, and no change in body weight. Of note, tuspetinib produced greater tumor growth inhibition in the MOLM-14 FLT3-ITD/F691L model compared to gilteritinib, or entospletinib (SYK inhibitor) as single agents, and comparable activity to the gilteritinib plus entospletinib combination.

Latest Clinical Update and Program Status

On January 20, 2025, Aptose announced that the Cohort Safety Review Committee (CSRC) monitoring Aptose's Phase 1/2 TUSCANY trial of tuspetinib in combination with standard of care dosing of venetoclax and azacitidine (TUS+VEN+AZA triplet) has unanimously approved escalating from 40 mg TUS to 80 mg TUS based on its favorable review of data from the first four patients in the trial. No significant safety concerns or dose limiting toxicities (DLTs) have been reported, including no prolonged myelosuppression of subjects in remission. All four subjects treated in the 40 mg cohort remain on study while enrollment is open for the 80 mg cohort.

Key Findings and Messages included:

- To date, four newly diagnosed AML patients have received the lowest dose of TUS (40 mg) as part of the (TUS+VEN+AZA) combination.
- Three patients with unmutated (wildtype) FLT3 (FLT3-WT) completed Cycle 1 of treatment with no dose-limiting toxicities (DLTs) and no TUS dose adjustments.
    - Two FLT3-WT patients achieved complete remissions (CR and CRh) by the end of Cycle 1.
    - Notably, a patient with biallelic TP53 mutations and a complex karyotype obtained CR.
    - The third FLT3-WT patient experienced significant reductions in bone marrow leukemic blasts during Cycle 1 and remains on therapy in Cycle 2.
- The fourth patient, harboring FLT3-ITD and NPM1 mutations, is currently dosing in Cycle 1 and is not yet eligible for response evaluation.
- Pharmacokinetic (PK) analyses for TUS show plasma levels unaffected by the addition of AZA, providing predictability and avoiding the need for dose alterations due to PK interactions.
- Similarly, VEN plasma levels in Cycle 1 are consistent with published results and the prior TUS/VEN APTIVATE study in R/R AML, indicating no clinically significant interactions with TUS.

In December 2024, Aptose attended the 66th Annual American Society of Hematology (ASH) Meeting and Exposition in San Diego, California, and presented a poster entitled "Phase 1 Safety and Efficacy of Tuspetinib Plus Venetoclax Combination Therapy in Study Participants with Relapsed or Refractory Acute Myeloid Leukemia (AML) Support Exploration of Triplet Combination Therapy of Tuspetinib Plus Venetoclax and Azacitidine for Newly Diagnosed AML".

On January 9, 2025, Aptose announced dosing the first set of patients in the TUSCANY Phase 1/2 study with tuspetinib (TUS) in combination with venetoclax (VEN) and azacitidine (AZA) as a frontline triple drug combination (triplet) therapy for patients newly diagnosed with acute myeloid leukemia, or AML.

On January 12, 2025, Aptose announced promising early safety and response results from newly diagnosed acute myeloid leukemia (AML) patients dosed in Aptose's Phase 1/2 TUSCANY trial with a 40 mg dose of tuspetinib in combination with standard of care dosing of venetoclax and azacitidine (TUS+VEN+AZA triplet). The TUS+VEN+AZA triplet is being developed as a frontline therapy to treat large, mutationally diverse populations of newly diagnosed AML patients who are ineligible to receive induction chemotherapy.

Key Findings and Messages included:

- TUS+VEN+AZA triplet trial is proceeding in newly diagnosed AML patients
- TUS+VEN retains activity in the difficult-to-treat prior-VEN AML population
- TUS+VEN is active in FLT3 wildtype, representing ~70% of AML patients
- TUS+VEN is well tolerated and can be safely co-administered
- TUS+VEN is active across broad populations of R/R AML
- Combination of TUS with VEN may avoid VEN resistance
- TUS+VEN+AZA triplet may establish a more effective, mutation agnostic standard of care for chemotherapy ineligible AML patients

Highlights of the ASH poster presentation included:

TUS as Single Agent (n= 93 Patients)

- 60% and 42% CR/CRh with 80 mg TUS in FLT3 mutated and all-comer VEN-naïve AML
- 33% CRc & 42% ORR (CR, CRp, CRh, CRi or PR) in FLT3 mutated and VEN-naïve patients
    - Includes 40, 80, 120, and 160 mg TUS dose as a single agent
    - Includes those who failed prior therapy with venetoclax
    - Includes those with mutated or unmutated FLT3, those who failed prior-HSCT, priorFLT3i, prior-chemotherapy, prior-HMA
    - TUS once daily orally as a single agent achieved CR/CRh responses at four different dose levels (40, 80, 120, and 160 mg) with no dose limiting toxicities (no DLTs)
    - TUS showed a favorable safety profile with no DLTs through 160 mg per day, and no drug related discontinuations, no QTc, no differentiation syndrome, and no deaths

TUS/VEN Combination Therapy (n= 79 Patients)

- 40% ORR with 80 mg TUS + 400 mg VEN in FLT3 mutated patients
- 83% (5/6) had failed prior-VEN treatment and 50% (3/6) had failed both prior-VEN and FLT3i treatment
- TUS+VEN achieved responses among diverse R/R AML with adverse mutations in VEN-naïve, prior-VEN, FLT3WT, FLT3MUT, prior-FLT3
- TUS+VEN showed favorable safety and tolerability with no new or unexpected safety

On December 3, 2024, the Company announced that the National Cancer Institute (NCI), part of the National Institutes of Health, and the Company had entered into a Cooperative Research and Development Agreement ("CRADA"). Under the CRADA, the NCI and Aptose will collaborate on the clinical development of Aptose's proprietary lead clinical-stage compound tuspetinib (TUS), an inhibitor of key signaling kinases involved in myeloid malignancies, in the NCI Cancer Therapy Evaluation Program (CTEP) sponsored myeloMATCH trials employing combinations of targeted therapy for the treatment of molecularly defined acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS) populations. These trials will be conducted by NCI's National Clinical Trials

Network (NCTN), with the participation of the NCI Community Oncology Research Program (NCORP) in the U.S. and Canada. The myeloMATCH precision medicine trials (NCT05564390), funded by the NCI, were officially launched on May 16, 2024. myeloMATCH aims to expedite the development of tailored drug combination treatments for patients with newly diagnosed AML and MDS and to treat patients with these aggressive cancers of the blood and bone marrow from diagnosis throughout their treatment journey.

On June 14, 2024, Aptose presented tuspetinib (TUS) clinical findings as a clinical poster presentation and preclinical findings as a e-poster at the European Hematology Association (EHA) 2024 Hybrid Congress in Madrid, Spain.

Highlights of the findings include:

•Tuspetinib Monotherapy (TUS) and Tuspetinib + Venetoclax (TUS+VEN) Doublet Therapy Show Broad Clinical Activity and Strong Safety Data in relapsed or refractory (R/R) Acute Myeloid Leukemia (AML) and Differentiate TUS from other Investigational Drugs in AML

•TUS Monotherapy and TUS+VEN Doublet Therapy Active in Difficult-to-treat Genetic Subgroups, FLT3 Wildtype AML

•TUS Shown to Target VEN Resistance Mechanisms and Retain Activity on VEN-Resistant AML Cells in Preclinical Study

•Tuspetinib + Venetoclax + Azacitidine (TUS+VEN+AZA) Triplet Trial to Treat Newly Diagnosed AML Patients; Clinical Sites Being Activated

Our APTIVATE clinical trial of Tuspetinib as a monotherapy (TUS) and in combination treatment with Venetoclax (TUS+VEN) in a very ill AML patient population, yielded excellent and consistent safety findings and demonstrated clinical activity across a broad range of AML – including many with highly adverse genetic mutations. These findings supported advancement of Tuspetinib as an ideal third agent to add to a venetoclax and hypomethylating agent regimen for the frontline treatment of Newly Diagnosed AML patients. Conclusions from the clinical poster, entitled “Safety and Efficacy of Tuspetinib as Monotherapy and Combined with Venetoclax in a Phase 1/2 Trial of Patients with Relapsed or Refractory (R/R) Acute Myeloid Leukemia” include:

•Extensive dose exploration was performed with TUS (93 patients) and TUS+VEN (79 patients) in highly treatment experienced R/R AML patients (prior VEN, FLT3i, HMA, chemotherapy, HSCT)

•TUS monotherapy achieved complete remissions at 40, 80, 120, and 160 mg with no DLT, achieved a 42% CRc and 50% ORR in VEN naïve and FLT3-mutation harboring patients, and achieved responses in patients harboring highly adverse genetics (TP53MUT, RASMUT, other)

•TUS+VEN Doublet remained safe and well tolerated (40mg TUS + 400mg VEN | 80mg TUS + 400mg VEN), and achieved bone marrow blast reductions and responses among diverse R/R AML patients with adverse mutations and prior failure of VEN

•TUS targets known VEN resistance mechanisms in vitro and is clinically active in both FLT3MUT & FLT3WT R/R AML populations even after prior VEN exposure.

The greatest unmet medical need in AML is for an improved frontline therapy in Newly Diagnosed AML patients. Tuspetinib is now being developed as the TUS+VEN+HMA to establish a new standard of care for the treatment of these Newly Diagnosed AML patients that may increase response rates, extend survival, safely improve quality of life, treat a broad spectrum of genetically unique AML patient populations, and blunt the development of resistance to venetoclax.

•Progress has been made with VEN+HMA in 1L therapy but 1/3 do not respond and median OS <15 months with <25% alive at 3-years.

•Response rates and OS need improvement, especially in adverse genetic subgroups

•Emergence of VEN resistance via RAS/MAPK, TP53, and FLT3 clonal expansion, among other mechanisms, leads to relapse or refractory (R/R) AML that does not respond well to subsequent salvage therapies in R/R setting.

•A 3rd agent is needed to boost responses with VEN+HMA standard of care therapy.

•We believe Tuspetinib is the ideal 3rd Agent for Addition to VEN+AZA to Treat Newly Diagnosed AML

•TUS has excellent safety alone and in combination with VEN when co-administered

•TUS has broad activity across genetic subgroups including TP53, RAS/MAPK, & FLT3 mutants

•TUS mechanism may minimize drug resistance to VEN via inhibition of key AML kinases

•TUS can be administered with or without food allowing co-administration with VEN

•Preliminary PK data suggest no clinically meaningful interaction between TUS and VEN requiring dose modification for co-administration

In addition to the Tuspetinib clinical poster, a separate preclinical abstract was published as a poster publication at EHA, entitled “Tuspetinib Retains Nanomolar Potency Against AML Cells Engineered to Express the NRAS G12D Mutation or Selected for Resistance to Venetoclax’. The study demonstrated that TUS targets known venetoclax (VEN) resistance mechanisms, retaining nanomolar potency against AML cells engineered to express the NRAS-G12D mutation or selected for resistance to VEN, and in combination with VEN, could prevent emergence of resistance to both agents. TUS resistant cells showed hypersensitivity to VEN such that treatment with both drugs could also interfere with the emergence of TUS resistance.

On March 26, 2024, Aptose announced that more than 170 patients to date received TUS alone or in combination with the BCL-2 inhibitor venetoclax (VEN) during the Phase 1/2 clinical program in the very ill relapsed or refractory (R/R) AML patient population. At the single agent 80 mg dose, TUS achieved a favorable safety profile and an impressive response rate among patients who were naive to VEN. The safety profile of TUS remained favorable when TUS was combined with VEN in R/R AML patients, and responses were achieved in both patients naive to VEN and those who failed prior therapy with VEN. TUS avoids many typical toxicities observed with other agents and achieves broad activity across AML patients with a diversity of adverse genetic abnormalities.

On December 9, 2023, Aptose featured tuspetinib in an oral presentation at the 65th American Society of Hematology ("ASH") Annual Meeting and Exposition and announced that a growing body of clinical data for Aptose’s lead compound tuspetinib, demonstrates significant benefit as a single agent and in combination with venetoclax (VEN) in patients with R/R AML in the ongoing APTIVATE Phase 1/2 study. Data was presented in an oral presentation by lead investigator Naval G. Daver, M.D., Professor, Director Leukemia Research Alliance Program, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, TX.

Dr. Daver reported data from more than 100 relapsed/refractory patients from multiple international clinical sites, who had failed prior therapy and then were treated with TUS as a single agent or the TUS+VEN doublet. Both TUS and the TUS+VEN doublet delivered multiple composite complete remissions ("CRc") in this very ill AML population, while maintaining a favorable safety profile across all treated patients. The data demonstrated tuspetinib as a single agent (TUS) is active and well tolerated in one of the most challenging and heterogeneous disease settings in oncology – relapsed and refractory AML. Tuspetinib demonstrated broad activity, including activity in patients with FLT3 wild-type AML (accounting for more than 70% of the AML population), FLT3 mutated AML, NPM1 mutated AML, as well as in patients with mutations historically associated with resistance to targeted therapy. Most notably, TUS targets VEN resistance mechanisms, enabling the TUS+VEN combination therapy to uniquely treat the very ill prior-VEN AML population, including both FLT3 mutant and FLT3 wildtype disease. From a broader perspective, the growing body of antileukemic activity, and continued favorable safety profile, support advancement of tuspetinib as the TUS+VEN+HMA triplet combination therapy for the treatment of frontline newly diagnosed AML patients.

Dr. Daver also pointed out that while patients on the TUS+VEN therapy are early in their treatment cycles, most patients achieving a response remained on treatment and that responses have begun to mature as dosing continues. Highlights of Dr. Daver's ASH oral presentation include:

•As a single agent at therapeutic doses of 80-160 mg in 68 evaluable patients, TUS was more active in VEN-naive patients, with an overall CRc rate of 29% (8/28). This included a 42% CRc rate (5/12) in FLT3-mutated patients and a 19% CRc rate (3/16) in FLT3-unmutated, or wildtype, AML patients. Responses and blood counts improved with continuous dosing, many patients bridged to an allogeneic stem cell transplant (HSCT), durability was observed when HSCT was not performed, and 80 mg was selected as the RP2D. Overall, tuspetinib showed a favorable safety profile with only mild adverse events (AEs) and no dose-limiting toxicities (DLTs) up to 160 mg per day, and no drug discontinuations from drug-related toxicity.

•In the TUS+VEN doublet study, 49 patients were dosed with 80 mg of tuspetinib and 200 mg of venetoclax, with 36 evaluable (and 13 patients too early to assess). Patients were heavily exposed to Prior-VEN and Prior-FLT3 inhibitor treatment. TUS+VEN was active in both VEN-naive and Prior-VEN R/R AML patients. TUS demonstrated compelling composite complete remission (CRc) rates. Among all evaluable patients, TUS+VEN demonstrated a CRc rate of 25% (9/36); 43% (3/7) in VEN-naive patients, and 21% (6/29) in Prior-VEN patients. Among FLT3 wildtype patients, TUS+VEN demonstrated an overall CRc rate of 20% (5/25); 33% (2/6) in VEN-naive patients, and 16% (3/19) in Prior-VEN patients. Among FLT3 mutant patients, TUS+VEN demonstrated an overall CRc rate of 36% (4/11); a complete response in a VEN-naive patient (1/1); a 30% (3/10) in Prior-VEN patients; and 44% (4/9) in patients treated prior with a FLT3 inhibitor.

Clinical data from tuspetinib in AML was presented at the ASH Annual Meeting in December 2022 and during a Corporate Comprehensive Clinical Update Call held December 11, 2022. Data presented demonstrated that tuspetinib delivers single agent responses without prolonged myelosuppression or life-threatening toxicities in these very ill and heavily pretreated relapsed or refractory AML patients. Responses were observed in a broad range of mutationally-defined populations, including those with mutated forms of NPM1, MLL, TP53, NRAS, KRAS, DNMT3A, RUNX1, wild-type FLT3, ITD or TKD mutated FLT3, various splicing factors, and other genes. As of October 6, 2022, 60 heavily pretreated R/R AML patients were enrolled at multiple centers and treated at doses escalating from 20 mg to 200 mg, with further dose exploration at the 40 mg, 80 mg, 120 mg and 160 mg dose levels. Tuspetinib delivered multiple CRs at 40 mg, 80 mg, 120 mg and 160 mg dose levels in which no DLTs were observed. Tuspetinib demonstrated clinically meaningful benefit in all responders, by either bridging successfully to HSCT or leading to a durable response, as well as a favorable safety profile. In addition to 5 CRcs and 1 PR reported at ASH 2021, 4 new CRcs and 3 new PR had been generated during 2022. New responses during 2022 were achieved with 160 mg, 120 mg, 80 mg, and 40 mg. Among efficacy-evaluable patients treated with 80 mg, 120 mg, or 160mg, response rates ranging from 19% to 75% were achieved in specific genotypic subpopulations of R/R AML patients. Significant bone marrow leukemic blast reductions were observed broadly in FLT3+ and FLT3 wildtype patients across multiple dose levels, comparable to reported gilteritinib data, except that the patients treated with tuspetinib were more heavily pre-treated relapsed and refractory AML patients than those treated with gilteritinib. Vignettes of patient experiences highlight the potency and breadth of tuspetinib to deliver complete remissions among several mutationally-defined populations with a diversity of adverse mutations. Tuspetinib continued to show a favorable safety profile with only mild AEs and no DLTs up to 160 mg per day, and no drug discontinuations from drug-related toxicity. No drug-related SAE, drug-related deaths, differentiation syndrome, AE of QT prolongation or DLT were observed through the 160 mg level. Tuspetinib avoids many of the typical toxicities observed with other tyrosine kinase inhibitors. We identified a safe therapeutic range with a broad therapeutic window, spanning the dose levels of 40, 80, 120 and 160 milligrams. We also announced that enrollment had been initiated in the APTIVATE expansion trial for monotherapy and drug combination therapy with tuspetinib. For the APTIVATE expansion trial, we selected 120 mg as the initiating single agent expansion dose and 80 mg as the initiating dose selected for combination with venetoclax.

On January 30, 2023, we announced the dosing of patients in the APTIVATE Phase 1/2 clinical trial of tuspetinib, and that another clinical response has been achieved by a R/R AML patient receiving 40 mg tuspetinib once daily orally in the original dose exploration trial, the second response at the recently launched low-dose 40 mg cohort. In addition, we elucidated a rationale for the superior safety profile of tuspetinib. While several kinase inhibitors require high exposures that exert near complete suppression of a single target to elicit responses, those

agents often cause additional toxicity because they also cause extensive inhibition of that target in normal cells. In contrast, tuspetinib simultaneously suppresses a small suite of kinase-driven pathways critical for leukemogenesis. Consequently, tuspetinib achieves clinical responses at lower exposures with less overall suppression of each pathway, thereby avoiding many toxicities observed with competing agents

Concurrent with the European Hematology Association (EHA) Annual Congress held June 8-11, 2023, Aptose held an interim clinical update webcast on June 10, 2023, to present highlights from the ongoing clinical development of tuspetinib. Aptose reported completion of the tuspetinib dose escalation and dose exploration Phase 1/2 trial in 77 R/R AML patients, tuspetinib demonstrated a favorable safety profile, and tuspetinib delivered monotherapy responses across four dose levels with no dose-limiting toxicity in mutationally diverse and difficult to treat R/R AML populations, including patients with highly adverse mutations that typically do not respond to monotherapy or combination therapy: TP53-mutated patients with a CR/CRh = 20% and RAS-mutated patients with a CR/CRh = 22%. Aptose also reported completion of a successful End of Phase 1 Meeting with the US FDA for tuspetinib, that a monotherapy RP2D was selected as 80mg daily, and that all development paths remain open, including the single arm accelerated path. Following completion of the dose escalation and dose exploration phases of the Phase 1/2 clinical program, Aptose focused attention on the tuspetinib APTIVATE expansion trial. The APTIVATE trial sought to identify patient populations that may serve as development paths in R/R AML patients sensitive to the TUS+VEN doublet and can serve as development paths for accelerated and full approvals. We reported that patient enrollment in the APTIVATE expansion trial has been brisk and preliminary CR activity had already been reported in patients receiving the TUS+VEN doublet who previously failed therapy with venetoclax.

On October 29, 2023, Aptose presented two posters related to the clinical and preclinical activity of tuspetinib at the European School of Haematology 6th International Conference: Acute Myeloid Leukemia "Molecular and Translational": Advances in Biology and Treatment, held October 29-31, 2023, in Estoril, Portugal. Clinical findings included 1) data from the APTO-TUS-HV01 clinical trial (the "Food Effect Study") evaluating the pharmacokinetic (PK) properties of tuspetinib in healthy human volunteers in which tuspetinib was administered with or without food, and 2) from an international Phase 1/2 study of tuspetinib as a single agent and in combination with venetoclax in patients with R/R AML from across clinical centers in the United States, South Korea, Spain, Australia and other sites. Data from the Food Effect Study in healthy human volunteers demonstrated tuspetinib can be administered with or without food and foresee no clinically meaningful difference in exposure. This is an important finding for patient convenience, as venetoclax is dosed with food and tuspetinib can now be simultaneously administered with the venetoclax rather than require staggered dosing. Findings from the Phase 1/2 clinical trial demonstrated tuspetinib as a single agent was well-tolerated and highly active among R/R AML patients with a diversity of adverse genotypes and delivered a 42% CR/CRh cross-evaluable venetoclax-naive patients at the 80mg daily RP2D. The TUS+VEN doublet has been well tolerated in the APTIVATE international Phase 1/2 expansion trial in R/R AML patients and achieved multiple responses in patients who previously failed venetoclax ("Prior-VEN failure AML"), including Prior-VEN failure patients who also previously failed FLT3 inhibitors, all of whom represent emerging populations of high unmet medical need. Notably, tuspetinib targets venetoclax resistance mechanisms that may re-sensitize Prior-VEN failure patients to venetoclax.

Separate from the clinical studies, the preclinical study (entitled: “Tuspetinib Oral Myeloid Kinase Inhibitor Creates Synthetic Lethal Vulnerability to Venetoclax”) presented by Aptose during the ESH Conference investigated the effects of tuspetinib on key elements of the phosphokinome and apoptotic proteome in both parental and TUS-resistant AML cells. In parental cells, tuspetinib inhibits key oncogenic signaling pathways and shifts the balance of pro- and anti-apoptotic proteins in favor of apoptosis, suggesting that it may generate vulnerability to venetoclax. Indeed, acquired resistance in the AML cells to tuspetinib generated a synthetic lethal vulnerability to venetoclax of unusually high magnitude. Concurrent administration of TUS+VEN therefore may discourage the emergence of resistance to tuspetinib during treatment. In conjunction with poster presentations at the ESH Conference, on October 30, 2023, Aptose held a “Clinical Update and KOL Data Review of AML Drug Tuspetinib” that was webcast and featured Dr. Naval Daver, MD, Professor, Director Leukemia Research Alliance Program, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, Texas. Dr. Daver is the lead investigator on Aptose’s APTIVATE trial and is recognized for significant achievements in the development of novel AML treatments, including several combination therapies. Aptose presented data in 49 patients who received the TUS+VEN doublet, showing an overall response rate (ORR) of 48% among all patients that had achieved an evaluable stage, as well as a 44% ORR among Prior-VEN failure AML patients, including FLT3-unmutated (wildtype) patients (43% ORR) and FLT3-mutated patients (60% ORR), some of whom also had failed prior therapy with FLT3 inhibitors. The TUS+VEN

doublet was well tolerated with no unexpected safety signals. The TUS/VEN doublet may serve the Prior-VEN failure R/R AML patients that represent a rapidly growing population that is highly refractory to any salvage therapy with response rates in the 4-15% range. The compelling data with the TUS+VEN doublet in R/R AML patients suggest a TUS+VEN+HMA triplet may serve the needs of frontline (1L) newly diagnosed AML patients.

Luxeptinib Program

Licensing Overview

On May 7, 2018, we exercised an option by paying $2.0 million in cash to the South Korean company CrystalGenomics Invites Co. Ltd, formerly Crystal Genomics, Inc. ("CG") to purchase an exclusive license to research, develop and commercialize luxeptinib in all countries of the world except the Republic of Korea and China, for all fields of use (collectively, the "Rights"). On June 14, 2018, we announced that we had entered into a license agreement with CG for us to gain a license for rights to CG-806 in China (including the People's Republic of China, Hong Kong, and Macau) (the "China Rights"). Under the license agreement, we made an upfront payment to CG of $3.0 million for the China Rights. CG is eligible for development, regulatory and commercial-based milestones, as well as single-digit royalties on product sales in China. The total deal value for the China Rights, including the upfront payment, is up to $125 million. Aptose now owns worldwide (excluding Korea) rights to luxeptinib, a first-in-class, highly potent oral small molecule being developed for AML, B-cell malignancies, and other hematologic malignancies. Future possible royalties that might be paid under these agreements are determined on a country-by-country and product-by-product basis, on net sales during the period of time beginning on the first commercial sale of such product in such country and continuing until the later of: (i) the expiration of the last-to-expire valid claim of the CG Patents in such country covering such product; and (ii) ten (10) years after the first commercial sale of such product in such country.

Preclinical Profile

Luxeptinib exhibits a picomolar IC_{50} toward FLT3 with the Internal Tandem Duplication ("FLT3-ITD"), potency against the wild type FLT3 and a host of mutant forms of FLT3, as well as single-digit nanomolar $IC_{50's}$ against BTK and its C481S mutant ("BTK-C481S"). Further, luxeptinib suppresses a small group of other relevant oncogenic kinases/pathways (including CSF1R, PDGFRα, TRK, and the ERK, MYC, AKT/mTOR/S6K and AURK/H3S10 pathways) that are operative in AML and certain B cell malignancies, but does not inhibit the TEC, epidermal growth factor receptor (EGFR) and ErbB2/4 kinases that are responsible for safety concerns with certain other kinase inhibitors.

As a potent inhibitor of FLT3-ITD, luxeptinib may become an effective therapy in a high-risk subset of AML patients. This is because the FLT3-ITD mutation occurs in approximately 30% of patients with AML and is associated with a poor prognosis. In murine xenograft studies of human AML (FLT3-ITD), CG-806 administered orally resulted in tumor elimination without measurable toxicity. Importantly, luxeptinib targets other oncogenic kinases which may also be operative in FLT3-ITD AML, thereby potentially allowing the agent to become an important therapeutic option for a broader group of this difficult-to-treat AML patient population. The findings that luxeptinib targets all forms of FLT3 and several other key oncogenic pathways, and that luxeptinib was well tolerated from a safety perspective during efficacy and formal Good Laboratory Practice ("GLP") toxicology studies, suggest that luxeptinib may also have applicability in treating patients, particularly those over the age of 65, who cannot tolerate other therapies.

Separate from the AML and FLT3 applications, luxeptinib may be a therapeutic option for patients with B cell malignancies. Overexpression of the BTK enzyme can drive oncogenic signaling of certain B cell malignancies, including CLL and certain NHL such as mantle cell lymphoma, follicular lymphoma, diffuse large cell B cell lymphoma, and others. Therapy of these patients with covalent, irreversible BTK inhibitors, such as ibrutinib, that target the active site cysteine ("Cys") residue of BTK can be beneficial in many patients. However, therapy with covalent BTK inhibitors can select for BTK with a C481S mutation, thereby conferring resistance to covalent BTK inhibitors. Furthermore, approximately half of CLL patients have discontinued treatment with ibrutinib after 3.4 years of therapy. Discontinuation of ibrutinib is due to the development of drug resistance (in particular, patients have malignancies that developed the BTK-C481S mutation), or due to refractory disease (patient tumors did not respond to ibrutinib) or intolerance (side effects led to discontinuation of ibrutinib), according to a study performed at The Ohio State University. The C481S mutation is observed in 5-10% of the patients, while 40-45% of the patients were

intolerant or refractory to ibrutinib. As a non-covalent, reversible inhibitor of BTK, luxeptinib does not rely on the Cysteine 481 residue for inhibition of the BTK enzyme. Indeed, recent X-ray crystallographic studies (with wild type and C481S BTK) demonstrated that luxeptinib binds productively to the BTK active site in a manner that is indifferent to the presence or absence of mutations at the 481 residue. Moreover, *in vitro* studies demonstrated that luxeptinib kills B cell malignancy cell lines on average approximately 1,000 times more potently than ibrutinib and kills ibrutinib-resistance cancer cells, and that luxeptinib more potently killed primary malignant cells taken from the bone marrow of CLL and ALL B-cell cancer patients. Yet, luxeptinib demonstrated a high degree of safety in animal efficacy and GLP toxicology studies. Consequently, patients who are resistant, refractory or intolerant to ibrutinib or other commercially approved or development-stage BTK inhibitors with B cell malignancies may continue to be sensitive to luxeptinib therapy. This is particularly true since luxeptinib inhibits the wild type and mutant forms of BTK, as well as other kinases/pathways that drive the survival and proliferation of B cell malignancies.

Latest Clinical Update and Program Status

During 2023 and early 2024, clinical evaluation of the new G3 formulation of luxeptinib was performed and has now been completed. The G3 formulation was tested in a single dose bioavailability study in 20 patients, including both B-cell cancer and AML patients, and across 5 dose levels (10mg to 200mg). The G3 formulation then was evaluated in R/R AML patients with continuous dosing using two different dose levels (50mg BID and 200mg BID) in a total of 11 patients. Data shows the G3 formulation dosed at 200mg twice daily can achieve 2-3uM steady state plasma levels, with approximately 10-fold better absorption, and interestingly even better tolerability, than the original G1 formulation. Thus, the G3 formulation achieved the desired plasma exposure benchmark and can serve as the formulation of choice for future studies with LUX. Aptose is exploring alternative development paths and collaborations to advance LUX as a single agent or in combination with VEN to treat defined R/R patient populations of high unmet need.

Luxeptinib was evaluated in a Phase 1 a/b trial in patients with relapsed or refractory B cell malignancies who have failed or are intolerant to standard therapies, and in a separate Phase 1 a/b trial in patients with relapsed or refractory AML or high-risk MDS. During 2022, a new G3 formulation was tested as a single dose in 20 patients during the ongoing Phase 1 a/b clinical program. Modeling of the PK properties of G3 predicted steady-state plasma exposure from continuous dosing with 50 mg of G3 (every 12 hours, Q12h) should be comparable to that of 900 mg of the original G1 formulation Q12h, representing a significant improvement in bioavailability with G3. On November 14, 2022, we announced dosing of the first AML patient to receive a continuous dosing regimen of the G3 formulation (50 mg G3 Q12h), with the protocol allowing for further dose escalation of G3 in subsequent patients. Clinical data from both studies were presented during a Corporate Comprehensive Clinical Update Call held December 11, 2022. During the Corporate Update Call, we announced a CR was achieved with a diffuse large B-cell lymphoma patient at the end of Cycle 22 with 900mg BID of the original G1 formulation. Previously, an MRD-negative CR was reported with a R/R AML patient receiving 450mg BID of the original G1 formulation.

Concurrent with the EHA Annual Congress held June 8-11, 2023, Aptose held an interim clinical update webcast on June 10, 2023. During the update, Aptose reviewed clinical findings with the new G3 formulation of luxeptinib. Aptose confirmed that continuous dosing with 50mg Q12h of the G3 formulation in multiple patients achieves roughly an equivalent pharmacokinetic profile as 900mg original G1 formulation, and that dose escalation with the G3 formulation was anticipated. Since completion of the 50mg G3 Q12h dose exploration, R/R AML patients have been dosed with 200mg Q12h G3.

Safety and PK data with continuous dosing of the G3 formulation have been completed and the 200mg dose of G3 luxeptinib achieved steady state exposure plasma levels of approximately 2uM. The amalgam of clinical safety, PK and activity data with all formulations of luxeptinib in B-cell cancer and AML patients are being collected and evaluated, and we plan to disclose the findings at a scientific presentation. In addition, a molecularly defined subgroup of CLL patients (harboring mutations in FLT3 receptor) has been identified as a potential target population for treatment with luxeptinib in combination with other agents, and a feasibility analysis for the potential development of luxeptinib for the target population is underway.

Competitive Conditions

The biotechnology and pharmaceutical industries are characterized by rapidly evolving technology and intense competition. There are numerous companies in these industries that are focusing their efforts on activities similar to ours. Some of these are companies with established positions in the pharmaceutical industry and may have substantially more financial and technical resources, more extensive research and development capabilities, and greater marketing, distribution, production, and human resources than us. In addition, we face competition from other companies for opportunities to enter partnerships with biotechnology and pharmaceutical companies and academic institutions.

Competition with our potential products may include chemotherapeutic agents, monoclonal antibodies, antisense therapies, small molecules, immunotherapies, vaccines, and other biologics with novel mechanisms of action. These drugs may kill cancer cells indiscriminately, or through a targeted approach, and some have the potential to be used in non-cancer indications. We also expect that we will experience competition from established and emerging pharmaceutical and biotechnology companies that have other forms of treatment for the cancers that we target, including drugs currently in development for the treatment of cancer that employ a number of novel approaches for attacking these cancer targets. Cancer is a complex disease with more than 100 indications requiring drugs for treatment. The drugs in competition with our potential drugs have specific targets for attacking the disease, targets which are not necessarily the same as ours. These competitive drugs, however, could potentially also be used together in combination therapies with our drugs to manage the disease. Other factors that could render our potential products less competitive may include the stage of development, where competitors' products may achieve earlier commercialization, as well as superior patent protection, better safety profiles, or a preferred cost-benefit profile.

Intellectual Property

We believe that our issued patents and pending applications are important in establishing and maintaining a competitive position with respect to our products and technology.

Tuspetinib (HM43239)

In November 2021, we licensed the exclusive rights to research, develop and commercialize tuspetinib (the "Tuspetinib Licensing Agreement"). Under the terms of the Tuspetinib Licensing Agreement, Hanmi granted Aptose exclusive worldwide rights to tuspetinib for all indications. Aptose is now the exclusive licensee of composition of matter and use patents covering tuspetinib, and tuspetinib analogs. Aptose believes that it now owns rights to a strong and defensive intellectual property position.

As of December 31, 2024, Aptose owned rights in 59 issued patents, including 4 issued U.S. patents, and 23 patents validated in countries in Europe, that are in force and cover the tuspetinib compound, or analog compounds. These patents are expected to provide protection until 2038 through 2039. Patent applications are also pending in the United States and in contracting states to the Patent Cooperation Treaty for coverage of tuspetinib and analog compounds, with expected expiry dates between 2038 and 2044.

Luxeptinib (CG-806)

In May 2018 and June 2018, we licensed the Rights to CG-806, for all fields of use, in all territories outside of the Republic of Korea and China, by exercising an option we obtained through a June 2016 option-license agreement with CG that had granted us an exclusive option to research, develop and commercialize CG-806. In June 2018, we entered into a separate license agreement with CG for Aptose to gain a license for the China Rights. Aptose now owns worldwide Rights to CG-806, including an issued patent in China but excluding any Rights in Korea.

As of December 31, 2024, Aptose owned rights to 49 issued patents, including 3 issued U.S. patents, and 30 patents validated in countries in Europe, that are in force and cover numerous compounds, including the CG-806 compound, pharmaceutical compositions comprising the CG-806 compound, and methods of use for treating various diseases by administering various compounds, including the CG-806 compound. These patents are expected to provide protection until 2033-2038. Patent applications are also pending in the United States and in contracting states to the Patent Cooperation Treaty for coverage of CG-806, with expected expiry dates between 2038-2039.

The Company's research and development activities involve the controlled use of hazardous and radioactive materials and, accordingly, the Company is subject to federal, provincial and local laws and regulations in the United States and Canada governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. To the knowledge of the Company, compliance with such environmental laws and regulations does not and will not have any significant impact on its capital spending, profits or competitive position within the normal course of its operating activities. There can be no assurance, however, that the Company will not be required to incur significant costs to comply with environmental laws and regulations in the future or that its operations, business or assets will not be materially adversely affected by current or future environmental laws or regulations.

Employees

As of December 31, 2024, we employed 13 full-time persons in research and drug development and administration activities. Three of our employees hold Ph.D.s, one holds an M.D, and numerous others hold degrees and designations such as M.Sc., B.Sc., C.P.A., and M.B.A. To encourage a focus on achieving long-term performance, employees and members of the board of directors of the Company (the "Board") have the ability to acquire an ownership interest in the Company through Aptose's share option and alternate compensation plans.

The business of the Company requires personnel with specialized skills and knowledge in oncology. Researchers must be able to design and implement studies to assess the efficacy of anticancer drugs. Specialized knowledge and skills relating to chemistry and formulation process development are also needed. Such knowledge and skills are needed to develop product specific analytical methods and formulation processes. The Company's business also requires clinical and regulatory expertise and knowledge. The Company has trained scientists and personnel with broad experience in these fields.

None of our employees are unionized, and we consider our relations with our employees to be good.

Government Regulation

Overview

Our overall regulatory strategy is to work with the appropriate government departments which regulate the use and sale of therapeutic drug products. This includes the FDA in the United States, Health Canada in Canada, the European Medicines Agency ("EMA") in Europe, and other local regulatory agencies with oversight of preclinical studies, clinical trials and marketing of therapeutic products. Where possible, we intend to take advantage of opportunities for accelerated development of drugs designed to treat rare and serious or life-threatening diseases. We also intend to pursue priority evaluation of any application for marketing approval filed in Canada, the United States or the European Union and to file additional drug applications in other markets where commercial opportunities exist. We may not be able to pursue these opportunities successfully.

Regulation(s) by government authorities in the United States, Canada, and the European Union are significant factors in guiding our current research and drug development activities. To clinically test, manufacture and market drug products for therapeutic use, we must be in compliance with guidance and regulations established by the regulatory agencies in the countries in which we currently operate or intend to operate.

The laws of most of these countries require the licensing of manufacturing facilities, carefully controlled research and the extensive testing of products. Biotechnology companies must establish the safety and efficacy of their new products in clinical trials; they must establish and comply with current good manufacturing practices ("cGMPs") for the manufacturing of the product and control over marketing activities before being allowed to market a product. The safety and efficacy of a new drug must be shown through human clinical trials of the drug carried out in accordance with the guidance and regulations established by local and federal regulatory agencies.

The process of completing clinical trials and obtaining regulatory approval for a new drug takes a number of years and requires the expenditure of substantial resources. Once a new drug or product license application is submitted, regulatory agencies may not review the application in a timely manner and may not approve the product. Even after a New Drug Application ("NDA") submission has occurred and/or approval has been obtained, further studies, including post-marketing studies, may be required to provide additional data on the efficacy and safety

necessary to confirm the approved indication or to gain approval for the use of the new drug as a treatment for clinical indications other than those for which the new drug was initially tested. Regulatory agencies also require post-marketing surveillance programs to monitor a new drug's side effects, safety and long-term effects of the product. A serious safety or effectiveness problem involving an approved new drug may result in a regulatory agency mandating a withdrawal of the new drug from the market and possible civil action. It is possible that we could encounter such difficulties or excessive costs in our efforts to secure necessary approvals, which could delay or prevent us from manufacturing or marketing our products.

In addition to the regulatory product approval framework, biotechnology companies, including Aptose, are subject to regulation under local, provincial, state and federal law, including requirements regarding occupational safety, laboratory practices, environmental protection and hazardous substance control, and may be subject to other present and future local, provincial, state, federal and foreign regulation, including possible future regulation of the biotechnology industry.

Approval of New Drugs in Canada

In Canada, the manufacture and sale of new drugs are controlled by Health Canada. New drugs must pass through a number of testing stages, including pre-clinical testing and human clinical trials. Pre-clinical testing involves testing the new drug's chemistry, pharmacology and toxicology *in vitro* and *in vivo*. Successful results (that is, potentially valuable pharmacological activity combined with an acceptable low level of toxicity) enable the developer of the new drug to file a clinical trial application to begin clinical trials involving humans.

To study a drug in Canadian patients, a clinical trial application submission must be filed with Health Canada. The clinical trial application submission must contain specified information, including the results of the pre-clinical tests completed at the time of the submission and any available information regarding use of the drug in humans. In addition, since the method of manufacture may affect the efficacy and safety of a new drug, information on manufacturing methods and standards and the stability of the drug substance and dosage form must be presented. Production methods and quality control procedures must be in place to ensure an acceptably pure product, essentially free of contamination, and to ensure uniformity with respect to all quality aspects.

In addition, all federally regulated trials must be approved and monitored by an independent committee of doctors, scientists, advocates and others to ensure safety and ethical standards, Institutional Review Boards ("IRBs") or Ethics Review Boards ("ERBs"). The review boards study and approve all study-related documents before a clinical trial begins and also carefully monitor data to detect benefit or harm, and validity of results.

Provided Health Canada does not reject a clinical trial application submission and IRB or ERB approval has been obtained, clinical trials can begin. Clinical trials for product candidates in Canada, as in the United States, are generally carried out in three phases. Phase 1 involves studies to evaluate toxicity and ideal dose levels in healthy humans. The new drug is administered to human patients who have met the clinical trial entry criteria to determine pharmacokinetics, human tolerance and prevalence of any adverse side effects. Phases 2 and 3 involve therapeutic studies. In Phase 2, efficacy, dosage, side effects and safety are established in a small number of patients who have the disease or disorder that the new drug is intended to treat. In Phase 3, there are controlled clinical trials in which the new drug is administered to a large number of patients who are likely to receive benefit from the new drug. In Phase 3, the effectiveness of the new drug in patients is compared to that of standard accepted methods of treatment in order to provide sufficient data for the statistical proof of safety and efficacy for the new drug.

If clinical studies establish that a new drug has value, the manufacturer submits a new drug submission application to Health Canada for marketing approval. The new drug submission contains all known information known about the new drug, including the results of pre-clinical testing and clinical trials. Information about a substance contained in new drug submission includes its proper name, its chemical name, and details on its method of manufacturing and purification, and its biological, pharmacological and toxicological properties. The new drug submission also provides information about the dosage form of the new drug, including a quantitative listing of all ingredients used in its formulation, its method of manufacture, manufacturing facility information, packaging and labeling, the results of stability tests, and its diagnostic or therapeutic claims and side effects, as well as details of the clinical trials to support the safety and efficacy of the new drug. Furthermore, for biological products, an on-site evaluation is completed to assess the production process and manufacturing facility. It is required prior to the issuance

of a notice of compliance. All aspects of the new drug submission are critically reviewed by Health Canada. If a new drug submission is found satisfactory, a notice of compliance is issued permitting the new drug to be sold for the approved use. In Canada, an establishment license must be obtained prior to marketing the product.

Health Canada has a policy of priority evaluation of new drug submissions for all drugs intended for serious or life-threatening diseases for which no drug product has received regulatory approval in Canada and for which there is reasonable scientific evidence to indicate that the proposed new drug is safe and may provide effective treatment.

An exception to the foregoing requirements relating to the manufacture and sale of a new drug is the limited authorization that may be available in respect of the sale of new drugs for emergency treatment. Under the special access program, Health Canada may authorize the sale of a quantity of a new drug for human use to a specific practitioner for the emergency treatment of a patient under the practitioner's care. Prior to authorization, the practitioner must supply Health Canada with information concerning the medical emergency for which the new drug is required, such data as is in the possession of the practitioner with respect to the use, safety and efficacy of the new drug, the names of the institutions at which the new drug is to be used and such other information as may be requested by Health Canada. In addition, the practitioner must agree to report to both the drug manufacturer and Health Canada the results of the new drug's use in the medical emergency, including information concerning adverse reactions, and must account to Health Canada for all quantities of the new drug made available.

The Canadian regulatory approval requirements for new drugs outlined above are similar to those of other major pharmaceutical markets. While the testing carried out in Canada is often acceptable for the purposes of regulatory submissions in other countries, individual regulatory authorities may request supplementary testing during their assessment of any submission. Therefore, the clinical testing conducted under Health Canada authorization or the approval of regulatory authorities of other countries may not be accepted by regulatory authorities outside Canada or other countries.

Approval of New Drugs in the United States

In the United States, the FDA controls and investigates the investigation, manufacturing, and sale of new drugs. New drugs require FDA approval of an NDA prior to commercial sale. In the case of certain biological products, a Biological License Application ("BLA") must be obtained prior to marketing and batch releasing. As in Canada, to obtain marketing approval, data from adequate and well-controlled human clinical trials, demonstrating to the FDA's satisfaction a new drug's safety and effectiveness for its intended use, are required. Data are generated in studies conducted pursuant to an investigational new drug ("IND") submission, similar to that required for a clinical trial application in Canada. Clinical trials with human subjects are characterized as Phase 1, Phase 2 and Phase 3 trials or a combination thereof. In a marketing application, the manufacturer must also demonstrate the identity, potency, quality and purity of the active ingredients of the new drug involved, and the stability of those ingredients. Further, the manufacturing facilities, equipment, processes and quality controls for the new drug must comply with the FDA's current cGMP regulations for drugs both in a pre-licensing inspection before product licensing and in subsequent periodic inspections after licensing. An establishment license grants the sponsor permission to fabricate, package, label, distribute, import, wholesale or test the newly approved drug.

Federally regulated trials must be approved and monitored by an independent committee of doctors, scientists, advocates, and others to ensure safety and ethical standards, IRBs or ERBs. The review boards study and approve all study-related documents before a clinical trial begins and also carefully monitor data to detect benefit or harm, and validity of results.

Post-Approval Regulation

The monitoring of a new drug does not cease once it is on the market. For example, a manufacturer of a new drug must report any new information received concerning serious side effects, as well as the failure of the new drug to produce desired effects. If Health Canada determines it to be in the interest of public health, a notice of compliance for a new drug may be suspended and the new drug may be removed from the market.

A post surveillance program involves clinical trials conducted after a drug is marketed (referred to as Phase 4 studies in the United States) and is an important source of information on as yet undetected adverse outcomes, especially in populations that may not have been involved in the premarketing trials (e.g., children, the elderly, pregnant women) and the drug's long-term morbidity and mortality profile. Regulatory authorities may require companies to conduct Phase 4 studies as a condition of market approval. Companies often conduct post-marketing studies in the absence of a regulatory mandate.

The foregoing description is a summary of the requirements for a new drug to be approved for marketing in North America. The EMA and Japanese Pharmaceuticals and Medical Devices Agency are also important regulatory authorities in drug development. Together with the FDA, they are the three International Conference on Harmonization parties which oversee the three largest markets for drug sales.

Information About Our Executive Officers

Aptose's leadership team comprises accomplished industry, financial and clinical research professionals who are dedicated to building a comprehensive anticancer drug pipeline and clinical development programs focused on targeted therapeutics directed against dysregulated oncogenic processes in patients with life. The team includes our President, Chairman and Chief Executive Officer, our Senior Vice President, Chief Financial Officer and Chief Business Officer, and our Chief Medical Officer.

William G. Rice, Ph.D., age 66, joined Aptose as Chairman, President and Chief Executive Officer in October 2013. Dr. Rice brings more than 25 years of C-level executive, operational, business development, financial, and R&D experience in the biotech industry to Aptose. Prior to joining Aptose, Dr. Rice served as the President, Chief Executive Officer and Chairman of the board of Cylene Pharmaceuticals, Inc., a private biotechnology company, from 2003 to 2013. Prior to Cylene, Dr. Rice was the founder, President, Chief Executive Officer and Director of Achillion Pharmaceuticals, Inc. from 1998 to 2003. He also served as Senior Scientist and Head of the Drug Mechanism Laboratory at the National Cancer Institute-Frederick National Laboratory for Cancer Research from 1992 to 1998 and served as a faculty member in the division of Pediatric Hematology and Oncology at Emory University School of Medicine from 1989 to 1992. Dr. Rice performed his postdoctoral training in the Division of Hematology/Oncology in the Department of Internal Medicine at the University of Michigan Medical Center, prior to which he earned his Ph.D. in Biochemistry from Emory University Department of Biochemistry.

Fletcher Payne, age 62, joined Aptose as Senior Vice President, Chief Business Officer, Chief Financial Officer ("CFO") and Corporate Secretary in June 2022. With over 25 years of experience in the healthcare sector, Mr. Payne has held several CFO and senior management positions at various biotech companies, in addition to roles in finance and accounting. He has overseen legal, corporate development and licensing functions. Throughout his career, he has successfully executed a diverse range of business transactions totaling more than $3.7 billion, focusing primarily on clinical testing, oncology, neurological conditions, and orphan disease indications. Mr. Payne most recently served as CFO of Syapse, where he successfully completed several financing transactions and oversaw the company's accounting, finance, corporate development, and legal functions. Previously, he served as CFO at Catalyst Biosciences, a publicly traded biotech company. Mr. Payne has also held CFO roles and senior financial positions at various organizations, including CytomX Therapeutics, Plexxikon Inc., Rinat Neuroscience Corporation, Dynavax Technologies Corporation, and Cell Genesys, among others. He earned a Bachelor of Science in Finance from the Haas School of Business at the University of California, Berkeley.

Rafael Bejar, *M.D, Ph.D*., age 53, joined Aptose as Senior Vice President and Chief Medical Officer in January 2020. Dr. Bejar is an internationally recognized physician scientist with extensive research and clinical experience in the area of hematologic malignancies. Dr. Bejar joined Aptose from UC San Diego ("UCSD") where he began working in 2012. He continues to serve at UCSD as an Associate Professor of Clinical Medicine, caring for patients and maintaining a research laboratory focused on translational studies of myeloid malignancies and also serves and is an independent consultant as an advisor and Chair of Independent Data Monitoring Committees for other pharmaceutical companies. At UCSD, he founded the MDS Center of Excellence and led the Hematology Disease Team from 2017 to 2019. There he has directed several clinical studies and served as an advisor for numerous companies including Celgene (now BMS), Takeda, AbbVie, Astex, Genoptix (now NeoGenomics), Keros, Servier, Geron, Forty Seven (now Gilead), PersImmune, Epizyme (now Ipsen) and Daiichi-Sankyo. Outside UCSD, Dr. Bejar sits on the Scientific Advisory Board for the MDS Foundation, is a prior member of the National Comprehensive Cancer Network

Guidelines Committee and has led projects for the International Working Group for MDS. He is frequently invited to speak at national and international meetings and has published articles in a variety of journals including The *New England Journal of Medicine*, *Journal of Clinical Oncology*, *Leukemia* (where he is an Associate Editor), *Blood*, and *Blood Advances*. Dr. Bejar completed his fellowship in the Massachusetts General Hospital Cancer Center/Dana-Farber Cancer Institute program and has been board certified in Internal Medicine, Hematology, and Oncology. He completed his internship in Internal Medicine at the University of Chicago followed by his residency at the Brigham and Women's Hospital in Boston where he later served as a Medical Chief Resident and an Instructor in Hematology. He holds an M.D. degree and a Neuroscience Ph.D. from UCSD and a B.S. in Physics from MIT

Corporate Information

Our headquarters are located at 66 Wellington Street West, Suite 5300, TD Bank Tower Box 48, Toronto, Ontario, MK5 1E6, Canada, and our executive offices are located at 12770 High Bluff Drive, Suite 120, San Diego, CA 92130 (telephone: 858-926-2730).

We file annual, quarterly, current reports, proxy statements and other information with the SEC. The SEC maintains an Internet site that contains our public filings and other information regarding the Company, at www.sec.gov. We make these reports available free of charge at our website http://www.aptose.com (under the "Investors — Financial Information" caption).

We are also a reporting issuer under the securities laws of every province of Canada.

Cautionary Note Regarding Forward-Looking Statements and Risk Factor Summary

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities law. We refer to such forward-looking statements and forward-looking information collectively as "forward-looking statements". These statements relate to future events or future performance and reflect our expectations and assumptions regarding our growth, results of operations, performance and business prospects and opportunities. Such forward-looking statements reflect our current beliefs and are based on information currently available to us. In some cases, forward-looking statements can be identified by terminology such as "may", "would", "could", "will", "should", "expect", "plan", "intend", "anticipate", "believe", "estimate", "predict", "potential", "continue" or the negative of these terms or other similar expressions concerning matters that are not historical facts. The forward-looking statements in this Annual Report on Form 10-K include, among others, statements regarding our future operating results, economic performance and product development efforts and statements in respect of:

- our ability to obtain the substantial capital we require to fund research and operations and to continue as a going concern;
- our compliance plans to address various notifications from Nasdaq and whether such compliance plans will be accepted by Nasdaq;
- our business strategy;
- our clinical development plans;
- our plans to conduct clinical trials and preclinical programs;
- our ability to accrue appropriate numbers and types of patients;
- our reliance on external contract research/manufacturing organizations for certain activities;
- our plans to secure and maintain strategic partnerships to assist in the further development of our product candidates and to build our pipeline;
- our ability to file and maintain intellectual property to protect our pharmaceutical assets;
- potential exposure to legal actions and potential need to take action against other entities;

•our expectations regarding the progress and the successful and timely completion of the various stages of our drug discovery, drug synthesis and formulation, preclinical and clinical studies and the regulatory approval process;

•our plans, objectives, expectations, and intentions; and

•other statements including words such as “anticipate,” “contemplate,” “continue,” “believe,” “plan,” “estimate,” “expect,” “intend,” “will,” “should,” “may,” and other similar expressions.

The forward-looking statements contained in this Annual Report on Form 10-K reflect our current views with respect to future events, are subject to significant risks and uncertainties, and are based upon a number of estimates and assumptions that, while considered reasonable by us, are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Forward-looking statements contained in this Annual Report on Form 10-K are made as of the date of this Annual Report on Form 10-K.

Except as required under applicable securities legislation, we undertake no obligation to publicly update or revise forward-looking statements, whether as a result of new information, future events or otherwise.

Risk Factor Summary

Many factors could cause our actual results, performance or achievements to be materially different from any future results, performance, or achievements that may be expressed or implied by such forward-looking statements, including, among others:

•our ability to continue as a going concern;

•our lack of product revenues;

•our need to raise substantial additional capital in the near future and that we may be unable to raise such funds when needed and on acceptable terms;

•our compliance plans to address various notifications from Nasdaq and whether such compliance plans will be accepted by Nasdaq;

•our early stage of development, particularly the inherent risks and uncertainties associated with (i) developing new drug candidates generally, (ii) demonstrating the safety and efficacy of these drug candidates in clinical studies in humans, and (iii) obtaining regulatory approval to commercialize these drug candidates;

•further equity financing, which may substantially dilute the interests of our existing shareholders;

•clinical studies and regulatory approvals of our drug candidates are subject to delays, and may not be completed or granted on expected timetables, if at all, and such delays may increase our costs and could substantially harm our business;

•our reliance on external contract research/manufacturing organizations for certain activities and if we are subject to quality, cost, or delivery issues with the preclinical and clinical grade materials supplied by contract manufacturers, our business operations could suffer significant harm;

•clinical studies are long, expensive and uncertain processes and the United States Food and Drug Administration, or “FDA”, or other similar foreign regulatory agencies that we are required to report to, may ultimately not approve any of our product candidates;

•our ability to comply with applicable regulations and standards;

•our inability to achieve our projected development goals in the time frames we announce and expect;

•difficulties in enrolling patients for clinical trials may lead to delays or cancellations of our clinical trials;

•impact of government spending cuts;

•our reliance on third parties to conduct and monitor our preclinical studies;

•our ability to attract and retain key personnel, including key executives and scientists;

•any misconduct or improper activities by our employees;

•our exposure to exchange rate risk;

•our ability to commercialize our business attributed to negative results from clinical trials;

•the marketplace may not accept our products or product candidates due to the intense competition and technological change in the biotechnical and pharmaceuticals, and we may not be able to compete successfully against other companies in our industries and achieve profitability;

•our ability to obtain and maintain patent protection;

•our ability to afford substantial costs incurred with defending our intellectual property;

•our ability to protect our intellectual property rights and not infringe on the intellectual property rights of others;

•our business is subject to potential product liability and other claims;

•potential exposure to legal actions and potential need to take action against other entities;

•commercialization limitations imposed by intellectual property rights owned or controlled by third parties;

•our ability to maintain adequate insurance at acceptable costs;

•our ability to find and enter into agreements with potential partners;

•extensive government regulation;

•data security incidents and privacy breaches could result in increased costs and reputational harm;

•our Common Share price has been and is likely to continue to be volatile;

•future sales of our Common Shares by us or by our existing shareholders could cause our Common Share price to drop;

•changing global market and financial conditions;

•changes in an active trading market in our Common Shares;

•difficulties by non-Canadian investors to obtain and enforce judgments against us because of our Canadian incorporation and presence;

•our “smaller reporting company” status;

•any failures to maintain an effective system of internal control may result in material misstatements of our financial statements, or cause us to fail to meet our reporting obligations or fail to prevent fraud;

•our broad discretion in how we use the proceeds of the sale of Common Shares

•our ability to expand our business through the acquisition of companies or businesses; and

•other risks detailed from time-to-time in our on-going filings with the SEC and Canadian securities regulators, and those which are discussed in Item 1A. Risk Factors in this Annual Report on Form 10-K.

Should one or more of these risks or uncertainties materialize, or should the assumptions described in the Item 1A. Risk Factors in this Annual Report on Form 10-K underlying those forward-looking statements prove incorrect, actual results may vary materially from those described in the forward-looking statements.

Although we have attempted to identify factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not anticipated, estimated or intended. Forward-looking statements are based upon our beliefs, estimates and opinions at the time they are made and we undertake no obligation to update forward-looking statements if these beliefs, estimates and opinions or circumstances should change, except as required by applicable law. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

We qualify all the forward-looking statements contained in this Annual Report on Form 10-K by the foregoing cautionary statements.

ITEM 1A. RISK FACTORS

Risk Factors and Uncertainties

Any of the risks and uncertainties described below could significantly and negatively affect our business, prospects, financial condition, operating results, or credit ratings, which could cause the trading price of our Common Shares to decline. Additional risks and uncertainties not presently known to us, or risks that we currently consider immaterial, could also impair our business operations or financial condition. The following discussion of risk factors contains "forward-looking" statements, as discussed above.

Risks Related to our Business

There is substantial doubt that we can remain a going concern over the next twelve months.

As of the filing date, we have sufficient liquidity to support the Company's operations until April 2025. In order for the Company to meet its capital requirements, and continue to operate, additional financing will be necessary. The Company is evaluating strategies to obtain the required additional funding for future operations. These strategies may include, but are not limited to, obtaining equity financing, and restructuring of operations to decrease expenses. However, given the challenges in the U.S. and global financial markets, that may impact the Company's ability to raise financing in the capital markets, the Company may be unable to access further equity or when needed, if at all. As the Company is primarily pursuing one compound that is licensed from a related party with significant licensing payments who will have influence on the Company, other investors may not be willing to invest in the Company. As such, there can be no assurance that the Company will be able to obtain additional liquidity when needed or under acceptable terms, if at all. The consolidated financial statements do not reflect any adjustments to the carrying amounts and classification of assets, liabilities, and reported expenses that may be necessary if the Company were unable to continue as a going concern. Such adjustments may be material. (See footnote 2.(b) Basis of presentation - Going Concern.)

We are an early-stage development company with no revenues from product sales.

We are at an early stage of development. None of our potential products has obtained regulatory approval for commercial use and sale in any country and as such, no revenues have resulted from product sales. Significant additional investment will be necessary to complete the development of any of our product candidates. Preclinical and clinical trial work must be completed before our potential products could be ready for use within the markets that we have identified. We may fail to develop any products, obtain regulatory approvals, enter or complete clinical trials or commercialize any products. We do not know whether any of our potential product development efforts will prove to be effective, meet applicable regulatory standards, obtain the requisite regulatory approvals, be capable of being manufactured at a reasonable cost or be accepted in the marketplace.

The product candidates we are currently developing are not expected to be commercially viable for at least the next several years and we may encounter unforeseen difficulties or delays in commercializing our product candidates. In addition, our potential products may not be effective or may cause undesirable side effects.

Our product candidates require significant funding to reach regulatory approval assuming positive clinical results. We are currently conducting Phase 1 clinical trials with our product candidates tuspetinib and luxeptinib. Significant additional capital will be necessary to complete the Phase 1 clinical trials, and if required, Phase 2 or Phase 3 clinical trials. Such funding for our product candidates may be difficult, or impossible to raise in the public or private markets or through partnerships. If funding or partnerships are not readily attainable, the development of our product candidates may be significantly delayed or stopped altogether. The announcement of a delay or discontinuation of development of any of our product candidates could have a negative impact on our share price.

We need to raise additional capital.

We have an ongoing need to raise additional capital. As noted above, as of March 28, 2025, we have sufficient liquidity to support the Company's operations until April 2025. To obtain the necessary capital, we must rely on some or all of the following: additional share issuances, debt issuances (including promissory notes), collaboration agreements or corporate partnerships and grants and tax credits to provide full or partial funding for our activities.

Additional funding may not be available on terms that are acceptable to us or in amounts that will enable us to carry out our business plan.

Our need for capital may require us to:

•engage in equity financings that could result in significant dilution to existing investors;

•delay or reduce the scope of or eliminate one or more of our development programs;

•obtain funds through arrangements with collaborators or others that may require us to relinquish rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves;

•license rights to technologies, product candidates or products on terms that are less favorable to us than might otherwise be available;

•considerably reduce operations; or

•cease our operations.

In addition, sales of our Common Shares in the public markets, or the perception that such sales could occur, could depress the market price of our Common Shares and impair our ability to raise capital through the sale of additional equity securities.

Our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health crises.

We may be impacted by business interruptions resulting from pandemics and public health emergencies, including war and terrorism or natural disasters including earthquakes, typhoons, floods and fires. Any such event, or a fear of the foregoing, could adversely impact us by causing operating, manufacturing, supply chain, clinical trial and project development delays and disruptions, labor shortages, travel and shipping disruption or shutdowns. We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results and financial condition.

We have a history of operating losses. We expect to incur net losses and we may never achieve or maintain profitability.

We have not been profitable since our inception in 1986. We reported net losses of $25.4 million in the fiscal year ended December 31, 2024, $51.2 million in the fiscal year ended December 31, 2023, $41.8 million in the fiscal year ended December 31, 2022, $65.4 million in the fiscal year ended December 31, 2021 and as of December 31, 2024, we had an accumulated deficit of $541.0 million. We had negative shareholders' equity of $4.5 million as of December 31, 2024 (December 31, 2023, negative shareholders' equity of $2.9 million).

We have not generated any significant revenue to date and it is possible that we will never have sufficient product sales revenue (if any) to achieve profitability. We expect to continue to incur losses for at least the next several years as we or our collaborators and licensees pursue clinical trials, research and development efforts. To become profitable, we, either alone or with our collaborators and licensees, must successfully develop, manufacture and market our current product candidates tuspetinib or luxeptinib, as well as continue to identify, develop, manufacture and market new product candidates. It is possible that we will never have significant product sales revenue or receive royalties on our licensed product candidates. If funding is insufficient at any time in the future, we may not be able to develop or commercialize our products, take advantage of business opportunities or respond to competitive pressures.

We currently do not earn any revenues from our drug candidates and are therefore considered to be in the development stage. The continuation of our research and development activities and the commercialization of the targeted therapeutic products are dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and payments from strategic partners. We have no current sources of significant payments from strategic partners.

We heavily rely on the capabilities and experience of our key executives and scientists and the loss of any of them could affect our ability to develop our products.

The loss of our executive officers could harm our operations and our ability to achieve strategic objectives. While we have employment agreements with our executive officers, such employment agreements do not guarantee their retention. We also depend on our scientific and clinical collaborators and advisors, all of whom have outside commitments that may limit their availability to us. In addition, we believe that our future success will depend in large part upon our ability to attract and retain highly skilled scientific, managerial, medical, clinical and regulatory personnel, particularly as we expand our activities and seek regulatory approvals for clinical trials. We routinely enter into consulting agreements with our scientific and clinical collaborators and advisors, key opinion leaders and academic partners in the ordinary course of our business. We also enter into contractual agreements with physicians and institutions who will recruit patients into our clinical trials on our behalf in the ordinary course of our business. Notwithstanding these arrangements, we face significant competition for these types of personnel from other companies, research and academic institutions, government entities and other organizations. We cannot predict our success in hiring or retaining the personnel we require for continued growth. The loss of the services of any of our executive officers or other key personnel could potentially harm our business, operating results or financial condition.

Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have a material adverse effect on our business.

We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include failures to comply with FDA/Health Canada regulations, provide accurate information to the FDA/Health Canada, comply with manufacturing standards we have established, comply with federal, state and provincial health-care fraud and abuse laws and regulations, 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, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Employee misconduct could also involve the improper use of information obtained in clinical trials, which could result in regulatory sanctions and serious harm to our reputation. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a substantial impact on our business and results of operations, including the imposition of substantial fines or other sanctions.

We have no sales, marketing or distribution experience and would have to invest significant financial and management resources to establish these capabilities.

We currently expect to rely heavily on third parties to launch and market our products, if they are approved. However, if we elect to develop internal sales, distribution and marketing capabilities, we will need to invest significant financial and management resources. For products where we decide to perform sales, marketing and distribution functions ourselves, we could face a number of additional risks, including:

- we may not be able to attract and build a significant marketing or sales force;
- the cost of establishing a marketing or sales force may not be justifiable in light of the revenues generated by any particular product; and
- our direct sales and marketing efforts may not be successful.

If we are unable to develop our own sales, marketing and distribution capabilities, we will not be able to successfully commercialize our products without reliance on third parties.

We may expand our business through the acquisition of companies or businesses or by entering into collaborations or by in-licensing product candidates, each of which could disrupt our business and harm our financial condition.

We may seek to expand our pipeline and capabilities by acquiring one or more companies or businesses, entering into collaborations, or in-licensing one or more product candidates. For example, in November 2021, we entered into the Tuspetinib Licensing Agreement with Hanmi, granting Aptose exclusive worldwide rights to develop and commercialize Tuspetinib. Additionally, in June 2016, we entered into a definitive agreement with CG, granting Aptose an exclusive option to research, develop, and commercialize CG-806 in all countries of the world except the Republic of Korea, for all fields of use.

Acquisitions, collaborations and in-licenses involve numerous risks, including, but not limited to:

•substantial cash expenditures;

•technology development risks;

•potentially dilutive issuances of equity securities;

•incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;

•difficulties in assimilating the operations of the acquired companies;

•potential disputes regarding contingent consideration;

•diverting our management's attention away from other business concerns;

•entering markets in which we have limited or no direct experience;

•potential loss of our key employees or key employees of the acquired companies or businesses; and

•failure of the in-licenses agents or technologies to deliver the desired activities or functions.

We have experience in entering collaborations and in-licensing product candidates; however, we cannot provide assurance that any acquisition, collaboration or in-license will result in any benefit to us. We may incorrectly judge the value or worth of an acquired company or business or in-licensed product candidate. In addition, our future success could depend in part on our ability to manage the rapid growth associated with some of these acquisitions, collaborations and in-licenses. We cannot assure you that we would be able to successfully combine our business with that of acquired businesses, manage a collaboration or integrate in-licensed product candidates. Furthermore, the development or expansion of our business may require a substantial capital investment by us.

Fluctuations in exchange rates can cause us to incur losses.

We may be exposed to fluctuations of the U.S. dollar against certain other currencies because we hold most of our cash and cash equivalents in U.S. dollars, while we incur some of our expenses in foreign currencies, primarily the Canadian dollar. Fluctuations in the value of currencies could cause us to incur currency exchange losses, and we do not currently employ a hedging strategy against exchange rate risk. As a result, changes in the exchange rate between the Canadian dollar and the U.S. dollar could materially impact our reported results of operations and distort period to period comparisons. In particular, to the extent that foreign currency-denominated (i.e., non-U.S. dollar) monetary assets do not equal the amount of our foreign currency denominated monetary liabilities, foreign currency gains or losses could arise and materially impact our financial statements. As a result of such foreign currency fluctuations, it could be more difficult to detect underlying trends in our business and results of operations. In addition, to the extent that fluctuations in currency exchange rates cause our results of operations to differ from our expectations or the expectations of our investors, the trading price of our Common Shares could be adversely affected.

Risks Related to Development, Clinical Testing and Regulatory Approval of Our Product Candidates

Fast Track Designation by the FDA may not lead to a faster development or regulatory review or approval process.

We have obtained Fast Track Designation for tuspetinib for the treatment of patients with R/R AML and FLT3 mutation. We may seek Fast Track Designation for one or more of our other product candidates. If a drug is intended for the treatment of a serious or life-threatening condition and the drug demonstrates the potential to address unmet medical needs for this condition, the product sponsor may apply for FDA Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development program.

Clinical trials are long, expensive and uncertain processes and the FDA or Health Canada may ultimately not approve any of our product candidates. We may never develop any commercial drugs or other products that generate revenues.

None of our product candidates has received regulatory approval for commercial use and sale in North America. We cannot market a pharmaceutical product in any jurisdiction until it has completed thorough preclinical testing and clinical trials in addition to that jurisdiction's extensive regulatory approval process. Approval in one country does not assure approval in another country. In general, significant research and development and clinical studies are required to demonstrate the safety and efficacy of our product candidates before we can submit any applications for regulatory approval.

Clinical trials are long, expensive and uncertain processes. Clinical trials may not start or be on schedule and the FDA, Health Canada or any other regulatory body may not ultimately approve our product candidates for commercial sale in the relevant territory. The clinical trials of any of our drug candidates could be unsuccessful, which would prevent us from advancing, commercializing or partnering the drug.

Even if the results of our preclinical studies or clinical trials are initially positive, it is possible that we will obtain different results in the later stages of drug development or that results seen in clinical trials will not continue with longer term treatment. Positive results in Phase 1 clinical trials may not necessarily repeat in larger Phase 2 or Phase 3 clinical trials.

Our preclinical studies and clinical trials may generate negative results that will not allow us to move towards the commercial use and sale of our product candidates. Furthermore, negative preclinical or clinical trial results may cause our business, financial condition, or results of operations to be materially adversely affected. Our tuspetinib and luxeptinib product candidates are currently being evaluated in Phase 1 studies, and are expected to undergo many years of testing and regulatory examinations prior to any potential regulatory approvals.

Preparing, submitting and advancing applications for regulatory approval of products is complex, expensive and time intensive and entails significant uncertainty. A commitment of substantial resources to conduct time-consuming research, preclinical studies and clinical trials is required if we are to complete development of our products.

Clinical trials of our products require that we identify and enroll a large number of patients with the illness under investigation. We may not be able to enroll a sufficient number of appropriate patients to complete our clinical trials in a timely manner, particularly in smaller indications and indications where there is significant competition for patients. If we experience difficulty in enrolling a sufficient number of patients to conduct our clinical trials, we may need to delay or terminate ongoing clinical trials and will not accomplish objectives material to our success. Delays in planned patient enrollment or lower than anticipated event rates in our current clinical trials or future clinical trials also may result in increased costs, program delays, or both.

In addition, unacceptable toxicities or adverse side effects may occur at any time in the course of preclinical studies or human clinical trials or, if any product candidates are successfully developed and approved for marketing, during commercial use of any approved products. The appearance of any unacceptable toxicities or adverse side effects could interrupt, limit, delay or abort the development of any of our product candidates or, if previously approved, necessitate their withdrawal from the market. Furthermore, disease resistance or other unforeseen factors may limit the effectiveness of our potential products.

Our failure to develop safe and commercially viable drugs would substantially impair our ability to generate revenues and sustain our operations and would materially harm our business and adversely affect our share price.

We may choose to expend our limited resources on programs that do not yield successful product candidates as opposed to indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited resources and access to capital to fund our operations, our management must make strategic decisions as to which product candidates and indications to pursue and how much of our resources to allocate to each. Our management must also evaluate the benefits of developing in-licensed or jointly owned technologies, which in some circumstances we may be contractually obligated to pursue, relative to developing other product candidates, indications or programs. Our management has broad discretion to suspend, scale down, or discontinue any or all of these development efforts, or to initiate new programs to treat other diseases. If we select and commit resources to opportunities that we are unable to successfully develop, or we forego more promising opportunities, our business, financial condition and results of operations will be adversely affected.

We may not achieve our projected development goals in the time frames we announce and expect.

We set goals for, and make public statements regarding, the expected timing of the accomplishment of objectives material to our success, such as the commencement and completion of clinical trials, the submission of a drug-regulatory application, and the expected costs to develop our product candidates. The actual timing and costs of these events can vary dramatically due to factors within and beyond our control, such as delays or failures in our IND submissions or clinical trials, issues related to the manufacturing of drug supply, uncertainties inherent in the regulatory approval process, market conditions and interest by partners in our product candidates, among other things. Our clinical trials may not be completed, we may not make regulatory submissions or receive regulatory approvals as planned; or we may not secure partnerships for any of our product candidates. Any failure to achieve one or more of these milestones as planned would have a material adverse effect on our business, financial condition and results of operations.

Government funding cuts may impact our federal research initiatives.

The U.S. government, alongside the Department of Government Efficiency (DOGE), is currently evaluating changes to spending priorities, which could lead to the suspension of payments for existing funding contracts, either temporarily or permanently. This review could significantly affect federal research initiatives, including the MyeloMATCH program, which relies on the National Cancer Institute (NCI), which is part of the National Institutes of Health (NIH), for funding. The MyeloMATCH program is a collection of precision medicine clinical trials designed for patients with myelodysplastic syndromes (MDS) and acute myeloid leukemia (AML), led by the National Clinical Trials Network and supported by the NCI Community Oncology Research Program (NCORP).

The full impact of DOGE's recent fiscal policy changes on the MyeloMATCH program remains unclear. However, any reduction in funding to the NCI could have a material adverse impact on our business, operating results, and financial condition as it relates to the MyeloMATCH program. Such financial constraints may jeopardize the MyeloMATCH program's ability to sustain current research, execute upcoming projects, and fulfill its strategic goals. Cutbacks could also affect the necessary overhead expenses of the NCI that supports clinical trials, including facility upkeep, utilities, and regulatory compliance.

Furthermore, federal funding cuts could also impact other essential health services, including Medicaid, Medicare, and programs implemented under the Affordable Care Act. Proposals to reduce federal expenditures on health programs could result in a surge of uninsured individuals, diminished access to healthcare, elevated costs for

consumers, and lower reimbursements for hospitals, nursing homes, and other healthcare providers. These budgetary constraints could place considerable pressure on the U.S. healthcare system, potentially compromising healthcare delivery and patient care nationwide. The impact of patients seeking clinical trials and potentially reducing their medical insurance coverage for standard-of-care medical procedures is unknown. Any reduction in medical insurance coverage could result in Aptose having increased patient costs in our clinical studies.

Delays in clinical testing could result in delays in commercializing our product candidates and our business may be substantially harmed.

We cannot predict whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, if at all. Our product development costs will increase if we experience delays in clinical testing. Significant clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before us, which would impair our ability to successfully commercialize our product candidates and may harm our financial condition, results of operations and prospects. The completion of clinical trials for our products, including the tuspetinib and luxeptinib clinical trials may be delayed for a number of reasons, including delays related, but not limited, to:

- failure by regulatory authorities to grant permission to proceed with a clinical trial;
- a regulatory decision to place or placing the clinical trial on hold;
- patients failing to enroll or remain in our trials at the rate we expect;
- suspension or termination of clinical trials by regulators for many reasons, including concerns about patient safety or failure of our contract manufacturers to comply with cGMP requirements;
- any changes to our manufacturing process that may be necessary or desired;
- delays or failure to obtain GMP-grade clinical supply from contract manufacturers of our products necessary to conduct clinical trials;
- product candidates demonstrating a lack of safety or efficacy during clinical trials;
- patients choosing an alternative treatment for the indications for which we are developing any of our product candidates or participating in competing clinical trials;
- patients failing to complete clinical trials due to dissatisfaction with the treatment, side effects or other reasons;
- reports of clinical testing on similar technologies and products raising safety and/or efficacy concerns;
- competing clinical trials and scheduling conflicts with participating clinicians;
- clinical investigators not performing our clinical trials on their anticipated schedule, dropping out of a trial, or employing methods not consistent with the clinical trial protocol, regulatory requirements or other third parties not performing data collection and analysis in a timely or accurate manner;
- failure of our contract research organizations, or CROs, to satisfy their contractual duties or meet expected deadlines;
- inspections of clinical trial sites by regulatory authorities or IRBs, or ethics committees or boards finding regulatory violations that require us to undertake corrective action, resulting in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study;
- one or more IRBs or ethics committees or boards rejecting, suspending or terminating the study at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; or
- failure to reach agreement on acceptable terms with prospective clinical trial sites.

Our product development costs will increase if we experience delays in testing or approval or if we need to perform more or larger clinical trials than planned. Additionally, changes in regulatory requirements and policies may occur, and we may need to amend study protocols to reflect these changes. Amendments may require us to resubmit our study protocols to regulatory authorities or IRBs or ethics committees or boards for re-examination, which may impact the cost, timing or successful completion of a trial. Delays or increased product development costs may have a material adverse effect on our business, financial condition and prospects.

We rely on contract manufacturers over whom we have limited control. If we are subject to quality, cost or delivery issues with the preclinical and clinical grade materials supplied by contract manufacturers, our business operations could suffer significant harm.

We rely on contract manufacturing organizations ("CMOs") to manufacture our product candidates for some preclinical studies and clinical trials. We rely on CMOs for manufacturing, filling, packaging, storing and shipping of drug product in compliance with cGMP regulations applicable to our products. The FDA and other regulatory agencies ensure the quality of drug products by carefully monitoring drug manufacturers' compliance with cGMP regulations. The cGMP regulations for drugs contain minimum requirements for the methods, facilities and controls used in manufacturing, processing and packing of a drug product.

We contracted with multiple CMOs for the manufacture of tuspetinib and luxeptinib to supply the active ingredient and then drug product for our clinical trials. The synthesis of luxeptinib is challenging from a scale-up synthetic chemistry perspective. We pre-qualified CMOs to have the capacity, the systems and the experience to supply tuspetinib and luxeptinib for our clinical trials. We have qualified the manufacturing facilities and the FDA has also performed site audits for our selected CMOs. Despite the efforts to prequalify CMOs, delays and errors may occur, and any such manufacturing failures, delays or compliance issues could cause delays in the completion of our clinical trial programs.

There can be no assurances that CMOs will be able to meet our timetable and requirements. We have contracted with alternate suppliers in the event our current CMOs are unable to scale up production, or if our current CMOs otherwise experience any other significant problems in the manufacture of tuspetinib and luxeptinib. However, it is possible that all third-party manufacturing sources may experience failure or delays and may demand commercially unreasonable terms, which may lead to further delays in the development of our product candidates. Further, contract manufacturers must operate in compliance with cGMP and failure to do so could result in, among other things, the disruption of product supplies. Our dependence upon third parties for the manufacture of our products may adversely affect our profit margins and our ability to develop and deliver products on a timely and competitive basis.

Some components of our products are manufactured by third parties outside of the United States, and our business may be harmed by legal, regulatory, economic, political and public health risks associated with international trade and those markets.

We have third-party manufacturing partners in South Korea, Germany and the United Kingdom; in addition, some materials used by our third-party manufacturers are supplied by companies located in other countries, including China. Our reliance on suppliers and manufacturers in foreign markets creates risks inherent in doing business in foreign jurisdictions, including: (a) the burdens of complying with a variety of foreign laws and regulations, including laws relating to the importation and taxation of goods (b) public health crises, such as pandemics and epidemics, in the countries where our suppliers and manufacturers are located; (c) transportation interruptions or increases in transportation costs; and (d) foreign intellectual property infringement risks.

Tensions between the United States and China have increased over the past few years as a result of disputes in areas including trade policy, intellectual property, cybersecurity and data privacy. Our business could be harmed if relations between the United States and China worsen or if either government imposes additional policies, tariffs or sanctions.

If we have difficulty enrolling patients in clinical trials, the completion of the trials may be delayed or canceled.

As our product candidates advance from preclinical testing to clinical testing, and then through progressively larger and more complex clinical trials, we will need to enroll an increasing number of patients that meet our eligibility criteria. There is significant competition for recruiting cancer patients in clinical trials, and we may be unable to enroll the patients we need to complete clinical trials for cancer indications on a timely basis or at all. Certain factors that affect enrollment of patients in our clinical trials are impacted by external forces that may be beyond our control. Such factors include, but are not limited to, the following:

- size and nature of the patient population;
- eligibility and exclusion criteria for the trial;
- design of the study protocol;
- competition with other companies for clinical sites or patients;
- the perceived risks and benefits of the product candidate under study;
- the patient referral practices of physicians; and
- the number, availability, location and accessibility of clinical trial sites.

If we are unable to successfully develop companion diagnostics for our therapeutic product candidates, or experience significant delays in doing so, we may not achieve marketing approval or realize the full commercial potential of our therapeutic product candidates.

We plan to develop companion diagnostics for our therapeutic product candidates. We expect that, at least in some cases, regulatory authorities may require the development and regulatory approval of a companion diagnostic as a condition to approving our therapeutic product candidates. We have limited experience and capabilities in developing or commercializing diagnostics and plan to rely in large part on third parties to perform these functions. We do not currently have any agreement in place with any third party to develop or commercialize companion diagnostics for any of our therapeutic product candidates.

Companion diagnostics are subject to regulation by the FDA, Health Canada and comparable foreign regulatory authorities as medical devices and may require separate regulatory approval or clearance prior to commercialization. If we, or any third parties that we engage to assist us, are unable to successfully develop companion diagnostics for our therapeutic product candidates, or experience delays in doing so, our business may be substantially harmed.

We rely and will continue to rely on third parties to conduct and monitor many of our preclinical studies and our clinical trials, and their failure to perform as required could cause substantial harm to our business.

We rely and will continue to rely on third parties to conduct a significant portion of our preclinical and clinical development activities. Preclinical activities include *in vivo* studies providing access to specific disease models, pharmacology and toxicology studies, and assay development. Clinical development activities include trial design, regulatory submissions, clinical patient recruitment, clinical trial monitoring, clinical data management and analysis, safety monitoring and project management, contract manufacturing and quality assurance. If there is any dispute or disruption in our relationship with third parties, or if they are unable to provide quality services in a timely manner and at a feasible cost, our active development programs will face delays. Further, if any of these third parties fails to perform as we expect or if their work fails to meet regulatory requirements, our testing could be delayed, canceled or rendered ineffective.

Negative results from clinical trials or studies of others and adverse safety events involving the targets of our products may have an adverse impact on our future commercialization efforts.

From time to time, studies or clinical trials on various aspects of biopharmaceutical products are conducted by academic researchers, competitors or others. The results of these studies or trials, when published, may have a significant effect on the market for the biopharmaceutical product that is the subject of the study. The publication of negative results of studies or clinical trials or adverse safety events related to our product candidates, or the therapeutic

areas in which our product candidates compete, could adversely affect our share price and our ability to finance future development of our product candidates, and our business and financial results could be materially and adversely affected.

The design or our execution of clinical trials may not support regulatory approval.

The design or execution of a clinical trial can determine whether its results will support regulatory approval and flaws in the design or execution of a clinical trial may not become apparent until the clinical trial is well advanced. In some instances, there can be significant variability in safety or efficacy results between different trials of the same product candidate due to numerous factors, including changes in trial protocols, differences in size and type of the patient populations, adherence to the dosing regimen and other trial protocols and the rate of dropout among clinical trial participants. We do not know whether any Phase 2, Phase 3 or other clinical trials that we may conduct will demonstrate consistent or adequate efficacy and safety to obtain regulatory approval to market our product candidates.

Further, the FDA, Health Canada and comparable foreign regulatory authorities will have some discretion in the approval process and in determining when or whether regulatory approval will be obtained for any of our product candidates. Our product candidates may not be approved even if they achieve their primary endpoints in future Phase 3 clinical trials or registration trials. The FDA, Health Canada or other regulatory authorities may disagree with our trial design and our interpretation of data from preclinical studies and clinical trials. In addition, any of these regulatory authorities may change requirements for the approval of a product candidate even after reviewing and providing comments or advice on a protocol for a pivotal Phase 3 clinical trial that has the potential to result in approval by the FDA, Health Canada or another regulatory agency. In addition, any of these regulatory authorities may also approve a product candidate for fewer or more limited indications than we request or may grant approval contingent on the performance of costly post-marketing clinical trials. The FDA, Health Canada or other regulatory authorities may not approve the labeling claims that we believe would be necessary or desirable for the successful commercialization of our product candidates.

As a result of intense competition and technological change in the biotechnical and pharmaceutical industries, the marketplace may not accept our products or product candidates, and we may not be able to compete successfully against other companies in our industry and achieve profitability.

Many of our competitors have:

•drug products that have already been approved or are in development;

•large, well-funded research and development programs in the biotechnical and pharmaceutical fields;

•substantially greater financial, technical and management resources, stronger intellectual property positions and greater manufacturing, marketing and sales capabilities, areas in which we have limited or no experience; and / or

•significantly greater experience in undertaking preclinical testing and clinical trials of new or improved pharmaceutical products and obtaining required regulatory approvals.

Consequently, our competitors may obtain FDA, Health Canada and other regulatory approvals for product candidates sooner and may be more successful in manufacturing and marketing their products than we or our collaborators are.

Our competitors' existing and future products, therapies and technological approaches will compete directly with the products we seek to develop. Current and prospective competing products may be more effective than our existing and future products as far as they may provide greater therapeutic benefits for a specific problem or may offer easier delivery or comparable performance at a lower cost.

For tuspetinib and luxeptinib in AML, examples of companies that have developed or are pursuing different therapies include AbbVie and Roche (VENCLEXTA), Agios/Servier (TIBSOVO), Arog (crenolanib), Astellas (XOSPATA), Celgene/BMS (IDHIFA), Curis (emavusertib), Daiichi Sankyo (quizartinib), Jazz (VYXEOS), Kronos Bio (lanraplenib), Kura (KO-539), Novartis (RYDAPT), Pfizer (MYLOTARG), Rigel (REZLIDHA), and Syndax (revumenib, SNDX-5613), among others.

For luxeptinib in B cell malignancies, examples of companies that have developed or are pursuing different approaches to BTK inhibition, both for the wild type and C481S-mutant forms, include AbbVie (IMBRUVICA), AstraZeneca (CALQUENCE), Beigene Co., Ltd. (Zanubrutinib), Eli Lilly (pirtobrutinib), and Merck (nemtabrutinib), among others.

Any product candidate that we develop and that obtains regulatory approval must then compete for market acceptance and market share. Our products may not gain market acceptance among physicians, patients, healthcare payers, insurers, the medical community and other stakeholders. The degree of market acceptance of our product candidates, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and potential advantages compared to alternative treatments;
- the ability to offer our product candidates for sale at competitive prices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- sufficient third-party coverage or reimbursement; and
- the prevalence and severity of any side effects.

Further, any products we develop may become obsolete or face generic entry before we recover any expenses we incurred in connection with the development of these products. As a result, we may never achieve profitability.

Risks Related to our Intellectual Property

We may be unable to obtain patents to protect our technologies from other companies with competitive products, and patents of other companies could prevent us from manufacturing, developing or marketing our products.

Patent protection

The patent positions of pharmaceutical and biotechnology companies are uncertain and involve complex legal and factual questions. The United States Patent and Trademark Office ("U.S.P.T.O.") and many other patent offices in the world have not established a consistent policy regarding the breadth of claims that they will allow in biotechnology patents.

Our pending patent applications may not result in issued patents and our issued patents may not be held valid and enforceable if challenged. Competitors may be able to circumvent any such issued patents by adoption of a competitive, though non-infringing product or process. Interpretation and evaluation of pharmaceutical or biotechnology patent claims present complex and often novel legal and factual questions. Our business could be adversely affected by increased competition in the event that any patent granted to it is held to be invalid or unenforceable or is inadequate in scope to protect our operations.

Allowable patentable subject matter and the scope of patent protection obtainable may differ between jurisdictions. If a patent office allows broad claims, the number and cost of patent interference proceedings in the United States, or analogous proceedings in other jurisdictions and the risk of infringement litigation may increase. If it allows narrow claims, the risk of infringement may decrease, but the value of our rights under our patents, licenses and patent applications may also decrease.

The scope of the claims in a patent application can be significantly modified during prosecution before the patent is issued. Consequently, we cannot know whether our pending applications will result in the issuance of patents or, if any patents are issued, whether they will provide us with significant proprietary protection or will be circumvented, invalidated or found to be unenforceable.

Publication of discoveries in scientific or patent literature often lags behind actual discoveries. Patent applications filed in the United States generally will be published 18 months after the filing date unless the applicant certifies that the invention will not be the subject of a foreign patent application. In many other jurisdictions, such as Canada, patent applications are published 18 months from the priority date. We may not be aware of such literature. Accordingly, we cannot be certain that the named inventors of our products and processes were the first to invent that product or process or that we were the first to pursue patent coverage for our inventions.

In addition, United States patent laws may change which could prevent or limit us from filing patent applications or patent claims in the United States to protect our products and technologies or limit the exclusivity periods that are available to patent holders for United States patents. For example, the Leahy-Smith America Invents Act, (the "Leahy-Smith Act") was signed into law in 2011 and includes a number of significant changes to United States patent law. These include changes to transition from a "first-to-invent" system to a "first-to-file" system and to the way issued patents are challenged. These changes may favor larger and more established companies that have more resources to devote to patent application filing and prosecution. It is not clear what, if any, impact the Leahy-Smith Act will ultimately have on the cost of prosecuting our patent applications in the United States, our ability to obtain patents in the United States based on our discoveries and our ability to enforce or defend our United States issued patents.

Until such time, if ever, that further patents are issued to us, we will rely upon the law of trade secrets to the extent possible given the publication requirements under international patent treaty laws and/or requirements under foreign patent laws to protect our technology and our products incorporating the technology. In this regard, we have adopted certain confidentiality procedures. These include: limiting access to confidential information to certain key personnel; requiring all directors, officers, employees and consultants and others who may have access to our intellectual property to enter into confidentiality agreements which prohibit the use of or disclosure of confidential information to third parties; and implementing physical security measures designed to restrict access to such confidential information and products. Our ability to maintain the confidentiality of our technology is crucial to our ultimate possible commercial success. The procedures adopted by us to protect the confidentiality of our technology may not be effective, third parties may gain access to our trade secrets or our trade secrets or those of our collaborators may be independently discovered by others. Our collaborators, employees and consultants and other parties may not comply with the terms of their agreements with us, and we might be unable to adequately enforce our rights or obtain adequate compensation for the damages caused by unauthorized disclosure or use of our trade secrets or know how. Further, by seeking patent protection in various countries, it is inevitable that a substantial portion of our technology will become available to our competitors, through publication of such patent applications.

Enforcement of intellectual property rights

Protection of the rights revealed in published patent applications can be complex, costly and uncertain. Our commercial success depends in part on our ability to maintain and enforce our proprietary rights. If third parties engage in activities that infringe our proprietary rights, our management's focus will be diverted and we may incur significant costs in asserting our rights. We may not be successful in asserting our proprietary rights, which could result in our patents being held invalid or a court holding that the third party is not infringing, either of which would harm our competitive position.

Others may design around our patented technology. We may have to participate in interference proceedings declared by the U.S.P.T.O., European opposition proceedings, or other analogous proceedings in other parts of the world to determine priority of invention and the validity of patent rights granted or applied for, which could result in substantial cost and delay, even if the eventual outcome is favorable to us. Our pending patent applications, even if issued, may not be held valid or enforceable.

Our products and product candidates may infringe the intellectual property rights of others, or others may infringe on our intellectual property rights which could increase our costs.

Our success also depends on avoiding infringement of the proprietary technologies of others. In particular, there may be certain issued patents and patent applications claiming subject matter which we or our collaborators may be required to license in order to research, develop or commercialize tuspetinib or luxeptinib. In addition, third parties may assert infringement or other intellectual property claims against us. An adverse outcome in these proceedings could subject us to significant liabilities to third parties, require disputed rights to be licensed from third-parties or require us to cease or modify our use of the technology. If we are required to license third-party technology, a license under such patents and patent applications may not be available on acceptable terms or at all. Further, we may incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another's proprietary technology. We may also need to bring claims against others who we believe are infringing our rights in order to become or remain competitive and successful. Any such claims can be time consuming and expensive to pursue.

We may incur substantial cost in defending our intellectual property.

While we believe that our products and technology do not infringe proprietary rights of others, third parties may assert infringement claims in the future and such claims could be successful. Even if challenges are unsuccessful, we could incur substantial costs in defending ourselves against patent infringement claims brought by others or in prosecuting suits against others. In addition, others may obtain patents that we would need to license, which may not be available to us on reasonable terms. Whether we are able to obtain a necessary license would depend on the terms offered, the degree of risk of infringement and the need for the patent.

We have licensed important portions of our intellectual property from Hanmi and CG, and are subject to significant obligations under those license agreements.

The rights we hold under our license agreements with Hanmi and CG are critical to our business.

Our tuspetinib program is built around patents exclusively in-licensed from Hanmi, which permit us to research, develop and commercialize tuspetinib worldwide. Under the Tuspetinib Licensing Agreement, we are subject to significant obligations, including diligence obligations with respect to development and commercialization activities, payment obligations upon achievement of certain milestones and royalties on product sales, as well as other material obligations. Hanmi is eligible for payments upon the achievement of developmental, regulatory and commercial-based milestones, as well as tiered royalties on product sales.

Our luxeptinib program is built around patents exclusively in-licensed from CG, which permit us to research, develop and commercialize luxeptinib worldwide except for the Republic of Korea. Under our agreement with CG, we are subject to significant obligations, including diligence obligations with respect to development and commercialization activities, payment obligations upon achievement of certain milestones and royalties on product sales, as well as other material obligations. CG is eligible for payments upon the achievement of developmental, regulatory and commercial-based milestones, as well as low single-digit royalties on product sales.

If there is any conflict, dispute, disagreement or issue of non-performance between us and Hanmi or CG regarding our rights or obligations under the respective license agreements, including any conflict, dispute or disagreement arising from our failure to satisfy diligence or payment obligations under such agreements, Hanmi or CG may have a right to terminate the respective license. The loss of this license agreement could materially and adversely affect our ability to use intellectual property that could be critical to our drug discovery and development efforts, as well as our ability to enter into future collaboration, licensing and/or marketing agreements for one or more affected drug candidates or development programs.

Our business depends, in part, on our ability to use technology that we have licensed or will in the future license from third parties, including CG, and, if these licenses were terminated or if we were unable to license additional technology we may need in the future, our business will be adversely affected.

We currently hold licenses for certain technologies that are or may be critical to our current and subsequent product candidates. These include our exclusive license to research, develop and commercialize luxeptinib worldwide except for the Republic of Korea, and our exclusive license to develop and commercialize tuspetinib worldwide. Both licenses are subject to termination in the event of a breach by us of the license, if we fail to cure the breach following notice and the passage of a cure period. We may need to acquire additional licenses in the future to technologies developed by others. Furthermore, future license agreements may require us to make substantial milestone payments. We may also be obligated to make royalty payments on the sales, if any, of products resulting from the license. The termination of a license or the inability to license future technologies on acceptable terms may adversely affect our ability to develop or sell our products.

Legal and Regulatory Risk

Our ability to develop, produce and market our products is subject to extensive government regulation.

Government regulation is a significant factor in the development, production and marketing of our products. Research and development, testing, manufacture, marketing and sales of pharmaceutical products or related products are subject to extensive regulatory oversight, often in multiple jurisdictions, which may cause significant additional costs and/or delays in bringing products to market, and in turn, may cause significant losses to investors. The regulations applicable to our product candidates in a given jurisdiction may change. Even if granted, regulatory approvals may include significant limitations on the uses for which products can be marketed or may be conditioned on the conduct of post-marketing surveillance studies. Failure to comply with applicable regulatory requirements can, among other things, result in delay in approving or refusal to approve a product candidate, interruptions of clinical trials or manufacturing, suspension or withdrawal of regulatory approval, warning letters, the imposition of civil penalties or other monetary payments, product recall or seizure, operating restrictions, injunctions or criminal prosecution. In addition, regulatory agencies many not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates.

Requirements for regulatory approval vary widely from country to country. Regulatory authorities in other countries must approve a product prior to the commencement of marketing the product. The time required to obtain any such approval may be longer or shorter than in Canada or the United States. Approved drugs, as well as their manufacturers, are subject to continuing and ongoing review, and discovery of problems with these products or the failure to adhere to manufacturing or quality control requirements may result in regulatory restrictions being imposed.

Current and future legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates and may adversely affect the prices we may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could, among other things, prevent or delay marketing approval of our product candidates, restrict or regulate post approval activities and affect our ability to profitably sell any products for which we obtain marketing approval.

For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care Education Reconciliation Act, or collectively the Affordable Care Act, was enacted to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Additionally, the Drug Supply Chain Security Act, enacted in 2013, imposed new obligations on manufacturers of pharmaceutical products related to product tracking and tracing.

Since its enactment, there have been judicial, executive and Congressional challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and amendments to the Affordable Care Act in the future. On June 17, 2021, the United States Supreme Court dismissed the most recent judicial challenge to the Affordable Care Act without specifically ruling on the constitutionality of the Affordable Care Act. Prior to the Supreme Court's decision, President Biden issued an executive order initiating a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the Affordable Care Act marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the Affordable Care Act. It is possible that the Affordable Care Act will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and the healthcare reform measures of the Biden administration will impact the Affordable Care Act and our business.

We expect ongoing initiatives in the United States and internationally to increase pressure on drug pricing. Regulations that mandate price controls and limitations on patient access to products or establish prices paid by government entities or programs may impact product candidates that we may successfully develop. Pharmaceutical product pricing is subject to enhanced government and public scrutiny and calls for reform. Some U.S. states have implemented, and other U.S. states are considering, pharmaceutical price controls or patient access constraints under the Medicaid program, and some U.S. states are considering price-control regimes that would apply to broader segments of their populations that are not Medicaid eligible. Efforts by government officials or legislators to implement measures to regulate prices or payments for pharmaceutical products, including legislation on drug importation, could have an adverse effect on anticipated revenues from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop drug candidates.

Legislative and regulatory proposals have also been made to expand post approval requirements and restrict sales and promotional activities for pharmaceutical products in the U.S. Any healthcare reforms enacted in the future may, like the Affordable Care Act, be phased in over a number of years but, if enacted, could reduce our revenue, increase our costs, or require us to revise the ways in which we conduct business or put us at risk for loss of business. It is not clear whether additional legislative changes will be enacted, or whether the current regulations, guidance or interpretations will be changed, or what the impact of such changes on our business, if any, may be.

In Canada, the Patented Medicine Prices Review Board (the "PMPRB") has jurisdiction to control prices of patented medicines that are considered excessive. Recent changes to the regulations governing the PMPRB are intended to lower the prices of patented medicines even further. The PMPRB's jurisdiction could extend to any of our drug products that are approved in Canada and protected under Canadian patents, with an adverse effect on the prices that we would otherwise obtain for these drugs in the relevant market.

Coverage and adequate reimbursement may not be available for our product candidates, which could make it difficult for us to sell our products profitably.

Market acceptance and sales of any drug candidates that we develop will depend in part on the extent to which reimbursement for these products and related treatments will be available from third party payors, including government health administration authorities and private health insurers. Third party payors decide which drugs they will pay for and establish reimbursement levels. Third party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. However, decisions regarding the extent of coverage and amount of reimbursement to be provided for each of our drug candidates will be made on a plan-by-plan basis. One payor's determination to provide coverage for a product does not assure that other payors will also provide coverage, and adequate reimbursement, for the product. Additionally, a third-party payor's decision to provide coverage for a drug does not imply that an adequate reimbursement rate will be approved. Each plan determines whether or not it will provide coverage for a drug, what amount it will pay the manufacturer for the drug, and on what tier of its formulary the drug will be placed. The position of a drug on a formulary generally determines the copayment that a patient will need to make to obtain the drug and can strongly influence the adoption of a drug by patients and physicians. Patients who are prescribed treatments for their conditions and providers performing the prescribed 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.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. 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 product 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 product for which we obtain marketing approval. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize any drug candidates that we develop.

Additionally, there have been a number of legislative and regulatory proposals to change the healthcare system in the United States and in some foreign jurisdictions, including Canada, that could affect our ability to sell any future drugs profitably. These legislative and regulatory changes may negatively impact the reimbursement for any future drugs, following approval.

We are subject to U.S. and Canadian healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm, fines, disgorgement, exclusion from participation in government healthcare programs, curtailment or restricting of our operations and diminished profits and future earnings.

Healthcare providers, physicians and others will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our future arrangements with healthcare providers, patients and third-party payors could expose us to broadly applicable U.S. and Canadian laws and regulations relating to fraud abuse and healthcare more generally that may constrain the business or financial arrangements and collaborative partners through which we market, sell and distribute any products for which we obtain marketing approval.

Efforts to ensure that our collaborations with third parties, and our business generally, will comply with applicable U.S. and Canadian healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental laws and regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, imprisonment, exclusion of products from government funded healthcare programs, contractual damages, reputational harm, disgorgement, curtailment or restricting of our operations, any of which could substantially disrupt our operations and diminish our profits and future earnings. If any of 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 criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. The risk of the Company being found in violation of these laws is increased by the fact that many of them have not been fully interpreted regulatory authorities or courts, and their provisions are open to a variety of interpretations.

If product liability, clinical trial liability or environmental liability claims are brought against us or we are unable to obtain or maintain product liability, clinical trial or environmental liability insurance, we may incur substantial liabilities that could reduce our financial resources.

The clinical testing and commercial use of pharmaceutical products involves significant exposure to product liability, clinical trial liability, environmental liability and other risks that are inherent in the testing, manufacturing and marketing of our products. These liabilities, if realized, could have a material adverse effect on our business, results of operations and financial condition.

We have obtained limited product liability insurance coverage for our clinical trials on humans; however, our insurance coverage may be insufficient to protect us against all product liability damages. Regardless of merit or eventual outcome, liability claims may result in decreased demand for a future product, injury to reputation, withdrawal of clinical trial volunteers, loss of revenue, costs of litigation, distraction of management and substantial monetary awards to plaintiffs. Additionally, if we are required to pay a product liability claim, we may not have sufficient financial resources to complete development or commercialization of any of our product candidates and our business and results of operations will be adversely affected. In general, insurance will not protect us against some of our own actions, such as negligence.

As our development activities progress towards the commercialization of product candidates, our liability coverage may not be adequate, and we may not be able to obtain adequate product liability insurance coverage at a reasonable cost, if at all. Even if we obtain product liability insurance, our financial position may be materially adversely affected by a product liability claim. A product liability claim could also significantly harm our reputation and delay market acceptance of our product candidates. Additionally, product recalls may be issued at the direction of the FDA, other government agencies or other companies having regulatory control for pharmaceutical sales. If a product recall occurs in the future, such a recall could adversely affect our business, financial condition or reputation.

If we 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 operations involve the use of hazardous and flammable materials, including chemicals and radioactive and biological materials. Our operations also 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. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties.

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, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

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 may also result in substantial fines, penalties or other sanctions.

We may be unable to obtain partnerships for our product candidates, which could curtail future development and negatively affect our share price. In addition, our partners might not satisfy their contractual responsibilities or devote sufficient resources to our partnership.

Our strategy for the research, development and commercialization of our products requires entering into various arrangements with corporate collaborators, licensors, licensees and others, and our commercial success is dependent upon these outside parties performing their respective contractual responsibilities. The amount and timing of resources that such third parties will devote to these activities may not be within our control. These third parties may not perform their obligations as expected and our collaborators may not devote adequate resources to our programs. In addition, we could become involved in disputes with our collaborators, which could result in a delay or termination of the related development programs or result in litigation. We intend to seek additional collaborative arrangements to develop and commercialize some of our products. We may not be able to negotiate collaborative arrangements on favorable terms, or at all, in the future, and our current or future collaborative arrangements may not be successful.

If we cannot negotiate collaboration, license or partnering agreements, we may never achieve profitability and we may not be able to continue to develop our product candidates. Continuing Phase 1 and commencing Phase 2 and Phase 3 clinical trials for tuspetinib and luxeptinib would require significant amounts of funding and such funding may not be available to us.

Risks Related to Our Common Shares

Our share price has been and is likely to continue to be volatile and an investment in our Common Shares could suffer a decline in value.

You should consider an investment in our Common Shares as risky and invest only if you can withstand a significant loss and wide fluctuations in the market value of your investment. The market price of our Common Shares has been highly volatile and is likely to continue to be volatile. This leads to a heightened risk of securities litigation pertaining to such volatility. Factors affecting our Common Share price include but are not limited to:

- the progress of our pre-clinical and clinical trials;
- our ability to obtain partners and collaborators to assist with the future development of our products;
- general market conditions;
- our ability to continue as a going concern;
- announcements of technological innovations or new product candidates by us, our collaborators or our competitors;
- published reports by securities analysts;
- developments in patent or other intellectual property rights;
- the cash and investments held by us and our ability to secure future financing;
- our ability to raise additional capital;
- public concern as to the safety and efficacy of drugs that we and our competitors develop;
- shareholder interest in our Common Shares; and
- low liquidity in the daily trading volume of our Common Shares

Future sales of our Common Shares by us or by our existing shareholders could cause our share price to fall.

The issuance of Common Shares by the Company could result in significant dilution in the equity interest of existing shareholders and adversely affect the market price of our Common Shares. Sales by existing shareholders of a large number of our Common Shares in the public market and the issuance of Common Shares in connection with strategic alliances, or the perception that such additional sales could occur, could cause the market price of our Common Shares to decline and have an undesirable impact on our ability to raise capital.

We are susceptible to stress in the global economy and therefore, our business may be affected by the current and future global financial conditions.

If the increased level of volatility and market turmoil that have marked recent years continue, our operations, business, financial condition and the trading price of our Common Shares could be materially adversely affected. Furthermore, general economic conditions may have a significant impact on us, including our ability to raise capital, our commercialization opportunities and our ability to establish and maintain arrangements with others for research, manufacturing, product development and sales.

Failure to meet the TSX's and the Nasdaq's continued listing requirements could result in the delisting of our Common Shares, negatively impact the price of our Common Shares and negatively impact our ability to raise additional capital.

If we fail to satisfy the continued listing requirements of the Nasdaq Capital Market, such as the corporate governance requirements or the minimum closing bid price requirement, the exchange may take steps to delist our Common Shares. A delisting would likely have a negative effect on the price of our Common Shares and would impair your ability to sell or purchase our Common Shares when you wish to do so. In the event of a delisting notification, we anticipate that we would take actions to restore our compliance with applicable exchange requirements, such as stabilize our market price, improve the liquidity of our Common Shares, prevent our Common Shares from dropping

below such exchange's minimum bid price requirement, or prevent future non-compliance with such exchange's listing requirements.

On July 16, 2024, the Company received a deficiency letter (the "Deficiency Letter") from the Nasdaq, notifying the Company that, for the prior thirty consecutive business days, the closing bid price for the Company's Common Shares was below the minimum $1.00 per Common Share required for continued listing on The Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(a)(2) (the "Minimum Bid Price Requirement"). The Deficiency Letter had no immediate effect on the listing of the Company's Common Shares, and its Common Shares continued to trade on The Nasdaq Capital Market and the Toronto Stock Exchange ("TSX") under the symbol "APS." The Company's listing on the TSX is independent and will not be affected by the Company's Nasdaq listing status. The Company was given 180 calendar days, or until January 13, 2025, to regain compliance with the Minimum Bid Price Requirement. If at any time before January 13, 2025, the bid price of the Company's Common Shares closed at $1.00 per Common Share or more for a minimum of 10 consecutive business days, Nasdaq would have provided written confirmation that the Company regained compliance. If the Company did not regain compliance with the Minimum Bid Price Requirement by January 13, 2025, the Company may, at the discretion of Nasdaq, be afforded a second 180 calendar day period to regain compliance. To qualify for the extension, the Company was required to meet the continued listing requirement for the market value of publicly held shares and all other initial listing standards for The Nasdaq Capital Market, with the exception of the bid price requirement. On March 14, 2025, Nasdaq confirmed that we had regained compliance with the Minimum Bid Price Requirement.

On April 2, 2024, the Company received a letter (the "Notification Letter") from The Nasdaq Stock Market ("Nasdaq") stating that the Company was not in compliance with Nasdaq Listing Rule 5550(b)(1) (the "Rule") because the stockholders' equity of the Company as of December 31, 2023, as reported in the Company's Annual Report on Form 10-K filed with the SEC on March 26, 2024, was below the minimum requirement of $2,500,000. Notwithstanding the Notification Letter, the Company believes that following the closing of its financings on January 30, 2024 and January 31, 2024, respectively (the "Financings"), as disclosed in the Company's recently filed Annual Report on Form 10-K that as of the dates of the closing of the Financings that the Company's stockholders' equity exceeded $2,500,000. Additionally, the Company does not have a market value of listed securities of $35 million, or net income from continued operations of $500,000 in the most recently completed fiscal year or in two of the last three most recently completed fiscal years, the alternative quantitative standards for continued listing on the Nasdaq Capital Market. The Notification Letter received had no immediate effect on the Company's continued listing on the Nasdaq Capital Market, subject to the Company's compliance with the other continued listing requirements. Pursuant to Nasdaq's Listing Rules, the Company had 45 calendar days (until May 17, 2024), to submit a plan to evidence compliance with the Rule (a "Compliance Plan").

The Company submitted the Compliance Plan on May 17, 2024, and received an extension to September 30, 2024 to regain compliance. As of September 30, 2024, the Company had not gained compliance with the requirement. Accordingly, on October 1, 2024, the Company received a staff determination letter from the Listing Department stating that the Company did not meet the terms of the extension because it did not complete its proposed financing initiatives to regain compliance. On October 8, 2024, the Company requested an appeal and hearing of the Listing Department's determination, which automatically stayed Nasdaq's delisting of the Company's Common Shares pending the appeal panel's decision, such hearing was scheduled for November 21, 2024. The Company submitted a revised plan to regain compliance on November 11, 2024 and on December 19, 2024, the Company announced that the panel granted the Company's request for an extension to evidence compliance with all applicable criteria for continued listing on The Nasdaq Stock Market. On or before March 31, 2025, the Company will be required to demonstrate compliance with Nasdaq Listing Rule 5550(b)(1) requiring the Company to have a minimum of $2.5 million in shareholders' equity (the "Equity Rule") to continue its listing on the Nasdaq Stock Market.

As of March 28, 2025, the Company has not yet been able to regain compliance with the Nasdaq's minimum equity requirement of $2.5 million (the "Stockholders' Equity Requirement").

On February 29, 2024, the Company received a deficiency letter (the "2024 Deficiency Letter") from the Nasdaq Listing Qualifications Department of The Nasdaq Stock Market LLC ("Nasdaq") notifying the Company that the Company's January 2024 private placement (the "Private Placement") of securities to Hanmi violated rule 5635(d) because the Company did not obtain shareholder approval prior to such issuance. Nasdaq stated that the Private Placement involved the issuance of greater than 20% of the issued and outstanding Common Shares of the Company

at a discount to the Nasdaq official closing price on January 25, 2024, the date of the subscription agreement between the Company and Hanmi. The 2024 Deficiency Letter had no immediate effect on the listing of the Company's Common Shares. In accordance with the Nasdaq Listing Rules, the Company was given forty-five (45) calendar days, or until April 14, 2024, to submit a plan to regain compliance.

On April 25, 2024, the Company received a letter from the Listing Qualifications Department of Nasdaq (the "Staff") notifying the Company of the Staff's determination that the Company had regained compliance with Nasdaq Listing Rule 5635(d) and the Staff had determined that the matter was now closed. Pursuant to the Company's plan to regain compliance, on April 26, 2024, the Company announced that it had amended the warrant agreement with Hanmi to prohibit the exercise of the Hanmi warrants in excess of the Nasdaq 19.99% limitation (the "Nasdaq 19.99% Cap"), unless shareholder approval is first obtained to exceed the Nasdaq 19.99% Cap.

Compliance with changing corporate governance regulations and public disclosure may result in additional expenses.

Changing laws, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act (new SEC regulations and Nasdaq rules), and Bill C-59 and the corresponding amendments to the Competition Act (Canada) are creating uncertainty for companies such as ours. These laws, regulations and standards are subject to varying interpretations in some 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, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We are committed to maintaining high standards of corporate governance and public disclosure. As a result, our efforts to comply with evolving laws, regulations and standards have resulted in, and are likely to continue to result in, increased general and administrative expenses and management time related to compliance activities. If we fail to comply with these laws, regulations and standards, our reputation may be harmed and we might be subject to sanctions or investigation by regulatory authorities, such as the SEC. Any such action could adversely affect our financial results and the market price of our Common Shares.

Certain Canadian laws could delay or deter a change of control.

Limitations on the ability to acquire and hold our Common Shares may be imposed by the Competition Act in Canada. This legislation permits the Commissioner of Competition of Canada to review any acquisition of a significant interest in the Company and grants the Commissioner jurisdiction to challenge such an acquisition before the Canadian Competition Tribunal if the Commissioner believes that it would, or would be likely to, result in a substantial lessening or prevention of competition in any market in Canada. The Investment Canada Act subjects an acquisition of control of a company by a non-Canadian to government review if the value of our assets, as calculated pursuant to the legislation, exceeds a threshold amount. A reviewable acquisition may not proceed unless the relevant minister is satisfied that the investment is likely to result in a net benefit to Canada. Any of the foregoing could prevent or delay a change of control and may deprive or limit strategic opportunities for our shareholders to sell their shares.

The exercise of all or any number of outstanding stock options, the award of any additional options, warrants, restricted stock units or other stock-based awards or any issuance of shares to raise funds or acquire a business may dilute your Common Shares.

We have in the past and may in the future grant to some or all of our directors, officers and employees options to purchase our Common Shares and other stock-based awards as non-cash incentives to those persons. Additionally, during the year ended December 31, 2024, in connection with various financing activities, we issued an aggregate of 1,267,585 Common Share purchase warrants to various investors, as well as placement agent warrants to placement agents involved with such financings. The issuance of any equity securities could, and the issuance of any additional shares will, cause our existing shareholders to experience dilution of their ownership interests.

Any additional issuance of shares or a decision to acquire other businesses through the sale of equity securities may dilute our investors' interests, and investors may suffer dilution in their net book value per share depending on the price at which such securities are sold. Such issuance may reduce the proportionate ownership and voting power of all other shareholders. The dilution may result in a decline in the price of our Common Shares or a change in control.

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

We have not paid any cash dividends to date and we do not intend to declare dividends for the foreseeable future, as we anticipate that we will reinvest future earnings, if any, in the development and growth of our business. Therefore, investors will not receive any funds unless they sell their Common Shares, and shareholders may be unable to sell their shares on favorable terms or at all. We cannot assure you of a positive return on investment or that you will not lose the entire amount of your investment in our Common Shares. Prospective investors seeking or needing dividend income or liquidity should not purchase our Common Shares.

General Risks

It may be difficult for non-Canadian investors to obtain and enforce judgments against us because of our Canadian incorporation and presence.

We are a corporation existing under the laws of Canada. Some of our directors and some of the experts named or unnamed in this Annual Report on Form 10-K, are residents of Canada, and all or a substantial portion of their assets, and a substantial portion of our assets, are located outside the United States. Consequently, although we have appointed an agent for service of process in the United States, it may be difficult for holders of our Common Shares who reside in the United States to effect service within the United States upon our directors and officers and experts who are not residents of the United States. It may also be difficult for holders of our shares who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers and experts under the United States federal securities laws. Investors should not assume that Canadian courts (i) would enforce judgments of United States courts obtained in actions against us or our directors, officers or experts predicated upon the civil liability provisions of the United States federal securities laws or the securities or "blue sky" laws of any state within the United States or (ii) would enforce, in original actions, liabilities against us or our directors, officers or experts predicated upon the United States federal securities laws or any such state securities or "blue sky" laws. In addition, we have been advised by our Canadian counsel that in normal circumstances, only civil judgments and not other rights arising from United States securities legislation are enforceable in Canada and that the protections afforded by Canadian securities laws may not be available to investors in the United States.

We are likely a "passive foreign investment company" which may have adverse United States federal income tax consequences for United States shareholders.

United States investors in our Common Shares should be aware that we believe we are classified as a passive foreign investment company ("PFIC") during the tax year ended December 31, 2023, and based on the nature of our business, the projected composition of our gross income and the projected composition and estimated fair market value of our assets, we expect to be a PFIC for the year ended December 31, 2024, and may be a PFIC in subsequent tax years. If the Company is a PFIC for any year during a United States shareholder's holding period, then such United States shareholder generally will be required to treat any gain realized upon a disposition of Common Shares, or any so-called "excess distribution" received on its Common Shares, as ordinary income, and to pay an interest charge on a portion of such gain or distributions, unless the shareholder makes a timely and effective "qualified electing fund" election ("QEF election") or a "mark-to-market" election with respect to the Common Shares. A United States shareholder who makes a QEF election generally must report on a current basis its share of the Company's net capital gain and ordinary earnings for any year in which the Company is a PFIC, whether or not the Company distributes any amounts to its shareholders. However, United States shareholders should be aware that we do not intend to satisfy record keeping requirements that apply to a qualified electing fund, and we do not intend to supply United States shareholders with information that such United States shareholders require to report under the QEF election rules, in the event that we are a PFIC and a United States shareholder wishes to make a QEF election. Thus, United States shareholders should assume that they will not be able to make a QEF election with respect to their Common Shares. A United States shareholder who makes the mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the Common Shares over the taxpayer's basis therein. Each United States shareholder should consult its own tax advisor regarding the United States federal, United States local, and foreign tax consequences of the PFIC rules and the acquisition, ownership, and disposition of our Common Shares.

Any failure to maintain an effective system of internal control may result in material misstatements of our consolidated financial statements or cause us to fail to meet our reporting obligations or fail to prevent fraud; and in that case, our shareholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our Common Shares.

Section 404(a) of the Sarbanes-Oxley Act of 2002 requires that our management assess and report annually on the effectiveness of our internal control over financial reporting and identify any material weaknesses in our internal control over financial reporting.

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. If we fail to maintain an effective system of internal control, we might not be able to report our financial results accurately or prevent fraud; and in that case, our shareholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our Common Shares. While we believe that we have sufficient personnel and review procedures to allow us to maintain an effective system of internal control, we cannot assure you that we will not experience potential material weaknesses in our internal control. Even if we conclude that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. GAAP, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our future reporting obligations.

If we fail to timely achieve and maintain the adequacy of our internal control over financial reporting in a timely manner, we may not be able to produce reliable financial reports or help prevent fraud. Our failure to achieve and maintain effective internal control over financial reporting could prevent us from complying with our reporting obligations on a timely basis, which could result in the loss of investor confidence in the reliability of our consolidated financial statements, harm our business and negatively impact the trading price of our Common Shares.

Data security incidents and privacy breaches could result in important remediation costs, increased cyber security costs, litigation and reputational harm.

Cyber security incidents can result from deliberate attacks or unintentional events. Cyber-attacks and security breaches could include unauthorized attempts to access, disable, improperly modify or degrade the Company's information, systems and networks, the introduction of computer viruses and other malicious codes and fraudulent "phishing" emails that seek to misappropriate data and information or install malware onto users' computers. Cyber-attacks in particular vary in technique and sources, are persistent, frequently change and are increasingly more targeted and difficult to detect and prevent against. Our network security and data recovery measures and those of third parties with which we contract, may not be adequate to protect against cyber-attacks.

Disruptions due to cyber security incidents could adversely affect our business. In particular, a cyber security incident could result in the loss or corruption of data from our research and development activities, including clinical trials, which may cause significant delays to some or all of our clinical programs. Also, our trade secrets, including unpatented know how, technology and other proprietary information could be disclosed to competitors further to a breach, which would harm our business and competitive position. We expect that risks and exposures related to cyber security attacks will remain high for the foreseeable future due to the rapidly evolving nature and sophistication of these threats. While we have invested in the protection of data and information technology, there can be no assurance that our efforts to implement adequate security measures would be sufficient to protect us against cyber-attacks.

We must successfully upgrade and maintain our information technology systems.

We rely on various information technology systems to manage our operations. There are inherent costs and risks associated with maintaining, modifying and/or changing these systems and implementing new systems, including potential disruption of our internal control structure, substantial capital expenditures, additional administration and operating expenses, retention of sufficiently skilled personnel to implement and operate its systems, demands on management time and other risks and costs of delays or difficulties in transitioning to new systems or of integrating new systems into our current systems. In addition, our information technology system implementations may not result in productivity improvements at a level that outweighs the costs of implementation, or at all. The implementation of

new information technology systems may also cause disruptions in our business operations and have an adverse effect on our business, prospects, financial condition and operating results.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Cybersecurity Risk Management and Strategy

We have developed and maintain a cybersecurity program designed to assess, identify, and manage risks from cybersecurity threats. As part of this program, we conduct periodic assessments of our IT systems to evaluate the effectiveness of applicable security controls. These assessments follow industry-standard frameworks and include a review of our information security controls to assess cybersecurity capabilities and maturity. The results of these assessments are reported to the Audit Committee of the Board of Directors.

In general, we seek to address cybersecurity risks through a cross-functional approach focused on preserving the confidentiality, integrity, and availability of the information that we collect and store by identifying, preventing, and mitigating cybersecurity threats and effectively responding to cybersecurity incidents when they occur.

We have established a cybersecurity policy that outlines the governance processes for identifying and managing material risks to privacy and cybersecurity. Our policy also describes our capabilities and processes for detecting, responding to, analyzing, mitigating, recovering from, and reporting cybersecurity incidents. We also manage and maintain business continuity and disaster recovery capabilities to help ensure the availability of business-critical technology resources.

Governance Related to Cybersecurity Risks

Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through committees, has responsibility for the oversight of risk management. Our Audit Committee oversees the management of risks from cybersecurity threats. In addition, the full board reviews our major risk exposures, their potential impact on us, and the steps we take to manage them.

Our Chief Information Officer (CIO) is responsible for developing, implementing, and maintaining our cybersecurity risk management policies and procedures. The individual currently serving as CIO has over thirty-five years of experience in cybersecurity, information security, data protection, regulatory compliance, and risk management within complex and international business verticals such as pharmaceutical/biotech, technology, and logistics. The CIO provides regular cybersecurity updates to our board of directors.

Our Information Technology Steering Committee ("ITSC") oversees matters regarding the Company’s Information Technology strategy, priorities, and governance, including cybersecurity threats and risk assessments, through periodic meetings and frequent communications. ITSC members include representatives from the Finance, Regulatory Affairs, Operations, and Information Technology departments. The ITSC has a charter that is reviewed internally to ensure it is aligned with our business strategy. As outlined in its charter, and relative to cybersecurity, the ITSC is responsible for identifying and assessing material cybersecurity risks across the Company, including escalating to our Audit Committee and Executive Management where appropriate.

ITEM 2. PROPERTIES

Our headquarters are located at 66 Wellington Street West Suite 5300, TD Bank Tower Box 48 Toronto ON M5K 1E6, and our executive offices are located at 12770 High Bluff Drive, Suite 120, San Diego, CA 92130 (telephone: 858-926-2730). The lease for 7,556 square feet of office space in San Diego is scheduled to expire on May 31, 2026.

ITEM 3. LEGAL PROCEEDINGS

We know of no material pending legal proceedings to which our company or subsidiaries is a party or of which any of our properties, or the properties of our subsidiaries, is the subject. However, from time to time, we may be subject to various pending or threatened legal actions and proceedings, including those that arise in the ordinary course of our business. Such matters are subject to many uncertainties and to outcomes that are not predictable with assurance and that may not be known for extended periods of time.

ITEM 4. MINE SAFETY DISCLOSURES

None.

PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our Common Shares are currently traded on The Nasdaq Capital Market under the symbol "APTO" and the Toronto Stock Exchange under the symbol "APS."

As of March 28, 2025, there were approximately 8 shareholders of record of our Common Shares, which included Cede & Co., a nominee for Depository Trust Company, or DTC, and CDS & Co., a nominee for The Canadian Depository for Securities Ltd., ("CDS"). Common shares that are held by financial institutions as nominees for beneficial owners are deposited into participant accounts at either DTC or CDS, and are considered to be held of record by Cede & Co. or CDS & Co., each as one shareholder.

We currently intend to retain all future earnings, if any, for the operation and expansion of our business and, therefore, do not anticipate declaring or paying cash dividends on our Common Shares in the foreseeable future.

Repurchases of Equity Securities

There were no repurchases of equity securities during the fourth quarter of 2024.

ITEM 6. RESERVED

ITEM 7 - MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This discussion contains forward-looking statements that involve risks and uncertainties. When reviewing the discussion below, you should keep in mind the substantial risks and uncertainties that impact our business. In particular, we encourage you to review the risks and uncertainties described in "Risk Factors" in Part I, Item 1A in this Annual Report on Form 10-K. These risks and uncertainties could cause actual results to differ materially from those projected or implied by our forward-looking statements contained in this report. These forward-looking statements are made as of the date of this management's discussion and analysis, and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by law. All references to "dollar" or the use of the symbol "$" are to United States dollars, unless otherwise indicated.

On February 18, 2025, we filed articles of amendment under the Canada Business Corporations Act ("CBCA") to give effect to a 1-for-30 reverse stock split of our Common Shares (the "Reverse Stock Split"). All historical share and per share amounts reflected throughout this Annual Report on Form 10-K have been adjusted to reflect the Reverse Stock Split.

Aptose Biosciences Inc.

Our Business

Aptose is a science-driven clinical-stage biotechnology company committed to the development and commercialization of precision medicines addressing unmet clinical needs in oncology, with an initial focus on hematology. The Company's small molecule cancer therapeutics pipeline includes products designed to provide single agent efficacy and to enhance the efficacy of other anti-cancer therapies and regimens without overlapping toxicities. The Company's executive offices are located in San Diego, California, and our head office is located in Toronto, Canada.

Tuspetinib, ("Tuspetinib" or "TUS"), Aptose's lead program, is being developed for frontline combination therapy in newly diagnosed acute myeloid leukemia ("AML") patients to unlock the most significant patient impact and greatest commercial opportunity. AML is a highly aggressive cancer of the bone marrow and blood, and there is a tremendous unmet need for a therapy that can extend survival of newly diagnosed AML patients and improve their quality of life. Newly diagnosed AML patients typically fail all frontline (1L) therapies, and responses to subsequent salvage therapies in the relapsed or refractory (R/R) setting are limited, highlighting the need for a more effective triple drug ("triplet") combination therapy to increase survival in the frontline setting.

Current standard of care treatment in the 1L setting for many newly diagnosed AML patients includes a doublet combination of venetoclax and a hypomethylating agent (VEN+HMA). Exploratory triplet therapies using current agents added to VEN+HMA have achieved notable response rates but are compromised because of toxicities and the limited activity across subpopulations of AML patients. In contrast, tuspetinib is a convenient, orally administered, once-daily kinase inhibitor that targets select kinases operative in AML and exerts broad activity across AML populations with adverse genetics. However, tuspetinib avoids kinases that typically cause toxicities associated with other kinase inhibitors and has demonstrated an excellent safety profile. These properties position tuspetinib as an ideal agent for addition to the VEN+HMA backbone therapy to create a superior triplet (TUS+VEN+HMA) frontline therapy to treat newly diagnosed AML.

Aptose is currently conducting a Phase1/2 clinical trial to develop Tuspetinib in the TUS+VEN+HMA triplet drug combinations in newly diagnosed AML patients, and as the study enrolls patients, we have delivered and expect to continue to deliver important clinical data (CR and MRD negativity rates, safety, and survival) over the following 6 to 12 months. It was essential to understand the safety, tolerability, and response activities of tuspetinib as a single agent and as the TUS+VEN doublet combination before advancing to the TUS+VEN+HMA triplet. We therefore performed a clinical trial of TUS single agent in patients with relapsed or refractory (R/R) AML and then performed a trial with the TUS+VEN doublet therapy in R/R AML patients and now have advanced the TUS+VEN+HMA frontline therapy into newly diagnosed AML patients.

To be precise, we have now completed a dose escalation and dose exploration international Phase 1/2 clinical trial to assess the safety, tolerability, pharmacokinetics, pharmacodynamic responses, and efficacy of TUS as a single agent in patients with R/R AML. Significant bone marrow blast reductions and clinical responses without dose limiting toxicities were achieved at four dose levels across a broad diversity of mutationally-defined AML populations and with a highly favorable safety profile. Tuspetinib has demonstrated a favorable safety profile to date and has caused no drug-related QTc prolongations, liver or kidney toxicities, muscle damage, or differentiation syndrome, and no myelosuppression with continuous dosing of patients in remission. At a dose of 80 mg, tuspetinib demonstrated notable response rates in R/R AML patients that had never been treated with venetoclax (VEN-naive AML): CR/CRh=36% among all-comers, CR/CRh=50% among patients with mutated FLT3, and CR/CRh=25% in patients with wildtype FLT3.

After completing the single-agent dose escalation and exploration trial, tuspetinib advanced to the APTIVATE expansion trial of the Phase 1/2 program to evaluate the TUS+VEN doublet in relapsed/refractory (R/R) AML patient populations. The TUS+VEN doublet combination therapy maintained a favorable safety profile no new or unexpected safety signals were observed, and there were no reported drug-related adverse events involving QTc prolongation, differentiation syndrome, or deaths. The TUS+VEN doublet combination also achieved significant bone marrow reductions and clinical responses in heavily pretreated R/R AML patients, including those with mutated TP53, mutated NKRAS, wildtype or mutated FLT3, and those who had failed prior therapy with venetoclax (“Prior-VEN”) or FLT3 inhibitors (“Prior-FLT3i”).

Collectively, the clinical safety and efficacy data with TUS single agent and TUS+VEN doublet in R/R AML patients position tuspetinib for development as the TUS+VEN+HMA triplet in newly diagnosed AML patients. Newly diagnosed AML patients are VEN-naïve, FLT3i-naïve, and HMA-naïve – this patient population is expected to be highly responsive to a tuspetinib-containing triplet therapy. Based on the safety and efficacy profile of tuspetinib, we believe that tuspetinib as part of the TUS+VEN+HMA triplet, if approved, could establish a new standard of care therapy for newly diagnosed patients with mutated or unmutated FLT3 and in patients with other adverse genetic abnormalities. These beliefs related to the potential patient treatment and commercial opportunities are based on management’s current assumptions and estimates, which are subject to change, and there can be no assurance that tuspetinib will ever be approved or successfully commercialized and, if approved and commercialized, that it will ever generate significant revenues. See our “Risk Factors – “We are an early-stage development company with no revenues from product sales.” and “We have a history of operating losses. We expect to incur net losses and we may never achieve or maintain profitability.” in this Annual Report on Form 10-K.

Luxeptinib (“LUX”) is an orally administered, highly potent kinase inhibitor that selectively targets defined clusters of kinases that are operative in hematologic malignancies. LUX has demonstrated clinical activity in R/R AML and in R/R B-cell cancer patients but has not consistently achieved the desired exposure levels to drive responses. Absorption of the original G1 formulation hindered the effectiveness of luxeptinib, so a new G3 formulation was developed. Clinical evaluation of the G3 formulation has been completed in a single-dose bioavailability study across five dose levels and then with continuous dosing using two different dose levels. The G3 formulation achieved our desired plasma exposure benchmark, with approximately 10-fold better absorption, and better tolerability than the original formulation. We are seeking alternative development paths and collaborations for LUX. Given current funding and our prioritization of tuspetinib, we have decided to pause funding the development of luxeptinib.

Tuspetinib

Indication and Clinical Trials:

Tuspetinib is an oral, highly potent, small molecule inhibitor of kinases operative in myeloid malignancies and known to be involved in tumor proliferation, resistance to therapy and differentiation. Preclinical in vitro and in vivo studies suggest that Tuspetinib may be an effective monotherapy and combination therapy in patients with hematologic malignancies including AML. A U.S. based Phase 1/2 clinical trial with the TUS+VEN+HMA triplet drug combinations in newly diagnosed AML patients is currently being conducted. An international Phase 1/2 clinical trial has been completed in patients with relapsed or refractory AML, in which patients received either TUS single agent or the TUS+VEN doublet. That study delivered evidence of robust clinical activity, including multiple complete responses in R/R AML patients with various disease genotypes, and no toxicity trends that prevented advancement of TUS into the TUS+VEN+AZA triplet clinical study.

The FDA granted orphan drug designation to tuspetinib for the treatment of patients with AML in October 2018. Orphan drug designation is granted by the FDA to encourage companies to develop therapies for the treatment of diseases that affect fewer than 200,000 individuals in the United States. Orphan drug status provides research and development tax credits, an opportunity to obtain grant funding, exemption from FDA application fees and other benefits. The orphan drug designation also provides us with seven additional years of marketing exclusivity in this indication.

On December 3, 2024, the Company announced that the National Cancer Institute (NCI), part of the National Institutes of Health, and Aptose Biosciences Inc. have entered into a Cooperative Research and Development Agreement ("CRADA"). Under the CRADA, the NCI and Aptose will collaborate on the clinical development of Aptose's proprietary lead clinical-stage compound tuspetinib (TUS), an inhibitor of key signaling kinases involved in myeloid malignancies, in the NCI Cancer Therapy Evaluation Program (CTEP) sponsored myeloMATCH trials employing combinations of targeted therapy for the treatment of molecularly defined acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS) populations. These trials will be conducted by NCI's National Clinical Trials Network (NCTN), with the participation of the NCI Community Oncology Research Program (NCORP) in the U.S. and Canada.

The myeloMATCH precision medicine trials (NCT05564390), funded by the NCI, were officially launched on May 16, 2024. myeloMATCH aims to expedite the development of tailored drug combination treatments for patients with newly diagnosed AML and MDS and to treat patients with these aggressive cancers of the blood and bone marrow from diagnosis throughout their treatment journey.

Manufacturing:

Following the Tuspetinib licensing agreement between Aptose and Hanmi on November 4, 2021 (the "Tuspetinib Licensing Agreement"), Aptose received from Hanmi an existing inventory of drug product expected to support continuation of the current Phase 1/2 study. The Company and Hanmi also entered into a separate supply agreement in 2022 for additional production of new drug substance and drug product to support further clinical development. Additional batches of API and drug product have been produced by other companies during 2022 and 2023.

Program Updates at Recent Scientific Forums:

Aptose plans to initiate the triple drug combination study of tuspetinib + venetoclax + azacitidine (TUS+VEN+AZA) in newly diagnosed AML patients with 40 mg tuspetinib and then to dose escalate the tuspetinib dose to 80 mg. Safety and activity as a single agent were demonstrated with the 40 mg dose of tuspetinib in R/R AML patients demonstrated safety and activity as a single agent. This 40 mg dose represents one dose level below the 80 mg single agent recommended phase 2 dose (RP2D) of tuspetinib in R/R AML patients. This dose escalation approach is the typical FDA-recommended starting dose for drug combination studies.

In December 2024, Aptose attended the 66th Annual American Society of Hematology (ASH) Meeting and Exposition in San Diego, California, and presented a poster entitled "Phase 1 Safety and Efficacy of Tuspetinib Plus Venetoclax Combination Therapy in Study Participants with Relapsed or Refractory Acute Myeloid Leukemia (AML) Support Exploration of Triplet Combination Therapy of Tuspetinib Plus Venetoclax and Azacitidine for Newly Diagnosed AML".

Key Findings and Messages included:

- TUS+VEN+AZA triplet trial is proceeding in newly diagnosed AML patients
- TUS+VEN retains activity in the difficult-to-treat prior-VEN AML population
- TUS+VEN is active in FLT3 wildtype, representing ~70% of AML patients
- TUS+VEN is well tolerated and can be safely co-administered

•TUS+VEN is active across broad populations of R/R AML

•Combination of TUS with VEN may avoid VEN resistance

•TUS+VEN+AZA triplet may establish a more effective, mutation agnostic standard of care for chemotherapy ineligible AML patients

Highlights of the ASH poster presentation included:

TUS as Single Agent (n= 93 Patients)

•60% and 42% CR/CRh with 80 mg TUS in FLT3 mutated and all-comer VEN-naïve AML

•33% CRc & 42% ORR (CR, CRp, CRh, CRi or PR) in FLT3 mutated and VEN-naïve patients

•Includes 40, 80, 120, and 160 mg TUS dose as a single agent

•Includes those who failed prior therapy with venetoclax

•Includes those with mutated or unmutated FLT3, those who failed prior-HSCT, priorFLT3i, prior-chemotherapy, prior-HMA

•TUS once daily orally as a single agent achieved CR/CRh responses at four different dose levels (40, 80, 120, and 160 mg) with no dose limiting toxicities (no DLTs)

•TUS showed a favorable safety profile with no DLTs through 160 mg per day, and no drug related discontinuations, no QTc, no differentiation syndrome, and no deaths

TUS/VEN Combination Therapy (n= 79 Patients)

•40% ORR with 80 mg TUS + 400 mg VEN in FLT3 mutated patients

•83% (5/6) had failed prior-VEN treatment and 50% (3/6) had failed both prior-VEN and FLT3i treatment

•TUS+VEN achieved responses among diverse R/R AML with adverse mutations in VEN-naïve, prior-VEN, FLT3WT, FLT3MUT, prior-FLT3

•TUS+VEN showed favorable safety and tolerability with no new or unexpected safety

On June 14, 2024, Aptose presented tuspetinib (TUS) clinical findings as a clinical poster presentation and preclinical findings as a e-poster at the European Hematology Association (EHA) 2024 Hybrid Congress in Madrid, Spain. Highlights of the findings include:

•Tuspetinib Monotherapy (TUS) and Tuspetinib + Venetoclax (TUS+VEN) Doublet Therapy Show Broad Clinical Activity and Strong Safety Data in relapsed or refractory (R/R) Acute Myeloid Leukemia (AML) and Differentiate TUS from other Investigational Drugs in AML

•TUS Monotherapy and TUS+VEN Doublet Therapy Active in Difficult-to-treat Genetic Subgroups, FLT3 Wildtype AML

•TUS Shown to Target VEN Resistance Mechanisms and Retain Activity on VEN-Resistant AML Cells in Preclinical Study

•Tuspetinib + Venetoclax + Azacitidine (TUS+VEN+AZA) Triplet Trial to Treat Newly Diagnosed AML Patients; Clinical Sites Being Activated

Our APTIVATE clinical trial of Tuspetinib as a monotherapy (TUS) and in combination treatment with Venetoclax (TUS+VEN) in a very ill AML patient population, yielded excellent and consistent safety findings and demonstrated clinical activity across a broad range of AML – including many with highly adverse genetic mutations. These findings supported the advancement of Tuspetinib as an ideal third agent to add to a venetoclax and hypomethylating agent regimen for the frontline treatment of Newly Diagnosed AML patients. Conclusions from the

clinical poster, entitled “Safety and Efficacy of Tuspetinib as Monotherapy and Combined with Venetoclax in a Phase 1/2 Trial of Patients with Relapsed or Refractory (R/R) Acute Myeloid Leukemia” include:

•Extensive dose exploration was performed with TUS (93 patients) and TUS+VEN (79 patients) in highly treatment experienced R/R AML patients (prior VEN, FLT3i, HMA, chemotherapy, HSCT).

•TUS monotherapy achieved complete remissions at 40, 80, 120, and 160 mg with no DLT, achieved a 42% CRc and 50% ORR in VEN naïve and FLT3-mutation harboring patients, and achieved responses in patients harboring highly adverse genetics ($TP53^{MUT}$, RAS^{MUT}, other).

•TUS+VEN Doublet remained safe and well tolerated (40mg TUS + 400mg VEN | 80mg TUS + 400mg VEN), and achieved bone marrow blast reductions and responses among diverse R/R AML patients with adverse mutations and prior failure of VEN.

•TUS targets known VEN resistance mechanisms *in vitro* and is clinically active in both $FLT3^{MUT}$ & $FLT3^{WT}$ R/R AML populations even after prior VEN exposure.

The greatest unmet medical need in AML is for an improved frontline therapy in Newly Diagnosed AML patients. Tuspetinib is now being developed as the TUS+VEN+HMA to establish a new standard of care for the treatment of these Newly Diagnosed AML patients that may increase response rates, extend survival, safely improve quality of life, treat a broad spectrum of genetically unique AML patient populations, and blunt the development of resistance to Venetoclax.

•Progress has been made with VEN+HMA in 1L therapy but 1/3 do not respond and median OS <15 months with <25% alive at 3-years.

•Response rates and OS need improvement, especially in adverse genetic subgroups

•Emergence of VEN resistance via RAS/MAPK, TP53, and FLT3 clonal expansion, among other mechanisms, leads to relapse or refractory (R/R) AML that does not respond well to subsequent salvage therapies in R/R setting. Indeed, a recent publication (Matthews et. Al., *Blood* 2022; 140, Supplement 1: 1022–1024) showed survival of R/R AML patients receiving chemotherapy after failing prior therapy with HMA-VEN was limited; median OS was a mere 7.2 months, and for older patients (65 and older) the median OS was only 4.3 months

•These findings illustrate that adding a 3rd agent is needed to boost responses with VEN+HMA standard of care therapy in frontline therapy of newly diagnosed AML patients, to increase the durability of responses in these patients, and act across genetic subgroups of patients broadly.

•We believe Tuspetinib is the ideal 3rd Agent for Addition to VEN+AZA to Treat Newly Diagnosed AML

•TUS has excellent safety alone and in combination with VEN when co-administered

•TUS has broad activity across genetic subgroups including TP53, RAS/MAPK, & FLT3 mutants

•TUS mechanism may minimize drug resistance to VEN via inhibition of key AML kinases

•TUS can be administered with or without food allowing co-administration with VEN

•Preliminary PK data suggest no clinically meaningful interaction between TUS and VEN requiring dose modification for co-administration.

In addition to the Tuspetinib clinical poster, a separate preclinical abstract was published as an e-poster publication at EHA, entitled “Tuspetinib Retains Nanomolar Potency Against AML Cells Engineered to Express the NRAS G12D Mutation or Selected for Resistance to Venetoclax’. The study demonstrated that TUS targets known venetoclax (VEN) resistance mechanisms, retaining nanomolar potency against AML cells engineered to express the NRAS-G12D mutation or selected for resistance to VEN, and in combination with VEN, could prevent emergence of resistance to both agents. TUS-resistant cells showed hypersensitivity to VEN such that treatment with both drugs could also interfere with the emergence of TUS resistance.

On March 26, 2024, Aptose announced that more than 170 patients to date received TUS alone or in combination with the BCL-2 inhibitor venetoclax (VEN) during the Phase 1/2 clinical program in the very ill relapsed or refractory (R/R) AML patient population. At the single agent 80 mg dose, TUS achieved a favorable safety profile and an impressive response rate among patients who were naive to VEN. The safety profile of TUS remained favorable when TUS was combined with VEN in R/R AML patients, and responses were achieved in both patients naive to VEN and those who failed prior therapy with VEN. TUS avoids many typical toxicities observed with other agents and achieves broad activity across AML patients with a diversity of adverse genetic abnormalities.

On December 9, 2023, Aptose featured tuspetinib in an oral presentation at the 65th American Society of Hematology (ASH) Annual Meeting and Exposition. The company announced that a growing body of clinical data for its lead compound, tuspetinib, demonstrates significant benefit both as a single agent and in combination with venetoclax for patients with relapsed/refractory acute myeloid leukemia (R/R AML) in the ongoing APTIVATE Phase 1/2 study. The data were presented by lead investigator Naval G. Daver, M.D., Professor and Director of the Leukemia Research Alliance Program in the Department of Leukemia at The University of Texas MD Anderson Cancer Center, Houston TX.

Dr. Daver reported data from more than 100 relapsed/refractory patients from multiple international clinical sites, who had failed prior therapy and then were treated with TUS as a single agent or TUS+VEN. Both TUS and TUS+VEN delivered multiple composite complete remissions (CRc) in this very ill AML population, while maintaining a favorable safety profile across all treated patients. The data demonstrated tuspetinib is active and well tolerated in one of the most challenging and heterogeneous disease settings in oncology – relapsed and refractory AML. Tuspetinib demonstrated broad activity, including activity in patients with FLT3 wild-type AML (accounting for more than 70% of the AML population), FLT3 mutated AML, NPM1 mutated AML, as well as in patients with mutations historically associated with resistance to targeted therapy. Most notably, TUS targets VEN resistance mechanisms, enabling TUS+VEN uniquely to treat the very ill prior-VEN AML population, including both FLT3 mutant and FLT3 wildtype disease. From a broader perspective, the growing body of antileukemic activity, and continued favorable safety profile, support advancement of tuspetinib in a TUS+VEN+HMA triplet for the treatment of frontline newly diagnosed AML patients.

Dr. Daver also pointed out that while patients on the TUS+VEN therapy are early in their treatment cycles, most achieving a response remained on treatment and that responses have begun to mature as dosing continues. Highlights of Dr. Daver's ASH oral presentation include:

- As a single agent at therapeutic doses of 80-160 mg in 68 evaluable patients, TUS was more active in VEN-naive patients, with an overall CRc rate of 29% (8/28). This included a 42% CRc rate (5/12) in FLT3-mutated patients and a 19% CRc rate (3/16) in FLT3-unmutated, or wildtype, AML patients. Responses and blood counts improved with continuous dosing, many patients bridged to an allogeneic stem cell transplant ("HSCT"), durability was observed when HSCT was not performed, and 80 mg was selected as the RP2D. Overall, tuspetinib showed a favorable safety profile with only mild adverse events ("AEs") and no dose-limiting toxicities ("DLTs") up to 160 mg per day, and no drug discontinuations from drug-related toxicity.

- In the TUS+VEN doublet study, 49 patients were dosed with 80 mg of tuspetinib and 200 mg of venetoclax, with 36 evaluable (and 13 patients too early to assess). Patients were heavily exposed to prior-VEN and prior-FLT3 inhibitor treatment. TUS+VEN was active in both VEN-naive and prior -VEN R/R AML patients. TUS demonstrated compelling composite complete remission (CRc) rates. Among all evaluable patients, TUS+VEN demonstrated a CRc rate of 25% (9/36); 43% (3/7) in VEN-naive patients, and 21% (6/29) in Prior-VEN patients. Among FLT3 wildtype patients, TUS+VEN demonstrated an overall CRc rate of 20% (5/25); 33% (2/6) in VEN-naive patients, and 16% (3/19) in Prior-VEN patients. Among FLT3 mutant patients, TUS+VEN demonstrated an overall CRc rate of 36% (4/11); a complete response in a VEN-naive patient (1/1); a 30% (3/10) in Prior-VEN patients; and 44% (4/9) in patients treated prior with a FLT3 inhibitor.

On October 29, 2023, Aptose presented two posters related to the clinical and preclinical activity of tuspetinib at the European School of Haematology 6th International Conference: Acute Myeloid Leukemia "Molecular and Translational": Advances in Biology and Treatment, held October 29-31, 2023, in Estoril, Portugal. Clinical findings included 1) data from the APTO-TUS-HV01 clinical trial (the "Food Effect Study") evaluating the pharmacokinetic

(PK) properties of tuspetinib in healthy human volunteers in which tuspetinib was administered with or without food, and 2) from an international Phase 1/2 study of tuspetinib as a single agent (TUS) and in combination with venetoclax in patients with R/R AML from across clinical centers in the United States, South Korea, Spain, Australia and other sites. Data from the Food Effect Study in healthy human volunteers demonstrated tuspetinib can be administered with or without food and foresee no clinically meaningful difference in exposure. This is an important finding for patient convenience, as venetoclax is dosed with food and tuspetinib can now be co-administered with venetoclax rather than in staggered dosing. Findings from the Phase 1/2 clinical trial demonstrated tuspetinib as a single agent was well-tolerated and highly active among R/R AML patients with a diversity of adverse genotypes and delivered a 42% CR/CRh cross-evaluable venetoclax (VEN) naive patients at the 80mg daily RP2D. The TUS+VEN doublet has been well tolerated in the APTIVATE international Phase 1/2 expansion trial in R/R AML patients and achieved multiple responses in patients who previously failed venetoclax ("Prior-VEN failure AML"), including Prior-VEN failure patients who also previously failed FLT3 inhibitors, all of whom represent emerging populations of high unmet medical need. Notably, tuspetinib targets venetoclax resistance mechanisms that may re-sensitize Prior-VEN failure patients to venetoclax.

Separate from the clinical studies, the preclinical study (entitled: “Tuspetinib Oral Myeloid Kinase Inhibitor Creates Synthetic Lethal Vulnerability to Venetoclax”) presented by Aptose during the ESH Conference investigated the effects of tuspetinib on key elements of the phosphokinome and apoptotic proteome in both parental and TUS-resistant AML cells. In parental cells, tuspetinib inhibits key oncogenic signaling pathways and shifts the balance of pro- and anti-apoptotic proteins in favor of apoptosis, suggesting that it may generate vulnerability to venetoclax. In addition, acquired resistance in the AML cells to tuspetinib generated a synthetic lethal vulnerability to venetoclax of unusually high magnitude. Concurrent administration of TUS+VEN therefore may discourage the emergence of resistance to tuspetinib during treatment.

In conjunction with poster presentations at the ESH Conference, on October 30, 2023, Aptose held a “Clinical Update and KOL Data Review of AML Drug Tuspetinib” that was webcast and featured Dr. Naval Daver, MD, Professor, Director Leukemia Research Alliance Program, Department of Leukemia, The University of Texas MD Anderson Cancer Center, Houston, Texas. Dr. Daver is the lead investigator on Aptose’s APTIVATE trial and is recognized for significant achievements in the development of novel AML treatments, including several combination therapies. Aptose presented data in 49 patients who received the TUS+VEN doublet, showing an overall response rate ("ORR") of 48% among all patients that had achieved an evaluable stage, as well as a 44% ORR among Prior-VEN failure AML patients, including FLT3-unmutated ("wildtype") patients (43% ORR) and FLT3-mutated patients (60% ORR), some of whom also had failed prior therapy with FLT3 inhibitors. The TUS+VEN doublet was well tolerated with no unexpected safety signals. The TUS+VEN doublet may serve the Prior-VEN failure R/R AML patients that represent a rapidly growing population that is highly refractory to any salvage therapy. The compelling data with the TUS+VEN doublet in R/R AML patients suggest a TUS+VEN+HMA triplet may also serve the needs of frontline (1L) newly diagnosed AML patients.

Concurrent with the European Hematology Association (EHA) Annual Congress held June 8-11, 2023, Aptose held an interim clinical update webcast on June 10, 2023, to present highlights from the ongoing clinical development of tuspetinib. Aptose reported completion of the tuspetinib dose escalation and dose exploration Phase 1/2 trial in 77 R/R AML patients, tuspetinib demonstrated a favorable safety profile, and tuspetinib delivered monotherapy responses across four dose levels with no dose-limiting toxicity in mutationally diverse and difficult to treat R/R AML populations, including patients with highly adverse mutations that typically do not respond to monotherapy or combination therapy: TP53-mutated patients with a CR/CRh = 20% and RAS-mutated patients with a CR/CRh = 22%. Aptose also reported completion of a successful End of Phase 1 Meeting with the US FDA for tuspetinib, that a monotherapy RP2D was selected as 80mg daily, and that all development paths remain open, including the single arm accelerated path. Following completion of the dose escalation and dose exploration phases of the Phase 1/2 clinical program, Aptose focused attention on the tuspetinib APTIVATE expansion trial. The APTIVATE trial is designed to identify patient populations sensitive to tuspetinib monotherapy that may serve as development paths for single arm accelerated approval and to use the TUS+VEN doublet in R/R AML patients and identify patient populations of unmet need that are sensitive to the TUS+VEN doublet and can serve as development paths for accelerated and full approvals. We reported that patient enrollment in the APTIVATE expansion trial has been brisk and preliminary CR activity had already been reported in patients receiving the TUS+VEN doublet who previously failed therapy with venetoclax. During the interim clinical update webcast Aptose also reviewed clinical findings with the new G3 formulation of luxeptinib. Aptose disclosed that continuous dosing with 50mg of the G3 formulation achieves roughly an equivalent

pharmacokinetic profile as 900mg original G1 formulation, and that dose escalation with the G3 formulation was anticipated.

On March 23, 2023, Aptose announced the APTIVATE Phase 1/2 expansion trial with tuspetinib had been initiated and already had treated several R/R AML patients in the monotherapy arm, and that patient enrollment had been initiated in the doublet combination treatment arm of the APTIVATE trial with the TUS+VEN doublet. Since then, patients have continued to enroll and receive tuspetinib on the monotherapy arm. Plus, enrollment and dosing of patients on the TUS+VEN doublet arm have been brisk. Clinical investigator interest for tuspetinib is evident, and early signs of antileukemic activity during the APTIVATE trial have fueled the level of excitement for the trial.

Clinical responses to monotherapy with tuspetinib have been observed in a broad range of mutationally defined populations, including those with mutated forms of NPM1, MLL, TP53, DNMT3A, RUNX1, wild-type FLT3, ITD or TKD mutated FLT3, various splicing factors, and other genes. In the March 23, 2023, announcement, Aptose also highlighted an unexpected observation of a 29% CR/CRh response rate with tuspetinib monotherapy in R/R AML patients having mutations in the RAS gene or other genes in the RAS pathway. Responses in RAS-mutated patients are important because the RAS pathway is often mutated in response to therapy by other agents as the AML cells mutate toward resistance to those other agents. Collectively, these observations of broad clinical activity of tuspetinib, along with its favorable safety profile, position tuspetinib for potential accelerated development paths, as well as for doublet, triplet and maintenance therapy indications.

On January 30, 2023, Aptose announced dosing of patients in the APTIVATE Phase 1/2 clinical trial of tuspetinib, and that another clinical response has been achieved by a R/R AML patient receiving 40 mg tuspetinib once daily orally in the original dose exploration trial, the second response at the recently launched low-dose 40 mg cohort. In addition, Aptose elucidated a rationale for the superior safety profile of tuspetinib. While several kinase inhibitors require high exposures that exert near complete suppression of a single target to elicit responses, those agents often cause additional toxicity because they also cause extensive inhibition of that target in normal cells. In contrast, tuspetinib simultaneously suppresses a small suite of kinase-driven pathways critical for leukemogenesis. Consequently, tuspetinib achieves clinical responses at lower exposures with less overall suppression of each pathway, thereby avoiding many of the toxicities observed with competing agents.

Luxeptinib

Given current funding and our prioritization of tuspetinib, we have decided to pause funding the development of luxeptinib. For further information about the historical development of Luxeptinib, please refer to the Company's Annual Report on Form 10-K for the year ended December 31, 2023.

Indication and Clinical Trials:

Luxeptinib is an oral, highly potent kinase inhibitor that selectively targets defined kinases operative in myeloid and lymphoid hematologic malignancies. This small molecule has been evaluated in a Phase 1a/b study treating patients with R/R B-cell leukemias and lymphomas and in a Phase 1a/b study for treating patients with R/R AML or hr-MDS. These clinical studies demonstrated tumor shrinkage among B-cell cancer patients, including a CR in a diffuse large B-cell lymphoma patient that was determined via biopsy analysis at the end of Cycle 22 with 900mg BID dosing of the original G1 formulation. Likewise, an MRD-negative CR in one R/R AML patient occurred with 450mg BID dosing of the original G1 formulation. Because absorption of the original G1 formulation hampered effectiveness of luxeptinib, a new G3 formulation was developed. Enrollment of patients in the B-cell malignancy trial and the AML trial have been completed, and clinical evaluation of the G3 formulation has been completed. The G3 formulation was determined to deliver superior plasma exposure levels relative to the original G1 formulation, and any future trial with luxeptinib should use the G3 formulation. Regarding potential next steps with luxeptinib, recent therapeutic strategies with CLL B-cell cancer patients typically involve therapy with certain BTK inhibitors in combination with venetoclax (VEN). Drug resistance has begun to emerge in a molecularly defined subgroup of these patients, and the drug resistance has been correlated with mutations in the FLT3 receptor. Although FLT3 mutations are typically associated with AML patients, these R/R CLL prior-BTKi/Prior-VEN/FLT3-mutated patients are difficult to treat and represent a potential commercial market of approximately $200 million by 2039. The Dana Farber Cancer Institute identified this emerging patient population and has requested luxeptinib be tested as part of an investigator sponsored trial in combination with VEN in the R/R CLL prior-BTKi/Prior-VEN/FLT3-mutated patients. Non-clinical studies are

underway to position LUX+VEN for the treatment of these patients, and efforts are underway to identify sources of capital to support such a trial to develop LUX for a molecularly defined CLL subpopulation with a high unmet medical need.

During the fourth quarter of 2022, we completed dosing of the first, second, third, fourth, fifth, and sixth dose levels (150 mg, 300 mg, 450 mg, 600 mg, 750 mg, and 900 mg BID, respectively) of the original G1 formulation in the Phase 1 a/b trial in patients with B-cell leukemias and lymphomas. Among enrolled patients at that time with an array of B-cell malignancies, we had observed inhibition of phospho-BTK and "on-target" lymphocytosis in patients with classic CLL and modest tumor reductions in patients with different tumor types, indicating target engagement and pharmacologic activity of luxeptinib. During the ASH Annual Meeting in December 2022, we announced that a CR was achieved with a diffuse large B-cell lymphoma patient at the 900 mg dose level of the original G1 formulation, demonstrating luxeptinib is active in certain B-cell malignancies.

As part of the ongoing dose escalation of the current formulation of luxeptinib in patients with B-cell malignancies and AML, Aptose has made significant progress in the development of a G3 formulation that could reduce total API administered, reduce pill burden, improve absorption, and increase exposure. Aptose began testing this new G3 formulation of luxeptinib as a single dose with 72-hour pharmacokinetics ("PK") analysis in the ongoing studies in patients with hematologic malignancies in the first half of fiscal 2022. On March 22, 2022, we announced that the preliminary PK findings with the G3 formulation were encouraging, and the exploration of the G3 formulation was ongoing.

Exploration of the PK properties of single dose administration of 10mg, 20mg, 50mg, 100mg, and 200mg dose levels with the G3 formulation have been completed. On September 12, 2022 we announced that initial PK modeling studies predict up to an 18-fold improvement in plasma steady-state exposure by the G3 formulation relative to the original formulation, and that Aptose plans to move forward with the development of the G3 formulation in AML patients under continuous dosing conditions to determine if G3 can deliver desired exposures and clinical responses while continuing to demonstrate a favorable safety profile.

On March 23, 2023, Aptose announced that during the fourth quarter of 2022, continuous dosing had been initiated with the new G3 formulation of luxeptinib in the ongoing Phase 1 a/b clinical trial in patients with R/R AML. Initial PK data from continuous dosing of the 50 mg G3 formulation show plasma exposure levels roughly equivalent to the 900mg dose (18-fold greater dose) of the original G1 formulation. Aptose will be reviewing all data with the data monitoring committee and will make the determination to escalate and at what dose.

Concurrent with the EHA Annual Congress held June 8-11, 2023, Aptose held an interim clinical update webcast on June 10, 2023. During the update, Aptose reviewed clinical findings with the new G3 formulation of luxeptinib. Aptose confirmed that continuous dosing with 50mg of the G3 formulation in multiple patients achieves roughly an equivalent pharmacokinetic profile as 900mg original G1 formulation, and that dose escalation with the G3 formulation was anticipated.

A non-clinical article was published during the first quarter of 2023 in PLoS One, a highly respected online scientific publication. Titled, "Luxeptinib interferes with LYN-mediated activation of SYK and modulates BCR signaling in lymphoma," the article helps elucidate the mechanism by which luxeptinib suppresses the B-cell receptor pathway in a manner distinct from the BTK inhibitor ibrutinib. Luxeptinib was more effective than ibrutinib at reducing both steady state and anti-IgM-induced phosphorylation of the LYN and SYK kinases upstream of BTK where ibrutinib has little or no effect, suggesting luxeptinib can play a role in B-cell malignancies and inflammatory diseases distinct from ibrutinib and other BTK inhibitors.

In a separate line of non-clinical research with luxeptinib, a group from the University of Texas MD Anderson Cancer Center led by Dr. Michael Andreeff published an article in June 2023 in the journal Haematologica. The article was entitled "Concomitant targeting of FLT3 and BTK overcomes FLT3 inhibitor resistance in acute myeloid leukemia through the inhibition of autophagy," and the findings highlight the potential for co-targeting of FLT3/BTK/aurora kinases by luxeptinib to overcome resistance to certain FLT3 targeted therapies in AML, which is urgently needed.

On March 26, 2024, Aptose announced that during 2023 and early 2024, clinical evaluation of the new G3 formulation of LUX was completed. The G3 formulation was tested in a single dose bioavailability study in 20 patients, including both B-cell cancer and AML patients, and across 5 dose levels (10mg to 200mg). The G3 formulation then was evaluated in R/R AML patients with continuous dosing using two different dose levels (50mg BID and 200mg BID) in a total of 11 patients. Data demonstrated the G3 formulation dosed at 200mg twice daily can achieve 2-3uM steady state plasma levels, with approximately 10-fold better absorption and better tolerability than the original G1 formulation. Thus, the G3 formulation achieved the desired plasma exposure benchmark and can serve as the formulation of choice for future studies with LUX. Aptose is exploring alternative development paths and collaborations to advance LUX as a single agent or in combination with VEN to treat defined R/R patient populations of high unmet need.

Other corporate matters

Nasdaq Notices and Reverse Stock Split

Nasdaq private placement deficiency requirement

On February 29, 2024, the Company received a deficiency letter from the Nasdaq Listing Qualifications Department of The Nasdaq Stock Market LLC (“Nasdaq”) notifying the Company that the Company’s January 2024 private placement (the "Private Placement") of securities to Hanmi violated rule 5635(d) because the Company did not obtain shareholder approval prior to such issuance. Nasdaq stated that the Private Placement involved the issuance of greater than 20% of the issued and outstanding Common Shares of the Company at a discount to the Nasdaq official closing price on January 25, 2024, the date of the subscription agreement between the Company and Hanmi. The 2024 Deficiency Letter had no immediate effect on the listing of the Company’s Common Shares. In accordance with the Nasdaq Listing Rules, the Company was given forty-five (45) calendar days, or until April 14, 2024, to submit a plan to regain compliance.

On April 25, 2024, the Company received a letter from the Listing Qualifications Department of Nasdaq (the "Staff") notifying the Company of the Staff’s determination that the Company had regained compliance with Nasdaq Listing Rule 5635(d) and the Staff had determined that the matter was now closed. Pursuant to the Company's plan to regain compliance, on April 26, 2024, the Company announced that it had amended the warrant agreement with Hanmi to prohibit the exercise of the Hanmi warrants in excess of the Nasdaq 19.99% limitation (the "Nasdaq 19.99% Cap"), unless shareholder approval is first obtained to exceed the Nasdaq 19.99% Cap.

Nasdaq Minimum Bid Price requirement

On July 16, 2024, the Company received a deficiency letter (the “Deficiency Letter”) from the Nasdaq, notifying the Company that, for the prior thirty consecutive business days, the closing bid price for the Company’s common shares was below the minimum $1.00 per share required for continued listing on The Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(a)(2) (the “Minimum Bid Price Requirement”). The Deficiency Letter had no immediate effect on the listing of the Company’s common shares, and its common shares continued to trade on The Nasdaq Capital Market and the Toronto Stock Exchange (“TSX”) under the symbol “APS.” The Company’s listing on the TSX is independent and will not be affected by the Company’s Nasdaq listing status. The Company was given 180 calendar days, or until January 13, 2025, to regain compliance with the Minimum Bid Price Requirement. If at any time before January 13, 2025, the bid price of the Company’s common shares closed at $1.00 per share or more for a minimum of 10 consecutive business days, Nasdaq would have provided written confirmation that the Company regained compliance. If the Company did not regain compliance with the Minimum Bid Price Requirement by January 13, 2025, the Company may, at the discretion of Nasdaq, be afforded a second 180 calendar day period to regain compliance. To qualify for the extension, the Company was required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for The Nasdaq Capital Market, with the exception of the bid price requirement.

On January 14, 2025, the Company received an additional staff determination letter from the Nasdaq Listing Qualifications Department of The Nasdaq Stock Market LLC notifying the Company that, for the last thirty (30) consecutive business days, the closing bid price for the Company’s common shares was below the minimum $1.00 per share required for continued listing on The Nasdaq Capital Market pursuant to Nasdaq Listing Rule 5550(a)(2) (the “Minimum Bid Price Requirement”). The Company presented its plan of compliance to the hearings panel and was given until March 31, 2025, to regain compliance with the Minimum Bid Price Requirement.

On January 27, 2025, the Company held a Special Meeting of the shareholders of the Corporation (the “Meeting”). At the Meeting, shareholders voted in favor of an amendment to the Corporation’s Articles of Incorporation, as amended, to, at the discretion of the Company’s board of directors (the “Board”), to effect a Reverse Stock Split, with the ratio within such range to be determined at the discretion of the Board. The Board approved a ratio of 1-for-30 on February 18, 2025. Our Common Shares commenced trading on a post-Reverse Stock Split basis at market open on February 26, 2025. The par value and the authorized shares of the common stock were not adjusted as a result of the Reverse Stock Split. All the Company’s issued and outstanding Common Shares, stock options and warrants have been retroactively adjusted to reflect this Reverse Stock Split for all periods presented.

On March 14, 2025, Nasdaq confirmed that we had regained compliance with the minimum bid price requirement.

Nasdaq Equity rule requirement

On April 2, 2024, the Company received a letter (the “Notification Letter”) from Nasdaq stating that the Company was not in compliance with Nasdaq Listing Rule 5550(b)(1) (the “Rule”) because the stockholders’ equity of the Company as of December 31, 2023, as reported in the Company’s Annual Report on Form 10-K, was below the minimum requirement of $2.5 million (the “Stockholders’ Equity Requirement”). The Notification Letter had no immediate effect on the Company's continued listing on the Nasdaq Capital Market, subject to the Company's compliance with the other continued listing requirements. Pursuant to the Notification Letter, the Company had 45 calendar days to submit a plan to evidence compliance with the Rule (a “Compliance Plan”). The Company submitted the compliance plan on May 17, 2024, and received an extension to September 30, 2024 to regain compliance. As of September 30, 2024, the Company had not gained compliance with the requirement. Accordingly, on October 1, 2024, the Company received a staff determination letter from the Listing Department stating that the Company did not meet the terms of the extension because it did not complete its proposed financing initiatives to regain compliance. On October 8, 2024, the Company requested an appeal and hearing of the Listing Department’s determination, which automatically stayed Nasdaq’s delisting of the Company’s common shares pending the appeal panel’s decision, such hearing was scheduled for November 21, 2024. The Company submitted a revised plan to regain compliance on November 11, 2024 and on December 19, 2024, the Company announced that the panel granted the Company’s request for an extension to evidence compliance with all applicable criteria for continued listing on The Nasdaq Stock Market. On or before March 31, 2025, the Company will be required to demonstrate compliance with Nasdaq Listing Rule 5550(b)(1) requiring the Company to have a minimum of $2.5 million in shareholders’ equity (the “Equity Rule”) to continue its listing on the Nasdaq Stock Market.

As of March 28, 2025, the Company has not, yet, been able to regain compliance with the Nasdaq's minimum equity requirement of $2.5 million (the "Stockholders’ Equity Requirement").

LIQUIDITY AND CAPITAL RESOURCES

We are an early-stage development company and we currently do not earn any revenues from our drug candidates. The continuation of our research and development activities and the commercialization of the targeted therapeutic products are dependent upon our ability to successfully finance and complete our research and development programs through a combination of equity financing and payments from strategic partners. We have no current sources of significant payments from strategic partners. As of the filing date, we have sufficient liquidity to support the Company's operations until April 2025.

Sources of liquidity:

The following table presents our cash, cash equivalents and restricted cash and working capital as of December 31, 2024 and 2023.

	Balances at December 31, 2024 (in thousands)	Balances at December 31, 2023 (in thousands)
Cash, cash equivalents and restricted cash	$ 6,707	$ 9,252
Total current assets	$ 9,530	$ 11,894
Less: total current liabilities	(4,459)	(15,269)
Working capital	$ 5,071	$ (3,375)

Working capital is a non-GAAP measure which provides a fuller understanding of the Company's ability to fund future operations.

All our cash is maintained at high-credit quality institutions. We minimize the cash levels above the insurance levels required by the Federal Deposit Insurance Corporation and the Canada Deposit Insurance Corporation, with excess cash invested in short-term investments with leading financial institutions. Our short-term investments, maturing within 90 days and classified as cash and cash equivalents, consist of high interest savings accounts.

As of December 31, 2024, we reported negative shareholder's equity of $4.5 million (December 31, 2023, negative shareholder's equity of $2.9 million). In order for the Company to meet its capital requirements, and continue to operate, additional financing will be necessary. The Company plans to raise additional funds to fund our business operations through equity financing or other financing activities. Management continues considering other options for raising capital including debt, equity, through collaborations or reorganization to reduce operational expenses. However, given the challenges in the U.S. and global financial markets, which may impact the Company's ability to raise financing in the capital markets, the Company may be unable to access further equity or when needed, if at all. As the Company is primarily pursuing one compound that is licensed from a related party with significant licensing payments who will have influence on the Company, other investors may not be willing to invest in the Company. As such, there can be no assurance that the Company will be able to obtain additional liquidity when needed or under acceptable terms, if at all. The consolidated financial statements do not reflect any adjustments to the carrying amounts and classification of assets, liabilities, and reported expenses that may be necessary if the Company were unable to continue as a going concern. Such adjustments may be material. If necessary funds are not available, we may have to delay, reduce the scope of, or eliminate some of our development programs, potentially delaying the time to market for any of our product candidates.

(i)2022 At-The-Market Facility ("ATM")

On December 9, 2022, the Company entered into an equity distribution agreement pursuant to which the Company may, from time to time, sell Common Shares having an aggregate offering value of up to $50 million through Jones Trading Institutional Services LLC ("Jones Trading") on Nasdaq (the "2022 ATM Facility"). During the current year up to May 30, 2024, the date on which the Company terminated the 2022 ATM Facility, the Company issued 2,717 Common Shares under this 2022 ATM Facility at an average price of $36.60 per share for gross proceeds of $100 thousand (net of $121 thousand of share issuance costs). On May 30, 2024, the Company terminated the 2022 At-The-Market Facility. From inception to May 30, 2024, the date the Company terminated the 2022 ATM Facility, the Company raised a total of $2.1 million of gross proceeds ($2.0 million, net of share issuance costs) under the 2022 ATM Facility. Costs associated with the proceeds consisted of a 3% cash commission.

(ii)2023 Committed Equity Facility

On May 25, 2023, the Company and Keystone Capital Partners, LLC ("Keystone") entered into a committed equity facility, (the "2023 Committed Equity Facility"), which provides that subject to the terms and conditions set forth therein, we may sell to Keystone up to the lesser of (i) $25.0 million of the Common

Shares and (ii) a number of Common Shares equal to 19.99% of the Common Shares outstanding immediately prior to the execution of the 2023 Committed Equity Facility Agreement. with Keystone which respect to the 2023 Committed Equity Facility (subject to certain exceptions) (the "Total Commitment"), from time to time during the 24-month term of the 2023 Committed Equity Facility. Additionally, on May 25, 2023, the Company entered into a Registration Rights Agreement with Keystone, pursuant to which the Company agreed to file a registration statement with the SEC covering the resale of Common Shares that are issued to Keystone under the 2023 Committed Equity Facility. This registration statement became effective on June 30, 2023 and the 2023 Committed Equity Facility commencement date was July 12, 2023 (the "Commencement Date").

Upon entering into the 2023 Committed Equity Facility, the Company agreed to issue to Keystone an aggregate of 812 Common Shares (the "Commitment Shares") as consideration for Keystone's commitment to purchase Common Shares upon the Company's direction under the 2023 Committed Equity Facility. The Company issued 251 Common Shares, or 30% of the Commitment Shares, on the date of the 2023 Committed Equity Facility Agreement. An additional 251 Common Shares, or 30% of the Commitment Shares, were issued to Keystone in October 2023.

During the year ended December 31, 2023, the Company's issuance of Common Shares to Keystone comprised 24,016 Common Shares sold to Keystone at an average price of $87.30 per Common Share for cash proceeds of $2.1 million and 483 Commitment Shares.

During the year ended December 31, 2024, the Company issued 17,003 Common Shares to Keystone at an average price of $40.80 per Common Share for cash proceeds of $694 thousand and 329 Commitment Shares of $23 thousand. The Company recognized $82 thousand of financing costs associated with professional fees.

Since May 25, 2023 to April 2024, the time the Committed Equity Facility was terminated, the Company's issuance of Common Shares to Keystone comprised of an aggregate of 41,019 Common Shares at an average price of $68.10 per Common Share for aggregate gross cash proceeds of $2.8 million and 812 Commitment Shares.

From May 25, 2023 to the termination of the Committed Equity Facility, the Company recognized $168 thousand of financing costs associated with professional fees. In April 2024, the Company's issuances of Common Shares to Keystone reached the Total Commitment of the Committed Equity Facility, i.e. 19.99% of the Common Shares outstanding immediately prior to the execution of the 2023 Committed Equity Facility Agreement.

(iii)Hanmi 2023 Investment

On August 10, 2023, the Company entered into a binding term sheet with Hanmi whereby Hanmi agreed at their sole discretion to invest, up to a maximum of $7 million in Aptose up to a total ownership of 19.99% of Aptose by Hanmi. On September 6, 2023, the Company entered into a subscription agreement with Hanmi, pursuant to which the Company agreed to sell 22,281 Common Shares to Hanmi for proceeds of $3 million.

(iv)January 2024 Public Offering and Hanmi Private Placement

January 2024 Public Offering

On January 30, 2024, the Company completed a public offering (the "January 2024 Public Offering") of 188,304 Common Shares (including 24,561 Common Shares issued pursuant to a full exercise by the underwriter, Newbridge Securities Corporation ("Newbridge"), of its over-allotment option at a purchase price of $51.30 per Common Share, for aggregate gross proceeds of $9.7 million, less cash transaction costs of $1.6 million. The Company also issued share purchase warrants underlying a total of 188,174 Common Shares to each investor who participated in the January 2024 Public Offering (the "January 2024 Investor

Warrants"). Each January 2024 Investor Warrant has an exercise price of $51.30 per share and was exercisable immediately upon issuance. The January 2024 Investor Warrants will expire January 30, 2029.

Also in connection with the January 2024 Public Offering, the Company issued share purchase warrants underlying a total 18,084 Common Shares to Newbridge as compensation payable thereto, with each warrant having an exercise price of $64.13 per share and being exercisable beginning on July 30, 2025 and expiring on January 30, 2028. The issue-date fair value of all warrants issued to Newbridge in connection with the January 2024 Public Offering and the January 2024 Private Placements (the "Newbridge Warrants") were recorded as additional transaction costs, with a reduction to Common shares and a corresponding increase to Additional paid-in capital.

Hanmi Private Placement

Concurrently with the January 2024 Public Offering, the Company completed a private placement with Hanmi (the "Hanmi Private Placement") of 70,175 Common Shares at a price of $57.00 per Common Share, representing an 11% premium over the price of the Common Shares issued as part of the January 2024 Public Offering, for gross proceeds of $4.0 million, less cash transaction costs of $0.3 million. Also, as part of the January 2024 Private Placement, the Company issued to Hanmi, Common Share purchase warrants underlying 77,972 of our Common Shares (the "Hanmi Warrants"). Each Hanmi Warrant has an exercise price of $51.30 per Common Share and was exercisable immediately upon issuance. The Hanmi Warrants will expire January 31, 2029.

At December 31, 2024, Hanmi holds Common Shares and warrants of 99,647 and 77,972 respectively.

(v)Registered Direct Offering and concurrent private placement

On June 3, 2024, the Company completed the Registered Direct Offering for the purchase and sale of 60,000 Common Shares at a purchase price of $34.50 per Common Share and 68,500 pre-funded warrants (the "Pre-Funded Warrants") with an exercise price of $0.03 per Pre-Funded Warrant. Each Pre-Funded Warrant was exercisable immediately and expires on June 25, 2029.

In a concurrent private placement, Aptose issued unregistered series A warrants to purchase up to 128,500 Common Shares ("Series A Warrants") and series B warrants to purchase up to 128,500 Common Shares ("Series B Warrants"), each at an exercise price of $34.50 per share. The series A and series B unregistered warrants became exercisable beginning on the effective date of shareholder approval of the issuance of the shares issuable upon exercise of the warrants which was obtained on September 5, 2024. The Series A Warrants expire five years from September 5, 2024 and the Series B Warrants expire September 5, 2026.

The gross proceeds to the Company from the Registered Direct Offering was approximately $4.4 million, less cash transaction costs of approximately $0.4 million, which include placement agent and other professional fees. In addition, H.C. Wainwright ("HCW"), the lead placement agent engaged by the Company for the Registered Direct Offering, received 6,423 warrants, each with an exercise price of $43.13 (the "HCW Warrants"). The HCW warrants were exercisable beginning on September 5, 2024 and will expire on June 3, 2029.

(vi)September 2024 Common Share issuance

On September 5, 2024, the Company held a Special Meeting of Shareholders pursuant to which, shareholders voted to authorize, for purposes of complying with Nasdaq Listing Rule 5635(d), the issuance of Common Shares underlying certain warrants in an amount equal to or in excess of 20% of our Common Shares outstanding immediately prior the issuance of such warrants pursuant to the June 2024 Registered Direct Offering. On September 11, 2024, the Company issued 68,500 Common Shares upon the exercise of 68,500 Pre-Funded Warrants for a cash proceeds of $2 thousand at an exercise price of $0.03.

(vii)November 2024 Public Offering

On November 25, 2024, the Company completed a reasonable best efforts public offering (the "November 2024 Public Offering") with participation from our CEO and existing and new healthcare focused investors for the purchase and sale of 1,333,333 Common Shares at a price of $6.00 per share and warrants to purchase up to 666,599 Common Shares (the "November 2024 Investor Warrants"). The November 2024 Investor Warrants have an exercise price of $6.00 per share, were exercisable immediately and will expire five years from the issuance date. In connection with the November 2024 Public Offering, the Company received aggregate gross proceeds of $8.0 million, before deducting placement agent fees and other offering expenses, including approximately $1.1 million of placement agent fees of $0.6 million and professional fees of $0.5 million. Additionally, A.G.P./Alliance Global Partners ("AGP"), the lead placement agent engaged by the Company, received 53,333 warrants, each with an exercise price of $8.25 (the "AGP Warrants"). The AGP Warrants were exercisable immediately and will expire five years from November 25, 2024.

2022 Base Shelf

In October 2022, we filed a short form base shelf prospectus (the 2022 "Base Shelf") that allows us to distribute, upon the filing of prospectus supplements, up to $200,000,000 of Common Shares, warrants, or units comprising any combination of Common Shares and warrants. The Base Shelf was declared effective by the SEC on October 21, 2022 and expires on October 7, 2025.

Our ability to raise additional funds could be affected by adverse market conditions, the status of our product pipeline, and various other factors and we may be unable to raise capital when needed, or on terms favorable to us. If the necessary funds are not available, we may need to delay, reduce the scope of, or eliminate some of our development programs, potentially delaying the time to market for any of our product candidates. As of the filing date, we have sufficient liquidity to support the Company's operations until April 2025.

Cash flows

The following table presents a summary of our cash flows for the years ended December 31, 2024 and 2023:

	For the Years Ended,	
(in thousands)	**December 31, 2024**	**December 31, 2023**
Net cash (used in) provided by:		
Operating activities	$ (35,977)	$ (44,590)
Investing activities	18	9,960
Financing activities	33,414	6,910
Effect of exchange rates changes on cash and cash equivalents	—	2
Decrease in cash, cash equivalents, and restricted cash equivalents	$ (2,545)	$ (27,718)

Cash used in operating activities

Our cash used in operating activities for the year ended December 31, 2024 and December 31, 2023 was $36.0 and $44.6 million, respectively, for a decrease of $8.6 million. This was primarily due to reduced operating expenses, accounts payable and accrued liabilities. Our uses of cash for both periods consisted primarily of salaries and wages for our employees, facility and facility-related costs for our offices and laboratories, fees and pass-through expenses paid in connection with clinical and pre-clinical studies, drug manufacturing costs, laboratory supplies and materials, and professional fees. See "Results of Operations."

We do not expect to generate positive cash flow from operations in the foreseeable future due to increased research and development costs. These include expenses related to drug discovery, preclinical testing, clinical trials, and manufacturing, along with operating costs associated with supporting these activities, as well as potential

milestone payments to our collaborators. Negative cash flow is anticipated to continue until, if ever, we receive regulatory approval to commercialize any of our products in development or until royalty or milestone revenue from such products exceeds expenses.

Cash flow from investing activities:

Our cash provided by investing activities for the year ended December 31, 2024 was $18 thousand, and consisted of net acquisition of property and equipment and net disposal of property and equipment.

Our cash provided by investing activities for the year ended December 31, 2023 was $9,960 thousand, consisting mainly of net maturities of investments and net purchases of property and equipment.

Cash flow from financing activities:

Our cash flows from financing activities for the year ended December 31, 2024, amounted to $33.4 million, consisting of $10.0 million related party loan proceeds from Hanmi along with several share offerings during the year totaling $23.5 million.

Our cash flows from financing activities for the year ended December 31, 2023, was $6.9 million. This total includes $3.0 million in proceeds from shares issued to Hanmi, $2.1 million from the Committed Equity Facility, $1.8 million from shares issued through the 2022 ATM facility, and $29 thousand from the issuance of shares under the ESPP plan.

Contractual Obligations and Off-Balance Sheet Financing

As of December 31, 2024, we have not entered into any off-balance sheet arrangements.

In the ordinary course of business, the Company enters into research, development and license agreements pursuant to which we receive research services and rights to proprietary technologies. Milestone and royalty payments that may become due under various agreements are dependent on, among other factors, clinical trials, regulatory approvals and ultimately the successful development of a new drug, the outcome and timing of which is uncertain.

On November 4, 2021, the Company entered into the Tuspetinib Licensing Agreement with Hanmi for exclusive global rights to its compound named tuspetinib. Under the Tuspetinib Licensing Agreement, the Company has maximum obligations for clinical development and global regulatory milestones totaling $64.5 million for the first potential clinical indication of tuspetinib, $34 million for the second indication, and $29 million for the third indication. The Company has maximum obligations for tiered global sales-based milestones totaling $280 million. The Company also has an obligation for tiered royalty payments on global sales of commercialized product. The timing of any milestone or royalty payments that may become due is not yet determinable.

Under the license agreement with CG regarding the Rights (other than the China Rights), the Company has obligations for development milestones of $16 million related to the initiation of Phase 2 and pivotal clinical trials, and regulatory milestones totaling $44 million. The Company also has an obligation to pay royalty payments on sales

of commercialized product. The timing of any milestone or royalty payments that may become due is not yet determinable.

RESULTS OF OPERATIONS

A summary of the results of operations for the years ended December 31, 2024 and 2023 is presented below:

(in thousands, except per common share data)	Year ended December 31, 2024	2023
Revenues	$ —	$ —
Research and development expenses	15,103	36,765
General and administrative expenses	11,154	15,591
Change in fair value of warrants	686	—
Net finance income	141	1,149
Net loss	$ (25,430)	$ (51,207)
Unrealized gain on securities available-for-sale	—	2
Total comprehensive loss	$ (25,430)	$ (51,205)
Basic and diluted loss per common share	$ (36.38)	$ (227.43)

Net loss of $25.4 million for the year ended December 31, 2024 decreased by approximately $25.8 million as compared with $51.2 million for the year ended December 31, 2023, primarily as of a result of a decrease in research and development program costs and personnel expenses of $21.7 million, and a $4.4 million decrease in general and administrative costs.

Research and Development Expenses

Research and development ("R&D") expenses consist primarily of costs incurred related to the research and development of our product candidates and include:

•External research and development expenses incurred under agreements with third parties, such as contract research organizations, consultants, members of our scientific advisory boards, external labs and contract manufacturing organizations; and

•Employee-related expenses, including salaries, benefits, travel, and stock-based compensation for personnel directly supporting our clinical trials, manufacturing and development activities.

Subject to successful new financing activities, we expect our research and development expenses to be lower during 2025 than in 2024; and for the foreseeable future, as we advance tuspetinib into more extensive clinical trials, costs will increase unless the program is partnered.

Our R&D expenses for the years ended December 31, 2024 and 2023 were as follows:

(in thousands)	Year ended December 31, 2024	2023
Program costs – Tuspetinib	$ 9,606	$ 24,925
Program costs – Luxeptinib	422	3,510
Program costs – APTO-253	(19)	40
Personnel expenses	4,735	6,878
Stock-based compensation	346	1,373
Depreciation of property and equipment	13	39
	$ 15,103	$ 36,765

R&D expenses decreased by $21.7 million to $15.1 million for the year ended December 31, 2024 as compared with $36.8 million for the year ended December 31,2023. Changes to the components of our R&D expenses presented in the table above are primarily as a result of the following activities:

•Program costs for tuspetinib decreased by $15.3 million. This reduction is primarily due to decreased activity in our APTIVATE clinical trial, along with reduced manufacturing costs and related expenses

•For the comparative period in 2023, tuspetinib program costs included the healthy volunteer study, which was completed in the same year. The higher program costs for tuspetinib in 2023 represent the enrollment of patients in our APTIVATE clinical trial, our healthy volunteer trial, manufacturing activities to support clinical development, and related expenses.

•Program costs for luxeptinib decreased by approximately $3.1 million compared to the prior year. This reduction is primarily attributed to lower clinical trial and manufacturing activities.

•Program costs for APTO-253 decreased $59 thousand, from December 31, 2023. This reduction is due to the Company's decision on December 20, 2021, to cease further development of APTO-253.

•Personnel-related expenses decreased by $2.1 million, due to lower headcount in 2024.

•Stock-based compensation decreased by approximately $1.0 million in the year ended December 31, 2024, compared with the year ended December 31, 2023. This decrease is primarily due to stock options granted with lower grant date fair values when compared to the options granted in the prior period, coupled with option forfeitures recorded for the current year.

General and Administrative Expenses

General and administrative expenses consist primarily of salaries, benefits and travel, including stock-based compensation for our executive, finance, business development, human resources, and support functions. Other general and administrative expenses include professional fees for auditing, legal services, investor relations and other consultants, as well as insurance and facility related expenses.

We expect that our general and administrative expenses will increase for the foreseeable future as we incur additional costs associated with being a publicly traded company and to support our expanding pipeline of activities. We also expect our intellectual property related legal expenses to increase as our intellectual property portfolio expands.

The general and administrative expenses for the years ended December 31, 2024 and 2023 are as follows:

	Year ended December 31,	
	2024 (in thousands)	2023 (in thousands)
General and administrative, excluding items below:	$ 10,421	$ 13,262
Stock-based compensation	714	2,280
Depreciation of property and equipment	19	49
	$ 11,154	$ 15,591

General and administrative expenses for the year ended December 31, 2024, were $11.2 million, compared to $15.6 million for the same period in 2023, a decrease of $4.4 million. This decrease was primarily due to lower salary expenses and professional fees incurred during the period.

Stock-based compensation decreased by $1.6 million primarily due to a reduced number of options granted in the year ending December 31, 2024. Those options had a lower grant date fair value compared to the options granted in the prior period, along with option forfeitures recorded in the current period.

CRITICAL ACCOUNTING POLICIES

Critical Accounting Policies and Estimates

We periodically review our financial reporting and disclosure practices and accounting policies to ensure that they provide accurate and transparent information relative to the current economic and business environment. As part of this process, we have reviewed our selection, application and communication of critical accounting policies and financial disclosures. A "critical accounting policy" is one which is both important to the portrayal of our financial condition and results and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Management has discussed the development and selection of the critical accounting policies with the Audit Committee of the Board, and the Audit Committee has reviewed the disclosure relating to critical accounting policies in this MD&A. For additional information, please see the discussion of our significant accounting policies included in Note 2 under Item 8, Financial Statements and Supplementary Data, in this Annual Report on Form 10-K.

Significant Accounting Judgments and Estimates

Management's assessment of our ability to continue as a going concern involves making a judgment, at a particular point in time, about inherently uncertain future outcomes and events or conditions. Please see "Liquidity and Capital Resources" above for a discussion of the factors considered by management in arriving at its assessment. The critical accounting policies, judgments and estimates made by management are the estimates related to prepaid and accrued R&D activities.

Research and Development Activities:

R&D costs are expensed as incurred. R&D costs consist primarily of salaries and benefits, stock-based compensation, manufacturing, contract services, clinical trials, and research related overhead. Non-refundable advance payments for goods and services that will be used in future research are recorded in prepaid and other assets and are expensed when the services are performed.

The Company records expenses for research and development activities based on management's estimates of services received and efforts expended pursuant to contracts with vendors that conduct research and development on the Company's behalf. The financial terms vary from contract to contract and may result in uneven payment flows as compared with services performed or products delivered. As a result, the Company is required to estimate research and development expenses incurred during the period, which impacts the amount of accrued expenses and prepaid balances related to such costs as of each balance sheet date. Management estimates the amount of work completed through discussions with internal personnel and the contract research and contract manufacturing organizations as to the progress or stage of completion of the services. The Company's estimates are based on a number of factors, including the Company's knowledge of the status of each of the research and development project milestones, and contract terms together with related executed change orders. Management makes significant judgments and estimates in determining the accrued balance at the end of each reporting period.

Although management does not expect our estimates to be materially different from amounts actually incurred, if the estimates of the status and timing of services performed differ from the actual status and timing of services performed, it could result in the Company reporting amounts that are too high or too low in any particular period. As of December 31, 2024, the Company has recorded $1.6 million in prepaid expenses and $1.6 million in accrued liabilities related to its research and development activities. If the estimates are too high or too low by a factor of 10%, prepaid expenses would be overstated or understated by $160 thousand, and accrued liabilities would be over or understated by $160 thousand. Combined, this could mean an increase or decrease in research and development expenses by $320 thousand. There have been no material differences between the estimates of such expenses and the amounts actually incurred.

Updated share information

As of March 21, 2025, we had 2,552,429 Common Shares issued and outstanding. In addition, 39,219 Common Shares were issuable upon the exercise of outstanding stock options and 1,267,585 Common Shares issuable upon the exercise of outstanding Common Share purchase warrants.

ITEM 7A. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

Under SEC rules and regulations, as a smaller reporting company, we are not required to provide this information.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements and supplementary data required pursuant to this items are included in Item 15 of this Annual Report and are presented beginning on page F-1 of this Annual Report on Form 10-K.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

As of the end of our fiscal year ended December 31, 2024, an evaluation of the effectiveness of our "disclosure controls and procedures" (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) was carried out by our management, with the participation of our principal executive officer and principal financial officer. Based upon that evaluation, our principal executive officer and principal financial officer have concluded that as of the end of that fiscal year, our disclosure controls and procedures were not effective due to the material weakness in our internal control over financial reporting related to our accounting for complex financial instruments, specifically with regards to warrants.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rule 13a-15(f). Internal control over financial reporting is a process designed under the supervision and with the participation of our management, including our principal executive and financial officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

As of December 31, 2024, our management assessed the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013 Framework). Based on this assessment, our management concluded that, as of December 31, 2024, our internal control over financial reporting were not effective based on those criteria. We are a "smaller reporting company" as defined in Item 10(f)(1) of Regulation S-K under the Securities Act. For as

long as we continue to be a smaller reporting company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not smaller reporting companies.

Remediation Plan

We plan to undertake certain actions to remediate this deficiency and strengthen our internal control over financial reporting by enhancing existing controls and establishing additional review and procedure controls over the process of reviewing significant and complex contracts and agreements, which include the following:

1. Identify specific clauses and relevant guidance that could result in liability classification of issued warrants;

2. Identify and engage a firm that specializes in the analysis and technical accounting for the classification of warrants and utilize this firm to assist with the technical accounting analysis for our warrants, including arriving at the conclusion that these warrants should be classified as liabilities and marked to market each reporting period; and

3. Provide additional guidance, education and training to employees relating to our accounting procedures with a continued focus on warrant classification.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the 1934 Act) during our fiscal quarter ended December 31, 2024, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Director	Experience and Qualifications
Carol G. Ashe[2][3] Pennsylvania, United States Director Since August 2018	Ms. Ashe, age 67, has been the Chief Business Officer at the New York Genome Center, an independent, non-profit academic research institution focused on the advancement of genomic science and its application to drive novel biomedical discoveries to advance the understanding of the genetic basis of neurodegenerative disease, neuropsychiatric disease, and cancer, since 2014. Previously, she served as Vice President of Corporate Development for Endo's (NASDAQ: ENDP) branded, generic and platform drug delivery pharmaceutical business units from 2011 to 2013; a Partner at SR One, the corporate venture capital fund of GlaxoSmithKline (NYSE: GSK) or "GSK", from 2008 to 2010; and head of GSK's U.S. Corporate Legal Group supporting U.S.-based mergers, acquisitions, and equity investments from 2007 to 2008. Prior to that, Ms. Ashe led GSK's Global Business Development Transactions Legal Team supporting both the pharmaceutical and consumer healthcare business units for many years until 2007. In 2020, Ms. Ashe joined the Board of Elicio Therapeutics, Inc. (NASDAQ: ELTX), a clinical-stage biotechnology company developing a pipeline of novel immunotherapies for the treatment of cancer, as an independent director and she is a member of the Audit Committee, Nominating and Corporate Governance Committee and Chair of the Compensation Committee. Ms. Ashe received her BS degree in Biology from Pennsylvania State University, her law degree from Villanova University School of Law and is a registered patent attorney. Ms. Ashe makes valuable contributions to the Board based on over 25 years of experience in the pharmaceutical and biotechnology industry in business development and as legal counsel for business development transactions and patent matters.
Dr. Denis Burger[1][2][3][5] Oregon, United States Director Since 2007	Dr. Burger, age 81, currently is the managing member of Paradigm Ventures LLC, a healthcare consulting and funding firm based in Portland, Oregon, and has been since 1986. Previously, he co-founded Trinity Biotech, PLC, a diagnostic biotechnology company based in Dublin, Ireland, where he was Chairman from 1992 to 1995 and served on its board of directors until 2020 and chaired its Audit Committee from 1996 to 2016. Dr. Burger served as the Chairman, Chief Executive Officer and a Director of AVI Biopharma Inc., an Oregon-based biotechnology company, from 1996 to 2007. He was a co-founder and Chairman of Epitope Inc. from 1981 to 1990. Dr. Burger was Vice Chairman and Chief Scientific Officer of CytoDyn Inc. from 2014 to 2018. Dr. Burger has served as President of Yamhill Valley Vineyards since 1983. In addition, Dr. Burger previously held a professorship in the Department of Microbiology and Immunology and Surgery (Surgical Oncology) at the Oregon Health Sciences University in Portland. Dr. Burger received his M.Sc. and Ph.D. in Microbiology and Immunology from the University of Arizona. Dr. Burger served on the board of directors of Epitope Inc (1986-1990)*, Trinity Biotech, PLC. (1992 to 2020)*, CytoDyn Inc. (2014 to 2018)* and AVI BioPharma Inc (1996-2007)*. Dr. Burger has served on the Board of Aptose since 2007 and was Chair of the Audit Committee of Aptose from 2008 to 2015. Dr. Burger makes valuable contributions to the Board based on his Ph.D. in microbiology and immunology, and his more than 25 years of experience in the biotechnology industry as a senior executive and as a corporate director.

Dr. Erich Platzer[2][4] Basel, Switzerland Director Since 2014	Dr. Platzer, age 74, served as a board-certified physician in internal medicine, hematology and medical oncology between 1979 and 1991. In 2001, Dr. Platzer co-founded HBM Healthcare Investments (formerly HBM BioVentures), a global leader in healthcare investing and served as their investment advisor until 2015. Previously, he served as the business director of oncology, as well as the global strategic marketing and therapeutic area head of oncology at Roche, Basel. He also served in various other leadership roles at Roche and was responsible for various strategic corporate partnerships. He has over 12 years of experience in academic medicine and research and was a key member of the team at MSKCC that purified human G-CSF in 1983 (recombinant form: Neupogen®). He earned his M.D. from the Medical School of the University of Erlangen, where he also received his "Dr. med. habil." (M.D., Ph.D.). Dr. Platzer has served as a pharmaceutical industry expert on the board of directors of multiple biotech companies in both the U.S. and Europe. Currently he serves as chairman of Vivoryon Therapeutics NV, as well as a director of privately held Nitinotes Ltd. (Israel), coramaze technologies GmbH (Germany) and LMD SA (Switzerland). He has also served as the president of Swiss business angel group StartAngelsNetwork and remains a board member of this organization. Dr. Platzer makes valuable contributions to the Board based on over 25 years of experience in the biotechnology industry as a physician in hematology and medical oncology, as a corporate executive, and as a corporate director.
Dr. Bernd R. Seizinger[1][4] New Jersey, United States Director Since 2022	Dr. Seizinger, age 68, is an accomplished senior executive leader with more than 25 years of industry experience in both U.S. and European biotechnology and pharmaceutical companies and multiple financial advisory positions. His current positions include: Chairman of the board of directors, Oxford BioTherapeutics (U.K. private company, since 2016); Co-founder, executive chairman of the board and acting CEO, CryptoMedix (U.S. private company, since 2015). Furthermore, he is currently a member of the board of directors of the following publicly traded biotech companies: Aprea Therapeutics Inc. (U.S.; NASDAQ; since 2014)*; Oncolytics Biotech Inc. (Canada/U.S.; NASDAQ and TSX; since 2015)*; BioInvent International AB (Sweden; NASDAQ Stockholm; since 2018). In addition, he is currently serving on the advisory board of biotech venture capital fund Pureos (Switzerland; since 2019) and is senior advisor to biotech venture fund Hadean (Sweden & Norway; since 2018). Previous positions include: Bristol-Myers Squibb (U.S.) where he served as VP for oncology drug discovery and VP for corporate and academic alliances. Subsequently, he served as executive vice president and CSO of U.S. biotech company Genome Therapeutics, followed by 12 years as CEO and President of German/U.S. biopharmaceutical company GPC Biotech (listed on Frankfurt Stock Exchange and NASDAQ). Prior to his corporate appointments, Dr. Seizinger held senior faculty positions at Harvard Medical School and Massachusetts General Hospital and was a Visiting Professor at Princeton University during his tenure at Bristol-Myers Squibb. Dr. Seizinger received his M.D. from Ludwig-Maximilians-Universität Munich, and his Ph.D. from Max-Planck-Institute of Psychiatry/Neurobiology in Munich. Dr. Seizinger makes valuable contributions to the Board based on his insight and vast global biopharmaceutical experience.

Dr. William G. Rice[4] California, United States Director Since 2013	Dr. Rice, age 66, serves as the President, Chief Executive Officer, and Chairman of the Board of Aptose and joined the company in 2013. Prior to joining Aptose, Dr. Rice served as the President, Chief Executive Officer, and Chairman of the Board of Directors of Cylene Pharmaceuticals, Inc., a private biotechnology company from 2003 to 2013. Prior to Cylene, Dr. Rice was the founder, President, Chief Executive Officer and Director of Achillion Pharmaceuticals, Inc. from 1998 to 2003. Dr. Rice also served at the National Cancer Institute-Frederick National Laboratory for Cancer Research (FNLCR) as Senior Scientist and Head of the Drug Mechanism Laboratory from 1992 to 1998, prior to which he served as a faculty member in the division of Pediatric Hematology and Oncology at the Emory University School of Medicine from 1989 to 1992. Dr. Rice performed his post-doctoral fellowship in the Department of Medicine, Division of Hematology and Oncology at the University of Michigan Medical Center from 1986 to 1989, prior to which he received his Ph.D. from the Emory University Department of Biochemistry in 1986. Dr. Rice continues to serve as the Chairman of the Board of Directors of Cylene and was previously a member of the Board of Directors of Oncolytics Biotech Inc. (2015 to 2021)*. Dr. Rice makes valuable contributions to the Board of Directors based on his Ph.D. in Biochemistry, his extensive involvement in preclinical and clinical studies, his proven record of financings and licensing deals, and his more than 25 years of experience in the biotechnology industry as a senior executive and as a corporate director.
Dr. Mark D. Vincent[3])[4] Ontario, Canada Director Since 2007	Dr. Vincent, age 72, has been a Professor of Oncology at the University of Western Ontario since 2008 and a staff medical oncologist at the London Regional Cancer Program since 1990. Dr. Vincent has also served as the co-founder and Chief Executive Officer of Sarissa, Inc., a private company actively involved in the development of compounds which potentiate existing, approved targeted drugs including agents approved in leukemia, since 2000. Dr. Vincent holds multiple patents on the potentiation of cancer chemotherapy by the manipulation of drug resistance genes, sits on the advisory boards and speakers panels of several major pharmaceutical companies, and is a frequent international lecturer on the positioning of new drugs in the complex evolving management of lung and gastro-intestinal cancer. Dr. Vincent completed his oncology training at the Royal Marsden Hospital in London, England, with a major focus on leukemia/lymphoma. Dr. Vincent makes valuable contributions to the Board based on over 25 years of experience as a medical oncologist.

Warren Whitehead[1] Ontario, Canada Director Since 2011	Mr. Whitehead, age 72, serves as Chief Executive Officer of Amphotericin B Technologies, a subsidiary of Satellos Bioscience Inc., since April 2024. Previously, he served as the Head of Corporate Strategy and Chief Financial Officer of Satellos Bioscience Inc. ("Satellos"), a TSX-listed regenerative medicine company aimed at developing therapeutics for degenerative muscle diseases, since August 2021. He previously served as the Chief Financial Officer of ProMIS Neurosciences Inc. (formerly Amorfix Life Sciences Ltd.), a TSX-listed company targeting detection and effective treatment of Alzheimer's disease and amyotrophic lateral sclerosis, from 2013 to 2015, after which he concentrated on his role on corporate boards until he joined Satellos in 2021. From 2006 to 2008, he was the Chief Financial Officer of Arius Research Inc., a TSX-listed company developing anti-cancer antibodies, where he provided financial guidance and leadership during the acquisition of Arius by Roche in 2008. He was also the former Chief Financial Officer of Labopharm Inc. from 2000 to 2006, where he completed a series of public equity financings, including a cross-border Nasdaq offering. Other positions include Chief Financial Officer of Resolution Pharmaceuticals Inc., and a position in finance and business development at Glaxo Canada (now GlaxoSmithKline). Mr. Whitehead holds an MBA, and BComm from the University of Windsor and a BA from the University of Western Ontario. Mr. Whitehead was the former Chairman and board member of Plantform Corporation until 2019 and a former Board Member of Telesta Therapeutics (TSX), which was acquired by Prometic Life Sciences in 2016. Mr. Whitehead makes valuable contributions to the Board based on his financial expertise as a Chartered Professional Accountant (CPA) who has held chief financial officer roles at publicly traded pharmaceutical and biotechnology firms.

(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

(3) Member of the Corporate Governance and Nominating Committee.

(4) Member of the R&D Committee.

(5) Lead Director of the Corporation.

* SEC reporting issuer

Other than as described below, no proposed director is, to the knowledge of the Corporation as at the date of this filing, or has been, within 10 years before the date of this filing, a director, chief executive officer or chief financial officer of any company (including Aptose) that: (i) was subject to a cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Canadian securities legislation that was in effect for a period of more than 30 consecutive days, (ii) was subject to cease trade order, an order similar to a cease trade order or an order that denied the relevant company access to any exemption under Canadian securities legislation that was in effect for a period of more than 30 consecutive days that was issued after the proposed director ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer, (iii) while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets, or (iv) become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromised with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the proposed director.

Dr. Seizinger was a non-executive independent director of Opsona Therapeutics Ltd., a private company formed under the laws of Ireland, which filed for a creditors' voluntary liquidation under applicable Irish law in December 2018.

Moreover, no proposed director of the Corporation has been subject, to the knowledge of the Corporation, to (i) any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority, or (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable securityholder in deciding whether to vote for a proposed director.

There are no family relationships among any of the director nominees, directors and/or any of Aptose's executive officers. In addition, no nominee has an arrangement or understanding with another person under which he or she was or is to be selected as a director or nominee.

Composition and Independence of the Board

The Corporation's Board is currently composed of seven directors, a majority (six) of whom meet the independence standards under the listing standards of Nasdaq, the rules and regulations of the SEC, and National Instrument 52-110 – *Audit Committees* ("NI 52-110"). Each year the Board reviews the composition of the Board and assesses whether a Board member is "independent".

Director	**Independence**
Carol Ashe	Yes
Denis Burger	Yes
Erich Platzer	Yes
William G. Rice	No
Bernd R. Seizinger	Yes
Mark Vincent	Yes
Warren Whitehead	Yes

Dr. William G. Rice, Ph.D., Chairman, President and Chief Executive Officer of the Corporation is not an independent director because of his role in the Corporation's management team.

Ethical Business Conduct

We have adopted a code of ethics for directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at http://www.aptose.com under the Corporate Governance section of our Investors page. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals that is required to be disclosed pursuant to SEC rules and regulations, the name of such person who is granted the waiver and the date of the waiver.

The Corporate Governance and Nominating Committee regularly monitors compliance with the Code through communications with management and reports through the Disclosure and Insider Trading Policy (as described below) and ensures that management of the Corporation encourages and promotes a culture of ethical business conduct. A copy of the Code may be found by accessing the SEC's EDGAR filing database at www.sec.gov, on SEDAR+ at www.sedarplus.ca and on our website at www.aptose.com.

The Corporation has developed a Disclosure and Insider Trading Policy that covers "whistle blowing" and provides an anonymous means for employees and officers to report violations of the Code or any other corporate policies, in addition to providing guidelines on employee trading in the Corporation's securities.

The Board has not granted any waiver of the Code in favor of a director or officer of the Corporation. No material change reports have been filed since the beginning of the Corporation's most recently completed fiscal year that pertain to any conduct of a director or executive officer that constitutes a departure from the Code.

Conflicts of Interest

The Corporate Governance and Nominating Committee monitors the disclosure of conflicts of interest by directors and ensures that no director will vote or participate in a discussion on a matter in respect of which such director has a material interest.

Board Committees

The Corporation has a standing Audit Committee, a Corporate Governance and Nominating Committee and a Compensation Committee, each of which are composed entirely of independent directors. The Corporation also has a standing R&D Committee. Each current member of the R&D Committee, except for Dr. Rice, qualifies as "independent" under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Audit Committee

Membership. The current members of the Audit Committee are Denis Burger, Bernd R. Seizinger and Warren Whitehead. Mr. Whitehead is the Chair of the Audit Committee. The Board has determined that all members of the Audit Committee qualify as financial experts under the listing standards of Nasdaq.

In addition, each current member of the Audit Committee qualifies as "independent" for purposes of membership on audit committees under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The Audit Committee met four times during the period from January 1, 2024 until December 31, 2024.

Committee Mandate. Among its responsibilities, the Audit Committee:

•serves as an independent and objective party to monitor the integrity of our financial reporting process and systems of internal controls regarding finance, accounting, and legal compliance, including the review of our consolidated financial statements, MD&A and annual and interim results;

•identifies and monitors the management of the principal risks that could impact our financial reporting;

•monitors the independence and performance of our independent auditors, including the pre-approval of all audit fees and all permitted non-audit services in accordance with federal securities laws and the rules and regulations of the SEC;

•provides an avenue of communication among the independent auditors, management, and the Board; and

•encourages continuous improvement of, and foster adherence to, our policies, procedures and practices at all levels.

The Audit Committee is also responsible for implementing and overseeing our whistle-blowing procedures and reviewing the Corporation's plans to mitigate cybersecurity risks and respond to data breaches.

Corporate Governance and Nominating Committee

Membership. The current members of the Corporate Governance and Nominating Committee are Mark Vincent, Carol Ashe and Denis Burger. Dr. Vincent is the Chair of the Corporate Governance and Nominating Committee. Each current member of the Committee qualifies as "independent" under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110.

Meetings. The Corporate Governance and Nominating Committee met two times during the period from January 1, 2024 until December 31, 2024. In addition, governance matters were discussed and considered at the Board level.

Committee Mandate. Among its responsibilities, the Corporate Governance and Nominating Committee:

•identifies qualified individuals to become Board members, consistent with criteria approved by the Board;

•determines the composition of the Board and its committees;

•selects the director nominees for the next annual meeting of shareholders;

•monitors a process to assess Board, committee and management effectiveness;

•aids and monitors management succession planning; and

•develops, recommends to the Board, implements and monitors policies and processes related to the Corporation's corporate governance guidelines

Compensation Committee

Membership. The Compensation Committee is currently comprised of Carol Ashe, Denis Burger and Erich Platzer. Dr. Burger is the Chair of the Compensation Committee. Each current member of the Compensation Committee qualifies as "independent" for purposes of membership on compensation committees under the listing standards of Nasdaq, the rules and regulations of the SEC and NI 52-110, and as a "non-employee director" within the meaning of Rule 16b-3 under the Exchange Act.

Meetings. The Compensation Committee met four times during the period from January 1, 2024 until December 31, 2024. In addition, compensation matters were discussed and considered at the Board level.

Committee Mandate. Among its responsibilities, the Compensation Committee:

•reviews and makes recommendations to the Board regarding the corporate goals and objectives, performance and compensation of the Chief Executive Officer and other senior executive officers on an annual basis;

•evaluates the performance of the Chief Executive Officer and other senior executive officers;

•makes recommendations to the Board with respect to the compensation policies for the non-employee directors;

•makes recommendations regarding annual bonus policies for employees, the incentive-compensation plans and equity-based plans for the Corporation; and

•reviews executive compensation disclosure before the Corporation publicly discloses this information.

As part of its process to make recommendations to the Board with respect of the compensation for the non-employee directors and other employees of the Corporation, the Compensation Committee consults with the President and Chief Executive Officer and other officers of the Corporation to obtain recommendations as it deems necessary.

We have adopted a code of ethics for directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at http://www.aptose.com under the Corporate Governance section of our Investor Relations page. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals that is required to be disclosed pursuant to SEC rules and regulations, the name of such person who is granted the waiver and the date of the waiver.

The Company has an insider trading policy which governs the purchase, sale and/or other dispositions of its securities by directors, officers and employees, as well as the Company itself, that are reasonably designed to promote compliance with insider trading laws, rules and regulations and the exchange listing standards applicable to APTO. A copy of the Company's Insider Trading Policy has been filed as Exhibit 19.1 to this Annual Report.

ITEM 11. EXECUTIVE COMPENSATION

Information About Our Executive Officers

Our leadership team comprises accomplished industry, financial and clinical research professionals who are dedicated to building a comprehensive anticancer drug pipeline and clinical development programs focused on targeted therapeutics directed against dysregulated oncogenic processes in patients with life-threatening hematologic malignancies. For the year ended December 31, 2024, the leadership team included our Chairman, President and Chief Executive Officer, Dr. William G. Rice, our Senior Vice President, Chief Financial Officer and Chief Business Officer, Fletcher Payne and our Senior Vice President and Chief Medical Officer, Dr. Rafael Bejar.

Fletcher Payne, age 62, joined Aptose as Senior Vice President, Chief Business Officer, Chief Financial Officer ("CFO"), and Corporate Secretary in June 2022. With over 25 years of experience in the healthcare sector, Mr. Payne has held several CFO and senior management positions at various biotech companies, in addition to roles in finance and accounting. He has also overseen legal, corporate development, and licensing functions. Throughout his career, he has successfully executed a diverse range of business transactions totaling more than $3.7 billion, focusing primarily on clinical testing, oncology, neurological conditions, and orphan disease indications. Mr. Payne most recently held the position of CFO at Syapse, where he successfully completed several financing transactions and oversaw the company's accounting, finance, corporate development, and legal functions. Previously, he served as CFO at Catalyst Biosciences, a publicly traded biotech company. Mr. Payne has also held CFO roles and senior financial positions at various organizations, including CytomX Therapeutics, Plexxikon Inc., Rinat Neuroscience Corporation, Dynavax Technologies Corporation, and Cell Genesys, among others. He earned a Bachelor of Science in Finance from the Haas School of Business at the University of California, Berkeley.

Dr. Rafael Bejar, M.D, Ph.D., age 53, joined Aptose as Senior Vice President and Chief Medical Officer in January 2020. Dr. Bejar is an internationally recognized physician scientist with extensive research and clinical experience in the area of hematologic malignancies. Dr. Bejar joined Aptose from UC San Diego ("UCSD") where he began working in 2012. He continues to serve at UCSD as an Associate Professor of Clinical Medicine, caring for patients and maintaining a research laboratory focused on translational studies of myeloid malignancies and also serves and is an independent consultant as a member of the Independent Data Monitoring Committee for other pharmaceutical companies. At UCSD, he founded the MDS Center of Excellence and led the Hematology Disease Team from 2017 to 2019. There he has directed several clinical studies and served as an advisor for numerous companies including Celgene (now BMS), Takeda, AbbVie, Astex, Genoptix (now NeoGenomics), Keros, Servier, Geron, Forty Seven (now Gilead), PersImmune, Epizyme (now Ipsen) and Daiichi-Sankyo. Outside UCSD, Dr. Bejar sits on the Scientific Advisory Board for the MDS Foundation, is a prior member of the National Comprehensive Cancer Network Guidelines Committee, and has led projects for the International Working Group for MDS. He is frequently invited to speak at national and international meetings and has published articles in a variety of journals including *The New England Journal of Medicine*, *Journal of Clinical Oncology*, *Leukemia* (where he is an Associate Editor), *Blood, and Blood Advances*. Dr. Bejar completed his fellowship in the Massachusetts General Hospital Cancer Center/Dana-Farber Cancer Institute program and has been board certified in Internal Medicines, Hematology and Oncology. He completed his internship in Internal Medicine at the University of Chicago followed by his residency at the Brigham and Women's Hospital in Boston where he later served a Medical Chief Resident and an Instructor in Hematology. He holds an MD degree and Neuroscience PhD from UCSD and a BS in Physics from MIT.

The following discussion covers the compensation arrangements for Dr. Rice, Mr. Payne and Dr. Bejar (each, an "NEO" and, collectively the "Named Executive Officers").

Compensation Philosophy

The Compensation Committee's mandate is to review and advise the Board on the recruitment, appointment, performance, compensation, benefits and termination of executive officers. The Compensation Committee also administers and reviews procedures and policies with respect to equity-based compensation plans, employee benefit programs, pay equity and employment equity and reviews executive compensation disclosure where it is publicly disclosed.

Aptose's executive compensation program is designed to:

•attract and retain qualified, motivated and achievement-oriented individuals by offering compensation that is competitive in the industry and marketplace, especially given the current challenging market conditions for recruiting and retaining talent;

•align executive interests with the interests of shareholders; and

•ensure that individuals continue to be compensated in accordance with their personal performance and responsibilities and their contribution to our overall objectives.

These objectives are achieved by offering executives and employees a compensation package that is competitive and rewards the achievement of both our short-term and long-term objectives. As such, our compensation package consists of three key elements:

•base salary and initial stock options;

•short-term compensation incentives to reward corporate and personal performance through potential annual cash bonuses; and

•long-term compensation incentives related to long-term increase in share value through participation in equity-based compensation plans.

The Compensation Committee reviews each of these items on a stand-alone basis and also reviews compensation as a total package. Adjustments to compensation are made as appropriate following a review of the compensation package as a whole.

Policy on Timing of Equity Award Grants

The Compensation Committee has not established policies and practices (whether written or otherwise) regarding the timing of option grants or other awards in relation to the release of material nonpublic information ("MNPI") and do not take MNPI into account when determining the timing and terms of stock option or other equity awards to executive officers. We do not time the disclosure of MNPI, whether positive or negative, for the purpose of affecting the value of executive compensation.

Pay Positioning

The Corporation endeavors to target total cash compensation (salary and short-term incentive) somewhat above the 50th percentile of relevant publicly-traded peers, and generally provides long-term incentive opportunities in the 50th to 75th percentile of relevant publicly-traded peers. The Compensation Committee believes this approach aligns executive compensation with the long-term interests of Shareholders and with the Corporation's strategy, particularly when relatively few executives are performing multiple executive roles. In 2024, the Compensation Committee considered the Salary Increase and Turnover Study prepared by Radford (an Aon Consulting Company), which provided detailed information relating to cost-of-living adjustments for relevant publicly-traded peers within a similar geographic area. Based on this information and also taking into account experience in the role, scope of the role, performance and retention risk, as further explained below, the Compensation Committee suggested compensation goals for the executives for 2025 and the following years aligned with the target pay positioning set out above.

Although the Compensation Committee considers Radford's recommendations in its review of executive compensation, the Compensation Committee ultimately makes its own decisions about compensation matters. The Compensation Committee realizes that using a peer benchmark is neither the only means for gathering and validating

market data nor the only criteria for establishing executive compensation. In instances where an executive is uniquely critical to our success, the Compensation Committee may provide compensation in excess of the benchmark of the comparator group companies. Upward or downward variations for base salary and long-term incentives may also occur as a result of the individual's experience level, the balance of the individual's different elements of compensation, market factors and other strategic considerations. The Compensation Committee believes that, given the competitiveness of our industry and our company culture, our base compensation, cash incentives and equity programs must remain flexible, reward the achievement of clearly defined corporate goals. In addition, the Compensation Committee believes that such programs must be sufficient to retain our existing executive officers and to hire new executive officers, when necessary, and that unnecessary turnover at the executive level can have expensive consequences from the perspectives of time lost and capital required.

In 2024, achievements that were considered by the Compensation Committee when making compensation recommendations included, (i) for the oral, myeloid kinome inhibitor tuspetinib, the completion of dose escalation/dose exploration and the APTIVATE expansion trial to include single agent and drug combination in AML patient population; and (ii) for the oral, dual lymphoid and myeloid kinome inhibitor luxeptinib, dose escalation and evaluation with respect to third generation drug substance, and the manufacture of sufficient third generation drug substance to support clinical needs. The rigorous cash management and the management of the business relationships with strategic partners were also taken into account. In addition, the exceptional market environment for the hiring and retention of talent was an important factor for the Compensation Committee and the Board when making compensation decisions.

Base Salary

In establishing base salaries, the objective of the Compensation Committee is to establish levels that will enable Aptose to attract and retain executive officers that can effectively contribute to the long-term success of the Corporation. Base salary for each executive officer is determined by the individual's skills, abilities, experience, past performance and anticipated future contribution to our success. The members of the Compensation Committee use their knowledge of the industry and of industry trends as well as independent third-party consultants to assist with the determination of an appropriate compensation package for each executive officer.

Short-Term Compensation Incentives

Short-term compensation incentives motivate our executive officers to achieve specified performance objectives and to reward them for their achievement in the event that those objectives are met. Each year, the Compensation Committee approves the annual corporate objectives encompassing scientific, clinical, regulatory, business and corporate development and financial criteria. The annual cash incentive for the executive officers is based, at least in part, on the level of achievement of these annual objectives, assuming these objectives are still relevant at the time of evaluation.

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All corporate and executive officer objectives and short-term incentives are reviewed by the Compensation Committee and approved by the Board.

The annual cash incentives for executive officers for the year ended December 31, 2024 ranged from 40% to 55% of base salary.

Cash incentives are determined as soon as practicable after the end of the fiscal year and, for the Named Executive Officers, are included in the Summary Compensation Table in the year in respect of which they are earned.

Short-Term Compensation Incentives - Performance Metrics

The performance of the Named Executive Officers for the period ended December 31, 2024 was measured with respect to the following objectives:

1)Achievement of certain milestones for the clinical development of the tuspetinib program;

2)Achievement of certain milestones related to finance, financing and accounting; and

3)Achievement of certain milestones related to corporate and business development.

Each of the above objectives is weighted at 50%, 30% and 20%, respectively, in relation to assessment of satisfaction of overall corporate objectives and determination of any general corporate bonuses and additional unanticipated accomplishments during 2024 were also considered.

Long-Term Incentive Plans

Long-term compensation incentives at Aptose reward an executive's contribution to the attainment of Aptose's long-term objectives, align an executive's performance with the long-term performance of Aptose and to provide an additional incentive for an executive to enhance shareholder value. Long-term incentive compensation for directors, officers, employees and consultants is reviewed annually and may be accomplished through the grant of share options and of stock-based awards (collectively, "Awards") under the 2021 Stock Incentive Plan.

In certain cases, executive officers may be granted share options on the commencement of employment with Aptose in accordance with the responsibility delegated to each executive officer for achieving corporate objectives and enhancing shareholder value in accordance with those objectives.

The number of options granted for certain executives of Aptose for the year ended December 31, 2024 was based on achievement of both corporate and executive officer objectives. The Compensation Committee recommends the allocation of options, and options are priced using the closing market price of the Shares on the TSX or on Nasdaq, as applicable, on the last trading day prior to the grant. Options to purchase Shares granted under the 2021 Stock Incentive Plan expire ten years from the date of grant and vest over a term recommended by the Compensation Committee and approved by the Board of Directors. During 2024, options granted to Aptose Named Executive Officers vested over four years. The Compensation Committee and the Board consider previous grants of options when considering new grants of options.

Awards may be subject to accelerated vesting in the event of termination or change of control, see "Termination and Change of Control Benefits."

Other Benefits

In certain cases, the Compensation Committee may recommend inclusion of automobile allowances and the payment of certain professional dues as a component of a competitive remuneration package for executives.

Hedge or Offset Instruments

Pursuant to Aptose's Disclosure and Insider Trading Policy, no officer, director or other member of management of the Corporation may engage in short sales, transactions in put or call options, hedging transactions, margin accounts, pledges or other inherently speculative transactions with respect to the Corporation's stock at any time.

Clawback Policy

The Board has adopted an incentive compensation recovery policy (the "Clawback Policy") which provides for the recovery of erroneously awarded incentive compensation in the event that the Corporation is required to prepare an accounting restatement due to material noncompliance of the Corporation with any financial reporting requirements under the federal securities laws.

Employment Agreements

Aptose entered into an employment agreement with Dr. Rice on October 25, 2013 upon his commencement as Chairman, President, and Chief Executive Officer. This agreement was amended and restated on August 19, 2014 and on April 29, 2024. Pursuant to the amended and restated employment agreement, Dr. Rice is entitled to an annual base salary of $648,960, which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Dr. Rice is also eligible for an annual discretionary bonus of up to 55% of his current base salary. The annual bonus is based on the Corporation's and Dr. Rice's achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Rice is entitled to receive termination benefits described under "Termination and Change of Control Benefits" below. Dr. Rice also receives employee benefits including, without limitation, participation in our 401(k) plan with a 3% non-elective company contribution, participation in Aptose's group health coverage plan and life insurance plan for U.S. employees, 25 days of paid vacation time annually, and an annual automobile allowance of $18,000. Dr. Rice is subject to certain non-compete restrictions. Dr. Rice receives no remuneration for his service as Chairman of the Board, director or as a member of the R&D Committee of the Board.

Aptose entered into an employment agreement with Mr. Payne upon his commencement as Chief Financial Officer, effective June 27, 2022. Mr. Payne was promoted to Senior Vice President, Chief Financial Officer and Chief Business Officer in November 2023. This agreement was amended and restated on April 29, 2024. Pursuant to the amended and restated employment agreement, Mr. Payne is entitled to an annual base salary of $479,440 which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Mr. Payne is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation's and Mr. Payne's achievement of objectives and milestones to be determined on an annual basis by the Board. Mr. Payne is entitled to receive termination benefits described under "Termination and Change of Control Benefits" below and receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by us to our U.S.-based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Mr. Payne is subject to certain non-compete restrictions.

Aptose entered into an employment agreement with Dr. Bejar upon his commencement as Chief Medical Officer, effective January 1, 2020. This agreement was amended and restated on April 29, 2024. Pursuant to the amended and restated employment agreement, Dr. Bejar is entitled to an annual base salary of $509,600 which amount is reviewed annually by the Board and increased at the Board's discretion, upon the advice of the Compensation Committee. Dr. Bejar is also eligible for an annual discretionary bonus of up to 40% of his current base salary. The annual bonus is based on the Corporation's and Dr. Bejar's achievement of objectives and milestones to be determined on an annual basis by the Board. Dr. Bejar is entitled to receive termination benefits described under "Termination and Change of Control Benefits" below and receives employee benefits, including, without limitation, participation in any 401(k) plan with a 3% non-elective company contribution, participation in other benefits provided by us to our

U.S.-based executive officers and other employees, which consist to date of life insurance and health benefits, and 20 days of paid vacation time annually. Dr. Bejar is subject to certain non-compete restrictions.

Summary Compensation Table

The following table details the compensation information for the fiscal years ended December 31, 2023 and December 31, 2024 of the Corporation for the Named Executive Officers. All amounts presented in the following tables are as recorded in U.S. dollars.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock awards[1] ($)	Option awards[2] ($)	All other compensation[3] ($)	Total compensation ($)
Dr. William G. Rice							
Chairman, President and	2024	647,040	343,200	—	95,490	28,350	1,114,080
Chief Executive Officer	2023	623,077	—	99,000	174,691	27,900	924,668
Fletcher Payne							
Senior Vice President, Chief Financial	2024	478,022	184,400	—	75,028	10,350	747,800
Officer and Chief Business Officer	2023	448,131	—	65,993	87,345	9,900	611,369
Dr. Rafael Bejar							
Senior Vice President and Chief	2024	508,092	196,000	—	47,745	10,350	762,187
Medical Officer	2023	488,846	98,000	65,993	87,345	9,900	750,084

(1) The dollar amounts in this column reflect the aggregate grant date fair value of all stock awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in Note 14 to our Financial Statements included in this Annual Report on Form 10-K. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the NEOs. Stock awards are subject to the executives' continued employment with the Corporation, and consist of stock appreciation rights ("SARs"), restricted stock ("Restricted Stock") and restricted stock units ("RSUs"). During the year ended December 31, 2024, no stock awards were granted to NEOs. All stock awards held by Dr. Rice, Mr. Payne and Dr. Bejar and may be subject to accelerated vesting following termination of employment. See "Termination and Change of Control Benefits" below.

(2) The dollar amounts in this column reflect the aggregate grant date fair value of all share option awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts are included in Note 14 to our audited Financial Statements. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the NEOs. During the year ended December 31, 2024 the following share options were granted to NEOs: 2,333 share options for Dr. Rice, 1,833 share options for Mr. Payne and 1,166 share options for Dr. Bejar at an exercise price of $60.00 per share. All share options granted will vest over four years. Share options are subject to the executives' continued employment with the Corporation and have a maximum term of 10 years. All share option grants issued to Dr. Rice, Mr. Payne and Dr. Bejar may be subject to accelerated vesting following termination of employment. See "Termination and Change of Control Benefits" below.

(3) The dollar amounts in this column reflect the Corporation's contributions to the executives' accounts in our 401(k) plan and car allowances. The contributions to our executives' accounts in our 401(k) plan were as follows: for 2024: $10,350 for each of Dr. Rice, Mr. Payne and Dr. Bejar. Car allowances were as follows: for 2023: $18,000 to Dr. Rice, and for 2024: $18,000.

Outstanding Equity Awards at Fiscal Year-End

	Option-based awards				Share-based awards	
Name and *Principal Position*	**Number of securities underlying unexercised options (#) exercisable**	**Number of securities underlying unexercised options (#) unexercisable**	**Option exercise price ($)**	**Option expiration date**	**Number shares or units of stock that have not vested (#)**	**Market value of shares or units of stock that have not vested ($)**
Dr. William G. Rice	111	Nil	463.50	6-Jun-27		
Chairman, President and	222	Nil	475.31[1]	28-Mar-27		
Chief Executive Officer	1,037	518[2]	603.00	17-Jan-32		
	888	Nil	859.50	2-Jan-29		
	666	Nil	1,260.00	19-Jan-28		
	133	Nil	1,194.53[1]	30-Mar-26	Nil	Nil
	888	Nil	1,381.50	22-Jan-28		
	635	127[3]	1,966.50	4-Jan-31		
	266	Nil	2,176.43[1]	9-Jun-25		
	4,444	Nil[5]	3,109.50	30-Jan-30		
	Nil	1,333[4]	364.50	5-Jul-32		
	444	444[5]	297.00	18-Jan-33		
	Nil	2,333	60.00	5-Feb-34		
Fletcher Payne	1,482	740[6]	381.55	26-Jun-32		
Senior Vice President,	222	222[5]	297.00	18-Jan-33	Nil	Nil
Chief Financial Officer and						
Chief Business Officer	Nil	1,833	60.00	5-Feb-34		
Dr. Rafael Bejar	888	Nil	2,551.50	1-Jan-30		
Senior Vice President and	444	Nil	3,109.50	30-Jan-30		
Chief Medical Officer	635	127[3]	1,966.50	4-Jan-31		
	777	111	1,057.50	18-Aug-31	Nil	Nil
	889	444[2]	603.00	17-Jan-32		
	222	222[5]	297.00	18-Jan-33		
	Nil	1,166	60.00	5-Feb-34		

[1] Converted from the Canadian exercise price at the rate of 0.7913 Canadian dollars per U.S. dollar.

[2] Unexercisable options vest as follows: 33.33% vested on January 17, 2024, 33.33% vest on January 17, 2025, and 33.33% vest on January 17, 2026.

[3] Unexercisable options vest as follows: 50% vested on January 4, 2024, and 50% vest on January 4, 2025.

[4] Unexercisable options vest upon reaching certain performance triggers as determined by the Board.

[5] Unexercisable options vest as follows: 50% vested on January 19, 2024, 16.67% vest on January 19, 2025, 16.67% vest on January 19, 2026 and 16.67% vest on January 19, 2027.

[6] Unexercisable options vest as follows: 33.33% vested on June 26, 2024, 33.33% vest on June 26, 2025, and 33.33% vest on June 26, 2026.

Retirement Benefits

The Corporation maintains a 401(k) plan in which eligible employees of the Corporation may choose to participate, including the Named Executive Officers. The Corporation makes non-elective contributions of 3% of compensation for all eligible employees, subject to the maximum allowed by the Internal Revenue Code Section 401(k).

Termination and Change of Control Benefits

The employment agreements of Dr. Rice, Mr. Payne and Dr. Bejar provide that if their employment is terminated by the Corporation other than for “cause”, or if the Named Executive Officer resigns for “good reason” each of Dr. Rice, Mr. Payne and Dr. Bejar shall be entitled to a payment equivalent to 12 months of their respective annual base

salaries at the time of termination (Dr. Rice's December 31, 2024 annual base salary represented $648,960, Mr. Payne's annual base salary represented $479,440 and Dr. Bejar's base salary represented $509,600), plus an amount equal to the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination. In addition, the employment agreements of Dr. Rice, Mr. Payne and Dr. Bejar provide that certain payments related to health benefits will continue to be made for a period of 12 months following termination of their employment.

The employment agreements of Dr. Rice, Mr. Payne and Dr. Bejar provide that, in the event their employment with the Corporation is terminated within three months immediately preceding or 12 months immediately following the consummation of a "change of control" (defined as the consummation of any of the following: (a) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions to which the Corporation is a party, (b) a sale, lease or other conveyance of all or substantially all of the assets of the Corporation, or (c) liquidation, dissolution or winding up of the Corporation, whether voluntary of involuntary), each of Dr. Rice, Mr. Payne and Dr. Bejar would be eligible, subject to certain conditions, to receive a payment equivalent to 18 months of their annual base salaries at the time of termination, plus an amount equal to 150% of the average bonus remuneration received from the Corporation during the last three years of employment completed prior to the termination date, prorated based on the number of days the executive worked during the year of the termination, as well as continuation of the payments related to health benefits for a period of 12 months following the termination following a change of control.

DIRECTOR COMPENSATION

Overview

The Compensation Committee makes recommendations regarding compensation payable to our non-employee directors to the entire Board, which then makes final decisions regarding such compensation. Dr. Rice receives no remuneration for his service as Chairman of the Board and director or as a member of the R&D Committee of the Board.

Cash Compensation

Non-employee directors are entitled to an annual fee of $60,000 with no per meeting fees. The Lead Director is entitled to an additional annual fee of $40,000. The chair of each committee is entitled to an additional annual fee of $15,000, with the exception of the chair of the Audit Committee who is entitled to an additional annual fee of $20,000. Each committee member is entitled to receive an annual fee of $10,000 per committee, and members of the Audit Committee are entitled to an additional annual fee of $3,500. All fees are paid in quarterly installments.

Non-employee directors are reimbursed for any out-of-pocket travel expenses incurred in order to attend meetings. Executive directors are not entitled to directors' compensation.

Option Awards

Upon appointment to the Board a non-employee director will be entitled to an initial option grant under the 2021 Stock Incentive Plan and each year thereafter non-employee directors are eligible for an additional grant at the beginning of the fiscal year. The options vest 50% after one year, and 25% for each of the second and third years. If a director resigns, the director will have 90 days from the date of resignation to exercise all vested and unexercised options.

The maximum compensation (cash and equity awards) that may be received by any director during a financial year has been set to $500,000.

The following table details the compensation earned by each non-employee director for the year ended December 31, 2024:

Name	Fees earned or paid in cash ($)	Option awards[1][2] ($)	Total ($)
Carol G. Ashe	80,000[3]	4,547	84,547
Dr. Denis Burger	148,500[5]	4,547	153,047
Dr. Mark Vincent	85,000[6]	4,522	89,522
Mr. Warren Whitehead	80,000[7]	4,522	84,522
Dr. Erich Platzer	80,000[8]	4,547	84,547
Dr. Bernd R. Seizinger	88,500[9]	4,547	93,047

[1]The dollar amounts in this column reflect the aggregate grant date fair value of all share option awards granted during the indicated fiscal year. These amounts have been calculated in accordance with ASC 718, using the Black-Scholes option-pricing model and excluding the effect of estimated forfeitures. Assumptions used in the calculation of these amounts will be included in Note 14 to our Financial Statements. These amounts do not necessarily correspond to the actual value recognized or that may be recognized by the non-employee director.

During the year ended December 31, 2024, the following share options were granted to Aptose directors: 111 share options for Ms. Ashe, 111 share options for Dr. Burger, 111 share options for Dr. Vincent, 111 share options for Mr. Whitehead, 111 share options for Dr. Platzer and 111 share options for Dr. Seizinger. All options granted vest over three years.

[2]The aggregate number of shares subject to outstanding share options held by each of the non-employee directors listed in the table above as of December 31, 2024 was as follows: 953 for Ms. Ashe, 1,298 for Dr. Burger, 1,284 for Dr. Vincent, 1,187 for Mr. Whitehead, 1,242 for Dr. Platzer and 444 for Dr. Seizinger.

[3]Ms. Ashe earned this amount for her services as director on the Board and as a member of the Board's Corporate Governance and Nominating Committee and Compensation Committee.

[4]Dr. Burger earned this amount for his services as lead director on the Board, as Chair of the Board's Compensation Committee and as a member of the Board's Audit Committee and of the Board's Corporate Governance and Nominating Committee.

[5]Dr. Vincent earned this amount for his services as director on the Board, as Chair of the Board's Corporate Governance and Nominating Committee and as a member of the R&D Committee.

[6]Mr. Whitehead earned this amount for his services as director on the Board and as Chair of the Board's Audit Committee.

[7]Dr. Platzer earned this amount for his services as director on the Board, as a member of the Board's Compensation Committee and as a member of the R&D Committee.

[8]Dr. Seizinger earned this amount for his services as a director on the Board, as a member of the Board's Audit Committee and as Chair of the Board's R&D Committee.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The table below sets forth information known to us regarding the beneficial ownership of our Common Shares as of March 21, 2025 for:

•each person the Corporation believes beneficially holds more than 5% of our outstanding Shares based solely on our review of SEC filings;

•each of our directors and nominees for directors;

•each of the named executive officers named in the Summary Compensation Table (we collectively refer to these persons as our "Named Executive Officers" or "NEOs"); and

•all of our directors and executive officers as a group.

The number of Shares beneficially owned by a person includes shares subject to options held by that person that are currently exercisable or that become exercisable within 60 days of March 21, 2025. Percentage calculations assume, for each person and group, that all Common Shares that may be acquired by such person or group pursuant to options currently exercisable or that become exercisable within 60 days of March 21, 2025 are outstanding for the purpose of computing the percentage of Common Shares owned by such person or group. However, such unissued Common Shares described above are not deemed to be outstanding for calculating the percentage of Common Shares owned by any other person.

Except as otherwise indicated, the persons in the table below have sole voting and investment power with respect to all Common Shares shown as beneficially owned by them, subject to community property laws where applicable and subject to the information contained in the notes to the table.

Name of Beneficial Owner	Amount and Nature of Beneficial Ownership[(1)]	Percent of Class
Named Executive Officers and Directors		
Carol G. Ashe	953	*
Dr. Rafael Bejar	6,169	*
Dr. Denis Burger	1,346	*
Fletcher Payne	4,743	*
Dr. Erich Platzer	2,364	*
Dr. William G. Rice	20,629	*
Dr. Bernd R. Seizinger	1,010	*
Mark D. Vincent	1,298	*
Warren Whitehead	1,220	*
All Executive Officers and Directors as a Group (10 persons)	39,732	1.6%
Beneficial Owners of More Than 5%[2]		
Hanmi Pharmaceuticals Co., Ltd.[(2)(3)]	508,710	19.99%

* Does not exceed one percent of Common Shares outstanding

(1) Includes for the persons listed below the following Common Shares subject to options held by such persons that are currently exercisable or become exercisable within 60 days of March 21, 2025: Ms. Carol G. Ashe: 953; Dr. Rafael Bejar: 5,925; Dr. Denis Burger: 1,298; Mr. Fletcher Payne: 4,499; Dr. Erich Platzer: 1,242; Dr. William G. Rice: 14,489; Dr. Bernd R. Seizinger: 444; Dr. Mark Vincent: 1,284; and Mr. Warren Whitehead: 1,187.

(2) Based on information contained on the System for Electronic Disclosure by Insiders (SEDI). Hanmi also owns Common Share purchase warrants which, when exercised, will increase the number of Common Shares beneficially owned by Hanmi.

(3) Hanmi's ownership gives effect to the 19.99% ownership blocker (the "Blocker") restriction contained on certain of its securities. Hanmi currently holds warrants that if we did not give effect to the Blocker would represent 23.0% ownership interest in the Corporation.

General

As of December 31, 2024, the total number of Common Shares subject to outstanding Awards and available for future issuance by the Corporation under the 2021 Stock Incentive Plan and the Corporation's share option plan (the "Share Option Plan") was 52,210. As of December 31, 2024, there were outstanding options to purchase 21,615 Common Shares issued under the 2021 Stock Incentive Plan and outstanding options to purchase 17,872 Common Shares issued under the Share Option Plan, which, combined, represented 2.0% of the issued and outstanding Common Shares of the Corporation as of December 31, 2024 and Nil RSUs issued and outstanding under the 2021 Stock Incentive Plan, representing 0.0% of the issued and outstanding Common Shares of the Corporation.

2021 Stock Incentive Plan

On April 20, 2021, the Board unanimously approved and adopted the 2021 Stock Incentive Plan. The 2021 Stock Incentive Plan was ratified, confirmed and approved by the Shareholders at the annual and special meeting held on June 1, 2021 and amended to increase the number of shares available thereunder on May 31, 2022 and May 23, 2023.

2021 Stock Incentive Plan Highlights and Certain Important Provisions

•*Overall Share Limit*. The total number of Common Shares reserved under the 2021 Stock Incentive Plan is 34,338 subject to equitable adjustment in the event of any change in capitalization.

•*Outstanding Awards under Incentive Plans.* As of March 21, 2025, there were 39,219 Common Shares subject to issuance upon exercise of outstanding options under all of our equity compensation plans, at a weighted average exercise price of $1,166.57, and a weighted average remaining life of 6.3 years. There were no issued and outstanding Awards other than options.

•*No Liberal Recycling Provisions*. The 2021 Stock Incentive Plan provides that the following Common Shares shall not be recycled and shall not be made available again for grant under the 2021 Stock Incentive Plan: (i) any Common Shares which would have been issued upon any exercise of an option but for the fact that the exercise price was paid by a "net exercise" or any Common Shares tendered in payment of the exercise price of an option; (ii) any Common Shares withheld by the Corporation or Common Shares tendered to satisfy tax withholding obligations with respect to an Award; (iii) Common Shares covered by a stock-settled SAR issued under the 2021 Stock Incentive Plan that are not issued in connection with settlement in Common Shares upon exercise; or (iv) Common Shares that are repurchased by the Corporation using option exercise proceeds.

•*No Repricing of "Underwater" Options*. The Corporation will not reprice any previously granted Award for which the fair market value (being the closing price of the Common Shares, as reported on the Nasdaq or Toronto Stock Exchange, the "Fair Market Value") is less than the exercise price without Shareholder approval other than as a result of certain customary capitalization adjustments.

•*No Discount*. All options must have an exercise price equal to or greater than the Fair Market Value of the underlying Common Shares on the date of grant.

•*Change in Control*. Customary "Change in Control" provisions are triggered by the consummation of certain transactions, and not their approvals by the Board or the Shareholders. In addition, no Award agreement shall contain a definition of change in control that has the effect of accelerating the exercisability of any Award or the lapse of restrictions related to any Award upon only the announcement or Shareholder approval of (rather than consummation of) any reorganization, merger or consolidation of, or sale or other disposition of all or substantially all of the assets of, the Corporation.

•*Awards Subject to Clawback Policy*. Awards under the 2021 Stock Incentive Plan are subject to an incentive compensation recovery policy (the "Clawback Policy") adopted by the Corporation, as it may be amended from time to time.

•*No Dividend Equivalents Paid on Unvested Awards*. Under the 2021 Stock Incentive Plan, dividend and dividend equivalent amounts with respect to any Common Share underlying a Restricted Stock or RSU award may be accrued but shall not be paid until all conditions or restrictions relating to such Common Share have been satisfied, waived or lapsed. In addition, the 2021 Stock Incentive Plan prohibits the granting of dividend equivalents on stock options and SARs.

•*Annual Limit on Awards to Directors*. Under the 2021 Stock Incentive Plan, the maximum value of all equity and cash-based compensation granted to a non-employee director cannot exceed $500,000 in any calendar year (and for this purpose equity value is determined using grant date value under applicable financial accounting rules). The independent, non-employee members of the Board may make exceptions to this limit for a non-executive chair of the Board, provided that he or she may not participate in the decision.

Summary of the 2021 Stock Incentive Plan

The following brief summary of the 2021 Stock Incentive Plan is not intended to be exhaustive and is qualified in its entirety by the terms of the 2021 Stock Incentive Plan, which is incorporated by reference to the Definitive Proxy Statement on Schedule 14A filed with the SEC on April 1, 2021.

Eligibility

Eligibility under the 2021 Stock Incentive Plan is limited to employees, officers, non-employee directors, consultants, independent contractors or advisors providing services to the Corporation or any entity controlled by the Corporation (an "Affiliate"), or any person to whom an offer of employment or engagement with the Corporation or any Affiliate is extended.

As of March 28, 2025, there were 10 employees, 3 officers, 6 non-employee directors and 4 consultants who are eligible to participate under the 2021 Stock Incentive Plan. The Committee or subcommittee of the Board appointed from time to time by the Board to administer the 2021 Stock Incentive Plan (the "Administrator"), in its sole discretion, will determine which eligible persons will receive Awards under the 2021 Stock Incentive Plan.

New Plan Benefits

Future benefits under the 2021 Stock Incentive Plan cannot be determined at this time because the grants are at the discretion of the Board and because their value may be dependent upon the satisfaction of vesting conditions and the future price of the Common Shares. For additional information on the grants and awards made under the 2021 Stock Incentive Plan during the year ended December 31, 2024, see "*Summary Compensation Table*."

Common Shares Available for Awards

Subject to customary capitalization adjustments, as of March 21, 2025, the aggregate number of Common Shares that may be issued under all Awards under the 2021 Stock Incentive Plan shall equal 39,219 Common Shares. Any Common Shares subject to an Award pursuant to the Share Option Plan or the 2021 Stock Incentive Plan that are forfeited, cancelled, exchanged or surrendered or that otherwise terminates or expires without a distribution of Common Shares shall again be available for grant under the 2021 Stock Incentive Plan. Common Shares underlying Awards that can only be paid in cash do not count against the overall 2021 Stock Incentive Plan share limit.

The 2021 Stock Incentive Plan provides that the following Common Shares shall not be recycled and again made available for grant under the 2021 Stock Incentive Plan: (i) any Common Shares which would have been issued upon any exercise of an option but for the fact that the exercise price was paid by a "net exercise" or any Common Shares tendered in payment of the exercise price of an option; (ii) any Common Shares withheld by the Corporation or Common Shares tendered to satisfy tax withholding obligations with respect to an Award; (iii) Common Shares covered by a stock-settled SAR issued under the 2021 Stock Incentive Plan that are not issued in connection with settlement in Common Shares upon exercise; or (iv) Common Shares that are repurchased by the Corporation using option exercise proceeds. In addition, Common Shares issued under Awards granted in substitution for awards

previously granted by an entity that is acquired by or merged with the Corporation or an Affiliate shall not be counted against the aggregate number of Common Shares available for Awards under the 2021 Stock Incentive Plan.

In the event that any dividend (other than a regular cash dividend) or other distribution (whether in the form of cash, Common Shares, other securities or property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of Common Shares or other securities of the Corporation, issuance of warrants or other rights to purchase Common Shares or other securities of the Corporation order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the 2021 Stock Incentive Plan, then the Administrator shall, in accordance with applicable law and in such manner as it may deem equitable, adjust any or all of (i) the number and type of Common Shares (or other securities or other property) that thereafter may be made the subject of Awards, and (ii) the number and type of Common Shares (or other securities or other property) subject to outstanding Awards.

Types of Awards

Options

The 2021 Stock Incentive Plan authorizes awards of options. Subject to the limitations of the 2021 Stock Incentive Plan, the Administrator may grant options for such number of Common Shares and having such terms as the Administrator designates.

Options shall vest and be exercisable in the timeframe determined by the Administrator, which shall be set forth in the applicable option award agreement. The Administrator fixes the term of each option when granted, but such term may not be greater than 10 years from the date of grant. The exercise price of options is established by the Administrator and shall not be less than 100% of the Fair Market Value of a Common Share on the date of grant, except in limited circumstances. Payment for the exercise price may be made in cash or its equivalent, payment in unrestricted Common Shares already owned by the participant or, to the extent permitted under the relevant option award agreement, payment through (i) the sale by a broker acceptable to the Corporation on behalf of the participant of a portion of the Common Shares subject to the option, or (ii) the withholding of Common Shares that would otherwise be issuable in connection with the exercise of the options.

Stock Appreciation Rights

The 2021 Stock Incentive Plan authorizes awards of SARs, which confer to the holder a right to receive the excess of (i) the Fair Market Value of one Common Share on the date of exercise over (ii) the grant price of the SAR as specified in the relevant award agreement, which price shall not be less than 100% of the Fair Market Value of one Common Share on the date of grant of the SAR. The terms and conditions of a SAR will be set forth in an applicable award agreement, as determined by the Administrator. The Administrator fixes the term of each SAR when granted, but such term may not be greater than 10 years from the date of grant.

Restricted Stock

The 2021 Stock Incentive Plan authorizes awards of Restricted Stock, which will confer to the holder Common Shares subject to such restrictions as the Administrator may impose in an award agreement.

Restricted stock shall be issued at the time such awards are granted and will be held by the Corporation or a nominee until they are no longer subject to restrictions.

The 2021 Stock Incentive Plan authorizes the Administrator to pay dividends to holders of Restricted Stock.

RSUs

The 2021 Stock Incentive Plan authorizes awards of RSUs, which will confer to the holder a right to receive Common Shares (or a cash payment equal to the Fair Market Value of such Common Shares) at some future date, subject to such restrictions as the Administrator may impose in an award agreement.

For RSUs, no Common Shares shall be issued at the time such awards are granted. Upon the satisfaction, waiver, or lapse of restrictions relating to RSUs, Common Shares (or a cash payment equal to the Fair Market Value of such Common Shares) shall be issued and delivered to the holder of such RSUs.

The 2021 Stock Incentive Plan authorizes the Administrator to grant dividend equivalents to RSU holders (generally as additional RSUs), under which the participant shall be entitled to receive payments equivalent to and in lieu of the amount of cash dividends otherwise paid by the Corporation to holders of Common Shares. RSU dividend equivalents may be accrued but not paid out to a participant until all conditions or restrictions relating to such RSUs have been satisfied, waived or lapsed.

Limitations on Non-Employee Director Awards

The sum of the grant date fair value of equity-based Awards and the amount of any cash-based compensation granted to a non-employee director during any calendar year shall not exceed $500,000, subject to certain exceptions for compensation granted to a non-executive chair of the Board, in limited circumstances.

Transfer of Awards

No Award (other than fully vested and unrestricted Common Shares issued pursuant to any Award) and no right under any such Award shall be transferrable other than by will or by the laws of descent and distribution. In addition, no Award (other than fully vested and unrestricted Common Shares issued pursuant to any Award) and no right under any such Award may be pledged, alienated, attached or otherwise encumbered, and any purported pledge, alienation, attachment or encumbrance thereof shall be void and unenforceable against the Corporation or any Affiliate.

Amendment and Termination

The Board may from time to time amend, suspend or terminate the 2021 Stock Incentive Plan or any Award agreement, and the Administrator may amend the terms of any previously granted Award, provided that no amendment to the terms of any previously granted Award may (except as expressly provided in the 2021 Stock Incentive Plan), materially and adversely alter or impair the terms or conditions of the Award previously granted without the participant's consent. Any amendment to the 2021 Stock Incentive Plan, an Award agreement or to the terms of any Award previously granted is subject to compliance with all applicable laws, rules, regulations and policies of any applicable laws, rules, regulations and policies of any applicable governmental entity or stock exchange.

Prior approval of the Shareholders shall be required to make any amendment to the 2021 Stock Incentive Plan or an Award that would (i) require Shareholder approval under the rules of the Toronto Stock Exchange ("TSX"), the rules or regulations of the SEC, or any other securities exchange that is applicable to the Corporation; (ii) increase the number of Common Shares authorized under the 2021 Stock Incentive Plan; (iii) permit repricing of options or SARs, which is currently prohibited; (iv) permit the award of options or SARs at a price less than 100% of the Fair Market Value of a Common Share on the date of grant; (v) increase the maximum term permitted for options and for SARs; or (vi) increase the maximum number of Common Shares or dollar value of Awards which can be granted to a participant in a calendar year.

Change in Control

Effective upon the consummation (or immediately prior to the consummation) of any reorganization, merger, consolidation, split-up, spin-off, combination, plan of arrangement, take-over bid or tender offer, repurchase or exchange of Common Shares or other securities of the Corporation or any other similar corporate transaction or event involving the Corporation (each, a "Change in Control Event"), the Administrator may, in its sole discretion, provide for (i) the termination of any Award, whether or not vested, in exchange for an amount of cash and/or other property; (ii) the replacement of any Award with other rights or property selected by the Administrator in its sole discretion; (iii) the Award to be assumed by, or substituted for a similar Award from, the successor or survivor of the Corporation, or a parent or subsidiary thereof, with appropriate adjustments; (iv) the vesting or exercisability of Awards notwithstanding anything to the contrary in the applicable Award agreement; or (v) the determination of a future date after which Awards cannot vest, be exercised or become available, which may be the effective date of the Change in Control Event.

Clawback Provisions

All Awards under the 2021 Stock Incentive Plan are subject to forfeiture or other penalties pursuant to the Clawback Policy.

Withholdings

All Awards under the 2021 Stock Incentive Plan are subject to applicable deductions at source and tax reporting.

Share Option Plan

The Corporation currently maintains its existing Share Option Plan. However, following the approval of the 2021 Stock Incentive Plan by the shareholders, no further grants were permitted to be made under the Share Option Plan, though existing grants under the Share Option Plan continue in effect in accordance with their terms.

The Share Option Plan was established to advance the interests of Aptose by:

•providing Eligible Persons (as defined below) with additional incentives;

•encouraging stock ownership by Eligible Persons;

•increasing the interest of Eligible Persons in the success of Aptose;

•encouraging Eligible Persons to remain loyal to Aptose; and

•attracting new Eligible Persons to Aptose.

The Compensation Committee, as authorized by the Board, administers the Share Option Plan. Further to the approval of the 2021 Stock Incentive Plan by Shareholders, the Share Option Plan no longer makes new option grants available under the Share Option Plan upon the exercise of options previously granted. A copy of the Share Option Plan was filed on June 12, 2015 and is available on SEDAR+ at www.sedarplus.ca.

Under the Share Option Plan, options may be granted to any executive officer, employee, subsidiary of an executive officer or employee, or consultant or consultant entity ("Eligible Persons"). The exercise price of options granted under the Share Option Plan is established by the Board and will be equal to the closing market price of the Common Shares on the TSX on the last trading day preceding the date of grant. If there is no trading on that date, the exercise price will be the average of the bid and ask on the TSX on the last trading date preceding the date of grant. If not otherwise determined by the Board, an option granted under the Share Option Plan will vest as to 50% on the first anniversary of the date of grant of the option and an additional 25% on the second and third anniversaries after the date of grant. The Board fixes the term of each option when granted, but such term may not be greater than 10 years from the date of grant. If the date on which an option expires pursuant to an option agreement occurs during, or within 10 days after the last day of, a black out period or other restriction period imposed on the trading of Common Shares by the Corporation, the expiry date for the option will be the last day of the 10-day period. Options are personal to the participant and a participant may not transfer an option except in accordance with the Share Option Plan.

The Share Option Plan does not limit insider participation and does not provide a maximum number of Common Shares which may be issued to an individual under the Share Option Plan. The Corporation did not provide financial assistance to any Eligible Person to facilitate the exercise of options during the year ended December 31, 2024.

The Board may, in its sole discretion, amend, suspend or terminate the Share Option Plan or any portion of it at any time in accordance with applicable legislation, without obtaining the approval of Shareholders. Such amendments could include: (i) amendments of a "housekeeping" nature; (ii) a change to the vesting provisions of options granted pursuant to the Share Option Plan; and (iii) a change to the termination provisions of options granted under the Share Option Plan which does not entail an extension beyond the original expiry date.

Any amendment to any provision of the Share Option Plan is subject to any required regulatory or Shareholder approval. The Corporation is, however, required to obtain the approval of the Shareholders for any amendment related to (i) the maximum number of Common Shares reserved for issuance under the Share Option Plan, and under any

other security-based compensation arrangements of the Corporation; (ii) a reduction in the exercise price for options held by insiders of the Corporation; and (iii) an extension to the term of options held by insiders of the Corporation.

If an option holder is terminated without cause, resigns or retires, each option that has vested will cease to be exercisable three months after the option holder's termination date. Any portion of an option that has not vested on or prior to the termination date will expire immediately. If an option holder is terminated for cause, each option that has vested will cease to be exercisable immediately upon the Corporation's notice of termination. Any portion of an option that has not vested on or prior to the termination date will expire immediately.

Employee Share Purchase Plan

On April 20, 2021, the Board unanimously approved and adopted, subject to the approval of the Shareholders, the Corporation's 2021 employee stock purchase plan (the "ESPP"), a copy of which is attached as Appendix C to the Corporation's proxy statement dated April 20, 2021. After being approved by the Shareholders at the annual and special meeting held on June 1, 2021, the ESPP became effective on July 2, 2021.

ESPP Highlights

The ESPP:

•reserves 3,777 Common Shares. As of March 21, 2025, the closing price of a Common Share on Nasdaq was $3.69;

•permits a participant to contribute up to 15% of his or her eligible compensation each pay period through payroll deductions;

•establishes offering periods (usually two 6-month offering periods);

•permits participants to purchase Common Shares at a purchase price equal to 85% of the lesser of (i) the Fair Market Value of the Common Shares on the first trading day of an offering period (the "Offering Date"), and (ii) the Fair Market Value of the Common Shares on the last trading day of any offering period (or purchase period, if applicable) (the "Exercise Date"); and

•limits the value of Common Shares that a participant may purchase in a calendar year to $25,000 and limits the number of Common Shares that may be purchased by a participant under the ESPP to less than 5% of the outstanding Common Shares or 10,000 Common Shares per offering period.

ESPP Benefits

Participation in the ESPP is voluntary and each eligible employee will have the discretion to determine whether and to what extent to participate in and contribute to the ESPP. Accordingly, the benefits and amounts that will be received or allocated to officers and other employees under the ESPP are not determinable at this time.

Summary of Material Provisions of the ESPP

The following brief summary of the ESPP is not intended to be exhaustive and is qualified in its entirety by the terms of the ESPP, a copy of which is attached as Appendix C to the Corporation's proxy statement dated April 20, 2021.

Plan Administration

The ESPP is administrated by the Compensation Committee, or by the Board acting in place of the Compensation Committee. Subject to the terms of the ESPP, the Compensation Committee has the authority to, among other matters determine the terms and conditions of offerings under the ESPP, determine the eligibility of participants, and construe, interpret and apply the terms of the ESPP.

Common Shares Reserved for Issuance

Subject to customary capitalization adjustments, the maximum number of Common Shares reserved for issuance from treasury under the ESPP is 3,777.

Eligibility

Any individual who is a common law employee of the Corporation and any of its subsidiaries designated by the Compensation Committee for at least 20 hours per week on any given Offering Date will be eligible to participate in the ESPP.

The Compensation Committee may, in its discretion, exclude the following categories of employees from participation: (i) employees who have not completed at least two years of service since their last hire date; (ii) employees who customarily work not more than 20 hours per week or five months per calendar year; or (iii) certain highly-compensated employees.

As of March 28, 2025, there are 13 employees which are eligible to participate under the ESPP.

Offering Periods

The ESPP is currently expected to be administered through consecutive six-month periods referred to as "Offering Periods". The Offering Periods will be determined by the Compensation Committee, provided that no Offering Period may extend for a period longer than 27 months.

On the Offering Date, each eligible employee who has properly enrolled in that Offering Period will be granted an option to purchase Common Shares to be funded by payroll deductions, based on the participant's elected contribution rate. Unless a participant has properly withdrawn from the Offering Period, each option granted under the ESPP will automatically be exercised on the Exercise Date. The purchase price will be equal to 85% of the lesser of the Fair Market Value of the Common Shares on (i) the Offering Date; and (ii) the Exercise Date.

Contribution and Purchase Limitations

Unless otherwise determined by the Compensation Committee in accordance with the terms of the ESPP, no participant may (i) elect a contribution rate of more than 15% of his or her compensation for the purchase of Common Shares under the ESPP in any one payroll period; (ii) purchase more than 10,000 Common Shares under the ESPP on any one Exercise Date; or (iii) purchase Common Shares that have a Fair Market Value of more than $25,000, determined as of the Offering Date, in any calendar year.

Certain Corporate Transactions

If the number of outstanding Common Shares is changed by a dividend or other distribution (whether in the form of cash, Common Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Common Shares or other securities of the Corporation, or other change in the corporate structure of the Corporation affecting the Common Shares occur, the Compensation Committee, in order to prevent dilution or enlargement of the benefits or potential benefits intended to be made available under the ESPP will, in such manner as it may deem equitable, adjust the number and class of shares which may be delivered under the ESPP, the purchase price and the number of Common Shares covered by each option under the ESPP which has not yet been exercised, and the contribution and purchase limitations.

Amendments and Termination

The Compensation Committee may generally amend, suspend, or terminate the ESPP at any time without Shareholder approval.

During the year ended December 31, 2024, Named Executive Officers, as a group, did not purchase any Common Shares pursuant to the ESPP. Employees purchased an aggregate of 922 Common Shares pursuant to the ESPP during the same period.

Equity Compensation Plan Information

The following table sets forth certain details as at the end of the year ended December 31, 2024 with respect to compensation plans pursuant to which equity securities of the Corporation are authorized for issuance.

Plan Category	Number of Common Shares to be issued upon exercise of outstanding options (a)	Weighted-average exercise price of outstanding options (b)	Number of Common Shares remaining available for future issuance under the equity compensation plans (Excluding Common Shares reflected in Column (a))[1]
Equity compensation plans approved by security holders	39,489	$ 1,170.30	12,723
Equity compensation plans not approved by security holders	—	—	—
Total	39,489	$ 1,170.30	12,723

(1) Includes share option awards, RSUs, and dividend equivalents that may be awarded under our 2021 Stock Incentive Plan and Share Option Plan as at December 31, 2024.

Annual Burn Rate

The following table provides the annual burn rate associated with the 2021 Stock Incentive Plan and the Share Option Plan for each of the Corporation's three most recent fiscal years:

Equity Compensation Plan	Fiscal year	Number of securities granted under the plan[1][2]	Weighted average number of securities outstanding[1][3]	Annual burn rate[4]
2021 Stock Incentive Plan	2024	13,606	698,980	1.95%
	2023	8,498	225,154	3.77%
	2022	14,655	205,036	7.15%
Share Option Plan	2024	—	—	—
	2023	—	—	—
	2022	—	—	—

(1) The numbers have been reduced in the table above in accordance with the 30:1 reverse stock split effected on February 26, 2025.

(2) Corresponds to the number of securities granted under the plan in the applicable fiscal year.

(3) The weighted average number of securities outstanding during the period corresponds to the number of securities outstanding at the beginning of the period, adjusted by the number of securities repurchased or issued during the period, and multiplied by a time-weighting factor.

(4) The annual burn rate percent corresponds to the number of securities granted under the plan divided by the weighted average number of securities outstanding.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Related Party Transactions

For the last two completed fiscal years, no director, proposed director, executive officer, or immediate family member of a director, proposed director or executive officer nor, to the knowledge of our directors or executive officers, after having made reasonable inquiry, any person or company who beneficially owns, directly or indirectly, Common Shares carrying more than 5% of the voting rights attached to all Common Shares outstanding at the date hereof, or any immediate family member thereof, had any material interest, direct or indirect, in any transaction or proposed transaction of the Corporation which involves an amount exceeding the lesser of $120,000 or one percent of the average of the Corporation's total assets at year-end for the last two completed fiscal years.

Review, Approval and Ratification of Related Party Transactions

Our Audit Committee is tasked with reviewing related party transactions to determine whether such transactions are fair to the Company and its shareholders. The Audit Committee of the Board of Directors of the Company will also review and approve any issues relating to conflicts of interests and all related party transactions of the Company ("Related Party Transactions"). The Audit Committee, in undertaking such review and will analyze the following factors, in addition to any other factors the Audit Committee deems appropriate, in determining whether to approve a Related Party Transaction: (1) the fairness of the terms for the Company (including fairness from a financial point of view); (2) the materiality of the transaction; (3) bids / terms for such transaction from unrelated parties; (4) the structure of the transaction; (5) the policies, rules and regulations of the U.S. federal and state securities laws; (6) the policies of the Committee; and (7) interests of each related party in the transaction.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Audit, Audit-Related, Tax and Other Fees

The tables below present fees for professional services rendered by KPMG LLP for the fiscal years ended December 31, 2024 and 2023, respectively.

	2024	2023
Audit Fees[1]	$ 587,537	$ 467,098
Tax Fees[2]	7,226	30,129
Total	$ 594,763	$ 497,227

[1] Audit fees consisted of the audit of our annual financial statements for the fiscal years ended December 31, 2024 and 2023, respectively, and interim reviews. In addition, audit fees consist of the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the issuer's financials and include the provision of comfort letters and consents and the review of documents filed with regulatory authorities.

[2] Tax fees include fees billed for assistance in the preparation of corporate tax returns and related filings and general tax advisory services.

[3] All fees by KPMG are invoiced and paid in Canadian dollars. Fees for 2024 have been translated to U.S. dollars at the Bank of Canada average annual exchange rate of 0.7300 and 2023 have been translated to U.S. dollars at the Bank of Canada average annual exchange rate of 0.7410.

Pre-Approval Policies and Procedures

The Audit Committee has adopted procedures pursuant to which all audit, audit-related and tax services, and all permissible non-audit services provided by our independent registered public accounting firm must be pre-approved by the Audit Committee. All services rendered by KPMG LLP during our fiscal year 2024 were permissible under applicable laws and regulations and were all approved in advance by the Audit Committee in accordance with the rules adopted by the SEC in order to implement requirements of the Sarbanes-Oxley Act of 2002.

PART IV.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a)Documents filed as part of this report.

1.Financial Statements. We have filed the following documents as part of this Annual Report:

2.Financial Statement Schedules.

All schedules are omitted because they are not applicable or the required information is shown in the Financial Statements or notes thereto.

(b)Exhibits

Exhibit Number	Description of Document
3.1	Articles of Incorporation, Arrangement and Amendment (incorporated herein by reference to Exhibit 99.3 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
3.2	By-law #2 of the Company (incorporated herein by reference to Exhibit 99.2 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
3.3	Certificate of Amendment (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the SEC on June 5, 2023)
4.1*	Description of Securities (incorporated by reference to Exhibit 4.1 to the Company's Annual report on Form 10-K filed with the SEC on March 22, 2022)
10.1	Indemnification Agreement dated July 10, 2007 between Lorus Therapeutics Inc. and the Company (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report on Form 6-K filed with the SEC on September 4, 2007)
10.2+	Amended and Restated Executive Employment Agreement between the Company and Dr. William G. Rice dated August 19, 2014 (incorporated herein by reference to Exhibit 4.9A to the Company's Annual Report on Form 20-F filed with the SEC on March 4, 2015)
10.3+	Share Option Plan as amended May 5, 2015 (incorporated herein by reference to Exhibit 99.2 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
10.4+	Stock Incentive Plan as adopted May 5, 2015 (incorporated herein by reference to Exhibit 99.1 to the Company's Current Report on Form 6-K filed with the SEC on June 12, 2015)
10.5+	Form of Executive Employment Agreement, dated December 4, 2019, between the Company and Dr. Rafael Bejar (incorporated herein by reference to Exhibit 10.7 to the Company's Annual Report filed on Form 10-K filed with the SEC on March 10, 2020)
10.6^	License agreement dated June 13, 2018 by and between the Company and CrystalGenomics, Inc. (incorporated herein by reference to Exhibit 1.1 to the Company's Current Report on Form 6-K filed with the SEC filed on June 22, 2018)

10.7^	Option and License Agreement between the Company and CrystalGenomics, Inc. dated March 21, 2016 (incorporated herein by reference on Form 10-KA/3 filed with the SEC on April 22, 2019)
10.8^	Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated April 26, 2016 (incorporated herein by reference to Exhibit 99.2 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)
10.9^	Second Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated May 13, 2016 (incorporated herein by reference to Exhibit 99.3 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)
10.10^	Third Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated May 19, 2016 (incorporated herein by reference to Exhibit 99.4 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)
10.11^	Fourth Amendment to Option and License Agreement between the Company and CrystalGenomics, Inc., dated June 1, 2016 (incorporated herein by reference to Exhibit 99.5 to the Company's Current Report on Form 6-K filed with the SEC on June 8, 2016)
10.12^	License Agreement dated as of March 6, 2018 by and between the Company and Ohm Oncology Inc. (incorporated herein by reference to Exhibit 99.2 on Form 6-K filed with the SEC filed on March 8, 2018)
10.13+	Aptose Biosciences Inc. 2021 Employee Stock Purchase Plan (incorporated by reference to the Definitive Proxy statement on Schedule 14A filed with the SEC on April 1, 2021)(File no. 1-32001)
10.14+	Aptose Biosciences Inc. 2021 Employee Stock Incentive Plan (incorporated by reference to the Definitive Proxy statement on Schedule 14A filed with the SEC on April 1, 2021)(File no. 1-32001)
10.15^	Exclusive License Agreement, dated November 4, 2021, by and between Hanmi Pharmaceutical Co. Ltd. and Aptose Biosciences Inc. (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on November 4, 2021)
10.16	Employment Agreement dated June 3, 2019 between Aptose Biosciences Inc. and Philippe Ledru (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on April 11, 2022)
10.17	Employment Agreement, dated June 27, 2022, between Aptose Biosciences Inc. and Fletcher Payne (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on June 28, 2022)
10.18	Equity Distribution Agreement, dated December 9, 2022, among Aptose Biosciences Inc. and JonesTrading Institutional Services LLC(incorporated herein by reference to Exhibit 10.1 to the Company's Current Report filed on Form 8-K on December 12, 2022)
10.19	Registration Rights Agreement, dated as of May 25, 2023, by and between the Company and Keystone Capital Partners, LLC (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on May 26, 2023)
10.20	Common Share Purchase Agreement, dated as of May 25, 2023, by and between the Company and Keystone Capital Partners, LLC (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on May 26, 2023)
10.21	Subscription Agreement, dated September 6, 2023, by and between the Company and Hanmi Pharmaceutical Co., Ltd. (incorporated herein by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed with the SEC on September 12, 2023)
10.22	Investor Rights Agreement, dated September 6, 2023, by and between the Company and Hanmi Pharmaceutical Co., Ltd. (incorporated herein by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed with the SEC on September 12, 2023)
19.1	Insider Trading Policy

21.1*	List of Subsidiaries
23.1*	Consent of Independent Registered Public Accounting Firm (KPMG)
24.1*	Powers of Attorney (included on signature page)
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 of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
97.1*	Aptose Bioscience Inc. Clawback Policy
101.INS*	Inline XBRL Instance Document – the instance document does not appear in the Interactive Data File because XBRL tags are embedded within the Inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema With Embedded Linkbase Documents
104	Cover Page Interactive Data File (embedded within the Inline XBRL document)

+ Indicates management contract or compensatory plan.
* Filed herewith.

Confidential treatment has been sought with respect to certain portions of this exhibit.

Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been filed separately with the Securities and Exchange Commission.

** In accordance with Rule 406T of Regulation S-T, the Inline XBRL related information in Exhibit 101 to this Annual Report on Form 10-K is deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act, is deemed not filed for purposes of Section 18 of the Exchange Act, and otherwise is not subject to liability under these sections.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on the 28th day of March, 2025.

Aptose Biosciences Inc.	/s/ William G. Rice
By:	William G. Rice, Ph.D.
	President, Chief Executive Officer and Chairman of the Board of Directors

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

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

Signature	Title
/s/ William G. Rice William G. Rice, Ph.D.	President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)
/s/ Fletcher Payne Fletcher Payne	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Accounting Officer)
/s/ Denis R. Burger Denis R. Burger, Ph.D.	Director, Lead Independent
/s/ Carol G. Ashe Carol G. Ashe	Director
/s/ Erich M. Platzer Erich M. Platzer, M.D., Ph.D.	Director
/s/ Bernd R. Seizinger Bernd R. Seizinger, M.D., Ph.D.	Director
/s/ Mark D. Vincent Mark D.Vincent, M.D.	Director
/s/ Warren Whitehead Warren Whitehead	Director

Consolidated Financial Statements

APTOSE BIOSCIENCES INC.

Years ended December 31, 2024 and 2023

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors
Aptose Biosciences, Inc.
Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Aptose Biosciences Inc. and subsidiaries (the Company) as of December 31, 2024 and 2023, the related consolidated statements of loss and comprehensive loss, changes in shareholders' equity (deficit), and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2(b) to the consolidated financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2(b). The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

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

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated 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 consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a 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.

Evaluation of Research and Development Prepaid and Accrued Costs

As discussed in Notes 2(j), 5 and 9 to the consolidated financial statements, the Company records expenses for research and development activities based on management's estimates of services received and efforts expended pursuant to contracts with vendors that conduct research and development on the Company's behalf. The financial terms vary from contract to contract and may result in uneven payment flows as compared with services performed or products delivered. As a result, the Company is required to estimate research and development expenses incurred during the period, which impacts the amount of accrued expenses and prepaid balances related to such costs as of each balance sheet date. Management estimates the amount of work completed through discussions with internal personnel and the contract research and contract manufacturing organizations as to the progress or stage of completion of the services. The Company's estimates are based on a number of factors, including the Company's knowledge of the status of each of the research and development project milestones, and contract terms together with related executed change orders. Management makes significant judgments and estimates in determining the accrued balance at the end of each reporting period.

We identified the evaluation of research and development prepaid and accrued costs as a critical audit matter. Higher degree of auditor judgment was required in evaluating the results of our audit procedures because of the subjectivity and estimation uncertainty associated with this estimate.

The following are the primary procedures we performed to address this critical audit matter. For a selection of prepaid and accrued costs amounts for research and development projects, we assessed the Company's estimates by:

• inquiring with Company personnel responsible for overseeing the research and development activities to understand progress of the activities including project milestones, and contract terms together with related executed change orders

• inspecting the terms of the contracts, including related executed change orders, between the Company and the respective contract research and contract manufacturing organizations, the correspondence between the Company and these organizations as to the completion status, invoices received by the Company subsequent to period end, and using this information to arrive at an independent estimate of the prepaid or accrual amounts and comparing it to the amounts recorded by the Company

/s/KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

We have served as the Company's auditor since 1994.

Vaughan, Canada

March 28, 2025

APTOSE BIOSCIENCES INC.

Consolidated Statements of Financial Position
(In thousands of U.S. dollars, except for common share data)

	December 31, 2024	December 31, 2023
Assets		
Current assets:		
Cash and cash equivalents	$ 6,152	$ 9,252
Restricted cash equivalents, current	555	—
Prepaid expenses	2,253	2,042
Other current assets	570	600
Total current assets	9,530	11,894
Non-current assets:		
Property and equipment, net	26	152
Right-of-use assets, operating leases	571	943
Total non-current assets	597	1,095
Total assets	$ 10,127	$ 12,989
Liabilities and Shareholders' Deficit		
Current liabilities:		
Accounts payable to related parties	$ —	$ 2,554
Accounts payable	1,258	3,492
Accrued liabilities	2,773	8,829
Current portion of lease liability, operating lease	428	394
Total current liabilities	4,459	15,269
Non-current liabilities:		
Lease liability, operating leases	193	621
Loan payable to related party	10,018	—
Total non-current liabilities	10,211	621
Total liabilities	14,670	15,890
Shareholders' deficit:		
Share capital:		
Common shares, no par value, unlimited authorized shares, 2,006,028 and 264,745 shares issued and outstanding as of December 31, 2024 and December 31, 2023, respectively	457,404	444,806
Additional paid-in capital	83,336	72,146
Accumulated other comprehensive loss	(4,316)	(4,316)
Accumulated deficit	(540,967)	(515,537)
Total shareholders' deficit	(4,543)	(2,901)
Total liabilities and shareholders' deficit	$ 10,127	$ 12,989

Going concern, see Note 2(b).
Commitments, see Note 10.
Subsequent events, see Note 17.

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

APTOSE BIOSCIENCES INC.

Consolidated Statements of Loss and Comprehensive Loss
(In thousands of U.S. dollars, except for common share and per common share data)

	Year ended December 31, 2024	Year ended December 31, 2023
Revenue	$ —	$ —
Expenses:		
Research and development, related party	—	3,492
Research and development	15,103	33,273
General and administrative	11,154	15,591
Total expenses	26,257	52,356
Other income/(expense):		
Interest income	357	1,151
Interest expense, related party	(207)	—
Change in fair value of warrants	686	—
Foreign exchange loss	(9)	(2)
Total other income	827	1,149
Net loss	(25,430)	(51,207)
Other comprehensive loss:		
Unrealized gain on available-for-sale securities	—	2
Total comprehensive loss	$ (25,430)	$ (51,205)
Basic and diluted loss per common share	$ (36.38)	$ (227.43)
Weighted average number of common shares outstanding used in the calculation of basic and diluted loss per share	698,980	225,154

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

APTOSE BIOSCIENCES INC.

Consolidated Statements of Changes in Shareholders' Equity (Deficit)
(In thousands of U.S. dollars, except for common share data)

	Common Shares		Additional paid-in capital	Accumulated other comprehensive loss	Deficit	Total
	Number	Amount				
Balance, December 31, 2023	264,745	$ 444,806	$ 72,146	$ (4,316)	$ (515,537)	$ (2,901)
Common shares and warrants issued pursuant to the November 2024 Public Offering	1,333,333	5,066	1,854			6,920
Shares and warrants issued pursuant to the Registered Direct Offering	60,000	779	3,245	—	—	4,024
Common shares issued pursuant to the exercise of the Pre-Funded Warrants	68,500	—	2	—	—	2
Common shares and warrants issued pursuant to the Hanmi Private Placement	70,175	1,877	1,138	—	—	3,015
Common shares and warrants issued pursuant to the January 2024 Public Offering	188,304	4,236	3,891	—	—	8,127
Common shares issued under the 2023 Committed Equity Facility	17,332	635	—	—	—	635
Common shares issued under the 2022 ATM Facility	2,717	(21)	—	—	—	(21)
Stock-based compensation	—	—	1,060	—	—	1,060
Common shares issued under the ESPP	922	26	—	—	—	26
Net loss	—	—	—	—	(25,430)	(25,430)
Balance, December 31, 2024	2,006,028	$ 457,404	$ 83,336	$ (4,316)	$ (540,967)	$ (4,543)
Balance, December 31, 2022	205,306	$ 437,520	$ 68,869	$ (4,318)	$ (464,330)	$ 37,741
Common shares issued under the Hanmi Subscription Agreement	22,281	2,989	—	—	—	2,989
Common shares issued in exchange for RSUs	1,266	376	(376)	—	—	—
Common shares issued under the October 2022 ATM	11,198	1,809	—	—	—	1,809
Common shares issued under the 2023 Committed Equity Facility	24,499	2,083	—	—	—	2,083
Stock-based compensation	—	—	3,653	—	—	3,653
Common shares issued under the ESPP	195	29	—	—	—	29
Other comprehensive gain	—	—	—	2	—	2
Net loss	—	—	—	—	(51,207)	(51,207)
Balance, December 31, 2023	264,745	$ 444,806	$ 72,146	$ (4,316)	$ (515,537)	$ (2,901)

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

APTOSE BIOSCIENCES INC.

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

	Year ended December 31, 2024	Year ended December 31, 2023
Cash flows from operating activities:		
Net loss	$ (25,430)	$ (51,207)
Adjustments to reconcile net loss to cash used in operating activities:		
Stock-based compensation	1,060	3,653
Change in fair value of warrants	(686)	—
Depreciation of property and equipment	32	88
Loss on disposal of property and equipment	76	—
Amortization of right-of-use assets	372	378
Interest on lease liabilities	64	93
Interest on loan payable to related party	18	—
Change in operating assets and liabilities:		
Prepaid expenses	(211)	261
Operating lease payments	(458)	(405)
Other assets	30	(343)
Accounts payable	—	—
Accounts payable, related party	(2,554)	(430)
Accounts payable	(2,234)	150
Accrued liabilities, related party	—	(572)
Accrued liabilities	(6,056)	3,744
Cash used in operating activities	(35,977)	(44,590)
Cash flows from financing activities:		
Proceeds from loan payable with related parties	10,000	—
Issuance of common shares and warrants pursuant to the November 2024 Public Offering	6,920	—
Issuance of common shares pursuant to the June 2024 Registered Direct Offering	4,024	—
Proceeds from the June 2024 Pre-funded warrants exercise	2	—
Issuance of common shares and warrants pursuant to the January 2024 Public Offering	8,127	—
Issuance of common shares and warrants pursuant to the Hanmi Private Placement	3,701	2,989
Issuance of common shares under 2023 Committed Equity Facility	635	2,083
Issuance of common shares under 2022 ATM	(21)	1,809
Issuance of commons shares under the ESPP share purchase	26	29
Cash provided by financing activities	33,414	6,910
Cash flows from investing activities:		
Maturity of investments, net	—	9,989
Proceeds from disposal of property and equipment	23	—
Purchase of property and equipment	(5)	(29)
Cash provided by investing activities	18	9,960
Effect of exchange rate fluctuations on cash and cash equivalents	—	2
Decrease in cash, cash equivalents, and restricted cash equivalents	(2,545)	(27,718)
Cash, cash equivalents and restricted cash, beginning of year	9,252	36,970
Cash, cash equivalents and restricted cash, end of the year	$ 6,707	$ 9,252

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

The following table provides a reconciliation of cash, cash equivalents, and restricted cash equivalents reported within the consolidated statements of financial position that sum to the total of the amounts shown in the consolidated statements of cash flows:

	December 31, 2024	December 31, 2023
Cash and cash equivalents	$ 6,152	$ 9,252
Restricted cash	555	—
Total cash, cash equivalents, and restricted cash equivalents shown in the consolidated statements of cash flows	$ 6,707	$ 9,252

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

1.Reporting entity

Aptose Biosciences Inc. ("Aptose," "the Company," "we," "us," or "our") is a science-driven, clinical-stage biotechnology company committed to the development and commercialization of precision medicines addressing unmet clinical needs in oncology, with an initial focus on hematology. The Company's small molecule cancer therapeutics pipeline includes products designed to provide single agent efficacy and to enhance the efficacy of other anti-cancer therapies and regimens without overlapping toxicities. The Company's executive offices are located in San Diego, California, and our head office address has been changed to 66 Wellington Street West, Suite 5300, TD Bank Tower Box 48, Toronto, Ontario, Canada.

We are advancing targeted agents to treat life-threatening hematologic cancers that, in most cases, are not elective for patients and require immediate treatment. We have two clinical-stage investigational products for hematological malignancies: tuspetinib, an oral, potent myeloid kinase inhibitor, and luxeptinib, an oral, dual lymphoid and myeloid kinase inhibitor.

2.Significant accounting policies

(a)Reverse stock split

On February 26, 2025, the Company effected a 1-for-30 reverse stock split of the shares of its Common Shares (the "Reverse Stock Split"). The par value and the authorized shares of the Common Shares were not adjusted as a result of the Reverse Stock Split. All of the Company's issued and outstanding common shares (the "Common Shares"), stock options and warrants have been retroactively adjusted to reflect the Reverse Stock Split for all periods presented. See also Note 12.

(b)Basis of presentation - Going Concern

These consolidated financial statements have been prepared in conformity with U.S. GAAP and the rules and regulations of the Securities and Exchange Commission ("SEC"), related to annual reports filed on Form 10-K, assuming the Company will continue as a going concern. The going concern assumption contemplates the realization of assets and satisfaction of liabilities in the normal course of business. However, substantial doubt about the Company's ability to continue as a going concern exists. As of March 28, 2025, we estimate that we have sufficient liquidity to support the Company's operations until April 2025.

Since our inception, we have financed our operations and technology acquisitions primarily through equity financing, proceeds from the exercise of warrants and stock options, and interest income on funds held for future investment. Cash used for operating activities has primarily consisted of salaries and wages for our management and employees, facility and facility-related costs for our offices and laboratories, fees paid in connection with preclinical and clinical studies, licensing fees, drug manufacturing costs, laboratory supplies and materials, and professional fees. Due to the early stage of our clinical trials, we do not expect to generate positive cash flow from operations for the foreseeable future. Negative cash flows are expected to continue until we receive regulatory approval to commercialize any of our products under development and/or when royalty or milestone revenue from such products exceeds expenses.

We reported net losses of $25.4 million in the fiscal year ended December 31, 2024 and $51.2 million in the fiscal year ended December 31, 2023, As of December 31, 2024, the Company had an accumulated deficit of $541.0 million (December 31, 2023, $515.5 million); cash, cash equivalents and restricted cash equivalents balances of approximately $6.7 million (December 31, 2023, $9.3 million); current assets less current liabilities of approximately $5.1 million (December 31, 2023, negative $3.4 million); and negative shareholders' equity of $4.5 million (December 31, 2023, negative shareholders' equity of $2.9 million). Our cash needs for the next twelve months include estimates of the number of patients and rate of enrollment in our clinical trials, the amount of drug product we will require to support our clinical trials and general corporate overhead costs to support our operations. We have based these

estimates on assumptions and plans that may change and could impact the magnitude and/or timing of operating expenses and our cash runway.

Management recognizes that in order to meet the capital requirements and to continue to operate, additional financing will be necessary. The Company plans to raise additional funds to fund our business operations through equity financing or other financing activities (see also Note 12 and Note 13). Management continues considering other options for raising capital including debt, equity, through collaborations or reorganization to reduce operational expenses. However, given the decrease in the share price, as well as the effect of complying with Nasdaq's minimum equity requirement of $2.5 million by March 31, 2025, the possibility of being delisted from Nasdaq and the difficulty for micro-cap market capitalization companies to raise significant capital, the Company may be unable to access financing when needed. As such, there can be no assurance that the Company will be able to obtain additional liquidity when needed or under acceptable terms, if at all.

Our ability to raise additional funds has been affected by adverse market conditions, the status of our product pipeline, possible delays in enrollment in our trial, and various other factors and we may be unable to raise capital when needed, or on terms favorable to us. The raising of additional capital to make bulk payments to repay accounts payable, if successful, would potentially alleviate any significant doubt on the Company's ability to continue as a going concern. In the event that debt or equity financing is unable to be secured or contemplated, and trade sales fail to materialize, the Company may need to resolve to other means of protecting its assets in the best interests of its shareholders, including foreclosure or forced liquidation and/or seeking creditors' protection.

The aforementioned conditions raise substantial doubt about the Company's ability to continue as a going concern. The accompanying consolidated financial statements do not reflect any adjustments to the carrying amounts and classification of assets, liabilities, and reported expenses that may be necessary if the Company is unable to continue as a going concern; these types of adjustments could be material.

(c)Basis of presentation - functional currency, presentation currency and consolidation

The functional and presentation currency of the Company is the U.S. dollar. These consolidated financial statements include the accounts of its subsidiaries. All intercompany transactions, balances, revenue, and expenses are eliminated on consolidation.

(d) Significant accounting policies, estimates and judgments

The preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities at the date of the consolidated financial statements and reported amounts of revenue and expenses during the reporting period. Actual outcomes could differ from those estimates. The consolidated financial statements contain estimates, which by their nature, are uncertain, including estimates surrounding accrued research and development expenses. The impacts of such estimates are pervasive throughout the consolidated financial statements and may require accounting adjustments based on future occurrences. The estimates and underlying assumptions are reviewed on a regular basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised and in any future periods affected.

(e) Cash and cash equivalents

Cash and cash equivalents are short-term highly liquid investments with original maturities of 90 days or less as of the date of purchase. Cash equivalents are accounted for an amortized cost basis, which approximates their fair value due to their short-term maturities.

(f) Restricted cash equivalents

Restricted cash equivalents are money market funds that reflect the balance of unspent proceeds associated with the loan payable to related party.

(g) Concentration of risk

The Company is subject to credit risk from its cash, cash equivalents and restricted cash equivalents. The carrying amount of the financial assets represents the maximum credit exposure. The Company manages credit risk associated with its cash, cash equivalents and restricted cash equivalents by maintaining minimum standards of R1-low or A-low investments. The Company invests only in highly rated corporations and treasury bills, which are capable of prompt liquidation.

The Company has cash accounts in Canada and the U.S. The Canada Deposit Insurance Corporation (“CDIC”) and the U.S. Federal Deposit Insurance Corporation ("FDIC") provide insurance to protect depositors against the loss of their deposits in case of a bank failure. However, the maximum amount of coverage varies by jurisdiction and account type. In Canada, the CDIC insures eligible deposits up to $100,000 (CAD) per depositor, per insured category, per member institution. In the United States, the FDIC insures deposits up to $250,000 per depositor, per insured bank, for each account ownership category. It is important to note that not all deposits are eligible for insurance coverage. For example, deposits in foreign currency, deposits held in trust, and investments such as mutual funds, stocks, and bonds are not insured by either the FDIC or the CDIC.

The Company is subject to intermediary risk associated with the actions of financial intermediaries, such as banks or investment managers, who act on behalf of clients to buy and sell assets. The Company has diversified its investments with two large financial institutions to reduce the concentration of risk in any one institution. This measure reduces the likelihood of being significantly impacted by the failure of a single financial institution.

The Company has reduced the exposure to individual investment vehicles to minimize the risk of loss in case of adverse events. The Company has diversified the investment portfolio across different asset classes and investment vehicles to achieve this goal.

(h) Property and equipment

Property and equipment is measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The Company records depreciation at rates that charge operations with the cost of the assets over their estimated useful lives on a straight-line basis as follows:

Office furniture	5 years
Laboratory equipment	5 years
Computer hardware	3 years
Computer software	3 years
Leasehold improvements	Life of lease

The residual value, useful life and methods of depreciation of the assets are reviewed at each reporting period and adjusted prospectively if appropriate.

(i) Leases

The Company’s operating leases of tangible property with terms greater than twelve months are recognized as right of use assets, which represents the lessee’s right to use, or control the use of, a specified asset for the lease term, and a corresponding lease liability, which represents the lessee’s obligation to make lease payments under a lease, measured on a discounted basis. Landlord inducements in the form of free rent periods are netted against lease payments to the landlord in measuring right-of-use assets and lease liabilities.

(j)Research and development

Research and development (“R&D”) costs are expensed as incurred. R&D costs consist primarily of salaries and benefits, stock-based compensation, manufacturing, contract services, clinical trials and research related overhead. Non-refundable advance payments for goods and services that will be used in future research are recorded in prepaid and other assets and are expensed when the services are performed.

The Company records expenses for R&D activities based on management's estimates of services received and efforts expended pursuant to contracts with vendors that conduct research and development on the Company's behalf. The financial terms vary from contract to contract and may result in uneven payment flows as compared with services performed or products delivered. As a result, the Company is required to estimate research and development expenses incurred during the period, which impacts the amount of accrued expenses and prepaid balances related to such costs as of each balance sheet date. Management estimates the amount of work completed through discussions with internal personnel and the contract research and contract manufacturing organizations as to the progress or stage of completion of the services. The Company's estimates are based on a number of factors, including the Company's knowledge of the status of each of the research and development project milestones, and contract terms together with related executed change orders. Management makes significant judgments and estimates in determining the accrued balance at the end of each reporting period.

(k)Fair value

The Company measures its financial assets and liabilities at fair value. The carrying amounts for the Company's financial instruments, including cash, cash equivalents and restricted cash equivalents, accounts payable and accrued liabilities approximate their fair value due to their short maturities. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

(l)Warrants

The Company accounts for share purchase warrants issued in connection with financing activities in accordance with the authoritative guidance on accounting for derivative financial instruments indexed to, and potentially settled in, a company's own shares. The registered warrants require the issuance of registered securities upon exercise and do not sufficiently preclude an implied right to net cash settlement. All of the warrants issued in connection with financing activities (see Note 12, Share capital) have been classified as equity, with the grant date fair value of the instruments allocated between Common Shares and Additional paid-in capital based on the relative fair values of the base instrument and the warrants. The Company uses the Black-Scholes pricing model to value the warrants. Determining the appropriate fair-value model and calculating the fair value of registered warrants requires considerable judgment. A small change in the estimates used may cause a relatively large change in the estimated valuation. The estimated volatility of the Company's Common Shares at the date of issuance, and at each subsequent reporting period, is based on historical volatility that matches the expected remaining life of the warrants. The risk-free interest rate is based on the zero-coupon rate for bonds with a maturity similar to the expected remaining life of the warrants at the valuation date. The expected life of the warrants is assumed to be equivalent to their remaining contractual term.

(m)Stock-based compensation

The Company has a stock-based compensation plan (the "Stock Option Plan") available to officers, directors, employees, and consultants with grants under the Stock Option Plan approved by the Company's Board of Directors. Under the Stock Option Plan, the exercise price of each option equals the closing trading price of the Company's stock on the day prior to the grant if the grant is made during the trading day or the closing trading price on the day of the grant if the grant is issued after markets have closed. Vesting is provided for at the discretion of the Board of Directors and the expiration of options is to be no greater than 10 years from the date of grant.

The Company uses the fair value-based method of accounting for employee awards granted under the Stock Option Plan. The Company calculates the fair value of each stock option grant using the Black-Scholes option pricing model at the grant date. The stock-based compensation cost of the options is recognized as stock-based compensation expense over the relevant vesting period of the stock options using an estimate of the number of options that will eventually vest.

Stock options awarded to non-employees are measured at the grant-date fair value of the equity instruments issued in accordance with the Financial Accounting Standards Board's ("FASB") Accounting Standards Update ("ASU") No. 2018-07, Topic 718.

The Company has a stock incentive plan pursuant to which the Board may grant equity settled stock-based awards comprised of restricted stock units or dividend equivalents to employees, officers, consultants, independent contractors, advisors and non-employee directors of the Company. Compensation cost for restricted share units is

measured at fair value at the date of grant, which is the market price of the underlying security, and is expensed over the award's vesting period on a straight-line basis using an estimate of the number of awards that will eventually vest.

(n)Segment reporting

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker, or CODM. The Company's Chief Executive Officer serves as its CODM. The Company views its operations and manages its business as one segment, which is the discovery and development of personalized therapies addressing unmet medical needs in oncology. The Company operates primarily in the U.S.

(o)Loss per share

Basic loss per share is computed by dividing the net loss available to common shareholders by the weighted average number of shares outstanding during the year. Diluted loss per share is computed similarly to basic loss per share except that the weighted average share outstanding is increased to include additional shares for the assumed exercise of stock options and warrants, if dilutive. The number of additional shares is calculated by assuming that outstanding stock options and warrants were exercised and that the proceeds from such exercises were used to acquire Common Shares at the average market price during the year. The inclusion of the Company's stock options and warrants in the computation of diluted loss per share has an anti-dilutive effect on the loss per share and, therefore, they have been excluded from the calculation of diluted loss per share.

(p)Income taxes

The Company accounts for income taxes under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which these temporary differences are expected to be recovered or settled. Valuation allowances are provided if, based on the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company provides reserves for potential payments of tax to various tax authorities related to uncertain tax positions and other issues. Reserves are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filing is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. Potential interest and penalties associated with such uncertain tax positions are recorded as components of income tax expense. As of December 31, 2024 and December 31, 2023, the Company has not recorded any reserves for potential payments as the Company has a history of losses and does not have any revenue from operations.

(q) Recent Accounting Pronouncements

In November 2024, the FASB issued ASU 2024-03, *Disaggregation of Income Statement Expenses*, which is intended to improve disclosures by requiring additional information about specific expense categories in the notes to the financial statements on an annual and interim basis. The standard will be effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027, with early adoption permitted. The standard updates may be applied on either a prospective or retrospective basis. We are currently evaluating the disclosure requirements related to this new standard.

In December 2023, the FASB issued ASU 2023-09, *Improvements to Income Tax Disclosures*, which requires entities to disclose disaggregated information about their effective tax rate reconciliation as well as expanded information on income taxes paid by jurisdiction. The disclosure requirements will be applied on a prospective basis, with the option to apply them retrospectively. The standard is effective for fiscal years beginning after December 15, 2024, with early adoption permitted. The Company is currently evaluating the impact of ASU 2023-09 on the consolidated financial statements and related disclosures.

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

3.Cash and cash equivalents

Cash and cash equivalents consists of cash of $1,506 thousand (December 31, 2023 - $2,764 thousand) and deposits in high interest savings accounts, money market funds and accounts with original maturities less than 90 days totaling $4,646 thousand (December 31, 2023 - $6,488 thousand).

4.Restricted cash equivalents

Restricted cash equivalents consist of deposits in high interest savings accounts, money market funds and accounts with original maturities less than 90 days totaling $555 thousand (December 31, 2023 - nil).

On August 27, 2024, the Company and Hanmi Pharmaceutical Co. Ltd. (“Hanmi”) entered into a loan agreement, pursuant to which Hanmi agreed to loan $10 million to Aptose (the “Hanmi Loan Agreement”). Under the terms of the Hanmi Loan Agreement, the loan proceeds are restricted to be used for Tuspetinib-related business operation purposes, unless otherwise authorized by Hanmi. The use of the funds is also contingent upon the Company meeting specific manufacturing and clinical milestones. The restricted cash equivalents noted above reflects the balance, as of December 31, 2024, of the unspent proceeds associated with the Hanmi Loan Agreement. See Note 11, Related party transactions.

5.Prepaid expenses

Prepaid expenses are comprised of the following:

	December 31, 2024	December 31, 2023
Prepaid research and development expenses	$ 1,648	$ 720
Prepaid insurance	558	882
Other prepaid expenses	47	440
Total	$ 2,253	$ 2,042

6.Property and equipment, net

Property and equipment, net consists of the following:

December 31, 2024	Cost	Accumulated depreciation	Net book value
Laboratory equipment	$ —	$ —	$ —
Computer hardware	33	29	4
Computer software	222	222	—
Office furniture	118	117	1
Leasehold improvements	171	150	21
Total	$ 544	$ 518	$ 26

December 31, 2023	Cost	Accumulated depreciation	Net book value
Laboratory equipment	$ 197	$ 87	$ 110
Computer hardware	29	25	4
Computer software	222	222	—
Office furniture	140	132	8
Leasehold improvements	213	183	30
Total	$ 801	$ 649	$ 152

Depreciation expense for the years ended December 31, 2024 and 2023 were $32 thousand and $88 thousand, respectively.

During the year ended December 31, 2024, the Company recorded a loss on disposition of fixed assets of $76 thousand, with these assets having had an original cost of $262 thousand and accumulated depreciation of

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

$164 thousand. There was no loss on disposal of fixed assets in the year ended December 31, 2023. For the years ended December 31, 2024 and 2023, the Company had additions to fixed assets of $5 thousand and $29 thousand, respectively.

7.Right-of-use assets, operating leases, net

Right of use assets, operating leases, net are comprised of the following:

	Year ended December 31, 2024	Year ended December 31, 2023
Right-of-use assets, operating leases, beginning of year	$ 3,124	$ 3,100
Additions to right-of-use assets	—	24
Right-of-use assets, end of year	3,124	3,124
Less: Accumulated amortization	(2,553)	(2,181)
Right-of use assets, operating leases, net	$ 571	$ 943

8.Fair value measurements and financial instruments

The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value.

Level 1 - inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 - inputs are quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability, or inputs that are derived principally from or corroborated by observable market data or other means; and

Level 3 - inputs are unobservable (supported by little or no market activity).

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

The following table presents the fair value of the Company's financial instruments for the years presented:

	December 31, 2024	Level 1	Level 2	Level 3
Assets				
High interest savings accounts	$ 5,201	$ —	$ 5,201	$ —
Total	$ 5,201	$ —	$ 5,201	$ —

	December 31, 2023	Level 1	Level 2	Level 3
Assets				
High interest savings accounts	$ 2,002	$ —	$ 2,002	$ —
United States Treasury Bills	4,486	—	4,486	—
Total	$ 6,488	$ —	$ 6,488	$ —

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

9.Accrued liabilities

Accrued liabilities as of December 31, 2024 and December 31, 2023 consist of the following:

	December 31, 2024	December 31, 2023
Accrued personnel-related costs	$ 982	$ 1,989
Accrued research and development expenses	1,647	6,527
Other accrued expenses	144	313
Total	$ 2,773	$ 8,829

10.Lease liability

Aptose leases office space in San Diego, California, pursuant to a lease agreement that is scheduled to expire on May 31, 2026. Aptose previously had leased laboratory space in San Diego, which we exited prior to the expiration of the lease on February 28, 2023. We leased office space in Toronto, Ontario, Canada, which lease expired on June 30, 2024. The Company has not included any extension periods in calculating its right-to-use assets and lease liabilities. The Company also enters into leases for small office equipment.

To calculate the lease liability, the lease payments in the table below were discounted over the remaining term of the leases using the Company's incremental borrowing rate as of January 1, 2019 for existing leases at the time of adopting the FASB's Accounting Standards Codification ("ASC") no. 842, Leases ("ASC 842") and for new leases after the adoption of ASC 842, as of the date of the execution date of the new lease. The following table presents the weighted average remaining term of the leases and the weighted average discount rate:

Lease liability is comprised as follows:

	December 31, 2024	December 31, 2023
Weighted-average remaining term – operating leases (years)	1.4	2.4
Weighted-average discount rate – operating leases	7.90 %	7.38 %
Lease liability, total	$ 621	$ 1,015
Less: current portion of lease liability	428	394
Lease liability, non-current	$ 193	$ 621

Operating lease costs and operating lease cash flows presented for the years ended December 31, 2024 and 2023 are as follows:

	Year ended December 31, 2024	Year Ended December 31, 2023
Operating lease cost	$ 438	$ 471
Operating cash flows from operating leases	$ 458	$ 405

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

At December 31, 2024, future minimum payments of lease liabilities were as follows :

Years ending December 31,	Amount
2025	462
2026	197
Total minimum lease payments	$ 659
Less: imputed interest	(38)
Present value of lease liabilities	621
Less: current portion of lease liability	(428)
Lease liability, non-current	$ 193

11.Related party transactions

Hanmi Pharmaceutical Co. Ltd. (“Hanmi”)

On November 4, 2021, Aptose entered into a licensing agreement (the "Tuspetinib Licensing Agreement") with the South Korean company Hanmi. Under the terms of the Tuspetinib Licensing Agreement, Hanmi granted Aptose exclusive worldwide rights to tuspetinib for all indications. Hanmi received an upfront payment of $12.5 million, including $5 million in cash and $7.5 million in Common Shares. Aptose issued Hanmi 7,190 Common Shares in this upfront licensing payment. Hanmi will also receive up to $407.5 million in future milestone payments contingent upon achieving certain clinical, regulatory and sales milestones across several potential indications, as well as tiered royalties on net sales. The term of the agreement will continue on a product-by-product and country-by-country basis until the expiration of the royalty period for such product in such country. The licenses to Aptose will survive and become non-exclusive, perpetual, irrevocable and fully paid-up on a product-by-product and country-by-country basis, upon their natural expiration under the terms of the agreement.

In 2022, the Company and Hanmi also entered into a separate supply agreement for additional production of new drug substance and drug product to support further tuspetinib clinical development (the “Supply Agreement”), for which the Company pays Hanmi per batch of production. For the years ended December 31, 2024 and 2023 expenses related to the Supply Agreement totaled nil and $3.6 million, respectively. Since inception to December 31, 2024, $7.1 million had been expended under the Supply Agreement.

Under the Supply Agreement, the Company paid to Hanmi $2.6 million and $4.5 million for the years ended December 31, 2024 and 2023, respectively. Upon paying Hanmi $2.6 million in 2024, the Company reduced its accounts payable to Hanmi to nil. At December 31, 2024 and 2023 accounts payable and accrued liabilities to Hanmi were nil and nil, and $2.6 million and nil, respectively.

On August 27, 2024, the Company and Hanmi entered into a loan agreement with Hanmi, pursuant to which Hanmi agreed to loan $10 million to Aptose. Under the terms of the Hanmi Loan Agreement, the loan proceeds are restricted to be used for Tuspetinib related business operation purposes, unless otherwise authorized by Hanmi. The use of the funds is also contingent upon the Company meeting specific manufacturing and clinical milestones as outlined in the agreement. The loan is repayable in full on January 31, 2027, with an initial interest period ended on September 30, 2024 and subsequent interest payments due at the end of each three-month period thereafter. Aptose may repay all or any portion of the outstanding principal at any time without penalty, provided that any accrued and unpaid interest on the principal amount being repaid is also settled. The accrued interest on the unpaid principal loan is payable at the periods specified on the Hanmi Loan Agreement at a rate of 6% per annum. During the year ended December 31, 2024, Aptose paid $189 thousand of interest pursuant to the Hanmi Loan Agreement. And as of December 31, 2024, interest expense, related party was $207 thousand and accrued interest was $18 thousand, which is added to the principal of $10 million in non-current liabilities on the statement of financial position.

On September 2, 2024, and in connection with the Hanmi Loan Agreement, Aptose and Hanmi executed a letter of understanding, which outlines the steps associated with the negotiation of a co-development collaboration agreement for the advancement of tuspetinib (the "Future Collaboration Agreement"). Under the terms of the Future Collaboration Agreement, upon execution, the loan principal and any accrued and unpaid interest under the Hanmi Loan Agreement will automatically convert to Hanmi's prepayment of future milestone obligations under the Future Collaboration Agreement. Upon conversion, the Hanmi Loan Agreement, consisting of the $10 million loan principal

with any accrued and unpaid interest, would be deemed fully paid and satisfied. Hanmi has a security interest over all inventory of drug substances and drug products related to the Tuspetinib License Agreement.

As of December 31, 2024 Hanmi held 99,647 Common Shares and 77,972 warrants to purchase Common Shares at an exchange price of $51.30 per Common Shares of Aptose. See also Note 12, Share capital.

12.Share capital

The Company has authorized share capital of an unlimited number of common voting shares.

(a)Equity issuances:

(i)2022 At-The-Market Facility ("ATM")

On December 9, 2022, the Company entered into an equity distribution agreement pursuant to which the Company may, from time to time, sell Common Shares having an aggregate offering value of up to $50 million through Jones Trading Institutional Services LLC ("Jones Trading") on Nasdaq (the "2022 ATM Facility"). During the current year up to May 30, 2024, the date on which the Company terminated the 2022 ATM Facility, the Company issued 2,717 Common Shares under this 2022 ATM Facility at an average price of $36.60 per share for gross proceeds of $100 thousand (net of $121 thousand of share issuance costs). On May 30, 2024, the Company terminated the 2022 At-The-Market Facility. From inception to May 30, 2024, the date the Company terminated the 2022 ATM Facility, the Company raised a total of $2.0 million of gross proceeds ($2.0 million, net of share issuance costs) under the 2022 ATM Facility. Costs associated with the proceeds consisted of a 3% cash commission.

(ii)2023 Committed Equity Facility

On May 25, 2023, the Company and Keystone Capital Partners, LLC ("Keystone") entered into a committed equity facility, (the "2023 Committed Equity Facility"), which provides that subject to the terms and conditions set forth therein, we may sell to Keystone up to the lesser of (i) $25.0 million of the Common Shares and (ii) a number of Common Shares equal to 19.99% of the Common Shares outstanding immediately prior to the execution of the 2023 Committed Equity Facility Agreement. with Keystone which respect to the 2023 Committed Equity Facility (subject to certain exceptions) (the “Total Commitment”), from time to time during the 24-month term of the 2023 Committed Equity Facility. Additionally, on May 25, 2023, the Company entered into a Registration Rights Agreement with Keystone, pursuant to which the Company agreed to file a registration statement with the SEC covering the resale of Common Shares that are issued to Keystone under the 2023 Committed Equity Facility. This registration statement became effective on June 30, 2023 and the 2023 Committed Equity Facility commencement date was July 12, 2023 (the "Commencement Date").

Upon entering into the 2023 Committed Equity Facility, the Company agreed to issue to Keystone an aggregate of 838 Common Shares (the “Commitment Shares”) as consideration for Keystone’s commitment to purchase Common Shares upon the Company’s direction under the 2023 Committed Equity Facility. The Company issued 251 Common Shares, or 30% of the Commitment Shares, on the date of the 2023 Committed Equity Facility Agreement. An additional 251 Common Shares, or 30% of the Commitment Shares, were issued to Keystone in October 2023.

During the year ended December 31, 2023, the Company's issuance of Common Shares to Keystone comprised 24,016 Common Shares sold to Keystone at an average price of $87.30 per Common Share for cash proceeds of $2.1 million and 483 Commitment Shares.

During the year ended December 31, 2024, the Company issued 17,003 Common Shares to Keystone at an average price of $40.80 per Common Share for cash proceeds of $694 thousand and 329 Commitment Shares of $23 thousand. The Company recognized $82 thousand of financing costs associated with professional fees.

Since May 25, 2023 to April 2024, the time the Committed Equity Facility was terminated, the Company's issuance of Common Shares to Keystone comprised of an aggregate of 41,019 Common Shares at an average price of $68.10 per Common Share for aggregate gross cash proceeds of $2.8 million and 838 Commitment Shares.

From May 25, 2023 to the termination of the Committed Equity Facility, the Company recognized $168 thousand of financing costs associated with professional fees. In April 2024, the Company's issuances of Common Shares to Keystone reached the Total Commitment of the Committed Equity Facility, i.e. 19.99% of the Common Shares outstanding immediately prior to the execution of the 2023 Committed Equity Facility Agreement.

(iii)Hanmi 2023 Investment

On August 10, 2023, the Company entered into a binding term sheet with Hanmi whereby Hanmi agreed at their sole discretion to invest, up to a maximum of $7 million in Aptose up to a total ownership of 19.99% of Aptose by Hanmi. On September 6, 2023, the Company entered into a subscription agreement with Hanmi, pursuant to which the Company agreed to sell 22,281 Common Shares to Hanmi for proceeds of $3 million. See also (iv) Hanmi Private Placement, below for December 31, 2024.

(iv)January 2024 Public Offering and Hanmi Private Placement

January 2024 Public Offering

On January 30, 2024, the Company completed a public offering (the “January 2024 Public Offering”) of 188,304 Common Shares (including 24,561 Common Shares issued pursuant to a full exercise by the underwriter, Newbridge Securities Corporation (“Newbridge”), of its over-allotment option at a purchase price of $51.30 per Common Share), for aggregate gross proceeds of $9.7 million, less cash transaction costs of $1.6 million. The Company also issued share purchase warrants underlying a total of 188,174 Common Shares to each investor who participated in the January 2024 Public Offering (the “January 2024 Investor Warrants”). Each January 2024 Investor Warrant has an exercise price of $51.30 per share and was exercisable immediately upon issuance. The January 2024 Investor Warrants will expire January 30, 2029.

Also in connection with the January 2024 Public Offering, the Company issued share purchase warrants underlying a total of 18,084 Common Shares to Newbridge as compensation payable thereto, with each warrant having an exercise price of $64.13 per share and being exercisable beginning on July 30, 2025 and recorded as

additional transaction costs, with a reduction to Common shares and a corresponding increase to Additional paid-in capital.

Hanmi Private Placement

Concurrently with the January 2024 Public Offering, dated January 31, 2024, the Company completed a private placement with Hanmi (the "Hanmi Private Placement") of 70,175 Common Shares at a price of $57.00 per Common Share, representing an 11% premium over the price of the Common Shares issued as part of the January 2024 Public Offering, for gross proceeds of $4.0 million, less cash transaction costs of $0.3 million. As part of the January 2024 Private Placement, the Company issued to Hanmi share purchase warrants underlying 77,972 of our Common Shares (the "Hanmi Warrants"). Each Hanmi Warrant has an exercise price of $51.30 per share and were exercisable immediately upon issuance. The Hanmi Warrants will expire on January 31, 2029.

On February 29, 2024, the Company received a deficiency letter (the "February Deficiency Letter") from the Nasdaq Listing Qualifications Department of Nasdaq notifying the Company that the Company's Private Placement violated Nasdaq Listing Rule 5635(d) because the Company did not obtain shareholder approval prior to such issuance. Nasdaq stated that the Private Placement involved the issuance of greater than 20% of the issued and outstanding Common Shares of the Company at a discount to the Nasdaq official closing price on January 25, 2024, the date of the subscription agreement between the Company and Hanmi. The February Deficiency Letter had no immediate effect on the listing of the Company's Common Shares. In accordance with the Nasdaq Listing Rules, the Company was given 45 calendar days to submit a plan to regain compliance. The approval of the potential issuance of Common Shares in connection with the Hanmi investment, which would exceed 19.99% of the Corporation's outstanding shares as of the closing date of the Hanmi investment, as required by Nasdaq listing rules, was approved at the June 2024 Annual and General meeting.

In response to a Deficiency Letter from Nasdaq received on February 29, 2024 regarding the private placement with Hanmi and the resulting claimed violation of Nasdaq Listing Rule 5635(d), the Company submitted a plan to regain compliance on April 15, 2024. On April 25, 2024, the Company received a letter from the Listing Qualifications Department (the "Staff") of Nasdaq notifying the Company of the Staff's determination that the Company had regained compliance with Nasdaq Listing Rule 5635(d) and the Staff has determined that the matter is now closed. Pursuant to the Company's plan to regain compliance, on April 26, 2024, the Company announced that it had amended the warrant agreement with Hanmi to prohibit the exercise of the Hanmi warrants in excess of the Nasdaq 19.99% limitation (the "Nasdaq 19.99% Cap"), unless shareholder approval is first obtained to exceed the Nasdaq 19.99% Cap.

Due to modifications made, the warrants were classified as a liability on April 24, 2024, following the amendment of the Hanmi Warrants. After receiving shareholder approval on June 18, 2024, management reevaluated these warrants and determined that they met the criteria to be classified as equity. Consequently, the change in the fair value of the warrants, amounting to $0.7 million during the two-month period when the Hanmi Warrants were classified as liabilities, has been recorded as other income in the consolidated statements of loss. This change is also reflected in the comprehensive loss and additional paid-in capital in the consolidated statements of changes in shareholder equity.

At December 31, 2024 and December 31, 2023 Hanmi held Common Shares of 99,647 and 29,471, respectively. At December 31, 2024 and December 31, 2023 Hanmi held warrants of 77,972 and nil, respectively.

(v)Registered Direct Offering and concurrent private placement

On June 3, 2024, the Company completed a registered direct offering for the purchase and sale of 60,000 Common Shares at a purchase price of $34.50 per share and 68,500 pre-funded warrants (the "Pre-Funded

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

Warrants") with an exercise price of $0.03 per Pre-Funded Warrant (the "Registered Direct Offering"). Each Pre-Funded Warrant was exercisable immediately and expire on June 25, 2029.

In a concurrent private placement, Aptose issued unregistered series A warrants to purchase up to 128,500 Common Shares ("Series A Warrants") and series B warrants to purchase up to 128,500 Common Shares ("Series B Warrants"), each at an exercise price of $34.50 per share. The series A and series B unregistered warrants became exercisable beginning on the effective date of shareholder approval of the issuance of the shares issuable upon exercise of the warrants which was obtained on September 5, 2024. The Series A Warrants expire five years from September 5, 2024 and the Series B Warrants expire March 5, 2026.

The gross proceeds to the Company from the Registered Direct Offering was approximately $4.4 million, less cash transaction costs of approximately $0.4 million, which include placement agent and other professional fees. In addition, H.C. Wainwright ("HCW"), the lead placement agent engaged by the Company for the Registered Direct Offering, received 6,423 warrants, each with an exercise price of $43.13 (the "HCW Warrants"). The HCW warrants are exercisable beginning on June 3, 2024 and will expire on June 3, 2029.

(vi)September 2024 Common Share issuance

On September 5, 2024, the Company held a Special Meeting of Shareholders pursuant to which, shareholders voted to authorize, for purposes of complying with Nasdaq Listing Rule 5635(d), the issuance of Common Shares underlying certain warrants in an amount equal to or in excess of 20% of our Common Shares outstanding immediately prior the issuance of such warrants pursuant to the June 2024 Registered Direct Offering. On September 11, 2024, the Company issued 68,500 Common Shares upon the exercise of 68,500 Pre-Funded Warrants for a cash proceeds of $2 thousand at an exercise price of $0.03.

(vii)November 2024 Public Offering

On November 25, 2024, the Company completed a reasonable best efforts public offering (the "November 2024 Public Offering") with participation from our CEO and existing and new healthcare focused investors for the purchase and sale of 1,333,333 Common Shares at a price of $6.00 per share and warrants to purchase up to 666,599 Common Shares (the "November 2024 Investor Warrants"). The November 2024 Investor Warrants have an exercise price of $6.00 per share, were exercisable immediately and will expire five years from the issuance date. In connection with the November 2024 Public Offering, the Company received aggregate gross proceeds of $8.0 million, before deducting placement agent fees and other offering expenses, including approximately $1.1 million of placement agent fees of $0.6 million and professional fees of $0.5 million. Additionally, A.G.P./Alliance Global Partners ("AGP"), the lead placement agent engaged by the Company, received 53,333 warrants, each with an exercise price of $8.25 (the "AGP Warrants"). The AGP Warrants were exercisable immediately and will expire five years from November 25, 2024.

For additional information related to warrants, see Note 13.

(b)Loss per share:

Loss per Common Share is calculated using the weighted average number of Common Shares outstanding and is presented in the table below:

	Year ended December 31, 2024	Year ended December 31, 2023
Net loss	$ (25,430)	$ (51,207)
Weighted-average common shares – basic and diluted	698,980	225,154
Net loss per share – basic and diluted	$ (36.38)	$ (227.43)

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

The effect of any potential exercise of the Company's stock options and warrants outstanding during the years ended December 31, 2024 and December 31, 2023 has been excluded from the calculation of diluted loss per common share as it would be anti-dilutive.

	Year ended December 31, 2024	Year ended December 31, 2023
Outstanding stock options	39,489	39,465
Outstanding warrants to purchase common shares	1,267,585	-
Total anti-dilutive shares	1,307,074	39,465

13.Warrants

A summary of the issue-date fair value, which was estimated using the Black-Scholes pricing model, and which was recorded as additional paid-in capital, of share purchase warrants issued during the year ended December 31, 2024 is as follows:

	January 2024 Investor Warrants	Hanmi Warrants	Newbridge Warrants	Series A Warrants	Series B Warrants	HCW Warrants	November 2024 Investor Warrants	AGP Warrants
Issue-date Aptose share price	$ 59.70	$ 60.00	$ 59.70	$ 28.98	$ 28.98	$ 28.98	$ 5.53	$ 5.53
Exercise price	$ 51.30	$ 51.30	$ 64.13	$ 34.50	$ 34.50	$ 43.13	$ 6.00	$ 8.25
Risk-free interest rate	3.87 %	4.0 %	4.0 %	4.42 %	4.98 %	4.42 %	4.17 %	4.17 %
Expected dividend yield	—	—	—	—	—	—	—	—
Expected volatility	83.00 %	83.00 %	83.00 %	83.31 %	80.02 %	83.31 %	85.02 %	85.02 %
Expected life (years)	5.0	5.0	5.0	5.0	1.5	5.0	5.0	5.0
Issue date fair value (per equivalent share)	$ 42.19	$ 42.40	$ 39.97	$ 19.48	$ 10.20	$ 17.87	$ 3.45	$ 3.36

A summary of warrant activity during the year ended December 31, 2024 is as follows:

	Common Shares Issuable upon Exercise	Weighted average exercise price	Weighted average remaining contractual life (years)
Outstanding as of December 31, 2023	-	$ -	-
Issued	1,336,085	21.25	
Exercised	(68,500) *	0.03	
Outstanding as of December 31, 2024	1,267,585	$ 22.40	4.4
Exercisable as of December 31, 2024	1,267,585	$ 22.40	4.4

* Pre-Funded Warrants

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

The following table shows the number of outstanding warrants by exercise price and date of expiration as of December 31, 2024:

Shares Issuable Upon Exercise		Exercise Price	Expiration Date
128,500	$	34.50	March 5, 2026
18,084	$	64.13	January 30, 2029
188,174	$	51.30	January 30, 2029
77,972	$	51.30	January 31, 2029
6,423	$	43.13	June 3, 2029
128,500	$	34.50	September 5, 2029
666,599	$	6.00	November 25, 2029
53,333	$	8.25	November 25, 2029
1,267,585			

Upon full exercise of all of the warrants exercisable as of December 31, 2024, the Company would issue an additional 1,267,585 of its Common Shares, which could have a dilutive effect on existing shareholders.

14.Stock-based compensation:

(a)Stock option plan and employee stock purchase plan

Effective June 1, 2021, the Company adopted a new stock incentive plan (“New Incentive Plan”) and an employee stock purchase plan (“ESPP”).

The New Incentive Plan authorizes the Board of Directors to administer the New Incentive Plan to provide equity-based compensation in the form of stock options, stock appreciation rights, restricted stock, restricted stock units and Dividend Equivalents.

The Corporation currently maintains its existing Share Option Plan, previously defined as the Plan and 2015 Stock Incentive Plan ("2015 SIP"). Effective June 1, 2021 no further grants have been made under The Plan or 2015 SIP, though existing grants under the Plan will remain in effect in accordance with their terms.

The aggregate number of our Common Shares, no par value, that may be issued under all awards under the New Incentive Plan is (i) 23,046, plus (ii) any of our Common Shares subject to any outstanding award under our prior plans that, after June 1, 2021, are not purchased or are forfeited or reacquired by us, or otherwise not delivered to the participant due to termination, cancellation or cash settlement of such award subject to the share counting provisions of the New Incentive Plan.

Under both, the Plan and the New Incentive Plan, the exercise price of each option equals the closing trading price of the Company’s stock on the day prior to the grant if the grant is made during the trading day or the closing trading price on the day of grant if the grant is issued after markets have closed. Vesting is provided for at the discretion of the Board of Directors and the expiration of options is to be no greater than 10 years from the date of grant.

The Company uses the fair value-based method of accounting for employee awards granted under both plans. The Company calculates the fair value of each stock option grant using the Black-Scholes option pricing model at the

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

grant date. The stock-based compensation cost of the options is recognized as stock-based compensation expense over the relevant vesting period of the stock options using an estimate of the number of options that will eventually vest.

The ESPP, which is administered by the Board of Directors, allows eligible employees of the Company with an opportunity to purchase Common Shares through accumulated payroll deductions up to a maximum 15% of eligible compensation. The ESPP will be implemented by consecutive offering periods with a new offering period commencing on the first trading day on or after February 1 and August 1 each year, or on such other date as the Board of Directors will determine, and continuing thereafter until terminated in accordance with the Plan. Unless the Board of Directors provides otherwise, the purchase price will be equal to eighty-five percent (85%) of the fair market value of a Common Share on the offering date or the exercise date, whichever is lower.

The maximum number of Common Shares which will be made available for sale under the ESPP will be 3,777 Common Shares.

The first six-month offering period began on February 1, 2022 and ended on August 1, 2022. The second six-month period began on August 2, 2022 and ended on February 1, 2023. The third six-month period began on February 2, 2023, and ended on August 1, 2023. The fourth six-month period began on August 2, 2023 and ended on February 1, 2024. The fifth six-month period began on February 2, 2024 and ended on August 1, 2024. There were 922 and 195 Common Shares issued under the ESPP in the years ended December 31, 2024 and 2023, respectively.

Stock option transactions for the year ended December 31, 2024 and December 31, 2023, are summarized as follows:

	Options	Weighted average exercise price	Weighted average remaining contractual life (years)	Aggregate Intrinsic Value
Outstanding, December 31, 2022	36,666	$ 1,566.00		
Granted	7,232	296.10		
Forfeited	(4,433)	1,526.10		
Outstanding, December 31, 2023	39,465	$ 1,343.40		
Granted	13,606	59.97		
Forfeited	(13,582)	516.60		
Outstanding, December 31, 2024	39,489	$ 1,170.30	6.5	$ —
Exercisable, December 31, 2024	25,208	$ 1,692.90	5.3	$ —
Vested and expected to vest, December 31, 2024	36,513	$ 1,246.20	6.3	$ —

Aggregate intrinsic value represents the excess of the value of the closing stock price on the previous trading day of the respective balance sheet dates over the exercise price of the stock options. Total intrinsic value of options exercised was nil at December 31, 2024 and 2023.

As of December 31, 2024, there was $0.4 million of total unrecognized compensation cost related to non-vested stock options, which is expected to be recognized over an estimated weighted-average period of 1.5 years.

The following table presents the weighted average assumptions that were used in the Black-Scholes option pricing model to determine the fair value of stock options granted during the period, and the resultant weighted average fair values:

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

	Year ended December 31, 2024	Year ended December 31, 2023
Risk-free interest rate	4.07 %	3.42 %
Expected dividend yield	—	—
Expected volatility	83.1 %	80.3 %
Expected life of options (years)	5	5
Grant date fair value	$ 40.80	$ 195.90

The Company uses historical data to estimate the expected dividend yield and expected volatility of its Common Shares in determining the fair value of stock options. The expected life of the options represents the estimated length of time the options are expected to remain outstanding.

The following table presents the vesting terms of options granted in the period:

	Year ended December 31, 2024	Year ended December 31, 2023
	Options	Options
3-year vesting (50%-25%-25%)	667	1,611
4-year vesting (50%-16 2/3%-16 2/3%-16 2/3%)	12,939	5,621
Total stock options granted in the year	13,606	7,232

The Company has a stock incentive plan (SIP) pursuant to which the Board may grant stock-based awards comprised of restricted stock units or dividend equivalents to employees, officers, consultants, independent contractors, advisors and non-employee directors of the Company. Each restricted stock unit ("RSU") is automatically redeemed for one Common Share of the Company upon vesting. During the year ended December 31, 2023, the Company granted 1,266 RSUs with immediate vesting and an exercise price of $297.00. On February 6, 2023, all of these RSUs were redeemed for 1,266 Common Shares. The following table presents the vesting and redemption of the RSUs granted in the year ended December 31, 2023. No RSUs were granted in the year ended December 31, 2024.

	Year ended, December 31, 2024		Year ended, December 31, 2023	
	Number	Weighted average grant date fair value	Number	Weighted average grant date fair value
Outstanding, beginning of period	—	$ —	—	-
Granted	—	—	1,266	297.00
Vested	—	—	(1,266)	(297.00)
Outstanding, end of period	—	$ —	—	-

(b)Share-based payment expense

The Company recorded share-based payment expense related to stock options and RSUs as follows:

	Year ended December 31, 2024	Year ended December 31, 2023
Research and development	$ 346	$ 1,373
General and administrative	714	2,280
Total	$ 1,060	$ 3,653

15.Collaborative agreements:

The Company enters into research, development and license agreements in the ordinary course of business where the Company receives research services and rights to proprietary technologies. Milestone and royalty payments

that may become due under various agreements are dependent on, among other factors, clinical trials, regulatory approvals and ultimately the successful development of a new drug, the outcome and timing of which is uncertain.

On November 4, 2021, the Effective Date, the Company entered into the Tuspetinib Licensing Agreement with Hanmi for global rights to tuspetinib. In consideration of the license and other rights granted, Aptose made an upfront payment to Hanmi in the amount of $12.5 million, including $5.0 million in cash and $7.5 million in Aptose Common Shares. The number of Shares issued was determined using the average market closing price of the Common Shares on the NASDAQ stock market over the five trading day period ending on the Effective Date. Accordingly, Aptose issued 215,703 shares to Hanmi.

Under the Company's license agreement with Hanmi, the Company has maximum obligations for clinical development and global regulatory milestones totaling $64.5 million for the first potential clinical indication of tuspetinib, $34 million for the second indication, and $29 million for the third indication. The Company has maximum obligations for tiered global sales-based milestones totaling $280 million. The Company also has an obligation for tiered royalty payments on global sales of commercialized product. The timing of any milestone or royalty payments that may become due is not yet determinable.

On March 21, 2016, the Company entered into a license agreement with CrystalGenomics Invites Co. Ltd., formerly CrystalGenomics, Inc. ("CG") for rights to luxeptinib, in all territories outside of the Republic of Korea and China, the Company has obligations for development milestones of $16 million related to the initiation of Phase 2 and pivotal clinical trials, and regulatory milestones totaling $44 million. The Company also has an obligation to pay royalty payments on sales of commercialized product. The timing of any milestone or royalty payments that may become due is not yet determinable.

On June 13, 2018, the Company entered into a license agreement with CG to gain an exclusive license to luxeptinib in China. The Company has potential future obligations of development milestones of $6 million related to approval of an Investigational New Drug application and to the initiation of Phase 2 and pivotal clinical trials, and regulatory milestones totaling $20 million. The Company also has an obligation to pay sales milestones and royalty payments on sales of commercialized products. The timing or likelihood of any milestone or royalty payments that may become due is not yet determined.

Given current funding and the Company's prioritization of tuspetinib, the Company has decided to pause funding the development of luxeptinib.

(Tabular amounts in thousands of U.S. dollars, except as otherwise noted)

16.Income taxes

(a)Income taxes

For the years ended December 31, 2024 and 2023, the total comprehensive loss is as follows:

	December 31, 2024	December 31, 2023
Loss attributed to U.S. foreign operations	$ (21,564)	$ (45,652)
Loss attributed to Canadian operations	(3,866)	(5,555)
Loss before income taxes	$ (25,430)	$ (51,207)

(b)Tax rate reconciliation

Major items causing the Company's income tax rate to differ from the statutory rate of approximately 26.5% (December 31, 2023 – 26.5%) are as follows:

	Year ended December 31, 2024	Year ended December 31, 2023
Net loss	$ (25,430)	$ (51,207)
Statutory Canadian corporate tax rate	26.5 %	26.5 %
Computed expected tax recovery	$ (6,739)	$ (13,570)
Non-deductible permanent differences	(765)	873
Change in valuation allowance	6,740	13,059
Foreign tax rate differential	(4)	(677)
Prior year true-up adjustments	734	355
Other	34	(40)
	$ —	$ —

(c)Significant components of deferred taxes

The tax effects of temporary differences that give rise to significant portions of the unrecognized deferred tax assets are presented below:

	December 31, 2024	December 31, 2023
Net operating losses carried forward	$ 79,951	$ 73,552
Research and development expenditures	5,016	5,025
Property, equipment, and other intangible assets	7,265	7,321
Research and development tax credits	4,864	4,930
Financing costs	909	431
Right-of-use assets	13	19
Total deferred tax assets	98,018	91,278
Valuation allowance	(98,018)	(91,278)
Net deferred tax asset	$ —	$ —

The valuation allowance at December 31, 2024 was primarily related to net operating loss carryforwards that, in the judgment of management, are not more-likely than-not to be realized. In assessing the realizability of deferred tax assets, management considers whether it is more-likely-than-not that all or some portion of the deferred assets will not be realized. This ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which those deductible temporary difference become deductible. Based on the history of

losses and projections for future taxable income, management believes that it is not more-likely than-not that the Company will realize the benefits of these deductible temporary differences (e.g. deferred tax assets).

The Company has certain deductible Canadian research and development expenditures that have not been deducted for tax purposes, totaling $18.9 million, that can be carried forward indefinitely. The Company also has Canadian non-refundable federal and provincial investment tax credits of approximately $2.3 million which are available to reduce future federal taxes payable and began to expire in 2025, as well as non-refundable U.S. research and development tax credits of approximately $3.1 million which are available to reduce future U.S. taxes payable and begin to expire in 2038.

In addition, the Company has Canadian non-capital loss carryforwards of $292.7 million. To the extent that the non-capital loss carryforwards are not used, they begin to expire in 2026. The Company also has a U.S. non-capital loss carryforward of $1.2 million. To the extent that the non-capital loss carryforwards are not used, they begin to expire in 2034.

The Company files income tax returns with Canada and its provinces and territories. Generally, we are subject to routine examinations by the Canada Revenue Agency ("CRA"). Income tax returns filed with various provincial jurisdictions are generally open to examination for periods of four to five years subsequent to the filing of the respective return.

The Company also files income tax returns for our U.S. subsidiary with the U.S. federal and state tax jurisdictions. Generally, we are subject to routine examination by taxing authorities in the U.S. jurisdictions. There are presently no examination of our U.S. federal and U.S. state returns. We believe that our tax positions comply with the applicable tax law.

17.Subsequent events

On February 3, 2025, the Company and AGP entered into a sales agreement pursuant to which the Company may from time to time, sell Common Shares having an aggregate offering value of up to $1 million through AGP on Nasdaq (the “2025 ATM Facility”). Costs associated with the proceeds consist of 3% cash commission. Up to February 12, 2025, the Company issued 137,000 Common Shares under this 2025 ATM Facility at an average price of $7.31 per share for gross proceeds of $999 thousand ($961 thousand, net of share issuance costs).

On February 7, 2025, the Company issued 333 Common Shares under the ESPP.

On February 7, 2025, the Company and Keystone entered into the Purchase Agreement, which provides that subject to the terms and conditions set forth therein, the Company may sell to Keystone up to the greater of (i) $25 million of the Common Shares and (ii) the Exchange Cap (as defined below) (subject to certain exceptions provided in the Purchase Agreement) (the “Total Commitment”), from time to time during the two year term of the Purchase Agreement. Additionally, on February 7, 2025, the Company and Keystone entered into a registration rights agreement (the “Registration Rights Agreement”), pursuant to which the Company agreed to file a registration statement with the SEC covering the resale of Common Shares that are issued to Keystone under the Purchase Agreement. Upon entering into the Purchase Agreement, the Company agreed to issue to Keystone an aggregate of 8,020 Common Shares (the “Commitment Shares”) as consideration for Keystone’s commitment to purchase Common Shares upon the Company’s direction under the Purchase Agreement. The Company also agreed to pay Keystone up to $25,000 for its reasonable expenses under the Purchase Agreement.

On March 14, 2025, Nasdaq confirmed that we had regained compliance with the minimum bid price requirement. However, the Company has not, yet, been able to regain compliance with the Nasdaq's minimum equity requirement of $2.5 million (the "Stockholders’ Equity Requirement").

As discussed in Note 11 above, the “Company and Hanmi entered into the Hanmi Loan Agreement on August 27, 2024. On March 18, 2025, the Company entered into a debt conversion and interest payment agreement (“Debt Conversion Agreement”) with Hanmi pursuant to which the Company and Hanmi agreed to convert $1.5 million of Hanmi’s indebtedness under the Hanmi Loan Agreement into 409,063 Common Shares at $3.70 per share which was

the average closing price of the Company's Common Shares on Nasdaq for the five trading days immediately prior to entering into the Debt Conversion Agreement.

Exhibit 19.1

AMENDED AND REINSTATED DISCLOSURE AND INSIDER TRADING POLICY
APTOSE BIOSCIENCES INC.
(the "Company")

As revised and adopted by the Board of Directors (the "Board") on May 5, 2020

I.OBJECTIVES AND SCOPE

1.1.Objectives

The Company is committed to best practices in making timely and accurate disclosure of all *material information* and providing fair and equal access to *material information*. This policy explains the Company's disclosure and trading policies and practices.

The purpose of this policy is to ensure that the Company and its *directors*, *officers*, employees and *consultants* satisfy the legal obligations related to the proper and effective disclosure of corporate information and the trading of securities with that information in accordance with all applicable legal and regulatory requirements, including without limitation, in Canada, the *Securities Act* (Ontario) and other applicable legislation of an equivalent object and National Instrument 51-102 *Continuous Disclosure Obligation*, and in the United States, the fair disclosure regulation ("**Regulation FD**"), if applicable, under the United States Securities Exchange Act of 1934, as amended, adopted by the United States Securities and Exchange Commission. The Company's reputation for integrity, its shareholders, the market generally and securities regulators all require the Company and its directors, *officers*, employees and *consultants*, as well as anyone in a *special relationship* with the Company to provide appropriate disclosure of material information when it is proper to do so, and to ensure they do not unjustly benefit from having such information.

It is the Company's goal to raise awareness among its Board, management and employees of the need for a commitment to the timely, factual, accurate and broad dissemination of *material information*, in accordance with all applicable legal and regulatory requirements to enable orderly behaviour in the market, and of the need for a commitment to trade (including the grant or exercise of stock options and warrants as well as buying and selling the Company's shares or other securities) only when proper to do so.

Trading any securities while there is non-public *material information* relating to the Company may, under applicable securities laws, result in liability for the Company and for the individual involved.

Italicized words used in this policy (including the Appendices) have specific meanings set out in **Appendix A - Glossary**.

1.2.Scope

This policy applies to:

•all *directors*, *officers*, *consultants* and employees of the Company and/or its *affiliates*,

•those *associated* with them, including their household members, trading accounts, holding companies and investment companies, and

•all authorized spokespersons of the Company.

In addition, anyone in a *special relationship* with the Company (including spouses, relatives, holding companies and "tippees" thereof), while the Company has no authority to require them to comply with this policy, are subject to all applicable laws and would be well advised to comply with this policy.

This policy applies to all oral and written statements, including, but not limited to, statements made in:

•documents filed with securities regulators and stock exchanges,

•communications to shareholders,

•press releases,

•interviews with securities professionals (including analysts), institutional or other investors and the media,

•speeches, press conferences and management presentations, and

•information posted on the Company's website, electronic mail (e-mail) and other electronic communications.

II.DISCLOSURE COMMITTEE AND AUTHORIZED SPOKESPERSONS

2.1.Disclosure Committee

The Company has established a Disclosure Committee (hereinafter referred to as "**Disclosure Committee**") to oversee the implementation of this policy and to monitor its effectiveness. The members of the Disclosure Committee are: the Chief Executive Officer ("**CEO**"), the Chief Financial Officer ("**CFO**"), the Chief Medical Officer ("**CMO**") and the Chief Business Officer ("**CBO**"). The Disclosure Committee must be kept informed of all significant Company developments. All insiders with knowledge of information he or she believes could be material information that has not been disclosed and/or which is believed not to be known by the Disclosure Committee must notify the Disclosure Committee. The Disclosure Committee decides if information is material, and if so, will institute a Blackout Period (**See Section 5.4 – Trading Blackout Periods**), if appropriate, and determine when the *material information* should be disclosed. It may also decide to keep *material information* confidential in restricted circumstances. **See Section 3.3 – Confidential Material Information**.

2.2.Authorized Spokespersons

It is important for the Company to monitor and control information conveyed to the public. Accordingly, only the following persons may discuss *material information* with securities professionals (including analysts), institutional or other investors, the media or the public generally: the CEO, CFO, CMO and the CBO and any other *senior officer* of the Company from time to time designated by any of the foregoing individuals to respond to, or assist in responding to, specific enquiries as necessary or appropriate. These individuals will be briefed on appropriate responses to market rumours and leading questions. See **Part VII - Guidelines for Authorized Spokespersons**.

***Directors, officers, consultants* and employees who are not authorized spokespersons must not respond to inquiries from securities professionals (including analysts), institutional or other investors and the media or the public, personally, over the telephone, by e-mail, or otherwise.** Any inquiries must be referred immediately to the CEO or CFO.

The names and telephone numbers must be provided to the Market Surveillance Division of the Investment Industry Regulatory Organization of Canada and The Nasdaq Stock Market.

III.GENERAL PRINCIPLES REGARDING MATERIAL INFORMATION

3.1.Material Information will be Generally Disclosed by Press Release

The Company must promptly disclose all material information that is required to be disclosed under applicable securities laws and stock exchanges rules by issuing and filing a press release, a material change report and, in the United States, a Form 6-K or Form 8-K, as applicable, if and when required.

3.2.Material Information Defined

Material information is any information relating to the business and affairs of a company that:

•results in or would reasonably be expected to result in a significant change in the market price or value of any of the company's securities, or

•would reasonably be expected to have a significant influence on a reasonable investor's investment decisions.

Material information includes both *material facts* and *material changes.*

A *material fact* is a fact that significantly affects or could reasonably be expected to significantly affect the market price or value of a company's securities.

A *material change* is a change in the business, operations or capital of a company that would reasonably be expected to have a significant effect on the market price or value of any of the securities of the company, and includes a decision to implement such a change made by the Board or senior management who believe that confirmation of the decision by the Board is probable.

Examples of events or developments that may constitute *material information* are listed in **Appendix B - Examples of Potentially Material Information. The list is not exhaustive. The Disclosure Committee will exercise its own judgment in making materiality determinations regarding the Company.**

3.3.Confidential Material Information

For purposes of complying with Canadian securities laws and Canadian securities exchange rules:

The Disclosure Committee may delay public disclosure of *material information* if it determines that immediate release would be unduly detrimental to the Company's interests (for example, if it would prejudice negotiations in a corporate transaction). In these circumstances:

•Confidential Material Change Reports - The Disclosure Committee will cause the Company to file a confidential material change report with securities regulators, explaining the reasons why the report must be kept confidential, and will periodically (at least every 10 days[1]) review its decision.

•Complete Confidentiality Maintained - All persons with knowledge of confidential information must maintain complete confidentiality and must not disclose the information to any other person, except in the necessary course of business. See **Section 4.3 - Necessary Course of Business**.

•Trading Activity Monitored - Market activity in the Company's securities will be closely monitored by the CFO for any potential misuse of confidential *material information*[2]. See **Part V - Restrictions on Trading and "Tipping"; Trading Blackout Periods; Insider Reports**.

•Disclosure - As soon as the basis for confidentiality ceases to exist, or information is inadvertently disclosed or is leaked, or otherwise becomes publicly known, the confidential *material information* will be generally disclosed immediately by press release. See **Section 3.7– Situations Requiring Disclosure**.

For purposes of complying with Canadian and US securities laws and regulations and US securities exchange rules, an assessment of the need to disclose material information will be separately made by the Disclosure Committee (including under Regulation FD, if applicable) and, irrespective of the determination that disclosure would be unduly detrimental to the Company's interest, the Company will, at all times, comply with such laws, regulations and rules. If disclosure is required under such laws, regulations and rules, it may result in the need to disclose such information under this Section 3.3.

[1] Confidential material change reports must be renewed every 10 days in some jurisdictions to maintain confidentiality.

[2] The Company may also ask the Market Surveillance Division of Investment Industry Regulatory Organization of Canada to place the Company's securities on "stock watch" to monitor trading activity.

3.4.Material Information at Proposal Stage

As a general rule, if it is determined that disclosure of certain material non-public information is not required, it is the Company's policy not to release the information unless (i) the Company has regularly released that type of information in the past and (ii) such release is made in compliance with this policy. The Disclosure Committee may determine that a new development should be disclosed at the proposal stage, or before an event actually occurs, if it gives rise to *material information* at that stage. In these circumstances:

•Timing of Announcement - The intention to proceed with the material transaction or activity will be announced when a decision has been made to proceed with it by the Board, or by senior management with the expectation of the concurrence of the Board[3].

•Updates - Updates will be announced at least every 30 days until the announced event occurs, unless the original announcement indicates that an update will be disclosed on another indicated date.

•Material Changes - Prompt disclosure will be made of any *material changes* to the proposed transaction, or to the previously disclosed information.

3.5.No Selective Disclosure

The Company will not make disclosure of *material information* to selected individuals (such as securities professionals (including analysts), institutional or other investors and the media) if it has not been generally disclosed. If previously non-public *material information* is inadvertently disclosed or is leaked, other than disclosures in the necessary course of business, the *material information* will be generally disclosed immediately by press release, a material change report and, in the United States, a Form 6-K or Form 8-K, as applicable, if and when required. See **Section 3.7 – Situations Requiring Disclosure and Section 4.3 - Necessary Course of Business**.

3.6.Disclosure Must Be Factual, Balanced and Consistent

The substance and importance of the *material information* being disclosed must be clear. Unnecessary details, exaggerations and promotional commentary will be avoided. Disclosure will include any information the omission of which would make the rest of the disclosure misleading (half-truths are misleading). Disclosures should avoid overly promotional language regarding the Company that exceeds the level necessary to enable an investor to make an informed investment decision. Unfavourable *material information* will be disclosed as promptly and completely as favourable information. Disclosure will be consistent among all audiences, including securities professionals such as analysts, institutional or other investors and the media.

[3] In situations where a material change consists of a decision to implement a change made by the Company's senior management, who believe that confirmation by the Board is probable, the Company may delay issuing a press release and file a confidential material change report (see Section 3.3 – Confidential Material Information) until the decision is approved by the Board.

3.7.Situations Requiring Disclosure

Material information about the Company will be generally disclosed immediately by press release and material change report in any of the circumstances described below and in the United States, a Form 6-K or Form 8-K, if and when required. This will include contacting any applicable stock exchange, including the Market Surveillance Division of the Investment Industry Regulatory Organization of Canada and The Nasdaq Stock Market, discussing whether it will be necessary to halt the trading of the Company's securities pending the issuance of the press release. Pending the issuance of the press release, the Company will also take steps to inform those parties to whom any non-public, *material information* has been disclosed that the information is material, non-public and must be kept confidential.

The following are example of situations where disclosure will be immediately required:

•Inadvertent Disclosure - If the Company becomes aware, or has reasonable grounds to believe, that confidential *material information*, or rumours about it, has been inadvertently disclosed to selected individuals, or leaked.

•Misuse of *Material Information* - If the Company becomes aware, or has reasonable grounds to believe, that someone is trading the Company's securities with knowledge of confidential material information, or rumours about it (for example, if there is unusual trading activity in the Company's securities).

•Errors in Previous Disclosure - If the Company learns that previous disclosure contained a material error at the time it was given, and the correction constitutes *material information*.

IV.MAINTAINING CONFIDENTIALITY

4.1.Undisclosed Material Information Must Be Kept Confidential

All *material information* about the Company and its affiliates that has not been generally disclosed by press release must be kept strictly confidential in accordance with this policy.

It is often difficult to tell whether information is *material information*, or when a development (such as a proposed transaction) will mature into *material information*. **Accordingly, all non-public information relating to the Company and its affiliates should be treated as confidential material information**.

4.2.Material Information About Other Companies

From time to time, the Company may be involved in transactions or proposed transactions with another company that may result in *directors*, *officers*, *consultants* or employees of the Company having confidential information about that other company. **This information must be treated as confidential information in accordance with this policy, as if it were confidential information about the Company**. No one may trade in securities of the other company with knowledge of confidential information about the other company. See **Part V - Restrictions on Trading and "Tipping"; Trading Blackout Periods; Insider Reports**.

4.3.Necessary Course of Business

Non-public *material information* may be disclosed to selected individuals if doing so is in the necessary course of business and on a strict need-to-know basis. The individual receiving the non-public, material information must be advised that:

•the information is confidential and may not be disclosed to anyone else, other than in the necessary course of business (and then only with appropriate Company approvals); and

•they cannot trade, or assist others to trade, in the Company's securities until the confidential information is disclosed and an appropriate amount of time has passed to permit thorough dissemination and evaluation of the information.

As a general rule, an outside party that does not otherwise owe the Company a duty of trust or confidence (such as accountants and lawyers) receiving confidential information in the necessary course of business will be required to sign a confidentiality agreement.

Examples of communications in the necessary course of business are set out in **Appendix C - Communications in the Necessary Course of Business**. Disclosure to securities professionals (including analysts), institutional or other investors and the media is generally **not** considered to be in the necessary course of business. **Anyone who is uncertain about whether disclosure is in the necessary course of business should consult with the CFO or the CEO or another member of the Disclosure Committee**.

4.4.Procedures to Prevent the Misuse of Confidential Information

In order to prevent the inadvertent disclosure or misuse of confidential information, the procedures set forth in **Appendix D-Treatment of Confidential Information should be observed at all times**.

V.RESTRICTIONS ON TRADING AND "TIPPING"; TRADING BLACKOUT PERIODS; INSIDER REPORTS

5.1.Unlawful Trading and "Tipping"

•Insider Trading - It is illegal for a *person* in a *special relationship* with the Company with knowledge of material information affecting the Company that has not been publicly disclosed to buy or sell securities of the Company (including the exercise of stock options or warrants).

•"Tipping" - It is illegal for a person in a *special relationship* with the Company to inform ("**tip**") any other person (a "**tippee**") of material information affecting the Company that has not been publicly disclosed, except in the necessary course of business. See **Section 4.3 - Necessary Course of Business**.

Anyone who effects transactions in the Company's or a third party's shares (or provides information to enable others to do so) on the basis of non-public, *material information* is subject to both civil liability and criminal penalties, including imprisonment, as well as disciplinary action by the Company, up to and including termination for cause. Anyone who engages in tipping can be held liable both for such person's own transactions and for transactions effected by the tippee, or even a tippee of the tippee.

5.2.Special Relationship Persons Defined

The definition of those *persons* who are in a *special relationship* with the Company is set out in **Appendix A- Glossary**. The definition includes (but is not limited to):

•*Insiders*, *associates* and *affiliates* of the Company,

•any *associates* and *affiliates* of the Company whose transactions in the Company's securities are directed by, or subject to, the influence or control of an *insider*, *consultant* or employee of the Company,

•anyone proposing to make a take-over bid for the Company, become a party to a business combination with the Company or to acquire a substantial portion of the Company's property,

•anyone engaging in business or other professional activities with or on behalf of the Company or with or on behalf of any other person in a special relationship with the Company, and

•any person (a tippee) who learns of *material information* from someone that the tippee knows or should know is a *person* in a *special relationship* with the Company.

Anyone in a *special relationship* with the Company is subject to the prohibitions against insider trading and tipping. Furthermore, it is important that the **appearance** of insider trading and tipping in securities be avoided. The definition is very broad and captures all *directors*, *officers* and employees (including non-management employees) of the Company and anyone in a *special relationship* with the Company. It also captures a potentially infinite chain of tippees. This policy will continue to apply to transactions by any *person* in a *special relationship* with the Company in the Company's or a third party's shares even after such person's employment or service with the Company has terminated, as applicable. If any *person* in a *special relationship* with the Company is in possession of non-public *material information* when such person's employment or service terminates, he or she may not trade in the Company's shares until the information has become public or is no longer material.

Anyone who is uncertain about whether they are an *insider* of the Company, or about the scope of the definition of persons in a *special relationship* with the Company, should consult with the CEO or CFO. Anyone who knows of or suspects a violation of this Disclosure and Insider Trading Policy should report the violation immediately to the Company's CEO or CFO, or through the procedures for anonymous reporting outlined in the Company's Code of Business Conduct and Ethics. The Company and its subsidiaries will comply with all requests from applicable securities regulatory authorities, stock exchanges and other relevant agencies for information related to insider trading investigations.

5.3.Specific Restrictions

•Prohibited Use of Non-Public Material Information about the Company - The prohibition on insider trading and tipping applies to anyone in a *special relationship* with the Company who has knowledge of *material information* about the Company that has not been generally disclosed. These *persons* are prohibited from trading securities of the Company (this includes the granting of options to acquire Company shares, the purchase or sale of securities, the exercise of outstanding warrants or stock options and subsequent sale of securities), and from informing any other *person* of non-public *material information* affecting the Company (except

•as permitted and set forth in **Section 4.3 – Necessary Course of Business**), until the *material information* has been generally disclosed by press release and filing with the Canadian securities commissions and with the U.S. Securities and Exchange Commission and a reasonable period of time (usually, two full *trading days*) have passed for the information to be widely disseminated. See **Section 4.3 – Necessary Course of Business**.

•Use of Non-Public *Material Information* About a Counterparty - The prohibition on insider trading and tipping also applies to anyone in a *special relationship* with the Company who has knowledge of *material information* about a counterparty with which the Company is negotiating - or plans to negotiate - a merger, an acquisition, a business combination or other potentially material transaction that has not been generally disclosed. These persons are prohibited from trading securities of the counterparty, and from informing any other *person* of non-public *material information* affecting the counterparty (except as permitted and set forth in **Section 4.3 – Necessary Course of Business**), until the *material information* has been generally disclosed by press release and filing with the U.S. Securities and Exchange Commission and a reasonable period of time (usually, two full *trading days*) have passed for the information to be widely disseminated. See **Section 4.3 - Necessary Course of Business**.

•Stock Options, etc. - The issuance and exercise of stock options, *share appreciation rights* (SARs) and similar share compensation rights are trades in securities for purposes of the insider trading and tipping prohibitions and are fully subject to these restrictions.

•Derivatives, Options and Warrants - Buying and selling derivatives (whether issued by the applicable company or a third party), options, warrants, rights and similar securities are trades in securities for purposes of the insider trading and tipping prohibitions.

•During Pension Fund Blackouts - In accordance with Regulation BTR under the US Securities Exchange Act of 1934, as amended, no *director* or executive 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 executive officer acquires or previously acquired such equity security in connection with his or her service or employment as a *director* or executive 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 trading plan; compensatory grants or awards of equity securities pursuant to a plan that, by its terms, permits executive 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 executive officer of any blackout periods in accordance with the provisions of Regulation BTR.

•Speculating in Securities

Under Canadian securities laws, is unlawful for insiders to:

•short-sell securities of the Company or its *affiliates* (i.e., sell securities that they do not yet own), except in limited circumstances permitted by corporate and securities laws, and

•buy put options, or sell call options, on securities of the Company or its *affiliates*.

•Regardless of whether it is illegal and regardless of the jurisdiction of the transaction, no *officer*, *director* or other member of management of the Company may engage in short sales, transactions in put or call options, hedging transactions, margin accounts, pledges or other inherently speculative transactions with respect to the Company's stock at any time.

5.4.Trading Blackout Periods

The Company's securities may not be traded, and stock options, SARs and similar share compensation rights may not be issued or exercised, during the following "**Blackout Periods**":

•Financial Statements - If determined necessary by the Company's CEO or CFO, Blackout Periods may be implemented during the periods when the Company's quarterly and annual financial statements are being prepared and released. These Blackout Periods may be commenced at any time at the discretion of the Company's CEO or CFO, and will remain in place until such time as the Company's CEO or CFO determine. The Company's CEO or CFO will notify the *insiders*, *persons* in a *special relationship* with the Company and *officers, directors, consultants* and employees of the imposition and the termination of any such Blackout Period. Unless the Company's CEO or CFO shall otherwise determine, such Blackout Period shall end at the close of business on the second trading day following the release of the applicable financial statements.

•Pending Corporate Developments – Blackout Periods may be recommended from time to time for prescribed periods by the Company's CEO or CFO, the Board or the Disclosure Committee because of a pending corporate development or other confidential non-public *material information*. The Company's CEO or CFO, the Board or the Disclosure Committee will notify the *insiders*, *persons* in a *special relationship* with the Company and *officers, directors, consultants* and employees of the imposition and the termination of any such Blackout Period. Unless the Company's CEO or CFO, the Board or the Disclosure Committee shall otherwise determine, such Blackout Period shall end at the close of business on the second

trading day following the issuance of a press release generally disclosing details of such corporate development. Anyone with knowledge of the special circumstances, and anyone else designated by the Company's CEO or CFO, the Board or the Disclosure Committee, is subject to the trading blackout. This may include external advisors such as legal counsel, investment bankers and consultants.

5.5.Pre-Clearance of Trades

To protect the reputation of the Company and avoid the appearance of impropriety, all *insiders, officers, directors, consultants* and employees of the Company must pre-clear **all** transactions in the Company's securities (including the exercise of stock options) with the CFO or another designated officer of the Company. Notwithstanding the prior sentence:(a) only advance notice to the CFO or other designated officer of the Company, but not pre-clearance, is required for option exercises or gifts of Company securities; and (b) pre-clearance is not required for transactions effected in accordance with a written trading plan that has been properly established and approved pursuant to Rule 10b5-1 under the United States Securities Exchange Act of 1934, as amended, and the requirements of Section 5.6below (a "**Rule 10b5-1Trading Plan**").

5.6.Rule 10b5-1 Trading Plans

Notwithstanding any of the prohibitions contained in this policy, all i*nsiders, directors, officers, consultants* and *employees* of the Company may, if permitted under applicable Canadian securities laws, trade in the Company's securities at any time pursuant to a Rule 10b5-1 Trading Plan that has been properly adopted and is properly administered in accordance with under Rule 10b5-1 under the United States Securities Exchange Act of 1934, as amended. All adopted Rule 10b5-1 Trading Plans must comply with all applicable policies established by the Company in addition to complying with Rule 10b5-1 itself and applicable Canadian laws.

Adoption of a Rule 10b5-1 Trading Plan cannot be effective until such *insider, director, officer, consultant* or *employee* of the Company has received written confirmation from the CFO that the Company acknowledges adoption of the Rule 10b5-1 Trading Plan. To "properly" establish a Rule 10b5-1 Trading Plan, the Company or such *insider, director, officer, consultant* or *employee* of the Company must submit a draft of the proposed plan to the CFO and must receive written acknowledgement of such adoption from the CFO. Termination, modification or amendment of a Rule 10b5-1 Trading Plan must also be pre-cleared with the CFO. Additionally, all transactions under a Rule 10b5-1 Trading Plan must be reported as set forth below.

The rules applicable to Rule 10b5-1 Trading Plans are complex and technical in nature, and *insiders, directors, officers, consultants* and *employees* of the Company should not employ a Rule 10b5-1 Trading Plan without obtaining advice from legal counsel. A Rule 10b5-1 Trading Plan may not be adopted by any *insider, director, officer, consultant* or *employee* of the Company at any time when he/she is aware of confidential non-public *material information* or is subject to a Blackout Period.

Prior to adopting or terminating a Rule 10b5-1 Trading Plan, all *insiders, directors, officers, consultants* and *employees* of the Company must confer with, and, if applicable, provide a copy of the proposed Rule 10b5-1 Trading Plan to, the CFO. The Company reserves the right to consider and determine whether public announcement of a Rule 10b5-1 Trading Plan should be made.

By the close of business on the day of any transaction by any *insider, director, officer, consultant* or *employee* of the Company, each such person must deliver or cause to be delivered to the CFO, written documentation confirming each transaction in any security of the Company by such person or any affiliate of such person. The applicable transactions include any change in ownership, including gifts, stock trades, option grants, and other transfers. The applicable *insider, director, officer, consultant* or *employee* of the Company must give a copy of this Policy to any broker effecting trades in Company securities on behalf of such person and should request that such broker contact the Company's CFO by telephone and in writing by fax or email with the details of the transaction on the day it occurs, including any transactions effected in accordance with a Rule 10b5-1 Trading Plan. The reporting obligation remains that of the applicable *insider, director, officer, consultant* or *employee* of the Company, and no arrangements with the broker will remove that obligation from such person. This Policy does not require that the applicable *insider, director, officer, consultant* or *employee* of the Company, or his/her affiliates or associates submit confirmations of transactions in other companies' securities unless otherwise indicated in writing by the CFO.

5.7.Insider Reports

Insider reports must be filed by all insiders of the Company under securities laws to report the ownership of, and trades in, securities of the Company (including the issuance and exercise of stock options). **It is the insider's, and not the Company's, responsibility to file insider reports when required. The filing of an insider report does not relieve the insider from any other responsibility under this policy**.

Officers and *directors* subject to the reporting obligations under applicable securities law, including without limitation, National Instrument 55-104 *Insider Reporting Requirements and Exemptions*, and if applicable, Section 16 of the United States Securities Exchange Act of 1934 (the "**Exchange Act**"), should take care not to violate any prohibition on short-swing trading and the restrictions on sales by control persons (Rule 144 under the United States Securities Act of 1933, as amended), and should file all appropriate reports related to such rules and regulations, including, if applicable, Section 16(a) reports (Forms 3, 4 and 5) and any notices of sale required by Rule 144.

General instructions on when and how to file insider reports under Canadian securities laws is set out in **Appendix E1 - Filing Insider Reports under Canadian Securities Laws**.

VI.TIMELY DISCLOSURE

6.1.Press Releases

•Coordination - The issuance of press releases, whether or not they contain *material information*, is coordinated by the CFO.

•Specific Approvals -

•General - All press releases must be reviewed in advance by a majority of the members of the Disclosure Committee for accuracy and completeness prior to release.

•Annual Financial Statements - Annual financial statements must be reviewed by the Audit Committee and approved by the Board prior to release.

•Quarterly Financial Statements - Quarterly financial statements must be reviewed by the Audit Committee and approved by the Board prior to release.

•Procedure for Dissemination - If a press release containing *material information* is to be issued during trading hours, prior notice must be given to the Market Surveillance Division of Market Regulation Services Inc., of the Toronto Stock Exchange, so that it can give assistance and direction on whether there should be a trading halt. If approved by Market Surveillance, the issuance of the press release may be delayed until the close of trading. If the press release is issued outside normal trading hours, Market Surveillance must be notified before the market opens.

•Dissemination -

•Approved News-Wire Service - Press releases will be disseminated through an approved news-wire service that provides simultaneous national and/or international distribution and transmission to all relevant stock exchanges and securities regulatory authorities, national financial press and daily newspapers that provide regular coverage of financial news.

•SEDAR/Company Website - General disclosure will be enhanced by filing press releases containing *material information* on SEDAR, filing material change reports on SEDAR, filing such press releases or equivalent information on Form 6-K or Form 8-K, as applicable, with the SEC, when and if required, and by posting all press releases on the Investor Relations section of the Company's website. **Filing press releases on SEDAR and/or posting them on the Company's website alone does not constitute general disclosure for purposes of securities laws and stock exchange rules**. See **Section 6.5 - Electronic Communications.**

6.2.Press Releases of Summary Financial Results

The Company may issue a press release announcing financial results and highlighting major items, which may include pro forma results. Press releases of summary financial results will be issued concurrently with the issuance and filing of the related annual or quarterly financial statements and notes and management's discussion and analysis (MD&A).[4] Press releases of summary financial results will be reviewed by the Board prior to release. See **Section 6.1 – Press Releases**.

[4] If summary earnings news releases are issued in advance of the filing of the related financial statements and notes and MD&A, this will limit the ability of a company to discuss its financial results, since discussion of elements of the financial statements that have not been generally disclosed may constitute selective disclosure.

6.3.Material Change Reports

The CFO will review and coordinate the filing of material change reports for accuracy and completeness and to ensure that they are filed on a timely basis with all applicable securities regulators.

6.4.News Conferences and Analyst Conference Calls; Communication Quiet Periods

See **Section 7.1 - Private Briefings with Securities Professionals (Including Analysts), Investors and the Media** for one-on-one meetings and small group discussions.

•Participation - News conferences and analyst conference calls will be held in an open manner. All interested parties can participate by telephone or through the Internet by webcast and/or conferences and calls will be recorded. Webcast archives and/or transcripts will be posted on the Company's website for quarterly earnings and material corporate developments, and will remain there for a minimum of 30 days.

•Notice - Adequate notice will be given of the time, date and topic of each news conference or analyst conference call, containing instructions on how to access the call and indicating for how long and by what means the Company will make a replay available. Notice will be given:

•by press release distributed through an approved news-wire service,

•by blast e-mail sent to the Company's entire mailing list including financial and industry analysts, institutional and other investors and the financial press, and

•by notice on the front page of the Company's website.

•Attendance - Where practical, news conferences and analyst conference calls will be attended by at least the CEO or CFO. At least one member of the Disclosure Committee or a designate must be in attendance at every news conference and analyst conference. It is the responsibility of the Disclosure Committee to be completely familiar with the Company's public disclosure record to ensure consistency of information and to interrupt if questions could elicit the disclosure of non-public *material information*.

•Pre-Conference Briefing Sessions - Company officials will meet before news conferences and analyst conference calls. Where practical, statements and responses to anticipated questions will be scripted in advance and reviewed by the appropriate people within the Company.

•Cautionary Language - A Company spokesperson will provide cautionary language at the beginning of each conference with respect to any forward-looking information and will direct participants to publicly available documents containing all relevant assumptions, sensitivities and full discussion of the risks and uncertainties. See **Section 7.3 - Forward-Looking Information**.

•Information Provided - The Company will provide only *material information* that has been generally disclosed and non-*material information*, recognizing that an analyst or investor may construct information he or she obtains into a mosaic that could result in *material information*. The Company cannot alter the materiality of information by breaking it down into smaller, non-material components.

Examples of specific issues that are appropriate for discussion, and those issues that should be avoided, are listed in **Appendix F - Contacts with Securities Professionals (Including Analysts), Investors and the Media**.

Disclosure at news conferences, analyst conference calls and shareholders' meetings does not satisfy the Company's obligation to generally disclose *material information*. The Company generally discloses *material information* by press release. **Any disclosure of material information at news conferences, analyst conference calls and shareholders' meetings must be preceded by the issuance of a press release in accordance with this policy**.

•Record-Keeping - At least one Company official will keep detailed notes.

•Debriefing Sessions - The CEO or CFO will hold a debriefing meeting immediately after the news conference or analyst conference call. **If selective disclosure of previously non¬public material information is discovered, the material information will be generally disclosed immediately by press release**. See **Section 3.7 – Situations Requiring Disclosure**.

•Communication Quiet Periods -

•Quarterly and Non-Routine Quiet Periods - To avoid the potential for selective disclosure or the appearance of selective disclosure, the Company will observe quiet periods:

•prior to quarterly earnings announcements, and

•when a *material change* is pending.

The quarterly quiet period starts on the first day following the end of the quarter and ends on the second trading day following the issuance of a news release disclosing the quarterly results.

When a *material change* is pending, the quiet period shall end on the second trading day following the issuance of a press release generally disclosing details of such *material change*.[5]

•Activities During Quiet Periods - During a quiet period the Company will not initiate or participate in any meetings or telephone calls with analysts, investors or the media and no earnings guidance will be provided to anyone. Communications will be limited to responding to inquiries concerning *material information* that has been generally disclosed or non-*material information*. Trading by certain persons in the Company's securities is also restricted. **See Part V – Insider Trading; Tipping;**

[5] These scheduled quiet periods mirror the scheduled trading blackout periods. See **Section 5.4 – Trading Blackout Periods**.

Insider Reports. If the Company is invited to participate in investment meetings or conferences organized by others during a quiet period, the CEO or CFO may determine, on a case-by-case basis, if it is advisable to accept those invitations. If accepted, extreme caution must be exercised to avoid selective disclosure of any *material information* not yet publicly disclosed.

6.5.Electronic Communications

•Electronic Communications - The Company's website, e-mail and other channels available on the Internet provide opportunities for the Company to supplement traditional means of distributing information. **The electronic distribution of information is subject to the same securities laws and stock exchange rules as traditional forms of dissemination**.

•Company Website - The Company maintains a website in part so that investor relations information is available electronically. The Investor Relations page of the Company's website is segregated from the Company's other website pages. In particular, promotional, sales and marketing information will not be included on the same website pages as the Investor Relations page.

•Timing of Information Posted on Company Website - Timely disclosure documents will be posted as soon as possible after they have been generally disclosed. Disclosure on the Company's website alone will not satisfy the Company's obligation to generally disclose *material information*. The Company generally discloses *material information* by press release. **Any disclosure of *material information* on the Company's website must be preceded by the issuance of a press release in accordance with this policy**.

•Information Currency and Updates - The first page of all information posted on the Investor Relations page of the Company's website will be dated the date it is posted on the website and, if applicable, modified. Information will be updated or corrected as required (it is not sufficient that information is corrected or updated elsewhere). Out-of-date information will be deleted and archived. Information that is incorrect or that becomes inaccurate over time will also be deleted and archived, and a correction posted. See **Section 6.6 - Disclosure Record**.

•Contents - The Company's website will include the following:

•Cautionary Statement - a statement that information posted on the Company's website was accurate at the time of posting, but may be superseded by later information,

•Timely Disclosure Documents - all current timely disclosure documents, such as: annual reports; annual and quarterly financial statements; MD&A; annual information forms; management proxy circulars; prospectuses (provided that they have been filed and receipted by appropriate securities regulators, and subject to securities laws in all jurisdictions where the Company may be offering securities); press releases (favourable and unfavourable); material change reports; notices of declarations of dividends; redemption notices; all documents filed on SEDAR and EDGAR; and similar documents,

•Other Information - supplemental information provided to analysts, institutional investors and other market participants, such as: fact sheets; slides of presentations made at investor conferences; transcripts of investor relations conferences or speeches; and other material distributed at investor presentations,

•Contact Information - a statement on who to contact to obtain more information, and

•E-mail Link - e-mail link to the Company's Investor Relations Department to facilitate communication with investors Documents will be posted in their entirety. If this is impractical (for example, if it is a technical report with graphs, charts or maps) care must be taken that the excerpt is not misleading when read on its own.

•Third Party Documents -

•Analysts' Reports - **The Company will not post analysts' reports on the Company's internal or external website and will not provide a link to analysts' websites or publications**. The Company may choose to list the names of analysts who cover the Company on the Company's website. If the Company chooses to do so, it will list all analysts that the Company is aware of that follow the Company.

•Other Third Party Documents - The Company will not put any other investor relations information authored by third parties on its website, unless the information was prepared on behalf of the Company, or is general in nature and not specific to the Company.

•Responsibility for Company Website – The CFO is responsible for maintaining the Investor Relations page of the Company's website and is responsible, along with the general counsel (if any), for monitoring all Company information placed on the website to ensure that it is accurate, complete, up-to-date and in compliance with relevant securities laws.

•Electronic Inquiries - The CFO is responsible for responses to electronic inquiries. Only public information or information which could otherwise be disclosed in accordance with this policy shall be utilized in responding to electronic inquiries.

•Links - The CFO must approve all links from the Company's website to a third party website. Any link will include a notice that advises the reader that they are leaving the Company's website and that the Company is not responsible for the contents of the other site. Links will be checked regularly to make sure they still work.

6.6.Disclosure Record

The CFO will be responsible for maintaining a five-year archive containing all public information about the Company and all information posted on the Company's website.

VII.GUIDELINES FOR AUTHORIZED SPOKESPERSONS

The following are guidelines for the Company's authorized spokespersons and the Disclosure Committee when dealing with securities professionals (including analysts), institutional or other investors and the media.

7.1.Private Briefings with Securities Professionals (Including Analysts), Investors and the Media

•Participation - The Company recognizes that private briefings with analysts play an important role in seeking out information, analyzing and interpreting it and making recommendations. The Company also recognizes that private briefings with institutional and other investors are an important element of its Investor Relations program. The Company will meet with analysts and investors individually or in small groups as needed and will initiate contacts or respond to analysts' and investors' calls in a timely, consistent and accurate fashion in accordance with this policy. All analysts will receive fair treatment - whether they are recommending buying or selling the Company's securities.

•Attendance - Where practical, briefings with securities professionals (including analysts), investors and the media will be attended by at least one of the CEO or CFO. It is the responsibility of the Disclosure Committee to be completely familiar with the Company's public disclosure record to ensure consistency of information and to interrupt if questions could elicit the disclosure of non-public *material information*.

•Other Procedures - The Company will follow the procedures set out in **Section 6.4 – News Conferences and Analyst Conference Calls** under the following headings: Pre-Meeting Briefing Sessions; Cautionary Language; Information Provided; Record-Keeping; and Debriefing Sessions.

•Communication Quiet Periods - The Company will observe the communication quiet periods set out in out in **Section 6.4 – News Conferences and Analyst Conference Calls** under the heading, Communication Quiet Periods.

7.2.Analysts' Reports and Models

•Review of Analysts' Reports and Models - The Company believes that it is necessary and appropriate to review and potentially comment on reports and models prepared by financial analysts. However, this activity will be confined to identifying publicly disclosed factual information that may affect an analyst's model or to pointing out inaccuracies or omissions with reference to publicly available information about the Company.

To avoid any appearance of endorsing an analyst's report or model, any comments are to be provided orally and with a disclaimer stating that the report was reviewed for factual accuracy only. The Company will not express comfort with respect to analysts' reports, financial reports or earnings estimates or attempt to influence analysts' opinions or conclusions. For example, the Company cannot selectively confirm that an analyst's estimate is "on target" or that it is "too high" or "too low", whether directly or indirectly through implied "guidance".

•Limits on Distribution - The Company will not distribute analysts' reports, financial models or earnings estimates internally within the Company or externally to third parties, except:

•to *directors* and *senior officers* of the Company to assist them in managing earnings expectations, understanding how the marketplace values the Company and how corporate developments affect analysis, and

•to the Company's financial and other professional advisors in the necessary course of business. See **Section 4.3 – Necessary Course of Business**.

> See also **Section 6.5 – Electronic Communications** under the heading, Third Party Documents for limits on distributing analysts' reports and the names of analysts who cover the Company.

7.3.Forward-Looking Information

If the Company discloses forward-looking information, it will do so in compliance with all applicable laws, rules, regulations and policies, and the following guidelines will be observed:

•Application - Instances in which forward-looking information is made available to the public includes, but is not limited to: information that the Company files with securities regulators; information contained in news releases; information published on the Company's website; and information published in marketing materials or other similar materials prepared by the Company or distributed to the public.

•Performance Indicators - The Company must have a reasonable basis for any forward-looking information it discloses and should consider the reasonableness of the assumptions underlying the forward-looking information and the process followed in preparing and reviewing forward-looking information. Forward-looking statements that are overly optimistic, lack objectivity or are not adequately explained may be misleading.

•No Selective Disclosure - There will be no selective disclosure of forward-looking *material information*, orally or in writing. All forward-looking information identified as *material information* will be generally disclosed by press release. Earnings forecasts, in particular, may not be selectively disclosed. See **Section 7.5 – Earnings Guidance**.

•Cautionary Statements - The disclosure of any forward-looking information, orally or in writing, will be accompanied by the following cautionary language:

•Identification of Forward-Looking Information - a statement that the information is forward-looking,

•Assumptions - a cautionary note stating that the forward-looking information is based on material assumptions and that there is a significant risk that actual results may vary, perhaps materially, from the results projected,

•Identification of Assumptions - an explanation, in specific terms, of the material factors or assumptions (such as economic conditions or a course of action) on which the forward-looking information is based,

•Identification of Risks and Uncertainties - an explanation, in specific terms, of the risks and uncertainties that may cause actual results to vary materially from the results projected,

•Date of Information - a statement that the forward-looking information is given as of a certain date, and

•Disclaimer - a statement that the forward-looking information is subject to changes and disclaiming that the Company will update the information, subject to applicable securities laws.

> Cautionary statements regarding forward-looking information should be reviewed on a case-by-case basis taking into account the nature of the forward-looking information being provided.

•Updates - Once the Company has disclosed forward-looking *material information*, the Company's shall regularly assess whether previous statements of forward-looking information should be updated or supplemented by making additional disclosure to ensure that past disclosure of forward-looking information is accurately reflected in current MD&A and to update the information, if necessary, by press release.

7.4.Future-Oriented Financial Information

If the Company discloses *future-oriented financial information* or *financial outlook*, it will do so in compliance with all applicable laws, rules, regulations and policies, and such information will:

•be based on assumptions that are reasonable in the circumstances,

•be limited to a period for which the information can be reasonably estimated, and

•use the accounting policies the Company expects to use to prepare its historical financial statements for the period covered by the *future-oriented financial information* or *financial outlook*.

Future-oriented financial information and *future outlook* will generally be considered to be forward-looking *material information*. Accordingly, in addition to the disclosure required in **Section 7.3 – Forward-Looking Information**, if the Company discloses *future-oriented financial information* or *financial outlook* in writing, the Company must include disclosure that:

•states the date management approved such information, if the document containing such information is undated, and

•explains the purpose of the information and cautions readers that the information may not be appropriate for other purposes.

7.5.Future Guidance

The Company will try to ensure, through its regular public disclosure of quantitative and qualitative information, including its MD&A, that analysts' estimates are in line with the Company's own expectations. If the Company has determined that it will be reporting results materially below or above publicly held expectations, it will make general disclosure of this information in a press release in order to enable discussion without risk of selective disclosure. Future guidance press releases will be reviewed by the Board[6] prior to release.

See **Section 6.1 – Press Releases**. All forward-looking information contained in the press release must conform to the guidelines set out in **Section 7.3 – Forward-Looking Information**. A future guidance press release should be followed with a widely-available conference call to provide *material information* that has generally been disclosed or non-*material information* and analysis.

7.6.Management Presentations, etc.

Presentations at conferences, meetings and similar events should be either prepared or reviewed in advance by the Disclosure Committee.

7.7.Rumours

The Company's policy is not to comment on market rumours (including rumours on the Internet). The Company's spokespersons will consistently respond: **"It is our policy not to comment on market rumours or speculation."**

If the Toronto Stock Exchange (or any other exchange where the Company's securities are listed or other securities regulatory authority) asks the Company to make a clarifying statement in response to a rumour, the CEO or CFO will consider the matter and decide whether to make a definitive statement.

VIII.STATUTORY CIVIL LIABILITY

8.1.Ontario

The *Securities Act* (Ontario) provides investors with rights to sue for damages arising from misrepresentations in public disclosures by certain publicly traded companies. In practice, this means that investors in the secondary market have a private right of action to sue public companies, like the Company, their *directors* and *officers* and others for misrepresentations made in publicly released documents and public oral statements and for the failure to disclose on a timely basis material changes.

The liability regime distinguishes between "**core documents**" and "**non-core documents**". Core documents are generally more comprehensive documents such as an annual information form or information circulars for annual or special shareholders meetings. The plaintiff is required to prove, in the case of "**non-core documents**" and public oral statements, that the defendant acted knowingly, deliberately avoided acquiring knowledge or was guilty of gross misconduct.

[6] The Board may delegate this review function to the Audit Committee.

In summary, a misrepresentation is an untrue statement of *material information* or an omission to state *material information* that is required to be stated or that is necessary to make a statement not misleading in light of the circumstances in which it was made.

For the purposes of this policy, a *material change* should be understood as a change in the business, operations or capital of the Company that would reasonably be expected to have a significant effect on the market price or value of any of the securities of the Company.

The Disclosure Committee is responsible for ensuring that adequate processes are in place for verifying the accuracy of information to be disclosed in "**core documents**" (as such term is defined in the *Securities Act* (Ontario)) and in certain documents other than "**core documents**" and in public oral statements.

The processes for verifying the accuracy of information to be publicly disclosed by the Company are summarized below.

Core Documents - The following documents constitute "**Core Documents**":

a.annual and interim management's discussion and analysis

b.annual and interim financial statements

c.annual information forms

d.information circulars for annual shareholders' meetings

e.prospectuses

f.take-over bid and issuer bid circulars

g.directors' circulars

h.rights offering circulars

i.information circulars for shareholders' meetings other than annual meetings

j.material change reports (for officers only)

Core Documents (a) through (d), above are referred to in this policy as "**Routine Core Documents**" and Core Documents (e) through (j) above are referred to in this policy as "**Special Core Documents**".

Non-Core Documents - Non-core documents include all written communications other than Core Documents (including communications prepared and transmitted only in electronic form), that are required to be or are voluntarily filed with a securities commission, stock exchange or government under applicable securities or corporate law, or any other written communication the content of which would reasonably be expected to affect the market price or value of a security of the Company.

The principal examples of non-core documents are:

- annual reports (excluding management's discussion and analysis and financial statements)
- quarterly supplementary financial information
- news releases
- written version of slide presentations and speeches
- CEO/CFO quarterly and annual certification
- safe harbours for forward-looking statements (stand-alone filings)

CEO/CFO Quarterly and Annual Certifications – The processes leading to the signature by the CEO and the CFO of the Company (or each person who performs similar functions to a chief executive officer or chief financial officer) on the quarterly and annual certifications required under applicable Canadian securities legislation are as follows:

- such persons will each conduct a review of the filings covered by the applicable certificate;
- such persons will each conduct or cause to be conducted a reasonable investigation to satisfy themselves that there are no reasonable grounds to believe that any of the matters to be attested to in the applicable certificate are untrue; and
- where deemed appropriate by any person signing such certificate, such person may request that a back-up certificate be provided by any party who has prepared or reviewed the filings (or portion thereof) covered by the certificate in order to confirm the matters to be attested to therein.

8.2.Summary of Director Liability under the U.S. Securities Exchange Act of 1934

With respect to United States federal securities laws, the following is a description of the most common provisions relevant to the directors and officers of companies registered under the United States Securities Exchange Act of 1934, as amended (the "**1934 Act**").

Section 18 of the 1934 Act imposes liability on any person who makes (or causes to be made), in any document or report filed with the SEC, a statement that was, at the time it was made and in light of the circumstances in which it was made, false or misleading with respect to a material fact. Directors and officers can be sued for false and misleading statements under Section 18. Under Section 18, a claim can be brought be any person who, in reliance on the false or misleading statement, purchases or sells a security at a price affected by the statement. Liability under Section 18 is subject to a due diligence defence, and no liability will accrue if the director or officer proves that he or she acted in good faith and did not know the statement was false or misleading.

Documents filed with the SEC may also give rise to liability under Section 10(b) of the 1934 Act and Rule 10b-5 thereunder. Rule 10b-5 is the general anti-fraud provision of the 1934 Act, and generally prohibits manipulation and fraud in connection with the purchase and sale of any security. Rule 10b-5 is by far the most important civil liability provision of the U.S. federal securities laws. Importantly, lawsuits under Rule 10b-5 may be brought by either U.S. governmental

authorities or by private parties who claim to have been injured as a result of alleged misstatements or other manipulative or deceptive practices. Examples of actions that may violate these provisions are: knowingly or recklessly making false or misleading statements (or omissions) that could reasonably be expected to influence the purchase or sale of securities, intentionally creating an artificial demand for the Company's securities in order to inflate the share price, or engaging in other types of deceptive practices. Illegal insider trading also constitutes a violation of Rule 10b-5.

The defendant in an action under Rule 10b-5 need not themselves have purchased or sold securities, as it is enough that the defendant's conduct occurred "in connection with" such purchases or sales. Of significance to directors and officers, this test can be satisfied if false or misleading statements were made in a manner reasonably calculated to influence the investing public.

Under Section 20(a) of the 1934 Act, every person who, directly or indirectly, controls any person found to be liable under the 1934 Act is jointly and severally liable with the controlled person, unless the controlling person acted in good faith and did not directly or indirectly induce the act or acts constituting the violation or cause of action. Directors and officers of a corporation are generally deemed to "control" the corporation.

IX.VERIFICATION OF ACCURACY OF PUBLIC DISCLOSURE

General – Before the release of any Core Document or Non-Core Document, the Disclosure Committee will conduct or cause to be conducted a reasonable investigation to satisfy itself that, at the time of the release of such information, there are no reasonable grounds to believe that either (i) the information to be disclosed contains a misrepresentation or (ii) there will be any failure to make timely disclosure of such information.

Routine Core Documents – To ensure the accuracy and completeness of all Routine Core Documents, the Disclosure Committee will follow the following specific verification procedures:

- A member of the Disclosure Committee will prepare, or will appoint another person in the Company to prepare an initial draft of each Routine Core Document.

- Where deemed appropriate by the Disclosure Committee, a draft of each Routine Core Document will be circulated to and reviewed by the Company's external legal counsel or other experts.

- The relevant portions of Routine Core Documents will be circulated to and reviewed by officers and internal managers who have specific knowledge or expertise with respect to the matters to be disclosed.

- Where deemed appropriate by the Disclosure Committee, officers and internal managers will be encouraged and provided an opportunity to prepare draft disclosure regarding matters within their area of knowledge or expertise.

- The heads of the Company's departments will be assigned to review the description of their particular department included in any Routine Core Document.

•A senior officer of the Company who, in the opinion of the Disclosure Committee, will have the best understanding of the true risks in the business taken as a whole will be assigned to review boilerplate language, risk factor disclosure and forward-looking statement disclosure in all Routine Core Documents.

•Officers and internal managers who review or assist with the preparation of Routine Core Documents (or portions of such documents) are required to provide a certificate addressed to the CEO and CFO (or equivalents) confirming the accuracy and completeness of the disclosure reviewed or prepared.

•Routine Core Documents will be submitted to, reviewed and specifically approved by the Board.

•If the Routine Core Document contains any forward-looking information, the additional procedures set out in this policy will be followed.

Special Core Documents – To ensure the accuracy and completeness of all Special Core Documents, the Disclosure Committee will follow ALL OF the specific verification procedures applicable to Routine Core Document, as modified or supplemented by the following verification procedures:

•the Company's external legal counsel, under the supervision of the Disclosure Committee, will have primary drafting responsibility for all Special Core Documents.

•Where deemed appropriate by the Disclosure Committee, after consultation with the Company's external legal counsel, all draft Special Core Documents will be circulated to and reviewed by other experts retained by the Company such as auditors, accountants, financial advisors, specialized or local legal counsel and investor relations experts.

•Special Core Documents will be submitted to, reviewed and specifically approved by the Board.

Non-Core Documents – To ensure the accuracy and completeness of all Non-Core Documents, the Disclosure Committee will follow the following specific verification procedures:

•A member of the Disclosure Committee will prepare, or will appoint another person in the Company or the Company's investor relations firm to prepare, an initial draft of any Non-Core Documents.

•Where deemed appropriate by the Disclosure Committee, a draft of any Non-Core Document will be circulated to and reviewed by the Company's external legal counsel or other experts.

•Where deemed appropriate by the Disclosure Committee, the relevant portions of any Non-Core Documents will be circulated to and reviewed by officers and internal managers who have specific knowledge or expertise with respect to the matters to be disclosed.

•A senior officer of the Company who, in the opinion of the Disclosure Committee, will have the best understanding of the true risks in the business taken as a whole

will be assigned to review boilerplate language, risk factor disclosure and forward-looking statement disclosure in all Non-Core Documents.

•Before the release of any Non-Core Document, at least two members of the Disclosure Committee will review and sign-off on such document.

•If the Non-Core Document contains any forward-looking information, the additional procedures of this policy will be followed as set out below.

Influential Persons – Influential persons, such as control persons, insiders and promoters of the Company are not authorized to release any document or make any public oral statement that relates to the Company unless such disclosure has been reviewed by and specifically approved in advance by the Disclosure Committee. Unless specifically authorized in advance by the Disclosure Committee, influential persons must not represent themselves as having, or create circumstances that imply that such person has, any authority to disclose information or make public oral statements that relate to the Company. Influential persons may be exposed to liability for misrepresentations in disclosure documents or public oral statements and failures to make timely disclosure of material changes that such persons seek to influence or that they themselves release or make. Influential persons who wish to disclose information regarding the Company should contact the Disclosure Committee.

X.COMMUNICATION AND ENFORCEMENT

10.1.Communication of Policy

This policy will be posted on the Company's internal website and must be brought to the attention of all employees on an annual basis. All *directors, officers, consultants* and employees of the Company and/or its *affiliates*, and all authorized spokespersons, will be advised of its importance. The Company will communicate any changes to this policy.

10.2.Onus of Compliance

Violations of this policy may constitute violations of securities laws and/or result in damages and liability to the Company and those concerned personally. All *directors, officers, consultants* and employees of the Company and/or its affiliates, and all authorized spokespersons, are expected to be familiar with this policy and to comply fully with it.

10.3.Failure to Comply

The Company will take disciplinary action, up to and including termination, in respect of breaches of this policy. The type of disciplinary action will be dependent on the nature of the breach, and will be subject to and in accordance with applicable employment law. Any violation of this policy may result in:

•the immediate suspension or dismissal of those individuals concerned, and

•the Company reporting those individuals concerned to securities enforcement authorities, which could lead to civil and/or criminal sanctions.

10.4.Questions

All questions about this policy should be directed to the CEO or CFO or, in their absence, another member of the Disclosure Committee.

Appendix A – Glossary

The following definitions are extracted from appropriate securities legislation. References below to a company include a trust and a partnership.

affiliate	A company shall be deemed to be an *affiliate* of another company if one of them is the *subsidiary* of the other or if both are subsidiaries of the same company or if each of them is controlled by the same person or company; and, if two companies are affiliated with the same company at the same time, they are deemed to be *affiliated* with each other.
associate	Where used to indicate a relationship with any *person* or company means: (a)any company of which such *person* or company *beneficially owns*, directly or indirectly, voting securities carrying more than 10% of the voting rights attached to all voting securities of the company for the time being outstanding; (b)any partner of that *person* or company; (c)any trust or estate in which such person or company has a substantial *beneficial* interest or as to which such *person* or company serves as trustee or in a similar capacity; (d)any relative of that *person* who resides in the same home as that *person*; (e)any *person* who resides in the same home as that *person* and to whom that *person* is married, or any *person* of the opposite sex or the same sex who resides in the same home as that *person* and with whom that person is living in a conjugal relationship outside marriage; or (f)any relative of a *person* mentioned in clause (e) who has the same home as that *person*.
automatic securities purchase plan	*A dividend or interest reinvestment plan*, a *stock dividend plan* or any other plan of a reporting issuer or of a subsidiary of a reporting issuer to facilitate the acquisition of securities of the reporting issuer if the timing of the acquisitions of securities, the number of securities which may be acquired under the plan by a *director* or *senior officer* of the reporting issuer or of the subsidiary of the reporting issuer and the price payable for the securities are established by written formula or criteria set out in a plan document.
beneficially owned	(a)A *person* shall be deemed to own beneficially securities *beneficially owned* by a company controlled by him or by an *affiliate* of such company. (b)A *person* shall be deemed to own beneficially securities *beneficially owned* by a trust controlled by him. (c)A company shall be deemed to own beneficially securities *beneficially owned* by its *affiliates*. Beneficial ownership includes ownership through any trustee, legal representative, agent or other intermediary.

cash payment option	Means a provision in a dividend or *interest* reinvestment plan under which a participant is permitted to make cash payments to purchase from the issuer, or from an administrator of the issuer, securities of the issuer's own issue, in addition to the securities (a)purchased using the amount of the dividend or interest payable to or for the account of the participant; or (b)acquired as a stock dividend or other distribution out of earnings or surplus.
consultant	Where used in relation to a person, means a person acting as a consultant to the Company.
control or direction	(a)If a *person* or company has in fact given effective control or direction over securities to another *person* or company, through a voting trust, income splitting arrangement or other written or unwritten arrangement or understanding, those holdings should be aggregated with those of the *person* or company. (b)*Control or direction* does not include family holdings, unless a family member has in fact given effective *control or direction* to the relevant person or company, through a voting trust, income splitting arrangement or other written or unwritten arrangement or understanding, in which case the family holdings should be aggregated with those of the relevant *person* or company.
controlled company	A company shall be deemed to be controlled by another person or company or by two or more companies if, (a)*voting securities* of the first mentioned company carrying more than 50% of the votes for the election of *directors* are held, otherwise than by way of security only, by or for the benefit of the other *person* or company or by or for the benefit of the other companies; and (b)the votes carried by such securities are entitled, if exercised, to elect a majority of the board of directors of the first mentioned company.
director	Where used in relation to a *person*, includes a *person* acting in a capacity similar to that of a director of a company
dividend or interest reinvestment plan	An arrangement under which a holder of securities of an issuer is permitted to direct that the dividends or interest paid on the securities be applied to the purchase, from the issuer or an administrator of the issuer, of securities of the issuer's own issue.
executive officer	An executive officer of a company for a financial year, means an individual who at any time during the year was, (a)the chair of the company, if that individual performed the functions of the office on a full-time basis, (b)a vice-chair of the company, if that individual performed the functions of the office on a full-time basis,

	(c)the president of the company, (d)a vice-president of the company in charge of a principal business unit, division or function such as sales, finance or production, or (e)an *officer* of the company or any of its *subsidiaries* or any other person who performed a policy-making function in respect of the company whether or not the individual was also a director of the company or any of its *subsidiaries*.
financial outlook	Forward-looking information about prospective results of operations, financial position or cash flows that is based on assumptions about future economic conditions and courses of action and that is not presented in the format of a historical balance sheet, income statement or cash flow statement.
future-oriented financial information	Forward-looking information about prospective results of operations, financial position or cash flows, based on assumptions about future economic conditions and courses of action, and presented in the format of a historical balance sheet, income statement or cash flow statement.
holding body corporate	A body corporate is the holding body corporate of another if that other body corporate is its *subsidiary*.
insider	Each of the following persons is an *insider* of a reporting issuer: (a)every director or *senior officer* of the reporting issuer, (b)every director or *senior officer* of a company that is itself an insider or subsidiary of the reporting issuer, (c)any *person* or company who *beneficially owns*, directly or indirectly, *voting securities* of a reporting issuer or who exercises *control or direction* over voting securities of a reporting issuer or a combination of both carrying more than 10% of the *voting rights* attached to all *voting securities* of the reporting issuer for the time being out-standing other than *voting securities* held by the *person* or company as underwriter in the course of a distribution, and (d)the reporting issuer where it has purchased, redeemed or otherwise acquired any of its securities, for so long as it holds any of its securities.
lump-sum payment	A provision of an *automatic securities purchase plan* which allows a *director* or *senior officer* to acquire securities in consideration of an additional lump-sum payment, including, in the case of a *dividend or interest reinvestment plan* which is an automatic securities purchase plan, a cash *payment option*.
material change	Where used in relation to the affairs of a company, means a change in the business, operations or capital of the company that would reasonably be expected to have a significant effect on the market price or value of any of the securities of the company and includes a decision to implement such a change made by the board of directors

of the company or by senior management of the company who believe that confirmation of the decision by the board of directors is probable.

material fact — Where used in relation to securities issued or proposed to be issued, means a fact that significantly affects or could reasonably be expected to significantly effect, the market price or value of such securities.

material information — Material information is any information relating to the business and affairs of a company that results in or would reasonably be expected to result in a significant change in the market price or value of any of the company's listed securities. Material information consists of both *material facts* and *material changes* relating to the business and affairs of a listed company.

officer — The chair, any vice-chair of the board of directors, the president, any vice-president, the director of finance, the secretary, the assistant secretary, the treasurer, the assistant treasurer, the comptroller, the general counsel (if any), the general manager, and a managing director of a company, any other *person* designated an *officer* of a company by by-law or similar authority, and any individual acting in a similar capacity on behalf of a company.
For purposes of the *Canada Business Corporations Act*, an *officer* includes any person appointed as an officer under Section 121 of that Act.

person — A *person* includes an individual, a body corporate, a partnership, an unincorporated association, an unincorporated syndicate, an unincorporated organization, a trust, a trustee, an executor, an administrator, and any other legal or personal representative.

senior officer — Means the chair or a vice-chair of the board of directors, the president, a vice-president, the secretary, the treasurer or the general manager of a company or any other individual who performs functions for the company similar to those normally performed by an individual occupying any such office and each of the five highest paid employees of the company, including any of the individuals referred to above.

special relationship — A *person* is in a *special relationship* with a company if:

(a)the *person* is an *insider*, *affiliate* or *associate* of,

(i)the company;

(ii)a *person* that is proposing to make a take-over bid, as defined under applicable securities laws, for the securities of the company; or

(iii)a *person* that is proposing to become a party to a reorganization, amalgamation, merger or arrangement or similar business combination with the company or to acquire a substantial portion of its property;

(b)the *person* is engaging in or proposes to engage in any business or professional activity with or on behalf of the company or with or on behalf of a *person* described in subclause (a) (ii) or (iii);

(c)the *person* is a *director,* officer or employee of the company or of a person described in subclause (a) (ii) or (iii) or clause (b);

(d)the *person* learned of a *material fact* or *material change* with respect to the company while the *person* was a *person* described in clause (a), (b) or (c);

(e)the *person* learned of a *material fact* or *material change* with respect to the company from any other *person* described above, including a person described in this clause, and knows or ought reasonably to have known that the other *person* is a *person* in such a relationship

share appreciation right Means a right, granted by a company or any of its *subsidiaries* as compensation for services rendered or otherwise in connection with office or employment, to receive a payment of cash or an issue or transfer of securities based wholly or in part on changes in the trading price of publicly traded securities.

stock dividend plan Means an arrangement under which securities of a company are issued by the company to holders of securities of the company as a stock dividend or other distribution out of earnings or surplus.

subsidiary A company shall be deemed to be a subsidiary of another company if:

(a)it is controlled by:

(i)that other, or

(ii)that other and one or more companies each of which is controlled by that other, or

(iii)two or more companies each of which is controlled by that other; or

(b)it is a *subsidiary* of a company that is that other's *subsidiary*. Note: "*control*" is defined in terms of 50% of the votes attaching to shares.

trading day Means a day on which the stock exchanges on which the company's securities are traded are open for trading. If *material information* is disclosed on a trading day before the markets close, then such disclosure shall be considered to have been made at the commencement of the first trading day following such public disclosure.

voting security Means any security other than a debt security of a company carrying a voting right either under all circumstances or under some circumstances that have occurred and are continuing.

Appendix B - Examples of Potentially Material Information

Corporate structure

•changes in share ownership that may affect control of the Company

•major reorganizations, amalgamations or mergers

•take-over bids (tender offers), issuer bids or insider bids

Capital structure

•the public or private sale of additional securities

•planned repurchases or redemptions of securities

•planned splits of common shares or offerings of warrants or rights to buy shares

•any share consolidation, share exchange or stock dividend

•changes in the Company's dividend payments or policies

•the possible initiation of a proxy fight

•material modifications to rights of security holders

Financial results

•risk of insolvency, bankruptcy or receivership

•quarterly and annual earnings results

•firm evidence of a significant increase or decrease in near-term earnings prospects

•unexpected changes in the financial results for any periods

•shifts in financial circumstances, such as cash flow reductions, major asset write-offs or write-downs

•changes in the value or composition of the Company's assets

•any *material change* in the Company's accounting policy

Clinical Trials and Regulatory Approval

•results of preclinical and clinical trials

•initiation of preclinical or clinical trials

•unexpected delays or complications in clinical trials, due to problems with patient enrolment,

•regulatory approval or other factors

•granting of regulatory approval for the commencement of clinical trials

•granting of regulatory approval for the sale and marketing of products

Business and operations

•any development that affects the Company's resources, technology, products or markets

•a significant change in capital investment plans or corporate objectives

•actual or threatened major litigation, or a major development in or the resolution of such litigation

•major labour disputes

•major disputes with major contractors or suppliers

•significant new contracts, products, patents or services or significant losses of contracts or business

•changes to the Board or executive management, including the departure of the Company's CEO, CFO, COO, CMO, CBO or president (or persons in equivalent positions)

•the commencement of, or developments in, material legal proceedings or regulatory matters

•waivers of corporate ethics and conduct rules for *officers*, *directors* and other key employees

•any notice that reliance on a prior audit is no longer permissible

•de-listing of the Company's securities

•the movement of the Company's securities from one quotation system or exchange to another

•a change in auditors or disagreements with auditors

Acquisitions and dispositions

•significant acquisitions or dispositions of assets, property or joint venture interests

•acquisitions of other companies, including a take-over bid for, or merger with, another company

Changes in credit arrangements

•the borrowing or lending of significant amount of money

•any mortgaging or encumbering of the Company's assets

•defaults under debt obligations, agreements to restructure debt or planned enforcement procedures by a bank or any other creditors

•changes in rating agency decisions

•significant new credit arrangements

External political, economic, social or regulatory developments

•significant regulatory decisions or changes

•external political, economic or social developments that will have or have had a direct effect on the business and affairs of the Company that is both material and uncharacteristic of the effect generally experienced by other companies engaged in the same business or industry

Other

•any other development relating to the business and affairs of the Company that would reasonably be expected to significantly affect the market price or value of the Company's securities or have a significant effect on a reasonable investor's investment decision regarding the Company.

Appendix C - Communications in the Necessary Course of Business

Examples of communications in the necessary course of business would generally cover communications with:

- •vendors, suppliers or strategic partners on issues such as research and development, sales and marketing and supply contracts,
- •other employees, *officers* and *directors*,
- •lenders, legal counsel, auditors, underwriters, financial and other professional advisors to the Company,
- •parties to negotiations,
- •labour unions and industry associations,
- •government agencies and non-governmental regulators, and
- •credit rating agencies (provided that the information is disclosed for the purpose of assisting the agency to formulate a credit rating and the agency's ratings generally are or will be publicly available).

The communication of confidential *material information* may be in the necessary course of business if made:

- •to private placees in connection with a private placement financing for the Company, and
- •to controlling shareholders of the Company.

In either situation, the Company will generally disclose the *material information* provided to the private placee or the controlling shareholder at the earliest opportunity.

Securities laws prohibit any *person* that is proposing to make a take-over bid, become a party to a reorganization, amalgamation, merger, arrangement or similar business combination or acquire a substantial portion of a company's property from informing anyone of *material information* that has not been generally disclosed. The only exception is where the disclosure is in the necessary course of business to effect the take-over bid, business combination or acquisition.

Appendix D - Treatment of Confidential Information

1.*Material information* should not be discussed with anyone, except in the necessary course of business on a strict need-to-know basis.

2.Documents and files containing confidential information should be kept in a safe place to which access is restricted to individuals who need to know that information in the necessary course of business, and code names should be used if necessary.

3.Confidential matters should not be discussed in places where the discussion may be overheard, such as elevators, hallways, restaurants, airplanes or taxis.

4.Confidential matters should not be discussed on wireless telephones or other wireless devices.

5.Confidential documents should not be read or displayed in public places and should not be left where others can retrieve them.

6.Employees must ensure they maintain the confidentiality of information in their possession outside of the office as well as inside the office.

7.Transmission of documents by electronic means, such as by fax or directly from one computer to another, should be made only where it is reasonable to believe that the transmission can be made and received under secure conditions.

8.Unnecessary copying of confidential documents should be avoided and documents containing confidential information should be promptly removed from conference rooms and work areas after meetings have concluded. Extra copies of confidential documents should be shredded or otherwise destroyed.

9.Access to confidential electronic data should be restricted through the use of passwords.

10.Disclosure of the whereabouts of Company personnel involved in special projects who are away from the office, or the presence in the office of specific visitors, should be avoided, except where specifically authorized.

11.Confidential information about the Company should not be posted on the Internet.

12.In order to ensure that no *material information* that has not been publicly disclosed is inadvertently disclosed, employees are prohibited from participating in Internet chat rooms or newsgroup discussions on matters pertaining to the Company's activities or its securities. Employees who encounter a discussion pertaining to the Company should advise a member of the Disclosure Committee immediately, so the discussion may be monitored.

13.Communication by e-mail leaves a physical track of its passage that may be subject to later decryption attempts. All confidential information being transmitted over the Internet should be secured by encryption and validation methods. Employees should avoid using e-mail to transmit confidential information.

Appendix E - Filing Insider Reports under Canadian Securities Laws

This guide is provided for information purposes only. In addition, it only covers insider filing requirements under Canadian securities laws and not the laws of any other jurisdiction.[7] **It is the insider's, and not the Company's, responsibility to file insider reports in compliance with all applicable securities laws.**

Italicized words used in this Appendix have specific meanings set out in Appendix A – Glossary to the Company's Corporate Disclosure and Trading Policy.

1.What is an Insider Report?

Insider reports must be filed by all insiders of the Company under applicable securities laws to report the ownership of, and trades in, securities of the Company on SEDI. Only insiders who own securities of the Company need to file insider reports. SEDI is a Canada-wide internet-based system, developed by the Canadian Securities Administrators, for filing insider reports. Insider reports with respect to the securities of the Company must be filed electronically via SEDI.

2.What Securities Must Be Reported?

Generally, in an insider report, the insider must report his, her or its initial holdings, and any changes in these holdings, of any securities of the Company.

All securities of the Company that are *beneficially owned*, directly or indirectly, by the insider, or over which the insider exercises *control or direction*, must be reported. An insider *beneficially owns* securities held by others when those securities should be grouped with the insider's holdings, for example, if shares are held indirectly through a company *controlled or directed* by the insider, or through a trustee, legal representative, agent or other intermediary.

Whether an insider *controls or directs* securities depends on the facts. For example, an insider *controls or directs* securities if the insider has the power to direct the voting of securities through a voting trust or other similar arrangement (written or unwritten), or if the insider has discretionary investment power over securities. If the insider's spouse holds securities of the Company and the insider has no *control or direction* over those holdings, those holdings do not have to be reported by the insider.

3.Initial Reports

Insiders must file an initial insider report within **10 days** of becoming an insider of the Company to report his, her or its securities holdings in the Company.

4.Subsequent Reports

If there is any change in the insider's holdings, an insider report must be filed within **5 days** of the change. It is necessary to report every transaction involving a change in ownership. For example, if an insider sells 100 shares and then buys 100 shares later in the same month, both transactions must be reported. If an insider transfers shares from his, her or its name to an agent, nominee or custodian (for example, if shares are

[7] For example, there could be US insider filing requirements.

transferred to a Registered Retirement Savings Plan), the transfer must also be reported. Ownership is deemed to pass on the date of the trade (i.e., at the date the offer to buy or sell is accepted) and not on the settlement date.

5.Stock Options

Stock options are securities and trades in stock options by insiders must be reported. Generally, subject to certain exceptions discussed below, an insider report must be filed within **5 days** whenever:

(a)the insider is granted a stock option,

(b)the insider exercises the stock option (or, if applicable, a tandem *share appreciation right*, or SAR),

(c)the stock option terminates or expires, or

(d)the insider sells the underlying shares acquired on exercise of the stock option.

Appendix F - Contacts with Securities Professionals

(Including Analysts), Investors and the Media

Examples of specific issues that are appropriate for briefings with analysts, institutional and other investors, other market participants and the media include:

•descriptions of the markets in which the Company currently operates, including market size, growth rate (either historic or by citing projections of external experts), target customers, etc;

•corporate history, strategy and objectives to the extent previously publicly disclosed;

•product descriptions; and

•the Company's previously disclosed position in the market relative to its competitors.

Examples of specific issues that should be avoided include:

•significant data, and in particular financial information such as sales and profit figures,

•any discussion relating to management's comfort with previous revenue and earnings guidance (this applies to current and future quarters, as well as the current and future fiscal years);

•any discussion related to changes in the condition of the Company's markets, since such comments may give an indication of the Company's comfort with its previous guidance;

•any discussion related to changes in the Company's reporting practices;

•any discussion related to customer wins that have not yet been press released;

•any discussion of personnel changes that have not been press released; and

•any discussion of future features and functionality in the Company's products that have not been press released.

Exhibit 21.1

Subsidiaries of the Registrant

Name	State/Jurisdiction of Incorporation
Aptose Biosciences U.S. Inc.	Delaware
NuChem Pharmaceuticals Inc.	Ontario, Canada

Exhibit 23.1

KPMG LLP
100 New Park Place, Suite 1400
Vaughan, ON L4K 0J3
Tel 905-265 5900
Fax 905-265 6390
www.kpmg.ca

Consent of Independent Registered Public Accounting Firm

The Board of Directors

Aptose Biosciences Inc.

We consent to the use of our report dated March 28, 2025 on the consolidated financial statements of Aptose Biosciences Inc. (the "Entity") which comprise the consolidated statements of financial position as at December 31, 2024 and December 31, 2023, the related consolidated statements of loss and comprehensive loss, changes in shareholders' equity (deficit) and cash flows for the years then ended, and the related notes (collectively the "consolidated financial statements"), which is included in the Annual Report on Form 10-K of the Entity for the fiscal year ended December 31, 2024.

We also consent to the incorporation by reference of such report in the Registration Statements No. 333-257446, 333-274625, 333-228794 and 333-205158 on Form S-8, No. 333-267801 on Form S-3, and No. 333-281201, 333-275870 and 333-272752 on Form S-1 of the Entity.

We also consent to the reference to our firm under the heading "Experts" in the Registration Statements No. 333-267801 on Form S-3, and No. 333-281201, 333-275870 and 333-272752 on Form S-1 of the Entity.

/s/ KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

March 28, 2025

Vaughan, Canada

Exhibit 31.1

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, William G. Rice, certify that:

1.I have reviewed this Annual Report on Form 10-K of Aptose Biosciences Inc.;

2.Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3.Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4.The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a.Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b.Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c.Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d.Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5.The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a.All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b.Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 28, 2025

/s/ William G. Rice
Name: William G. Rice, Ph.D.
Title: President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Fletcher Payne, certify that:

1.I have reviewed this Annual Report on Form 10-K of Aptose Biosciences Inc.;

2.Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3.Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4.The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a.Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b.Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c.Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d.Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5.The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a.All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b.Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 28, 2025

/s/ Fletcher Payne
Name: Fletcher Payne
Title: Senior Vice President and Chief Financial Officer

Exhibit 32.1

Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, William G. Rice, the President and Chief Executive Officer of Aptose Biosciences Inc. (the "Company"), hereby certify that, to my knowledge:

1. The Annual Report on Form 10-K for the year ended December 31, 2024 (the "Report") of the Company fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2025

/s/ William G. Rice
Name: William G. Rice, Ph.D.
Title: President and Chief Executive Officer

Exhibit 32.2

Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Fletcher Payne, the Senior Vice President and Chief Financial Officer of Aptose Biosciences Inc. (the "Company"), hereby certify that, to my knowledge:

1.The Annual Report on Form 10-K for the year ended December 31, 2024 (the "Report") of the Company fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

2.The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 28, 2025

/s/ Fletcher Payne
Name: Fletcher Payne
Title: Senior Vice President and Chief Financial Officer

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Exhibit 97.1

APTOSE BIOSCIENCES INC. INCENTIVE COMPENSATION RECOVERY POLICY

1.Introduction.

The Board of Directors of Aptose Biosciences Inc. (the "**Company**") believes that it is in the best interests of the Company and its shareholders to create and maintain a culture that emphasizes integrity and accountability and that reinforces the Company's compensation philosophy. The Board has therefore adopted this policy, which provides for the recovery of erroneously awarded incentive compensation in the event that the Company is required to prepare an accounting restatement due to material noncompliance of the Company with any financial reporting requirements under the federal securities laws (the "**Policy**"). This Policy is designed to comply with Section 10D of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), related rules and the listing standards of Nasdaq Capital Market or any other securities exchange on which the Company's shares are listed in the future.

2.Administration.

This Policy shall be administered by the Board or, if so designated by the Board, the Compensation Committee (the "**Committee**"), in which case, all references herein to the Board shall be deemed references to the Committee. Any determinations made by the Board shall be final and binding on all affected individuals.

3.Covered Executives.

Unless and until the Board determines otherwise, for purposes of this Policy, the term "**Covered Executive**" means a current or former employee who is or was identified by the Company as the Company's president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice-president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance), any other officer who performs a policy-making function, or any other person (including any executive officer of the Company's subsidiaries or affiliates) who performs similar policy-making functions for the Company. "Policy-making function" excludes policy-making functions that are not significant. "Covered Executives" will include, at minimum, the executive officers identified by the Company pursuant to Item 401(b) of Regulation S-K of the Exchange Act. For the avoidance of doubt, "Covered Executives" will include at least the following Company officers: the President and Chief Executive Officer, the Senior Vice President and Chief Medical Officer, the Senior Vice President and Chief Financial Officer and the Senior Vice President and Chief Commercial Officer.

This Policy covers Incentive Compensation received by a person after beginning service as a Covered Executive and who served as a Covered Executive at any time during the performance period for that Incentive Compensation.

4.Recovery: Accounting Restatement.

In the event of an "Accounting Restatement," the Company will recover reasonably promptly any excess Incentive Compensation received by any Covered Executive during the three completed fiscal years immediately preceding the date on which the Company is required to prepare an Accounting Restatement, including transition periods resulting from a change in the Company's fiscal year as provided in Rule 10D-1 of the Exchange Act. Incentive Compensation is deemed **"received"** in the Company's fiscal period during which the Financial Reporting Measure specified in the Incentive Compensation award is attained, even if the payment or grant of the Incentive Compensation occurs after the end of that period.

(a)Definition of Accounting Restatement.

For the purposes of this Policy, an "**Accounting Restatement**" means the Company is required to prepare an accounting restatement of its financial statements filed with the Securities and Exchange Commission (the "**SEC**") due to the Company's material noncompliance with any financial reporting requirements under the federal securities laws (including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period).

The determination of the time when the Company is **"required"** to prepare an Accounting Restatement shall be made in accordance with applicable SEC and national securities exchange rules and regulations.

An Accounting Restatement does not include situations in which financial statement changes did not result from material non-compliance with financial reporting requirements, such as, but not limited to retrospective: (i) application of a change in accounting principles; (ii) revision to reportable segment information due to a change in the structure of the Company's internal organization; (iii) reclassification due to a discontinued operation; (iv) application of a change in reporting entity, such as from a reorganization of entities under common control;
(v) adjustment to provision amounts in connection with a prior business combination; and (vi) revision for stock splits, stock dividends, reverse stock splits or other changes in capital structure.

(b)Definition of Incentive Compensation.

For purposes of this Policy, "**Incentive Compensation**" means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a Financial Reporting Measure, including, for example, bonuses or awards under the Company's short and long-term incentive plans, grants and awards under the Company's equity incentive plans, and contributions of such bonuses or awards to the Company's deferred compensation plans or other employee benefit plans. Incentive Compensation does not include awards which are granted, earned and

vested without regard to attainment of Financial Reporting Measures, such as time-vesting awards, discretionary awards and awards based wholly on subjective standards, strategic measures or operational measures.

(c)Financial Reporting Measures.

"Financial Reporting Measures" are those that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements (including non-GAAP financial measures) and any measures derived wholly or in part from such financial measures. For the avoidance of doubt, Financial Reporting Measures include stock price and total shareholder return. A measure need not be presented within the financial statements or included in a filing with the SEC to constitute a Financial Reporting Measure for purposes of this Policy.

(d)Excess Incentive Compensation: Amount Subject to Recovery.

The amount(s) to be recovered from the Covered Executive will be the amount(s) by which the Covered Executive's Incentive Compensation for the relevant period(s) exceeded the amount(s) that the Covered Executive otherwise would have received had such Incentive Compensation been determined based on the restated amounts contained in the Accounting Restatement. All amounts shall be computed without regard to taxes paid.

For Incentive Compensation based on Financial Reporting Measures such as stock price or total shareholder return, where the amount of excess compensation is not subject to mathematical recalculation directly from the information in an Accounting Restatement, the Board will calculate the amount to be reimbursed based on a reasonable estimate of the effect of the Accounting Restatement on such Financial Reporting Measure upon which the Incentive Compensation was received. The Company will maintain documentation of that reasonable estimate and will provide such documentation to the applicable national securities exchange.

(e)Method of Recovery.

The Board will determine, in its sole discretion, the method(s) for recovering reasonably promptly excess Incentive Compensation hereunder. Such methods may include, without limitation:

(i)requiring reimbursement of compensation previously paid;

(ii)forfeiting any compensation contribution made under the Company's deferred compensation plans, as well as any matching amounts and earnings thereon;

(iii)offsetting the recovered amount from any compensation that the

Covered Executive may earn or be awarded in the future (including, for the avoidance of doubt, recovering amounts earned or awarded in the future to such individual equal to compensation paid or deferred into tax–qualified plans or plans subject to the Employee Retirement Income Security Act of 1974 (collectively, **"Exempt Plans"**); *provided that,* no such recovery will be made from amounts held in any Exempt Plan of the Company);

(iv)taking any other remedial and recovery action permitted by law, as determined by the Board; or

(v)some combination of the foregoing.

5.No Indemnification or Advance.

Subject to applicable law, the Company shall not indemnify, including by paying or reimbursing for premiums for any insurance policy covering any potential losses, any Covered Executives against the loss of any erroneously awarded Incentive Compensation, nor shall the Company advance any costs or expenses to any Covered Executives in connection with any action to recover excess Incentive Compensation.

6.Interpretation.

The Board is authorized to interpret and construe this Policy and to make all determinations necessary, appropriate or advisable for the administration of this Policy. It is intended that this Policy be interpreted in a manner that is consistent with the requirements of Section 10D of the Exchange Act and any applicable rules or standards adopted by the SEC or any national securities exchange on which the Company's securities are listed.

7.Effective Date.

The effective date of this Policy is **[November 9]**, 2023 (the "**Effective Date**"). This Policy applies to Incentive Compensation received by Covered Executives on or after the Effective Date that results from attainment of a Financial Reporting Measure based on or derived from financial information for any fiscal period ending on or after the Effective Date. In addition, this Policy is intended to be and will be incorporated as an essential term and condition of any Incentive Compensation agreement, plan or program that the Company establishes or maintains on or after the Effective Date.

8.Amendment and Termination.

The Board may amend this Policy from time to time in its discretion, and shall amend this Policy as it deems necessary to reflect changes in regulations adopted by the SEC under Section 10D of the Exchange Act and to comply with any rules or standards adopted by Nasdaq Capital Market or the Toronto Stock Exchange or any other securities exchange on which the Company's shares are listed in the future.

9.Other Recovery Rights.

The Board intends that this Policy will be applied to the fullest extent of the law. Upon receipt of this Policy, each Covered Executive is required to complete the Receipt and Acknowledgement attached as Schedule A to this Policy. The Board may require that any employment agreement or similar agreement relating to Incentive Compensation received on or after the Effective Date shall, as a condition to the grant of any benefit thereunder, require a Covered Executive to agree to abide by the terms of this Policy. Any right of recovery under this Policy is in addition to, and not in lieu of, any (i) other remedies or rights of compensation recovery that may be available to the Company pursuant to the terms of any similar policy in any employment agreement, or similar agreement relating to Incentive Compensation, unless any such agreement expressly prohibits such right of recovery, and (ii) any other legal remedies available to the Company. The provisions of this Policy are in addition to (and not in lieu of) any rights to repayment the Company may have under Section 304 of the Sarbanes-Oxley Act of 2002 and other applicable laws.

10.Impracticability.

The Company shall recover any excess Incentive Compensation in accordance with this Policy, except to the extent that certain conditions are met and the Board has determined that such recovery would be impracticable, all in accordance with Rule 10D-1 of the Exchange Act and Nasdaq Capital Market or any other securities exchange on which the Company's shares are listed in the future.

11.Successors.

This Policy shall be binding upon and enforceable against all Covered Executives and their beneficiaries, heirs, executors, administrators or other legal representatives.

Schedule A

INCENTIVE-BASED COMPENSATION CLAWBACK POLICY RECEIPT AND ACKNOWLEDGEMENT

I, , hereby acknowledge that I have received and read a copy of the Incentive Compensation Recovery Policy. As a condition of my receipt of any Incentive Compensation as defined in the Policy, I hereby agree to the terms of the Policy. I further agree that if recovery of excess Incentive Compensation is required pursuant to the Policy, the Company shall, to the fullest extent permitted by governing laws, require such recovery from me up to the amount by which the Incentive Compensation received by me, and amounts paid or payable pursuant or with respect thereto, constituted excess Incentive Compensation. If any such reimbursement, reduction, cancelation, forfeiture, repurchase, recoupment, offset against future grants or awards and/or other method of recovery does not fully satisfy the amount due, I agree to immediately pay the remaining unpaid balance to the Company.

Signature Date