ITEM 2 – MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This Quarterly Report on Form 10-Q contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended, and is subject to the safe harbor created by those sections. For more information, see "Cautionary Note Regarding Forward-Looking Statements." 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 our Annual Report on Form 10-K for the year ended December 31, 2023. 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.

The following discussion should be read in conjunction with our condensed consolidated financial statements and accompanying notes thereto contained in this Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, and with our audited consolidated financial statements and accompanying notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2023.

All amounts are expressed in United States dollars unless otherwise stated.

OVERVIEW

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 is located in Toronto, Canada.

Aptose Programs

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 an improved frontline 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 plans to develop Tuspetinib in the TUS+VEN+HMA triplet drug combinations in newly diagnosed AML patients, and once the study enrolls, we expect 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 (TUS) 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. See Note 2(a) and Item 1A -Risk Factors.

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 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 to date has demonstrated a favorable safety profile 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.

Following completion of the single agent dose escalation and exploration trial, tuspetinib advanced into the APTIVATE expansion trial of the Phase 1/2 program to evaluate the TUS+VEN doublet in 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 of 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 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 our Annual Report on Form 10-K filed with the SEC on March 26, 2024.

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 was not consistently achieving 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.

PROGRAM UPDATES

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. An international Phase 1/2 clinical trial in patients with relapsed or refractory AML is ongoing. The dose escalation portion of this study to date has observed evidence of robust clinical activity, including multiple complete responses in R/R AML patients with various disease genotypes, and no toxicity trends that should prevent further dose escalation.

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.

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 tuspetinib + venetoclax + azacitidine (TUS+VEN+AZA) triple drug combination study in newly diagnosed AML patients with 40 mg tuspetinib and then to dose escalate the tuspetinib dose to 80 mg, and then to potentially higher doses as appropriate. Safety and activity as a single agent were demonstrated with the 40 mg dose of tuspetinib in R/R AML patients. 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 which is the typical FDA recommended starting dose for drug combination studies.

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 ($TP53^{MUT}$, 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 the addition of 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 to broadly act across genetic subgroups of patients.

- 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 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 in patients with R/R AML in the ongoing APTIVATE Phase 1/2 study. Data were 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 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 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 our 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.

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

On February 29, 2024, the Company received a 2024 Deficiency Letter (the “February Deficiency Letter”) from the Nasdaq Listing Qualifications Department of Nasdaq notifying the Company that the Company’s private placement of securities to Hanmi (the "Private Placement") violated 5635(d) of the Nasdaq Listing Rules 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 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.

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 a Compliance Plan on May 17, 2024.

On July 16, 2024, the Company received a deficiency letter (the "Deficiency Letter") from the Staff of The Nasdaq Stock notifying the Company that, for the prior thirty consecutive business days, the closing bid price for the Company's Common Shares have been below the minimum $1.00 per share required for continued listing on Nasdaq 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 will continue to trade on Nasdaq. The Company's Common Shares continue to trade on 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 Nasdaq listing status. The Company has been 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 closes at $1.00 per share or more for a minimum of 10 consecutive business days, the Staff will provide written confirmation that the Company has achieved compliance with the Minimum Bid Requirement. If the Company does not regain compliance with the Minimum Bid Price Requirement by January 13, 2025, the Company may, at Nasdaq's discretion, be afforded a second 180 calendar day period to regain compliance, but if Nasdaq does not grant such extension, the Company's common shares could be delisted from Nasdaq. To qualify for the extension, the Company will be required to meet the continued listing requirement for market value of publicly held shares and all other initial listing standards for Nasdaq, with the exception of the bid price requirement. The Company intends to monitor the closing bid price of its Common Shares and may, if appropriate, consider available options, including the possibility of seeking shareholder approval of a reverse stock split, to regain compliance with the Minimum Bid Price Requirement. However, there can be no assurance that the Company will be able to regain compliance with the Minimum Bid Price Requirement or will otherwise be in compliance with other Nasdaq Listing Rules.

On August 1, 2024, the Company filed a preliminary S-1 prospectus to raise complete a proposed financing as part of its Compliance Plan, in addition to funds raised in the June 2024 Registered Direct Offering. On August 2, 2024, the Company implemented a reduction in force with an approximate $1.2 million per annum decrease in payroll costs.

The Company's stockholder's equity as of September 30, 2024 was negative $9.1 million. As of the date of this report, 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.

On October 1, 2024, the Corporation 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; such hearing is scheduled for November 21, 2024. The hearing request has automatically stayed Nasdaq's delisting of the Company's Common Shares pending the Panel's decision. At or prior to the hearing, the Company plans to present to Nasdaq information demonstrating that it has regained compliance with the continued listing standards under the Nasdaq Listing Rules, or alternatively a plan to regain compliance and a request for an extension of time to effectuate the plan. Notwithstanding the foregoing, there can be no assurance that the Company will regain compliance with the continued listing standards under the Nasdaq Listing Rules, or that the Panel will grant the Company an extension of time to regain compliance, in the event the Company requests such an extension.

On October 30, 2024, the Company filed an Amendment to the S-1 preliminary prospectus filed on August 1 (the "S-1/A") to raise financing as part of its Compliance Plan. The S-1/A relates to the offering of up to 21,528,525 Common Shares, no par value ("Offered Shares") together with warrants to purchase up to 10,764,263 Common Shares. Each Offered Share, or a pre-funded warrant (the "Pre-Funded Warrants) in lieu thereof, is being sold together with one half (1/2) common warrant (the "Common Warrants" and together, with the "Pre-Funded Warrants", the "Warrants") exercisable for one Common Share. The assumed combined public offering price for each Offered Share and accompanying Common Warrant is $0.3716, which is the last reported sale price of the Company's Common Shares on Nasdaq on October 29, 2024. The completion of the offering is conditional upon the approval of the TSX. In addition, this S-1/A relates to the issuance of Placement Agent Warrants (as defined below) to purchase up to 861,141 shares of the Company's Common Shares issuable to the Placement Agent (as defined below), based on an assumed public offering price of the Offered Shares and Warrants and the underlying Common Shares issuable upon the exercise of Placement Agent Warrants.

Each Common Warrant has an assumed exercise price of $0.3716 per Common Share, which is the last reported sale price of the Company's Common Shares on Nasdaq on October 29, 2024, will be exercisable immediately upon issuance, subject to certain limitations based on the holder's beneficial ownership of the Company's Common Shares, and will expire five years from the date of issuance. The Offered Shares and Common Warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering. The Company is also offering Pre-Funded Warrants to purchase up to 21,528,525 Common Shares

to those purchasers whose purchase of Offered Shares in this offering would result in the purchaser beneficially owning more than 4.99% (or, at the election of the purchaser, 9.99%) of the Company's outstanding Common Shares following the consummation of this offering in lieu of the Offered Shares that would result in ownership in excess of 4.99% (or, at the election of the purchaser, 9.99%) following the consummation of this offering. Each Pre-Funded Warrant will be exercisable for one Common Share at an exercise price of $0.0001 per Common Share. Each Pre-Funded Warrant is being issued together with the same Common Warrants described above being issued with each Offered Share. The assumed combined public offering price for each such Pre-Funded Warrant, together with the Common Warrants, is $0.3715, which is equal to the assumed public offering price in this offering of an Offered Share and accompanying Common Warrant less the $0.0001 per Common Share exercise price of each such Pre-Funded Warrant. Each Pre-Funded Warrant will be exercisable immediately upon issuance, subject to certain limitations based on the holder's beneficial ownership of the Company's Common Shares, and may be exercised at any time until the Pre-Funded Warrant is exercised in full. The Common Warrants are immediately separable and will be issued separately in this offering, but must be purchased together in this offering.

LIQUIDITY AND CAPITAL RESOURCES

Aptose is an early-stage development company, and we currently do not generate 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.

Sources of liquidity:

The following table presents our cash and cash equivalents, investments, working capital and stockholders' equity as of September 30, 2024 and December 31, 2023.

(in thousands)	Balances at September 30, 2024	Balances at December 31, 2023
Cash and cash equivalents	$ 7,962	$ 9,252
Total	$ 7,962	$ 9,252
Working capital	$ 477	$ (3,375)
Stockholders' equity	$ (9,134)	$ (2,901)

Working capital is a non-GAAP measure and represents primarily cash, cash equivalents, investments, prepaid expenses and other current assets less current liabilities. This financial measure provides a fuller understanding of the Company's capital available 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.

Management recognizes that in order for us to meet our capital requirements, and continue to operate, additional financing will be necessary. We plan to raise additional funds in order to fund our business operations. We will seek access to financing but there is no assurance that such additional funds will be available for us to finance our operations on acceptable terms, if at all. The Company's current cash, cash equivalents and investments are projected to support operations through January 2025. These conditions raise substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty. Such adjustments could be material. In assessing whether the going concern assumption is appropriate, management takes into account all available information about the future, which is at least, but is not limited to, twelve months from the end of the reporting year. The Company is in substantial doubt to continue as a going concern; As of September 30, 2024, the Company had negative shareholder's equity of $9.1 million (December 31, 2023 negative shareholder's equity of $2.9 million; an accumulated deficit of approximately $539.4 million (December 31, 2023, $515.5 million); during the nine months period ended September 30, 2024, the Company incurred a net loss of $23.8 million (2023 - $39.3 million) and as of September 30, 2024, the Company had a working capital of approximately $477 thousand (December 31, 2023, negative working capital of $3.4 million), including approximately $8 million (December 31, 2023, $9.3 million) in cash and cash equivalent balance, and current liabilities of approximately $9.8 million (December 31, 2023, $15.3 million). Our ability to raise additional funds could be affected by adverse market conditions, the status of our product pipeline, possible delays in enrollment in our trial, uncertainty regarding our continued listing on NASDAQ, and various other factors and we may be unable to raise capital when needed, or on terms favorable to us.

The Company faces increasingly challenging financial and business conditions, including an inability to raise sufficient equity and equity-linked financing to fully fund execution of its business plans and to satisfy the $2.5 million NASDAQ's shareholder's equity requirement. Since our inception, we have financed our operations and technology acquisitions primarily from equity financing, proceeds from the exercise of warrants and stock options, and interest income on funds held for future investment. During the current period, the Company has explored numerous alternatives to ensure the funding of the Company's clinical trials, services and to repay its outstanding vendors and to increase its equity level. The raising of additional capital, debt refinancing of the Company, collaborations, and/or the trade sale of some of the Company's assets or operations to make bulk payments to repay outstanding debt and 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 capital financing and/or debt refinancing and collaborations is unable to be secured, 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.

As there can be no certainty as to the resolution of the above matters, there is material uncertainty that may cast significant doubt about the Company's ability to continue as a going concern, see "Going Concern Risk", see Item II, Part IA below.

Our ability to raise additional funds could be affected by adverse market conditions, the status of our product pipeline, possible delays in enrollment in our clinical trials, 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.

June 2024 Registered Direct Offering

On June 3, 2024, the Company closed a registered direct offering priced at-the-market under Nasdaq rules of 1,800,000 Common Shares at a price of $1.15 per share and 2,055,000 pre-funded warrants at a purchase price of $1.149 per pre-funded warrant. Additionally, in a concurrent private placement, Aptose issued unregistered series A warrants to purchase up to 3,855,000 Common Shares and series B warrants to purchase up to 3,855,000 Common Shares, each at an exercise price of $1.15 per share. The unregistered series A and series B warrants became exercisable beginning on the effective date of shareholder approval of the issuance of the Common Shares issuable upon exercise of the warrants which was obtained on September 5, 2024. The series A warrants will expire five years from September 5, 2024 and the series B warrants will expire eighteen months from September 5, 2024. The gross proceeds to the Company from the offering was approximately $4.43 million, before deducting the placement agent's fees and other offering expenses. Financing costs of approximately $408 thousand included underwriting costs of 7% and professional fees. In addition, the underwriter received 192,750 warrants, each at an exercise price of $1.44. The unregistered warrants became exercisable on September 5, 2024 for the issuance of the shares issuable upon exercise of the warrants and will expire five years from September 5, 2024.

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 the Common Shares outstanding immediately prior the issuance of such warrants issued pursuant to that certain securities purchase agreement dated as of May 30, 2024 by and among the Company and certain institutional and accredited investors in connection with the Company's registered direct offering and private placement which closed on June 3, 2024. On September 11, 2024, the Company issued 1,395,000 Common Shares upon the exercise of 1,395,000 Pre-Funded Warrants for a cash proceeds of $1 thousand at an exercise price of $0.001.

January 2024 Public Offering and Private Placement

On January 31, 2024, the Company announced the closing of a $9.7 million public offering (the "Public Offering") and a $4 million private placement (the "Private Placement") with Hanmi. The Public Offering comprised of 5,649,122 Common Shares and warrants at a combined offering price of $1.71. This included 736,842 Common Shares and warrants pursuant to a full exercise by the underwriter of its over-allotment option. The Private Placement comprised 2,105,263 Common Shares sold at a price of $1.90 per share, representing an 11% premium over the price of the Common Shares issued as part of the Public Offering. Financing costs of approximately $1.4 million included underwriting costs of 7% and approximately $0.4 million in professional fees. The Company also issued Hanmi warrants to purchase Common Shares at an exercise price of $1.71 per share.

Hanmi 2023 Equity 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 percent of Aptose by Hanmi. On September 6, 2023, the Company entered into a subscription agreement with Hanmi, pursuant to which the Corporation agreed to sell 668,449 Common Shares to Hanmi for proceeds of $3 million.

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, the Company has the right, but not the obligation, to sell to Keystone, and Keystone is obligated to purchase, up to the Total Commitment during the 24-month term of the 2023 Committed Equity Facility.

Under the 2023 Committed Equity Facility, and subject to its terms and conditions set forth, 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 (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, we 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 25,156 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 7,547 Common Shares, or 30% of the Commitment Shares, on the date of the 2023 Committed Equity Facility and an additional 7,547 First Back-End Commitment Shares, or 30% of the Commitment Shares, were issued to Keystone 90 days following the Commencement date for nil cash proceeds. The remaining 10,062 Second Back-End Commitment Shares, or 40% of the Commitment Shares, were issued to Keystone in January 2024, 180 days following the Commencement Date.

In the year ended December 31, 2023, the Company's issuance of Common Shares to Keystone comprised 720,494 Common shares sold to Keystone at an average price of $2.91 per Common share for cash proceeds of $2.1 million and the 15,094 Commitment Shares. During the nine months ended September 30, 2024, the Company issued 510,101 Common Shares to Keystone at an average price of $1.36 per Common Share for cash proceeds of $694 thousand and 10,062 Commitment Shares. The Company recognized $82 thousand of financing costs associated with professional fees during the nine months ended September 30, 2024. Since inception 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 1,230,595 Common Shares at an average price of $2.27 per Common Share for aggregate gross cash proceeds of $2.8 million and 25,156 Commitment Shares. From inception 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.

At-The-Market Facility

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 year ended December 31, 2023, the Company issued 336,690 Common Shares under the 2022 ATM Facility at an average price of $5.62 for gross proceeds of $1.9 million ($1.8 million net of share issuance costs). During the current year up to May 30, 2024, the date on which the Company terminated the 2022 ATM Facility, the Company issued 81,591 Common Shares under this 2022 ATM Facility at an average price of $1.22 for gross proceeds of $100 thousand ($97 thousand net of share issuance costs). Since inception to May 30, 2024, the date on which 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.

Cash flows:

The following table presents a summary of our cash flows for the three-month and nine-month periods ended September 30, 2024 and 2023:

(in thousands)	Three months ended September 30,		Nine months ended September 30,	
	2024	2023	2024	2023
Net cash provided by/(used in):				
Operating activities	$ (10,376)	$ (10,536)	$ (27,917)	$ (35,331)
Investing activities	—	12,953	18	8,022
Financing activities	10,008	4,902	26,609	6,056
Effect of exchange rates changes on cash and cash equivalents	—	1	—	3
Net increase/(decrease) in cash and cash equivalents	$ (368)	$ 7,320	$ (1,290)	$ (21,250)

Cash used in operating activities:

Our cash used in operating activities for the three-month periods ended September 30, 2024 and 2023 was approximately $10.4 million and $10.5 million, respectively. Our cash used in operating activities for the nine-month periods ended September 30, 2024 and 2023 was approximately $27.9 million and $35.3 million, respectively.

Net cash used in operating activities decreased in both the three-month periods and nine-month periods ended September 30, 2024, compared to the same periods in 2023. This was primarily due to reduced operating expenses and accounts payable, with an increase in accrued liabilities over three-month periods and a reduction in accrued liabilities over nine-month periods (see 'Results of Operations'). Our uses of cash for operating activities 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 preclinical and clinical studies, drug manufacturing costs, laboratory supplies and materials, and professional fees.

We do not expect to generate positive cash flow from operations for the foreseeable future as we incur additional research and development costs, including costs related to preclinical testing, clinical trials and manufacturing, as well as operating expenses associated with supporting these activities, and potential milestone payments to our collaborators. It is expected that negative cash flows will continue until such time, if ever, that we receive regulatory approval to commercialize any of our products under development and/or royalty or milestone revenue from any such products exceeds expenses.

Cash flow from (used in) investing activities:

Our cash provided by investing activities for the three-month period ended September 30, 2024 was nil. Our cash provided by investing activities for the three-month period ended September 30, 2023 was $13 million, and consisted of net maturities of investments. Our cash provided by investing activities for the nine-month period ended September 30, 2024 was $18 thousand, and consisted of net acquisition of investments and net disposal of property and equipment. Our cash provided by investing activities for the nine-month period ended September 30, 2023, was $8 million, and consisted of net maturities of investments and net purchases of property and equipment.

The composition and mix of cash, cash equivalents and investments is based on our evaluation of conditions in financial markets and our near-term liquidity needs. We have exposure to credit risk, liquidity risk and market risk related to our investments. The Company manages credit risk associated with its cash and cash equivalents and investments by maintaining minimum standards of R1-low or A-low investments. The Company invests only in highly rated financial instruments which are capable of prompt liquidation. The Company manages its liquidity risk by continuously monitoring forecasts and actual cash flows. The Company is subject to interest rate risk on its cash and cash equivalents and investments. The Company does not believe that the results of operations or cash flows would be affected to any significant degree by a sudden change in market interest rates relative to interest rates on the investments, owing to the relatively short-term nature of the investments.

Cash flow from financing activities:

Our cash flow from financing activities for the three months ended September 30, 2024, was $10 million, consisting of $10 million from the proceeds of a loan payable to related parties and $8 thousand in cash proceeds from the issuance of shares under the ESPP. Our cash flow from financing activities for the three months ended September 30, 2023, was $4.9 million, consisting of $3 million, $1.2 million and $694 thousand resulting from Common Shares issued from the Hanmi subscription agreement, the 2023 Committed Equity Facility, and the 2022 ATM Facility, respectively, $50 thousand from a stock subscription advance under the 2023 Committed Equity

Facility and $13 thousand in cash proceeds from issuance of shares under the Employee Stock Purchase Plan ("ESPP"). Our cash flow from financing activities for the nine months ended September 30, 2024, was $26.6 million, consisting of $10 million from the proceeds of loan payable to related parties, $4.1 million from the issuance of Common Shares under the registered direct offering, $8.1 million from the issuance of Common Shares under the S-1 filing, $3.7 million from the issuance of Common Shares to Hanmi, $694 thousand from the issuance of Common Shares under the Committed Equity Facility, $97 thousand in cash proceeds from issuance of Common Shares under the 2022 ATM Facility, $26 thousand in cash proceeds from issuance of Common Shares under the ESPP, and partly offset by $177 thousand of financing costs. Our cash flow from financing activities for the nine months ended September 30, 2023 was $6.1 million, consisting of $3 million, $1.8 million and $1.2 million resulting from Common Shares issued from the Hanmi subscription agreement, the 2022 ATM Facility and the 2023 Committed Equity Facility, respectively, $50 thousand from a stock subscription advance under the 2023 Committed Equity Facility and $29 thousand in cash proceeds from issuance of shares under the ESPP.

CONTRACTUAL OBLIGATIONS AND COMMITMENTS DESCRIBED UNDER ITEM 7

There were no material changes to our contractual obligations and commitments described under Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, which can be found on EDGAR at www.sec.gov/edgar.shtml and on SEDAR+ at www.sedarplus.ca.

RESULTS OF OPERATIONS

A summary of the results of operations for the three-month and nine-month periods ended September 30, 2024 and 2023 is presented below:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2024	2023	2024	2023
Revenues	$ —	$ —	$ —	$ —
Research and development expenses	4,702	8,256	15,560	27,649
General and administrative expenses	2,263	3,425	8,510	12,580
Other income, net	12	234	225	977
Net loss	$ (6,953)	$ (11,447)	$ (23,845)	$ (39,252)
Other comprehensive income/(loss)	—	—	—	3
Comprehensive loss	$ (6,953)	$ (11,447)	$ (23,845)	$ (39,249)
Basic and diluted loss per common share	$ (0.37)	$ (1.76)	$ (1.48)	$ (6.14)

Net loss for the three-month period ended September 30, 2024 decreased by $4.5 million to $7.0 million, as compared to $11.4 million for the comparable period in 2023. Net loss for the nine-month period ended September 30, 2024 decreased by $15.5 million to $23.8 million, as compared to $39.3 million for the comparable period in 2023.

Components of net loss are presented below:

Research and Development

Research and development 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 2024 than in 2023; for the foreseeable future, as we advance tuspetinib into more extensive clinical trials, costs will increase unless the program is partnered.

The research and development expenses for the three-month and nine-month periods ended September 30, 2024, and 2023 were as follows:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2024	2023	2024	2023
Program costs – Tuspetinib	$ 4,067	$ 5,814	$ 10,656	$ 18,659
Program costs – Luxeptinib	(225)	648	287	2,643
Program costs – APTO-253	—	2	13	28
Personnel-related expenses	941	1,523	4,274	5,108
Stock-based compensation	(81)	259	317	1,182
Depreciation of equipment	—	10	13	29
Total	$ 4,702	$ 8,256	$ 15,560	$ 27,649

Research and development expenses decreased by $3.6 million to $4.7 million for the three-month period ended September 30, 2024, as compared to $8.3 million for the comparative period in 2023. Changes to the components of our research and development expenses presented in the table above are primarily as a result of the following events:

- Program costs for tuspetinib were $4.1 million for the three-month period ended September 30, 2024, compared with $5.8 million for the comparative period in 2023. The lower program costs for tuspetinib in the current period represent the reduction of activity in our APTIVATE clinical trial, reduced manufacturing costs, and related expenses. In the comparative period in 2023, tuspetinib program costs included the healthy volunteer study, which was completed in 2023.
- Program costs for luxeptinib decreased by approximately $873 thousand, primarily due to lower clinical trial and manufacturing activities.
- Program costs for APTO-253 decreased by approximately $2 thousand. The Company discontinued further clinical development of APTO-253.
- Personnel-related expenses decreased by $582 thousand, primarily related to fewer employees in the current three-month period.
- Stock-based compensation decreased by approximately $340 thousand in the three months ended September 30, 2024, compared to the three months ended September 30, 2023, primarily due to stock options granted with lower grant date fair values, in the current period and option forfeitures recorded in the current period.

Research and development expenses decreased by $12.0 million to $15.6 million for the nine-month period ended September 30, 2024, as compared to $27.6 million for the comparative period in 2023. Changes to the components of our research and development expenses presented in the table above are primarily as a result of the following events:

- Program costs for tuspetinib were $10.7 million for the nine-month period ended September 30, 2024, a decrease of $8 million compared with $18.7 million for the comparative period in 2023. The lower program costs for tuspetinib in the current period represent the reduction of activity in our APTIVATE clinical trial, reduced manufacturing costs, and related expenses. In the comparative period in 2023, tuspetinib program costs included the healthy volunteer study, which was completed in 2023.
- Program costs for luxeptinib decreased by approximately $2.4 million to $287 thousand for the nine months ended September 30, 2024, as compared to $2.6 million in the comparative period, primarily due to lower clinical trial and manufacturing activities.
- Program costs for APTO-253 decreased by approximately $15 thousand, due to the Company’s decision on December 20, 2021 to discontinue further clinical development of APTO-253.
- Personnel-related expenses decreased by $834 thousand, primarily related to fewer employees in the current nine-month period and partially offset by salary increases.
- Stock-based compensation decreased by approximately $865 thousand in the nine months ended September 30, 2024, compared to the nine months ended September 30, 2023, primarily due to stock options granted with lower grant date fair values, in the current period and option forfeitures recorded in the current period.

General and Administrative

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 are professional fees for auditing and legal services, investor relations and other consultants, insurance and facility-related expenses.

We expect that our general and administrative expenses to support the trial will decrease related to cost reduction steps undertaken as part of our Nasdaq Compliance Plan submitted on May 17, 2024.

The general and administrative expenses for the three-month and nine-month periods ended September 30, 2024, and 2023 were as follows:

(in thousands)	Three months ended September 30, 2024	2023	Nine months ended September 30, 2024	2023
General and administrative, excluding items below	$ 2,191	$ 3,075	$ 7,809	$ 10,479
Stock-based compensation	68	340	686	2,060
Depreciation of equipment	4	10	15	41
Total	$ 2,263	$ 3,425	$ 8,510	$ 12,580

General and administrative expenses for the three-month period ended September 30, 2024 were $2.3 million, as compared to $3.4 million for the comparative period in 2023, a decrease of approximately $1.2 million. The decrease was primarily due to the following:

- General and administrative expenses, other than stock-based compensation and depreciation of equipment, decreased by approximately $884 thousand in the three months ended September 30, 2024, primarily as a result of lower salaries expenses in the period.
- Stock-based compensation decreased by approximately $272 thousand in the three months ended September 30, 2024, as compared to the three months ended September 30, 2023, due to stock options granted with lower grant date fair values in the current period and option forfeitures recorded in the current period.

General and administrative expenses for the nine-month period ended September 30, 2024 were $8.5 million, as compared to $12.6 million for the comparative period in 2023, a decrease of approximately $4.1 million. The decrease was primarily due to the following:

- General and administrative expenses, other than stock-based compensation and depreciation of equipment, decreased by approximately $2.7 million in the nine months ended September 30, 2024, primarily as a result of lower salaries expenses and professional fees expensed in the period.
- Stock-based compensation decreased by approximately $1.4 million in the nine months ended September 30, 2024, as compared to the nine months ended September 30, 2023, due to stock options granted with lower grant date fair values in the current period and 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. Management has discussed the development and selection of the critical accounting policies with the Audit Committee of the Board of Directors and the Audit Committee has reviewed the disclosure relating to critical accounting policies in this Management's Discussion and Analysis.

Significant Accounting Judgments and Estimates

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. For additional information, please see the discussion of our significant accounting policies in Note 2 to the Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023, filed with the SEC on

March 26, 2024. There were no material changes to our critical accounting policies and estimates during the three months ended September 30, 2024.

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 to 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 September 30, 2024, the Company has recorded $662 thousand in prepaid expenses and approximately $6.5 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% this would mean that prepaid expenses would be over or understated by approximately $66 thousand, and accrued liabilities would be over or understated by approximately $650 thousand. On a combined basis, this could mean an increase or decrease in research and development expenses by approximately $716 thousand. To date, there have been no material differences between the estimates of such expenses and the amounts actually incurred.

Other important accounting policies and estimates made by management are the valuation of contingent liabilities, the valuation of tax accounts, and the assumptions used in determining the valuation of share-based compensation, as described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2023.

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. However, the existence of a material uncertainty that casts significant doubt about the Company's ability to continue as a going concern without a significant restructuring and/or financing, and, accordingly, of the appropriateness of the use of the going concern assumption in the preparation of the unaudited condensed interim consolidated financial statements. Management is evaluating various alternatives to secure the necessary financing so that the Company can continue as a going concern. While the Company has been successful in obtaining financing to date, there can be no assurance that the Company will achieve profitability and be able to do so in the future on terms favorable for the Company. Please see the "Liquidity and Capital Resources" section in this Quarterly Report on Form 10-Q for a discussion of the factors considered by management in arriving at its assessment.

Updated share information

As of November 8, 2024, we had 19,521,183 Common Shares issued and outstanding. In addition, there were 1,212,355 Common Shares issuable upon the exercise of outstanding stock options and there were 16,946,491 Common Shares issuable upon the exercise of the outstanding warrants.

ITEM 3 – 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 4 – CONTROLS AND PROCEDURES

As of the end of our fiscal quarter ended September 30, 2024, 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 United States Exchange Act of 1934, as amended (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 our fiscal quarter ended September 30, 2024, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding required disclosure.

It should be noted that while our principal executive officer and principal financial officer believe that our disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors or fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

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 Exchange Act) during our fiscal quarter ended September 30, 2024 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

ITEM 1 – LEGAL PROCEEDINGS

We are not involved in any material active legal actions. 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 1A – RISK FACTORS

FOR INFORMATION REGARDING FACTORS THAT COULD AFFECT THE COMPANY'S RESULTS OF OPERATIONS, FINANCIAL CONDITION AND LIQUIDITY, SEE THE RISK FACTORS DISCUSSED IN OUR ANNUAL REPORT ON FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2023, UNDER ITEM 1A – RISK FACTORS. ADDITIONS TO THE RISK FACTORS DISCLOSED UNDER ITEM 1A – RISK FACTORS OF THE ANNUAL REPORT INCLUDE:

- our risk of imminent bankruptcy;
- we need to obtain substantial funding immediately in order to continue operations and our exploration of strategic alternatives;
- our suppliers may choose to stop working on programs, change the terms of contracts or terminate contracts for key programs;
- our suppliers may change the terms of contracts with the company;
- our risk of not being able to meet the continued listing requirements and other requirements of Nasdaq; and
- one of our contract research organizations represented 34% of our accounts payable as of September 30, 2024. Subsequent to September 30, 2024, we paid $622 thousand and the amount owed as of the date of this filing is nil.

GOING CONCERN RISK

The Company's financial statements have been prepared on a going concern basis under which the Company is considered to be able to realize its assets and satisfy its liabilities in the ordinary course of business. However, as of the date of this filing, management does not believe that the Company's cash and cash equivalents balance is sufficient to meet its general working capital requirements and contractual obligations for the next 12 months. The Company's current cash and cash equivalents are projected to support operations through January 2025. The Company's future operations are dependent upon the identification and successful completion of equity or debt financing and the achievement of profitable operations at an indeterminate time in the future. There can be no assurances that the Company will be successful in completing additional equity or debt financing or in achieving profitability, or that such additional equity or debt financing will be completed on terms satisfactory to the Company and would be sufficient to satisfy any liquidity concerns related to the Company's ability to continue as a going concern. Certain adverse conditions and material uncertainties cast doubt upon the ability of the Company to continue as a going concern without a significant restructuring and/or financing. These include:

- the Company has cash-on-hand of approximately $6.8 million as at the date of this filing;
- the Company has a working capital deficiency (excess current liabilities over current assets);
- the Company currently has had no material sales of marketed products and no material sources of cash other than financings, and there can be no assurance as to the Company's ability to maintain or obtain sufficient financing sources for operations or to meet future obligations.
- uncertainty regarding the Company's Nasdaq listing raises significant doubt about its ability to continue as a going concern without substantial financing.

Due to these adverse conditions and material uncertainties, the use of the going concern assumption in the preparation of the Company's financial statements may not be appropriate. This could result in material adjustments to the amounts and classifications of assets and liabilities in the Company's financial statements should the Company fail to continue as a going concern. The financial statements do not give effect to any adjustments relating to the carrying values and classification of assets and liabilities that would be necessary should it be unable to continue as a going concern. If the Company is unable to continue as a going concern, it may be forced to seek relief under applicable bankruptcy and insolvency legislation, which may negatively affect the price and volatility of the common shares and any investment in such shares could suffer a significant decline or total loss in value and would subject the Company to additional risks related to such proceedings.

ITEM 6 – EXHIBITS

Exhibit Number	Description of Document
10.1*	Facility Agreement among the Company and Hanmi Pharmaceutical Co., Ltd dated August 27, 2024
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.
101**	The following consolidated financial statements from the Aptose Biosciences Inc. Quarterly Report on Form 10-Q for the quarter ended September 30, 2024, formatted in Inline Extensible Business Reporting Language (Inline XBRL): (i) statements of operations and comprehensive loss, (ii) balance sheets, (iii) statements of changes of shareholders' equity, (iv) statements of cash flows, and (v) the notes to the financial statements.
101.SCH	XBRL Taxonomy Extension Schema With Embedded Linkbases Document
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)
*	Filed herewith.
**	In accordance with Rule 406T of Regulation S-T, the XBRL related information in Exhibit 101 to this Quarterly Report on Form 10-Q 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.

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, on the 8th day of November, 2024.

APTOSE BIOSCIENCES INC.

By: /s/ William G. Rice, Ph.D.
William G. Rice, Ph.D.
President and Chief Executive Officer