

Prospectus Supplement
(to Prospectus dated October 21, 2022)

1,800,000 Common Shares

2,055,000 Pre-Funded Warrants to Purchase up to 2,055,000 Common Shares

Common Shares Underlying the Pre-Funded Warrants

We are offering 1,800,000 common shares, no par value (“Common Shares”), and 2,055,000 pre-funded warrants (the “Pre-Funded Warrants”) to purchase up to an aggregate of 2,055,000 Common Shares issuable from time to time upon exercise of the Pre-Funded Warrants to a single institutional investor pursuant to this prospectus supplement and the accompanying prospectus. Such investor will also receive series A Common Share warrants to purchase up to 3,855,000 Common Shares (the “Series A Warrants”) and series B Common Share warrants to purchase up to 3,855,000 Common Shares (the “Series B Warrants”, together with the Series A Warrants, the “Common Warrants”) in a concurrent private placement with an exercise price of \$1.15 per share. The Series A Warrants will expire five years from the date of shareholder approval as required under the applicable rules and regulations of the Nasdaq Stock Market (the “Shareholder Approval”) and the Series B Warrants will expire eighteen months from the date of the Shareholder Approval. The Common Warrants and the shares issuable upon exercise thereof are not being registered under the Securities Act of 1933, as amended (the “Securities Act”), and are not offered pursuant to this prospectus supplement and the accompanying prospectus. The Common Warrants are being offered pursuant to an exemption from the registration requirements of the Securities Act provided in Section 4(a)(2) of the Securities Act and/or Regulation D promulgated thereunder. The offering price for each Common Share is \$1.15 and the offering price for each Pre-Funded Warrant is \$1.149.

Pre-Funded Warrants are also being offered to an investor whose purchase of Common Shares in this offering would otherwise result in the investor, together with its affiliates and certain related parties, beneficially owning more than 9.99% of our outstanding Common Shares following the consummation of this offering. A holder of Pre-Funded Warrants will not have the right to exercise any portion of its Pre-Funded Warrants if the holder, together with its affiliates and certain related parties, would beneficially own in excess of 9.99% of the number of Common Shares outstanding immediately after giving effect to such exercise. Each Pre-Funded Warrant will be exercisable for one Common Share at an exercise price of \$0.001 per Common Share. Each Pre-Funded Warrant will be exercisable upon issuance and will expire when exercised in full. There is no established public trading market for the Pre-Funded Warrants and we do not expect a market to develop. We do not intend to apply for listing of the Pre-Funded Warrants on any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the Pre-Funded Warrants will be limited.

Our common shares are listed on the Nasdaq Capital Market (“Nasdaq”) under the symbol “APTO” and on the Toronto Stock Exchange (“TSX”) under the symbol “APS”. On May 30, 2024, the last reported sale price of the common shares on Nasdaq was \$1.16 per common share and on May 30, 2024, the TSX reported C\$1.53 per common share.

We have engaged H.C. Wainwright & Co., LLC to act as our exclusive placement agent in connection with this offering. The placement agent has agreed to use its reasonable best efforts to arrange for the sale of the securities offered in this offering. The placement agent is not purchasing or selling any of the securities we are offering, and the placement agent is not required to arrange the purchase or sale of any specific number of securities or dollar amount. There is no required minimum number of securities that must be sold as a condition to completion of this offering, and there are no arrangements to place the funds in an escrow, trust, or similar account.

Investing in our securities involves a high degree of risk. See the information contained under “[Risk Factors](#)” on page S-8 of this prospectus supplement and in the documents incorporated herein by reference.

	Per Share	Per Pre-Funded Warrant	Total ⁽¹⁾
Offering Price	\$ 1.15	\$ 1.149	\$4,431,195.00
Placement Agent Fees ⁽²⁾	\$ 0.0805	\$ 0.0805	\$ 310,327.50
Proceeds, Before Expenses, to Us	\$ 1.0695	\$ 1.0685	\$4,120,867.50

- (1) The amount of the offering proceeds to us presented in this table does not give effect to any exercise of the warrants being issued in the concurrent private placement.
- (2) We have agreed (i) to pay the placement agent a cash fee of 7.0% of the aggregate gross proceeds raised in this offering and pay for certain expenses, and (ii) to issue to the placement agent or its designees warrants to purchase a number of Common Shares equal to 5.0% of the aggregate number of Common Shares and Common Shares issuable upon the exercise of Pre-Funded Warrants included in this offering, or 192,750 Common Shares (the “Placement Agent Warrants”), at an exercise price equal to 125% of the offering price, or \$1.4375 per share. See “Plan of Distribution” beginning on page S-15 of this prospectus supplement for additional information regarding compensation payable to the placement agent, including the Placement Agent Warrants. The Placement Agent Warrants and the shares of Common Shares issuable thereunder are not being registered pursuant to this prospectus supplement and the accompanying prospectus.

Neither the Securities and Exchange Commission nor any securities commission in any state of the United States has approved or disapproved of these securities or determined whether this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

Delivery of the shares of Common Shares, Warrants and Pre-Funded Warrants is expected to be made on or about June 3, 2024, subject to satisfaction of customary closing conditions.

H.C. Wainwright & Co.

The date of this prospectus supplement is May 30, 2024

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a “shelf” registration statement on Form S-3 (File No. 333-267801) that we originally filed with the U.S. Securities and Exchange Commission (the “SEC”), on October 11, 2022 and which became effective on October 21, 2022.

This document is in two parts. The first part is this prospectus supplement which describes the specific terms of an offering of Common Shares and Pre-Funded Warrants and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the accompanying prospectus or any document incorporated by reference that we filed with the SEC before the date of this prospectus supplement, you should rely on the information in this prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date, for example, a document incorporated by reference in the accompanying prospectus – the statement in the document having the later date modifies or supersedes the earlier statement.

We further note that the representations, warranties, and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty, or covenant to you. Moreover, such representations, warranties, or covenants were accurate only as of the date when made. Accordingly, such representation, warranties, and covenants should not be relied upon as accurately representing the current state of our affairs.

We have not and the placement agent has not authorized anyone to provide you with any information or to make any representations other than those included or incorporated by reference in this prospectus supplement and the accompanying prospectus and any relevant free writing prospectus. If you receive any information not authorized by us, we and the placement agent take no responsibility for, and can provide no assurance as to the reliability of, such information. We are not making an offer to sell the securities in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained or incorporated by reference in this prospectus supplement or the accompanying prospectus or any relevant free writing prospectus is accurate as of any date other than its respective date.

We are offering to sell, and seeking offers to buy, securities only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the securities in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless the context otherwise requires, “Aptose,” the “Company,” “we,” “us,” “our” and similar names refer to Aptose Biosciences Inc.

FORWARD-LOOKING STATEMENTS

This prospectus supplement 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, which we collectively refer to as “forward-looking statements”. 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,” “hope,” “foresee” or the negative of these terms or other similar expressions concerning matters that are not historical facts.

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 lack of product revenues and net losses and a history of operating losses;
- 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;
- our need to raise substantial additional capital in the future and our ability to raise such funds when needed and on acceptable terms;
- 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 U.S. Food and Drug Administration (“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 governmental 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;
- 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;

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- 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 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 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;
- potential adverse U.S. federal tax consequences for U.S. shareholders because we are a “passive foreign investment company”;
- our “smaller reporting company” status;
- any failures to maintain an effective system of internal controls 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; and
- our ability to expand our business through the acquisition of companies or businesses.

More detailed information about risk factors and their underlying assumptions are included in our Annual Report on Form 10-K for the year ended December 31, 2023, as amended, under Item 1A—Risk Factors. 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.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus and in the documents we incorporate by reference. This summary does not contain all of the information that you should consider before deciding to invest in our common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully, including the "Risk Factors" sections contained in this prospectus supplement and the documents incorporated by reference herein, our consolidated financial statements and the related notes and the other documents incorporated by reference herein.

Our Business

Aptose Biosciences Inc. is a science-driven, clinical-stage biotechnology company committed to 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 office is located in San Diego, California.

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 luxetpinib (CG-806). Tuspetinib and luxetpinib are being evaluated for safety, tolerability, pharmacokinetics and efficacy in Phase 1/2 clinical trials, and each molecule is described below. 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 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. The clinical development path for triplet combination therapy in newly diagnosed AML patients with tuspetinib-based triplet combination therapy (tuspetinib + the BCL-2 inhibitor venetoclax + hypomethylating agent; TUS+VEN+HMA) begins with a 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, can reach annual sales greater than \$3 billion by 2035 because we believe tuspetinib 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.

Luxepitinib, 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 luxepitinib, 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 luxepitinib, a molecularly defined subgroup of hematologic malignancy patients was recently identified that may benefit from treatment with luxepitinib 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.

Corporate Information

Aptose is a publicly traded company governed by the Canada Business Corporations Act ("CBCA"). Our headquarters are located at 251 Consumers Road, Suite 1105 Toronto, Ontario, Canada M2J 4R3 (telephone: 647-479-9828), 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.

THE OFFERING

Common Shares offered by us	1,800,000 Common Shares.
Pre-Funded Warrants offered by us	2,055,000 Pre-Funded Warrants to purchase up to an aggregate of 2,055,000 Common Shares. Each Pre-Funded Warrant has an exercise price of \$0.001 per share, is immediately exercisable and will expire when exercised in full. See “Description of Securities We Are Offering” on page S-12 of this prospectus supplement.
Concurrent Private Placement	3,855,000 Series A Warrants to purchase up to 3,855,000 Common Shares and 3,855,000 Series B Warrants to purchase up to 3,855,000 Common Shares, each at an exercise price of \$1.15 per share. The Common Warrants will be exercisable beginning on the effective date of the Shareholder Approval. The Series A Warrants will expire five years from the date of the Shareholder Approval and the Series B Warrants will expire eighteen months from the date of the Shareholder Approval. The Common Warrants and the Common Shares issuable upon the exercise of the Common Warrants are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act. See “Private Placement” on page S-13 of this prospectus supplement.
Common Shares to be outstanding after this offering	18,109,393 Common Shares assuming no exercise of any Common Warrants, Pre-Funded Warrants, or Placement Agent Warrants issued in the concurrent private placement.
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately \$3.98 million. We intend to use the net proceeds of this offering for working capital and general corporate purposes. See “Use of Proceeds” on page S-10 of this prospectus supplement.
Risk Factors	Investing in our securities involves risks. See “Risk Factors” beginning on page S-8 of this prospectus supplement or otherwise incorporated by reference in this prospectus supplement for a discussion of factors to consider before deciding to invest in our securities.
Trading Symbol	Our Common Shares are listed on the Nasdaq Capital Market under the symbol “APTO” and on the TSX under the symbol “APS”. There is no established trading market for the Pre-Funded Warrants and we do not expect a trading market to develop. We do not intend to list the Pre-Funded Warrants on any securities exchange or nationally recognized trading system. Without a trading market, the liquidity of the Pre-Funded Warrants will be extremely limited.

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The number of common shares to be outstanding prior to and after this offering and the concurrent private placement offering is based on 16,309,393 common shares outstanding as of May 30, 2024 and excludes:

- 192,750 common shares issuable upon the exercise of the Placement Agent Warrants, at an exercise price of \$1.4375 per share to be issued as compensation in connection with this offering;
- 7,710,000 common shares issuable upon the exercise of the Common Warrants at an exercise price of \$1.15 per share;
- 1,430,639 stock options outstanding as of May 30, 2024, at a weighted average exercise price of \$35.37 per common share; and
- 135,716 common shares that have been reserved for issuance in connection with future grants under our security-based compensation plans.

Unless otherwise indicated, all information in this prospectus supplement assumes (i) no exercise of outstanding stock options or warrants or achievement of performance-based restricted stock units after May 30, 2024 and (ii) no exercise of the Pre-Funded Warrants offered and sold in this offering, the Common Warrants or Placement Agent Warrants issued in a concurrent private placement.

RISK FACTORS

Investment in our securities involves risks. Before deciding whether to invest in our securities, you should consider carefully the risk factors discussed below and those contained in the section entitled “Risk Factors” contained in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2024, as filed with the SEC on May 14, 2024, which is incorporated herein by reference in its entirety, as well as any amendment or update to our risk factors reflected in subsequent filings with the SEC. If any of the risks or uncertainties described in our SEC filings actually occurs, our business, financial condition, results of operations or cash flow could be materially and adversely affected. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. The risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations.

Risks Related to this Offering

You will experience immediate and substantial dilution.

Because the offering price per share in this offering exceeds the net tangible book value per Common Share outstanding prior to this offering you will incur an immediate and substantial dilution in the net tangible book value of the Common Shares you purchase in this offering or the Common Shares underlying the Pre-Funded Warrants you purchase in this offering. After giving effect to the sale by us of: (i) 1,800,000 Common Shares at an offering price of \$1.15 per Common Share and, and (ii) 2,055,000 Pre-Funded Warrants at an offering price of \$1.149 per Pre-Funded Warrant, and after deducting placement agent fees and estimated offering expenses payable by us and assuming no exercise of the Pre-Funded Warrants, Common Warrants and Placement Agent Warrants, you will experience immediate dilution of \$1.03 per share, representing the difference between the effective offering price per share and our as adjusted net tangible book value per share as of March 31, 2024 after giving effect to this offering. The exercise of warrants, including the Pre-Funded Warrants, Common Warrants, Placement Agent Warrants, exercise of outstanding stock options, and vesting of other awards may result in further dilution of your investment. See the section entitled “Dilution” appearing elsewhere in this prospectus supplement for a more detailed illustration of the dilution you would incur if you participate in this offering.

The trading price of our Common Shares could be highly volatile, which could result in substantial losses for purchasers of our Common Shares in this offering.

Our share price is volatile. The stock market in general and the market for pharmaceutical and biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your Common Shares at or above the offering price and you may lose some or all of your investment. The market price for our Common Shares may be influenced by many factors, including:

- announcements relating to the clinical development of our product candidates;
- announcements concerning the progress of our efforts to obtain regulatory approval for and commercialize our product candidates or any future product candidate, including any requests we receive from the FDA, or comparable regulatory authorities outside the United States, for additional studies or data that result in delays or additional costs in obtaining regulatory approval or launching these product candidates, if approved;
- the depth and liquidity of the market for our Common Shares;
- investor perceptions about us and our business;
- market conditions in the pharmaceutical and biotechnology sectors or the economy as a whole, which may be impacted by economic or other crises or external factors;
- price and volume fluctuations in the overall stock market;

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- the failure of one or more of our product candidates or any future product candidate, if approved, to achieve commercial success;
- announcements of the introduction of new products by us or our competitors;
- developments concerning product development results or intellectual property rights of others;
- litigation or public concern about the safety of our potential products;
- actual fluctuations in our quarterly operating results, and concerns by investors that such fluctuations may occur in the future;
- deviations in our operating results from the estimates of securities analysts or other analyst comments;
- additions or departures of key personnel;
- health care reform legislation, including measures directed at controlling the pricing of pharmaceutical products, and third-party coverage and reimbursement policies;
- developments concerning current or future strategic collaborations; and
- discussion of us or our stock price by the financial and scientific press and in online investor communities.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for pharmaceutical and biotechnology companies, which have experienced significant stock price volatility in recent years.

We have broad discretion in the use of the net proceeds of this offering and may not use them effectively.

We intend to use the net proceeds from this offering for working capital and general corporate purposes. However, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our Common Shares. The failure by management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our Common Shares to decline and delay the development of our product candidates.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional Common Shares or other securities convertible into or exchangeable for our Common Shares at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by the investor in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. If we sell Common Shares, convertible securities, or other equity securities, investors may be materially diluted by subsequent sales.

There is no public market for the Pre-Funded Warrants being offered in this offering.

There is no established public trading market for the Pre-Funded Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Pre-Funded Warrants on any securities exchange or nationally recognized trading system, including Nasdaq. Without an active market, the liquidity of the Pre-Funded Warrants will be limited.

Holders of Pre-Funded Warrant purchased in this offering will have no rights as common shareholders until such holders exercise such Pre-Funded Warrants and acquire our Common Shares.

Until holders of Pre-Funded Warrants acquire Common Shares upon exercise of such Pre-Funded Warrants, the holders will have no rights with respect to the Common Shares underlying such Pre-Funded Warrants. Upon

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exercise of the Pre-Funded Warrants, the holders will be entitled to exercise the rights of a common shareholder only as to matters for which the record date occurs after the exercise date.

We could fail to maintain the listing of our common shares on the Nasdaq Capital Market, which could seriously harm the liquidity of our stock and our ability to raise capital or complete a strategic transaction.

We 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 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 our recently filed Annual Report on Form 10-K that as of the dates of the closing of the Financings that our shareholders equity exceeded \$2,500,000.

The Notification Letter received had no immediate effect on our 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 to submit a plan to evidence compliance with the Rule (a “Compliance Plan”). The Company submitted a Compliance Plan within the required time, although there can be no assurance that the Compliance Plan will be accepted by Nasdaq. If the Compliance Plan is accepted by Nasdaq, the Company will be granted an extension of up to 180 calendar days from April 2, 2024 to evidence compliance with the Rule.

In the event the Compliance Plan is not accepted by Nasdaq, or in the event the Compliance Plan is accepted but we fail to evidence compliance within the extension period, we will have the right to a hearing before Nasdaq’s Hearing Panel. The hearing request would stay any suspension or delisting action pending the conclusion of the hearing process and the expiration of any additional extension period granted by the panel following the hearing. There can be no assurance that we will continue to maintain compliance with the rule or other listing requirements necessary for us to maintain the listing of our common shares on the Nasdaq Capital Market.

USE OF PROCEEDS

We expect to receive net proceeds of approximately \$3.98 million from this offering, after deducting placement agent fees and estimated offering expenses payable by us, including the placement agent fees, and excluding the proceeds, if any, from the exercise of the Warrants or the Placement Agent Warrants issued in the concurrent private placement. We intend to use the net proceeds of this offering for working capital and general corporate purposes.

DILUTION

If you invest in our securities in this offering, your ownership interest will be diluted to the extent of the difference between the effective offering price per Common Share and/or Pre-Funded Warrants and the as adjusted net tangible book value per Common Share immediately after this offering. The net tangible book value of our Common Shares as of March 31, 2024 was approximately \$(1,688,000) or approximately \$(0.11) per Common Share based upon 15,717,701 Common Shares outstanding as of March 31, 2024. Net tangible book value per share is equal to our total tangible assets, less our total liabilities, divided by the total number of Common Shares outstanding as of March 31, 2024.

Net tangible book value dilution per share to the investor participating in this offering represents the difference between the effective offering price per share paid by the purchaser of the securities in this offering

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and the as adjusted net tangible book value per Common Share immediately after this offering. After giving effect to the sale of 1,800,000 Common Shares and 2,055,000 Pre-Funded Warrants to purchase 2,055,000 shares in this offering at an offering price of \$1.15 per Common Share and \$1.149 per Pre-Funded Warrant, as applicable, and after deducting placement agent fees and estimated offering expenses payable by us, and assuming no exercise of the Pre-Funded Warrants, Placement Agent Warrants, and Common Warrants issued in the concurrent private placement, our as adjusted net tangible book value as of March 31, 2024 would have been approximately \$2,173,127, or \$0.12 per share. This represents an immediate increase in net tangible book value of \$0.23 per share to existing stockholders and immediate dilution of \$1.03 per share to the investor purchasing our securities in this offering at the offering price. The following table illustrates this dilution on a per share basis:

Offering price per share		\$1.15
Historical net tangible book value per share as of March 31, 2024	\$(0.11)	
Increase in net tangible book value per share attributable to this offering	\$ 0.23	
As adjusted net tangible book value per share after giving effect to this offering		\$0.12
Dilution in net tangible book value per share to the investor participating in this offering		\$1.03

The discussion and table above assume no exercise of Pre-Funded Warrants, Placement Agent Warrants, and Common Warrants sold in the concurrent private placement and are based on 15,717,701 Common Shares outstanding as of March 31, 2024. The number of shares outstanding as of March 31, 2024 excludes:

- 192,750 common shares issuable upon the exercise of the Placement Agent Warrants, at an exercise price of \$1.4375 per share to be issued as compensation in connection with this offering;
- 7,710,000 common shares issuable upon the exercise of the Common Warrants, at an exercise price of \$1.15 per share;
- 1,504,639 stock options outstanding as of March 31, 2024, at a weighted average exercise price of \$34.98 per common share; and
- 61,716 common shares that have been reserved for issuance in connection with future grants under our security-based compensation plans.

To the extent that outstanding options or warrants as of March 31, 2024 have been or may be exercised, performance-based restricted stock units have been achieved, or other shares issued, the investor purchasing our securities in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

DIVIDEND POLICY

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 purchase our Common Shares.

DESCRIPTION OF SECURITIES WE ARE OFFERING

Description of Securities

The following description of our common shares, no par value per share, is a summary and does not purport to be complete. It is subject to and qualified in its entirety by reference to our Articles of Incorporation, Arrangement and Amendment last amended on June 12, 2015 (the “Articles”) and our Amended By-Law No. 2 (the “Bylaws”), each of which is incorporated by reference as an exhibit to the Annual Report on Form 10-K. We encourage you to read our Articles and our Bylaws for additional information.

Authorized Capital

Our authorized share capital consists of an unlimited number of common shares.

Voting Rights

Holders of common shares will be entitled to receive notice of and to attend all meetings of the shareholders. Holders of common shares are entitled to one vote per share on all matters voted on by the shareholders, including the election of directors. Our common shares do not have cumulative voting rights. Each director is elected by a plurality of the votes cast. However, in an uncontested election, if a nominee for director receives a greater number of votes “withheld” from his or her election than votes “for” such election, the nominee will be considered not to have received the support of the shareholders, even though duly elected as a matter of corporate law. Such a nominee will be expected to provide forthwith his or her resignation to the board, effective on acceptance by the board. Unless special circumstances apply, the board will accept the resignation. Within 90 days following the applicable meeting of the shareholders, the board will determine whether to accept or reject the resignation offer that has been submitted. Following the board’s decision on the resignation, the board will promptly disclose, via press release, its decision (including the reasons for rejecting the resignation offer, if applicable).

Except for the election of directors, or as otherwise required by the Articles, the Bylaws or applicable laws and regulations, all questions properly before a meeting of shareholders will be decided by a majority of the votes cast on the question.

Dividend Rights and Dividend Policy

The holders of common shares are entitled, at the discretion of our board of directors, to receive out of any or all of our assets properly available for the payment of dividends, any dividend declared by the board of directors and payable by us on our common shares. Any dividend unclaimed after a period of six years from the date on which the same has been declared to be payable shall be forfeited and shall revert to us. We and our subsidiaries are, and may become, parties to agreements pursuant to which we borrow money, and certain covenants in these agreements may limit our ability to pay dividends or other distributions with respect to the common shares or to repurchase common shares.

We have not paid any dividends since our incorporation. At the discretion of our board of directors, we will consider paying dividends in the future as our operational circumstances may permit, having regard to, among other things, our earnings, cash flow and financial requirements. It is the current policy of our board of directors to retain all earnings to finance our business plan.

Liquidation Rights

The holders of common shares will participate on a pro rata basis in any distribution of our remaining property upon our liquidation, dissolution or winding-up or any other return of capital or distribution of our assets among our shareholders for the purpose of winding up our affairs.

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Other Rights and Preferences

Our common shares have no sinking fund or redemption provisions or preemptive, conversion or exchange rights.

Fully Paid Shares

Our outstanding common shares are, and any newly issued common shares will be, fully paid and non-assessable.

Pre-Funded Warrants

We are also offering 2,055,000 Pre-Funded Warrants to purchase up to an aggregate of 2,055,000 Common Shares (and the Common Shares issuable from time to time upon exercise of the Pre-Funded Warrants), to the same institutional investor whose purchase of Common Shares in this offering would otherwise result in the investor, together with its affiliates and certain related parties, beneficially owning more than 9.99% of our outstanding Common Shares following the consummation of this offering, in lieu of Common Shares. A holder of Pre-Funded Warrants will not have the right to exercise any portion of its Pre-Funded Warrants if the holder, together with its affiliates and certain related parties, would beneficially own in excess of 9.99% of the number of Common Shares outstanding immediately after giving effect to such exercise. Each Pre-Funded Warrant will be immediately exercisable for one Common Share at an exercise price of \$0.001 per share. The offering price is \$1.149 per Pre-Funded Warrant. Each Pre-Funded Warrant will be exercisable upon issuance and will expire when exercised in full. There is no established public trading market for the Pre-Funded Warrants and we do not expect a market to develop. We do not intend to apply for listing of the Pre-Funded Warrants on any securities exchange or nationally recognized trading system. Without an active trading market, the liquidity of the Pre-Funded Warrants will be limited. The summary of certain terms and provisions of the Pre-Funded Warrant is not complete and is subject to, and qualified in its entirety by, the provisions of the form of which is filed as an exhibit to our Current Report on Form 8-K and which is incorporated by reference herein.

CONCURRENT PRIVATE PLACEMENT

Concurrently with the sale of Common Shares in this offering, we will issue to the investor in this offering, the Series A Warrants and Series B Warrants to purchase an aggregate of up to 7,710,000 Common Shares at an exercise price of \$1.15 per share. The Series A Warrants will expire five years from the date of the Shareholder Approval in accordance with Nasdaq Listing Rule 5653(d), and the Series B Warrants will expire eighteen months from the date of the Shareholder Approval in accordance with Nasdaq Listing Rule 5653(d). We will receive gross proceeds from the concurrent private placement transaction solely to the extent such warrants are exercised for cash.

The Common Warrants and the Common Shares issuable upon the exercise of such warrants are not being registered under the Securities Act, are not being offered pursuant to this prospectus supplement and the accompanying prospectus and are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Accordingly, the investors may only sell Common Shares issued upon exercise of the Common Warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

Fundamental Transaction

In the event of any fundamental transaction, as described in the Common Warrants and generally including any merger with or into another entity, sale of all or substantially all of our assets, tender offer or exchange offer,

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or reclassification of our common shares, then upon any subsequent exercise of a Common Warrant, the holder will have the right to receive as alternative consideration, for each common share that would have been issuable upon such exercise immediately prior to the occurrence of such fundamental transaction, the number of common shares of the successor or acquiring corporation of our corporation, if it is the surviving corporation, and any additional consideration receivable upon or as a result of such transaction by a holder of the number of common shares for which the Common Warrant is exercisable immediately prior to such event. Notwithstanding the foregoing, in the event of a fundamental transaction, the holders of the Common Warrants have the right to require us or a successor entity to redeem the Common Warrants for cash in the amount of the Black-Scholes Value (as defined in the Common Warrant) of the unexercised portion of the Common Warrants concurrently with or within 30 days following the consummation of a fundamental transaction. However, in the event of a fundamental transaction which is not in our control, including a fundamental transaction not approved by our board of directors, the holders of the Common Warrants will only be entitled to receive from us or our successor entity, as of the date of consummation of such fundamental transaction the same type or form of consideration (and in the same proportion), at the Black Scholes Value of the unexercised portion of the Common Warrants, whether that consideration is in the form of cash, stock or any combination of cash and shares, or whether the holders of our common shares are given the choice to receive alternative forms of consideration in connection with the fundamental transaction.

Transferability

The Common Warrants and shares issued upon the exercise of the Common Warrant will be issued and sold without registration under the Securities Act, or securities laws of any state of the United States, in reliance on the exemptions provided by Section 4(a)(2) of the Act and/or Regulation D promulgated thereunder and in reliance on similar exemptions under applicable securities laws of any states of the United States. Accordingly, the investors may exercise those Common Warrants and sell the underlying shares only pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act, or another applicable exemption under the Securities Act. Subject to applicable laws, the Common Warrants may be transferred at the option of the holder upon surrender of the Common Warrant to us together with the appropriate instruments of transfer and payment of funds sufficient to pay any transfer taxes (if applicable).

Exchange Listing

There is no trading market available for the Common Warrants on any securities exchange or nationally recognized trading system. We do not intend to list the Common Warrants on any securities exchange or nationally recognized trading system.

Rights as a Shareholder

Except as otherwise provided in the Common Warrants or by virtue of such holder's ownership of Common Shares, the holders of the Common Warrants do not have the rights or privileges of holders of our Common Shares, including any voting rights, until they exercise their Common Warrants.

The summary below is not complete and is subject to, and qualified in its entirety by, the provisions of the Common Warrants, the forms of the Common Warrants are filed with the SEC as an exhibit to a Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus supplement and the accompanying prospectus form a part. Prospective investors should carefully review the terms and provisions of the form of the Common Warrants for a complete description of the terms and conditions of the Common Warrants.

Placement Agent Warrants

We have also agreed to issue to H.C. Wainwright & Co., LLC (or its designees) Placement Agent Warrants to purchase a number of Common Shares equal to 5.0% of the aggregate number of Common Shares included in this offering, or 192,750 Common Shares at an exercise price equal to 125% of the offering price of the Common Shares in this offering, or \$1.4375 per share, and to pay certain expenses of the placement agent in connection with this offering. The Placement Agent Warrants will be exercisable immediately and will expire five (5) years from the commencement of the sales pursuant to this offering. Except as provided herein, the Placement Agent Warrants will have substantially the same terms as the Series A Warrants. The summary of certain terms and provisions of the Placement Agent Warrants is not complete and is subject to, and qualified in its entirety by, the provisions of the form of the Placement Agent Warrant which we will file as an exhibit to our Current Report on Form 8-K and which is incorporated by reference herein.

PLAN OF DISTRIBUTION

We have engaged H.C. Wainwright & Co., LLC (the “placement agent”) to act as our exclusive placement agent, on a reasonable best-efforts basis, in connection with this offering pursuant to this prospectus supplement and accompanying prospectus. The terms of this offering are subject to market conditions and negotiations between us, the placement agent, and prospective investors. The engagement agreement does not give rise to any commitment by the placement agent to purchase any of the securities, and the placement agent will have no authority to bind us by virtue of the engagement agreement. The placement agent is not purchasing the securities offered by us in this offering and is not required to sell any specific number or dollar amount of securities but will assist us in this offering on a reasonable best-efforts basis. Further, the placement agent does not guarantee that it will be able to raise new capital in any prospective offering. The placement agent may engage sub-agents or selected dealers to assist with the offering. The placement agent has no commitment to buy any of the securities offered pursuant to this prospectus supplement and accompanying prospectus. We have entered into a securities purchase agreement directly with the investor in connection with this offering, and we will only sell to investors who have entered into the securities purchase agreement. We may not sell the entire amount of shares of our Common Stock and Pre-Funded Warrants offered pursuant to this prospectus supplement.

We expect to deliver the Common Shares and Pre-Funded Warrants being offered pursuant to this prospectus supplement and accompanying prospectus on or about June 3, 2024, subject to satisfaction of customary closing conditions.

We have agreed to indemnify the placement agent and specified other persons against certain liabilities relating to or arising out of the agent’s activities as placement agent, and to contribute to payments that the placement agent may be required to make in respect of such liabilities.

Fees and Expenses

We have agreed to pay the placement agent in connection with this offering (i) a cash fee equal to 7.0% of the aggregate gross proceeds of this offering, (ii) a non-accountable expense allowance of \$60,000 and (iii) \$15,950 for the clearing fees.

We estimate that the total expenses payable by us in connection with this offering, excluding the placement agent fees and expenses referred to above, will be approximately \$70,000.

Tail Financing Payments

We have also agreed to pay the placement agent, subject to certain exceptions, a tail fee equal to the cash and warrant compensation in this offering, if any investor, who was contacted or introduced to us by placement agent during the term of the engagement, provides us with capital in any public or private offering or other

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financing or capital raising transaction during the 6-month period following the termination or expiration of our engagement agreement.

Right of First Refusal

In addition, we have granted a right of first refusal to the placement agent pursuant to which it has the right to act as the exclusive manager or underwriter or agent, as applicable, if we or our subsidiaries finance any indebtedness using an agent, or raise capital through a public or private offering of equity, equity-linked or debt securities at any time prior to the 6-month anniversary of the consummation date of this offering.

Lock-up Agreement

We have agreed to be subject to a lock-up for a period of 60 days following the date of closing of the offering pursuant to this prospectus supplement and accompanying prospectus. This means that, during the applicable lock-up period, we may not issue, enter into any agreement to issue or announce the issuance or proposed issuance of any Common Shares or their equivalents, subject to certain exceptions. In addition, subject to certain exceptions, we have agreed to not issue any securities that are subject to a price reset based on the trading prices of our Common Shares or upon a specified or contingent event in the future, or enter into any agreement to issue securities at a future determined price for a period of one year following the closing date of this offering.

Regulation M

The placement agent may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, the placement agent would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of common shares by Wainwright acting as principal. Under these rules and regulations, the placement agent:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

Other Relationships

From time to time, the placement agent has provided and may provide in the future, various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which it may receive customary fees and commissions. Except as disclosed in this prospectus supplement, we have no present arrangements with the placement agent for any services.

Listing of our Common Shares

Our Common Shares are listed on the Nasdaq Capital Market under the symbol "APTO." On May 30, 2024, the closing price of our Common Shares as reported on the Nasdaq Capital Market was \$1.16 per share. We do not intend to apply for listing of the Pre-Funded Warrants on any securities exchange or nationally recognized trading system.

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of certain material U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership and disposition of Common Shares, the acquisition, ownership and disposition of Pre-Funded Warrants, and the acquisition, ownership and disposition of Common Shares received upon exercise of the Pre-Funded Warrants, all as acquired pursuant to this offering. This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from or relating to the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants, all as acquired pursuant to this offering. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including, without limitation, specific tax consequences to a U.S. Holder under an applicable income tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any particular U.S. Holder. This summary does not address the U.S. federal alternative minimum, U.S. federal net investment income, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants. In addition, except as specifically set forth below, this summary does not discuss applicable income tax reporting requirements. Each prospective U.S. Holder should consult its own tax advisors regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal net investment income, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants.

No legal opinion from legal counsel or ruling from the Internal Revenue Service (the “IRS”) has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, or contrary to, the positions taken in this summary. In addition, because the authorities on which this summary is based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the conclusions described in this summary.

Scope of this Summary

Authorities

This summary is based on the U.S. Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations (whether final, temporary, or proposed) promulgated thereunder, published rulings of the IRS, published administrative positions of the IRS, the current provisions of the Convention Between Canada and the United States of America with respect to Taxes on Income and on Capital of 1980, as amended (the “Canada-U.S. Tax Treaty”), and U.S. court decisions that are applicable, and, in each case, as in effect and available, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis, which could affect the U.S. federal income tax considerations described in this summary. Except as provided herein, this summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive or prospective basis.

U.S. Holders

For purposes of this summary, the term “U.S. Holder” means a beneficial owner of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants, as acquired pursuant to this offering, that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;

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- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (1) is subject to the primary supervision of a court within the U.S. and the control of one or more U.S. persons for all substantial decisions or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Non-U.S. Holders

For purposes of this summary, a “non-U.S. Holder” is a beneficial owner of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants that is not a U.S. Holder or an entity or arrangement classified as a partnership for U.S. federal income tax purposes. This summary does not address the U.S. federal, state or local tax consequences to non-U.S. Holders arising from or relating to the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants. Accordingly, a non-U.S. Holder should consult its own tax advisors regarding the U.S. federal, state or local and non-U.S. tax consequences (including the potential application of and operation of any income tax treaties) relating to the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants.

U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including, but not limited to U.S. Holders that: (a) are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) have a “functional currency” other than the U.S. dollar; (e) own Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other integrated transaction; (f) acquire Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are subject to the alternative minimum tax; (i) are subject to special tax accounting rules with respect to the Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants; (j) are partnerships or other “pass-through” entities (and partners or other owners thereof); (k) are S corporations (and shareholders thereof); (l) are U.S. expatriates or former long-term residents of the United States subject to Section 877 or 877A of the Code; (m) hold Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants in connection with a trade or business, permanent establishment, or fixed base outside the United States; or (n) own or have owned or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or value of our outstanding shares. U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders described immediately above, should consult their own tax advisors regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal net investment income, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants.

If an entity or arrangement that is classified as a partnership (or other “pass-through” entity) for U.S. federal income tax purposes holds Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants, the U.S. federal income tax consequences to such entity or arrangement and the partners (or other owners or participants) of such entity or arrangement generally will depend on the activities of the

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entity or arrangement and the status of such partners (or owners or participants). This summary does not address the tax consequences to any such partner (or owner or participant). Partners (or other owners or participants) of entities or arrangements that are classified as partnerships or as “pass-through” entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants.

Treatment of Pre-Funded Warrants

Although it is not entirely free from doubt, we believe that a Pre-Funded Warrant should be treated as a separate class of our common shares for U.S. federal income tax purposes and a U.S. Holder of Pre-Funded Warrants should generally be taxed in the same manner as a holder of Common Shares except as described below. Accordingly, no gain or loss should be recognized upon the exercise of a Pre-Funded Warrant and, upon exercise, the holding period of a Pre-Funded Warrant should carry over to the Common Shares received. Similarly, the tax basis of the Pre-Funded Warrant should carry over to the Common Shares received upon exercise, increased by the exercise price of \$0.001 per Common Share. However, such characterization is not binding on the IRS, and the IRS may treat the Pre-Funded Warrants as warrants to acquire Common Shares. If so, the amount and character of a U.S. Holder’s gain with respect to an investment in Pre-Funded Warrants could change, and a U.S. Holder may not be entitled to make the “QEF Election” described below with respect to the Pre-Funded Warrants to mitigate PFIC consequences in the event that we are classified as a PFIC. A U.S. Holder generally may not make a Mark-to-Market Election with respect to the Pre-Funded Warrants. Accordingly, each U.S. Holder should consult its own tax advisor regarding the risks associated with the acquisition of a Pre-Funded Warrant pursuant to this offering (including potential alternative characterizations). The balance of this discussion generally assumes that the characterization described above is respected for U.S. federal income tax purposes.

Passive Foreign Investment Company Rules

If we were to constitute a “passive foreign investment company” or “PFIC” for any year during a U.S. Holder’s holding period, then certain potentially adverse rules would affect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants. We believe we were a “passive foreign investment company” (a “PFIC”) within the meaning of Section 1297 of the Code for our most recently completed taxable year and based on the nature of our business, the projected composition of our gross income and the projected composition and estimated fair market values of our assets, we expect to be a PFIC for our current taxable year and may be a PFIC in subsequent tax years. No opinion of legal counsel or ruling from the IRS concerning our status as a PFIC has been obtained or is currently planned to be requested. The determination of whether any corporation was, or will be, a PFIC for a tax year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether any corporation will be a PFIC for any tax year depends on the assets and income of such corporation over the course of each such tax year and, as a result, cannot be predicted with certainty as of the date of this document. Accordingly, there can be no assurance that the IRS will not challenge any determination made by us (or any of our non-U.S. subsidiaries) concerning our (or its) PFIC status. Each U.S. Holder should consult its own tax advisors regarding our PFIC status of the PFIC status of each of our non-U.S. subsidiaries.

In any year in which we are classified as a PFIC, a U.S. Holder will be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require. In addition to penalties, a failure to satisfy such reporting requirements may result in an extension of the time period during which the IRS can assess a tax. U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file an IRS Form 8621 annually.

We generally will be a PFIC if, for a tax year, (a) 75% or more of our gross income in such tax year is passive income (the “PFIC income test”) or (b) 50% or more of the value of our assets either produce passive

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income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets (the “PFIC asset test”). “Gross income” generally includes all sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and “passive income” generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions. Active business gains arising from the sale of commodities generally are excluded from passive income if substantially all of a foreign corporation’s commodities are stock in trade or inventory, depreciable property used in a trade or business, or supplies regularly used or consumed in the ordinary course of its trade or business, and certain other requirements are satisfied.

For purposes of the PFIC income test and PFIC asset test described above, if we own, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, we will be treated as if we (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and PFIC asset test described above, and assuming certain other requirements are met, “passive income” does not include certain interest, dividends, rents, or royalties that are received or accrued by us from certain “related persons” (as defined in Section 954(d)(3) of the Code) also organized in Canada, to the extent such items are properly allocable to the income of such related person that is not passive income.

Under certain attribution rules, if we are a PFIC, U.S. Holders will generally be deemed to own their proportionate share of our direct or indirect equity interest in any company that is also a PFIC (a “Subsidiary PFIC”), and will generally be subject to U.S. federal income tax as described below under “*Default PFIC Rules Under Section 1291 of the Code*” on their proportionate share of (a) any “excess distributions,” as described below, on the stock of a Subsidiary PFIC and (b) a disposition or deemed disposition of the stock of a Subsidiary PFIC by us or another Subsidiary PFIC, both as if such U.S. Holders directly held the shares of such Subsidiary PFIC. In addition, U.S. Holders may be subject to U.S. federal income tax on any indirect gain realized on the stock of a Subsidiary PFIC on the sale or disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants. Accordingly, U.S. Holders should be aware that they could be subject to tax under the PFIC rules even if no distributions are received and no redemptions or other dispositions of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants are made.

Default PFIC Rules Under Section 1291 of the Code

If we are a PFIC for any tax year during which a U.S. Holder owns Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants, the U.S. federal income tax consequences to such U.S. Holder of the acquisition, ownership, and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants will depend on whether such U.S. Holder makes a “qualified electing fund” or “QEF” election (a “QEF Election”) with respect to the Common Shares or Pre-Funded Warrants or makes a mark-to-market election under Section 1296 of the Code (a “Mark-to-Market Election”) with respect to Common Shares. A U.S. Holder that does not make either a QEF Election or a Mark-to-Market Election (a “Non-Electing U.S. Holder”) will be taxable as described below.

A Non-Electing U.S. Holder will be subject to the rules of Section 1291 of the Code (described below) with respect to: (a) any gain recognized on the sale or other taxable disposition of Common Shares, Pre-Funded Warrants and Common Shares received upon exercise of Pre-Funded Warrants; and (b) any “excess distribution” received on the Common Shares, Pre-Funded Warrants and Common Shares received upon exercise of Pre-Funded Warrants. A distribution generally will be an “excess distribution” to the extent that such distribution (together with all other distributions received in the current tax year) exceeds 125% of the average distributions received during the three preceding tax years (or during a U.S. Holder’s holding period for the Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants, if shorter).

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Under Section 1291 of the Code, any gain recognized on the sale or other taxable disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants of a PFIC (including an indirect disposition of the stock of any Subsidiary PFIC), and any "excess distribution" received on Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants or a distribution by a Subsidiary PFIC to its shareholder that is deemed to be received by a U.S. Holder, must be ratably allocated to each day in a Non-Electing U.S. Holder's holding period for the respective Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants. The amount of any such gain or excess distribution allocated to the tax year of disposition or distribution of the excess distribution and to years before the entity became a PFIC, if any, would be taxed as ordinary income (and not eligible for certain preferential tax rates, as discussed below). The amounts allocated to any other tax year would be subject to U.S. federal income tax at the highest tax rate applicable to ordinary income in each such year, and an interest charge would be imposed on the tax liability for each such year, calculated as if such tax liability had been due in each such year. A Non-Electing U.S. Holder that is not a corporation must treat any such interest paid as "personal interest," which is not deductible.

If we are a PFIC for any tax year during which a Non-Electing U.S. Holder holds Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants, we will continue to be treated as a PFIC with respect to such Non-Electing U.S. Holder, regardless of whether we cease to be a PFIC in one or more subsequent tax years. If we cease to be a PFIC, a Non-Electing U.S. Holder may terminate this deemed PFIC status with respect to the Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants by electing to recognize gain (which will be taxed under the rules of Section 1291 of the Code discussed above), but not loss, as if such Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants were sold on the last day of the last tax year for which we were a PFIC.

QEF Election

A U.S. Holder that makes a timely and effective QEF Election for the first tax year in which the holding period of its Common Shares or Pre-Funded Warrants begins generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to its Common Shares. However, a U.S. Holder that makes a timely and effective QEF Election will be subject to U.S. federal income tax on such U.S. Holder's pro rata share of (a) our net capital gain, which will be taxed as long-term capital gain to such U.S. Holder, and (b) our ordinary earnings, which will be taxed as ordinary income to such U.S. Holder. Generally, "net capital gain" is the excess of (a) net long-term capital gain over (b) net short-term capital loss, and "ordinary earnings" are the excess of (a) "earnings and profits" over (b) net capital gain. A U.S. Holder that makes a QEF Election will be subject to U.S. federal income tax on such amounts for each tax year in which we are a PFIC, regardless of whether such amounts are actually distributed to such U.S. Holder by us. However, for any tax year in which we are a PFIC and have no net income or gain, U.S. Holders that have made a QEF Election would not have any income inclusions as a result of the QEF Election. If a U.S. Holder that made a QEF Election has an income inclusion, such a U.S. Holder may, subject to certain limitations, elect to defer payment of current U.S. federal income tax on such amounts, subject to an interest charge. If such U.S. Holder is not a corporation, any such interest paid will be treated as "personal interest," which is not deductible.

A U.S. Holder that makes a timely and effective QEF Election with respect to us generally (a) may receive a tax-free distribution from us to the extent that such distribution represents our "earnings and profits" that were previously included in income by the U.S. Holder because of such QEF Election and (b) will adjust such U.S. Holder's tax basis in the Common Shares or Pre-Funded Warrants to reflect the amount included in income or allowed as a tax-free distribution because of such QEF Election. In addition, a U.S. Holder that makes a QEF Election generally will recognize capital gain or loss on the sale or other taxable disposition of Common Shares or Pre-Funded Warrants.

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The procedure for making a QEF Election, and the U.S. federal income tax consequences of making a QEF Election, will depend on whether such QEF Election is timely. A QEF Election will be treated as “timely” for purposes of avoiding the default PFIC rules discussed above if such QEF Election is made for the first year in the U.S. Holder’s holding period for the Common Shares or Pre-Funded Warrants in which we are a PFIC. A U.S. Holder may make a timely QEF Election by filing the appropriate QEF Election documents at the time such U.S. Holder files a U.S. federal income tax return for such year.

A QEF Election will apply to the tax year for which such QEF Election is timely made and to all subsequent tax years, unless such QEF Election is invalidated or terminated or the IRS consents to revocation of such QEF Election. If a U.S. Holder makes a QEF Election and, in a subsequent tax year, we cease to be a PFIC, the QEF Election will remain in effect (although it will not be applicable) during those tax years in which we are not a PFIC. Accordingly, if we become a PFIC in another subsequent tax year, the QEF Election will be effective and the U.S. Holder will be subject to the QEF rules described above during any subsequent tax year in which we qualify as a PFIC.

U.S. Holders should be aware that there can be no assurances that we will satisfy the record keeping requirements that apply to a QEF, or that we will supply U.S. Holders with information that such U.S. Holders are required to report under the QEF rules, in the event that we are a PFIC. Thus, U.S. Holders may not be able to make a QEF Election with respect to their Common Shares or Pre-Funded Warrants. Each U.S. Holder should consult its own tax advisors regarding the availability of, and procedure for making, a QEF Election with respect to us and any Subsidiary PFIC.

A U.S. Holder makes a QEF Election by attaching a completed IRS Form 8621, including a PFIC Annual Information Statement, to a timely filed United States federal income tax return. However, if we do not provide the required information with regard to us or any of our Subsidiary PFICs, U.S. Holders will not be able to make a QEF Election for such entity and will continue to be subject to the rules of Section 1291 of the Code discussed above that apply to Non-Electing U.S. Holders with respect to the taxation of gains and excess distributions.

Mark-to-Market Election

A U.S. Holder may make a Mark-to-Market Election with respect to Common Shares only if the Common Shares are marketable stock. The Common Shares generally will be “marketable stock” if the Common Shares are regularly traded on (a) a national securities exchange that is registered with the Securities and Exchange Commission, (b) the national market system established pursuant to section 11A of the Exchange Act, or (c) a foreign securities exchange that is regulated or supervised by a governmental authority of the country in which the market is located, provided that (i) such foreign exchange has trading volume, listing, financial disclosure, and surveillance requirements, and meets other requirements and the laws of the country in which such foreign exchange is located, together with the rules of such foreign exchange, ensure that such requirements are actually enforced and (ii) the rules of such foreign exchange effectively promote active trading of listed stocks. If such stock is traded on such a qualified exchange or other market, such stock generally will be “regularly traded” for any calendar year during which such stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. A U.S. Holder generally may not make a Mark-to-Market Election with respect to the Pre-Funded Warrants. Each U.S. Holder should consult its own tax advisor in this matter.

A U.S. Holder that makes a Mark-to-Market Election with respect to its Common Shares generally will not be subject to the rules of Section 1291 of the Code discussed above with respect to such Common Shares. However, if a U.S. Holder does not make a Mark-to-Market Election beginning in the first tax year of such U.S. Holder’s holding period for the Common Shares for which we are a PFIC and such U.S. Holder has not made a timely QEF Election, the rules of Section 1291 of the Code discussed above will apply to certain dispositions of, and distributions on, the Common Shares.

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Any Mark-to-Market Election made by a U.S. Holder for the Common Shares will also apply to such U.S. Holder's Common Shares received upon exercise of a Pre-Funded Warrant. As a result, if a Mark-to-Market Election has been made by a U.S. Holder with respect to our Common Shares, any Common Shares received upon exercise of a Pre-Funded Warrant will automatically be marked-to-market in the year of exercise. Because a U.S. Holder's holding period for Common Shares received upon exercise of a Pre-Funded Warrant should include the period during which such U.S. Holder held such Pre-Funded Warrant, a U.S. Holder will be treated as making a Mark-to-Market Election with respect to such Common Shares after the beginning of such U.S. Holder's holding period for such Common Shares unless such Common Shares are acquired in the same tax year as the year in which the U.S. Holder acquired its Pre-Funded Warrants. Consequently, the excess distribution regime described above generally will apply to the mark-to-market gain realized in the tax year in which such Common Shares are received upon the exercise of the Pre-Funded Warrants. However, the general mark-to-market rules will apply to subsequent tax years.

A U.S. Holder that makes a Mark-to-Market Election will include in ordinary income, for each tax year in which we are a PFIC, an amount equal to the excess, if any, of (a) the fair market value of the Common Shares as of the close of such tax year over (b) such U.S. Holder's adjusted tax basis in such Common Shares. A U.S. Holder that makes a Mark-to-Market Election will be allowed a deduction in an amount equal to the excess, if any, of (a) such U.S. Holder's adjusted tax basis in the Common Shares, over (b) the fair market value of such Common Shares (but only to the extent of the net amount of previously included income as a result of the Mark-to-Market Election for prior tax years).

A U.S. Holder that makes a Mark-to-Market Election generally also will adjust such U.S. Holder's tax basis in the Common Shares to reflect the amount included in gross income or allowed as a deduction because of such Mark-to-Market Election. In addition, upon a sale or other taxable disposition of Common Shares, a U.S. Holder that makes a Mark-to-Market Election will recognize ordinary income or ordinary loss (not to exceed the excess, if any, of (a) the amount included in ordinary income because of such Mark-to-Market Election for prior tax years over (b) the amount allowed as a deduction because of such Mark-to-Market Election for prior tax years). Losses that exceed this limitation are subject to the rules generally applicable to losses provided in the Code and Treasury Regulations.

A U.S. Holder makes a Mark-to-Market Election by attaching a completed IRS Form 8621 to a timely filed United States federal income tax return. A Mark-to-Market Election applies to the tax year in which such Mark-to-Market Election is made and to each subsequent tax year, unless the Common Shares cease to be "marketable stock" or the IRS consents to revocation of such election. Each U.S. Holder should consult its own tax advisors regarding the availability of, and procedure for making, a Mark-to-Market Election.

Although a U.S. Holder may be eligible to make a Mark-to-Market Election with respect to the Common Shares, no such election may be made with respect to the stock of any Subsidiary PFIC that a U.S. Holder is treated as owning, because such stock is not marketable. Hence, the Mark-to-Market Election will not be effective to eliminate the interest charge and other income inclusion rules described above with respect to deemed dispositions of Subsidiary PFIC stock or distributions from a Subsidiary PFIC to its shareholder.

Other PFIC Rules

Under Section 1291(f) of the Code, the IRS has issued proposed Treasury Regulations that, subject to certain exceptions, would cause a U.S. Holder that had not made a timely QEF Election to recognize gain (but not loss) upon certain transfers of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants that would otherwise be tax-deferred (e.g., gifts and exchanges pursuant to corporate reorganizations). However, the specific U.S. federal income tax consequences to a U.S. Holder may vary based on the manner in which Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants are transferred.

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If finalized in their current form, the proposed Treasury Regulations applicable to PFICs would be effective for transactions occurring on or after April 1, 1992. Because the proposed Treasury Regulations have not yet been adopted in final form, they are not currently effective, and there is no assurance that they will be adopted in the form and with the effective date proposed. Nevertheless, the IRS has announced that, in the absence of final Treasury Regulations, taxpayers may apply reasonable interpretations of the Code provisions applicable to PFICs and that it considers the rules set forth in the proposed Treasury Regulations to be reasonable interpretations of those Code provisions. The PFIC rules are complex, and the implementation of certain aspects of the PFIC rules requires the issuance of Treasury Regulations which in many instances have not been promulgated and which, when promulgated, may have retroactive effect. U.S. Holders should consult their own tax advisors about the potential applicability of the proposed Treasury Regulations.

Certain additional adverse rules may apply with respect to a U.S. Holder if we are a PFIC, regardless of whether such U.S. Holder makes a QEF Election. For example, under Section 1298(b)(6) of the Code, a U.S. Holder that uses Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants as security for a loan will, except as may be provided in Treasury Regulations, be treated as having made a taxable disposition of such Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants.

In addition, a U.S. Holder who acquires Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants from a decedent will not receive a “step up” in tax basis of such Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants to fair market value unless such decedent had a timely and effective QEF Election in place.

Special rules also apply to the amount of foreign tax credit that a U.S. Holder may claim on a distribution from a PFIC. Subject to such special rules, foreign taxes paid with respect to any distribution in respect of stock in a PFIC are generally eligible for the foreign tax credit. The rules relating to distributions by a PFIC and their eligibility for the foreign tax credit are complicated, and a U.S. Holder should consult with its own tax advisors regarding the availability of the foreign tax credit with respect to distributions by a PFIC.

The PFIC rules are complex, and each U.S. Holder should consult its own tax advisors regarding the PFIC rules (including the availability and advisability of making a QEF Election or Mark-to-Market Election) and how the PFIC rules may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Common Shares, Pre-Funded Warrants or Common Shares received upon exercise of Pre-Funded Warrants.

General Rules Applicable to the Ownership and Disposition of Common Shares and Pre-Funded Warrants

The following discussion is subject, in its entirety, to the rules described above under the heading “*Passive Foreign Investment Company Rules*”.

Distributions on Common Shares and Pre-Funded Warrants

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a Common Share or Pre-Funded Warrant will be required to include the amount of such distribution in gross income as a dividend (without reduction for any Canadian income tax withheld from such distribution) to the extent of our current or accumulated “earnings and profits”, as computed for U.S. federal income tax purposes. A dividend generally will be taxed to a U.S. Holder at ordinary income tax rates if we are a PFIC for the tax year of such distribution or were a PFIC for the preceding tax year. To the extent that a distribution exceeds our current and accumulated “earnings and profits”, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder’s tax basis in the Common Shares or Pre-Funded Warrants and thereafter as gain from the sale or exchange of such Common Shares or Pre-Funded Warrants. (See “*Sale or Other Taxable Disposition of Common Shares and Pre-Funded Warrants*” below). However, we do not intend to maintain the calculations of

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our earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder therefore should assume that any distribution by us with respect to Common Shares or Pre-Funded Warrants will constitute ordinary dividend income. Dividends received on Common Shares or Pre-Funded Warrants by corporate U.S. Holders generally will not be eligible for the “dividends received deduction” generally applicable to corporations. Subject to applicable limitations and provided we are eligible for the benefits of the Canada-U.S. Tax Treaty or the Common Shares are readily tradable on a United States securities market, dividends paid by us to non-corporate U.S. Holders, including individuals, in respect of Common Shares or Pre-Funded Warrants generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that we not be classified as a PFIC in the tax year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisors regarding the application of such rules.

Sale or Other Taxable Disposition of Common Shares and Pre-Funded Warrants

Upon the sale or other taxable disposition of Common Shares or Pre-Funded Warrants, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between the U.S. dollar value of cash received plus the fair market value of any property received and such U.S. Holder’s tax basis in such Common Shares or Pre-Funded Warrants sold or otherwise disposed of. Gain or loss recognized on such sale or other taxable disposition generally will be long-term capital gain or loss if, at the time of the sale or other taxable disposition, the Common Shares or Pre-Funded Warrants have been held for more than one year.

Preferential tax rates may apply to long-term capital gain of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gain of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

Additional Considerations

Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange or other taxable disposition of Common Shares or Pre-Funded Warrants generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). A U.S. Holder will have a tax basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who converts or otherwise disposes of the foreign currency after the date of receipt may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Different rules apply to U.S. Holders who use the accrual method of tax accounting. Each U.S. Holder should consult its own U.S. tax advisors regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Dividends paid on the Common Shares or Pre-Funded Warrants will be treated as foreign-source income, and generally will be treated as “passive category income” or “general category income” for U.S. foreign tax credit purposes. Any gain or loss recognized on a sale or other disposition of Common Shares or Pre-Funded Warrants generally will be United States source gain or loss. Certain U.S. Holders that are eligible for the benefits of Canada-U.S. Tax Treaty may elect to treat such gain or loss as Canadian source gain or loss for U.S. foreign tax credit purposes. The Code applies various complex limitations on the amount of foreign taxes that may be claimed as a credit by U.S. taxpayers. In addition, Treasury Regulations that apply to foreign taxes paid or accrued (the “Foreign Tax Credit Regulations”) impose additional requirements for Canadian withholding taxes to be eligible for a foreign tax credit, and there can be no assurance that those requirements will be satisfied. The Treasury Department has recently released guidance temporarily pausing the application of certain of the Foreign Tax Credit Regulations.

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Subject to the PFIC rules and the Foreign Tax Credit Regulations, each as discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the Common Shares or Pre-Funded Warrants generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income that is subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year. The foreign tax credit rules are complex and involve the application of rules that depend on a U.S. Holder's particular circumstances. Accordingly, each U.S. Holder should consult its own U.S. tax advisor regarding the foreign tax credit rules.

Backup Withholding and Information Reporting

Under U.S. federal income tax law and Treasury Regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on individuals who are U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a non-U.S. entity. U.S. Holders may be subject to these reporting requirements unless their Common Shares or Pre-Funded Warrants are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult their own tax advisors regarding the requirements of filing information returns, including the requirement to file an IRS Form 8938.

Payments made within the U.S. or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of Common Shares or Pre-Funded Warrants will generally be subject to information reporting and backup withholding tax (currently at a rate of 24%) if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on IRS Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons generally are excluded from these information reporting and backup withholding rules. Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner.

The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisors regarding the information reporting and backup withholding rules.

THE ABOVE SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL TAX CONSIDERATIONS APPLICABLE TO U.S. HOLDERS WITH RESPECT TO THE ACQUISITION, OWNERSHIP AND DISPOSITION OF COMMON SHARES, PRE-FUNDED WARRANTS AND COMMON SHARES RECEIVED UPON EXERCISE OF THE PRE-FUNDED WARRANTS. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN LIGHT OF THEIR OWN PARTICULAR CIRCUMSTANCES.

LEGAL MATTERS

The validity of the securities being offered hereby is being passed upon for us by McCarthy Tétrault LLP, Toronto, Ontario, with respect to matters of Canadian law and Dorsey & Whitney LLP, Vancouver, British Columbia and Denver, Colorado with respect to matters of U.S. law.

EXPERTS

The consolidated financial statements of Aptose Biosciences Inc. as of December 31, 2023 and 2022, and for each of the years then ended, have been included in this prospectus have been so included in reliance upon the report of KPMG LLP, an independent registered public accounting firm. The audit report covering the December 31, 2023 consolidated financial statements contains an explanatory paragraph that states that the Company's recurring losses from operations and net capital deficiency raise substantial doubt about the entity's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of that uncertainty.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934 and, accordingly, we file reports with and furnish other information to the SEC. This prospectus forms part of a registration statement we have filed with the SEC relating to, among other things, the Offered Shares. As permitted by SEC rules, this prospectus does not contain all of the information contained in the registration statement that we filed. For further information regarding us and the securities covered by this prospectus, you may desire to review the full registration statement, including its exhibits. The SEC maintains a website (<http://www.sec.gov>) from which interested persons can electronically access the registration statement, including the exhibits to the registration statement.

We also make these documents available on our website at website <http://www.aptose.com>. Our website and the information contained or connected to our website is not incorporated by reference in this prospectus supplement or the base prospectus, and you should not consider it part of this prospectus supplement or the base prospectus.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus supplement and accompanying prospectus. The information incorporated by reference is considered to be part of this prospectus supplement and accompanying prospectus, and later information that we file with the SEC will automatically update and supersede this information. This prospectus supplement incorporates by reference the documents listed below (other than, unless otherwise specifically indicated, current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items):

- a) Our Annual Report on Form 10-K for the year ended December 31, 2023, as amended, filed with the SEC on [March 26, 2024](#) and [April 29, 2024](#), respectively;
- b) Our Quarterly Report on [Form 10-Q](#) for the quarter ended March 31, 2024, filed with the SEC on May 14, 2024; and
- c) Our Current Reports on Form 8-K filed with the SEC on [January 30, 2024](#), [March 1, 2024](#), [April 5, 2024](#), [April 26, 2024](#) and [May 1, 2024](#).

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All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus supplement and deemed to be part of this prospectus supplement from the date of the filing of such reports and documents.



\$200,000,000

**Common Shares
Warrants
Units**

We may offer and issue from time to time common shares or warrants or any combination of those securities, either individually or in units, up to an aggregate initial offering price of \$200,000,000, in one or more transactions under this prospectus. The securities may be offered in amounts, at prices and on terms to be determined based on market conditions at the time of sale and set forth in an accompanying prospectus supplement.

This prospectus provides you with a general description of the securities that we may offer. Each time we offer securities, we will provide you with a prospectus supplement that describes specific information about the particular securities being offered and may add, update or change information contained or incorporated by reference in this prospectus. You should read both this prospectus and the applicable prospectus supplement, together with the additional information that is incorporated by reference into this prospectus and the applicable prospectus supplement.

Our common shares are listed on the Nasdaq Capital Market ("NASDAQ") under the symbol "APTO" and on the Toronto Stock Exchange under the symbol "APS". On October 20, 2022, the closing price of our common shares on NASDAQ was \$0.48 per share and on the Toronto Stock Exchange was C\$0.66 per share.

Investing in our securities involves a high degree of risk. You should carefully read the '[Risk Factors](#)' section of this prospectus beginning on page 2.

These securities have not been approved or disapproved by the Securities and Exchange Commission ("SEC") or any state securities regulatory authority, nor has the SEC or any state securities regulatory authority passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is October 21, 2022.

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement that we have filed with the SEC utilizing a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus, either individually or in units, in one or more offerings up to an aggregate initial offering price of \$200,000,000.

This prospectus provides you with a general description of the securities that we may sell under this prospectus. Each time we sell securities, we may also provide a prospectus supplement that may include, where applicable, specific information about the terms of that offering. If there is any inconsistency between the information in this prospectus and any applicable prospectus supplement, you should rely on the information in the prospectus supplement. Where required by statute, regulation or policy, and where securities are offered in currencies other than U.S. dollars, appropriate disclosure of foreign exchange rates applicable to those securities will be included in the prospectus supplement describing those securities.

We may also prepare free writing prospectuses to describe the terms of particular sales of securities, which terms may vary from those described in any prospectus supplement. You therefore should carefully review any free writing prospectus in connection with your review of this prospectus and any applicable prospectus supplement.

Please carefully read both this prospectus and any prospectus supplement, together with the documents incorporated by reference into this prospectus and any prospectus supplement, and the additional information described below under “Where You Can Find Additional Information”. This prospectus contains summaries of certain provisions contained in some of the documents described in this prospectus, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to in this prospectus have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under “Where You Can Find Additional Information”.

You should rely only on the information contained in or incorporated by reference into this prospectus and any prospectus supplement. We have not authorized anyone to provide you with different information. The distribution or possession of this prospectus in or from certain jurisdictions may be restricted by law. This prospectus is not an offer to sell any securities and is not soliciting an offer to buy securities in any jurisdiction where the offer or sale is not permitted or where the person making the offer or sale is not qualified to do so or to any person to whom it is not permitted to make such offer or sale. The information contained in this prospectus is accurate only as of the date of this prospectus and any information incorporated by reference into this prospectus is accurate only as of the date of the applicable document incorporated by reference, regardless of the time of delivery of this prospectus or of any sale of the securities. Our business, financial condition, results of operations and prospects may have changed since that date.

As used in this prospectus and in any prospectus supplement, unless the context otherwise requires, the terms “Aptose,” the “Company,” “we,” “us,” and “our” refer to Aptose Biosciences Inc., and, unless the context requires otherwise, the subsidiaries through which it conducts business.

The complete mailing address and telephone number of our principal executive officers is:

Aptose Biosciences Inc.
251 Consumers Road, Suite 1105
Toronto, Ontario, Canada M2J 4R3
(647) 479-9828

Unless stated otherwise or if the context otherwise requires, all references to dollar amounts in this prospectus and any prospectus supplement are references to U.S. dollars.

RISK FACTORS

An investment in our securities involves a significant degree of risk. You should carefully consider the risk factors and all of the other information included in this prospectus, any prospectus supplement, the documents we have incorporated by reference into this prospectus and any prospectus supplement, and in any related free writing prospectus, including those in Item 1A “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus and that are incorporated by reference into this prospectus, in evaluating an investment in our securities. If any of these risks were actually to occur, our business, financial condition or results of operations could be materially adversely affected. When we offer and sell any securities pursuant to a prospectus supplement, we may include in the applicable prospectus supplement additional risk factors relevant to those securities.

FORWARD-LOOKING STATEMENTS

This prospectus, including the documents incorporated by reference herein, 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 prospectus and, including any documents incorporated by reference herein, include, among others, statements regarding our future operating results, economic performance and product development efforts and statements in respect of:

The forward-looking statements contained in this prospectus and in the documents incorporated by reference 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. 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 lack of product revenues and net losses and a history of operating losses;
- 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;
- our need to raise substantial additional capital in the future and that we may be unable to raise such funds when needed and on acceptable terms;
- 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;

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- clinical studies are long, expensive and uncertain processes and the United States Food and Drug Administration, or “FDA”, or other similar foreign regulatory agency that we are required to report to, may ultimately not approve any of our product candidates;
- our operations could be adversely affected by events outside of our control, such as natural disasters, wars or health crises such as the COVID-19 pandemic;
- our ability to comply with applicable governmental 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;
- 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 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 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;
- potential adverse U.S. federal tax consequences for U.S. shareholders because we are a “passive foreign investment company”;
- our “smaller reporting company” status;

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- any failures to maintain an effective system of internal controls 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 under the heading “Risk Factors” in this prospectus and in the documents incorporated by reference.

Should one or more of these risks or uncertainties materialize, or should the assumptions described in the sections entitled “Risk Factors” in this prospectus and in the documents incorporated by reference underlying those forward-looking statements prove incorrect, actual results may vary materially from those described in the forward-looking statements.

More detailed information about these and other factors is included in this prospectus under the section entitled “Risk Factors” and in the documents incorporated by reference into this prospectus. 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 to be as 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.

Forward-looking statements contained in this prospectus are made as of the date of this prospectus. Forward-looking statements made in a document incorporated by reference into this prospectus are made as of the date of the original document and have not been updated by us except as expressly provided for in this prospectus.

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. **We qualify all the forward-looking statements contained in this prospectus and the documents incorporated by reference in this prospectus by the foregoing cautionary statements.**

ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated under the laws of Canada. Many of our directors and officers and the experts named in this prospectus are residents of countries other than the United States, and all or a substantial portion of their assets and some of our assets are located outside the United States. We have appointed Aptose Biosciences U.S. Inc. as our agent for service of process in the United States, but it may be difficult for holders of securities who reside in the United States to effect service within the United States upon those directors, officers and experts who are not residents of the United States. Additionally, it may not be possible for you to enforce judgments obtained in U.S. courts based upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States. In addition, there is doubt as to whether an original action could be brought in Canada against us or our directors or officers based solely upon U.S. federal or state securities laws and as to the enforceability in Canadian courts of judgments of U.S. courts obtained in actions based upon the civil liability provisions of U.S. federal or state securities laws.

APTOSE BIOSCIENCES INC.

This summary does not contain all the information about us that may be important to you. Please carefully read both this prospectus and any prospectus supplement together with the additional information contained in or incorporated by reference into this prospectus and any prospectus supplement.

Aptose Biosciences Inc. is a science-driven biotechnology company advancing first-in-class targeted agents to treat life-threatening cancers, such as acute myeloid leukemia (“AML”), high-risk myelodysplastic syndromes (“MDS”), chronic lymphocytic leukemia (“CLL”) and other hematologic malignancies. Based on insights into the genetic and epigenetic profiles of certain cancers and patient populations, Aptose is building a pipeline of novel oncology therapies directed at dysregulated processes and signaling pathways. Aptose is developing targeted medicines for precision treatment of these diseases to optimize efficacy and quality of life by minimizing the side effects associated with conventional therapies. We currently have in development two molecules: luxetpinib (CG-806), and HM43239, both being evaluated for safety, tolerability, pharmacokinetics and signals of efficacy in Phase 1 clinical trials, and a third clinical asset available for partnering (APTO-253). Each molecule is described below.

HM43239 is an oral potent myeloid kinase inhibitor, targeting a constellation of kinases operative in myeloid malignancies and known to be involved in tumor proliferation, resistance to therapy, and differentiation. HM43239 is currently being evaluated in an international Phase 1/2 dose-escalation clinical trial designed to assess the safety, tolerability, pharmacokinetics and pharmacodynamic responses of HM43239 as a single agent in patients with relapsed or refractory AML.

Luxetpinib is a novel, oral, highly potent lymphoid and myeloid kinase inhibitor that selectively targets defined clusters of kinases operative in myeloid and lymphoid hematologic malignancies. This small molecule anticancer agent is currently being evaluated in a Phase 1a/b study for the treatment of patients having B-cell malignancies including classic CLL, small lymphocytic lymphoma and certain non-Hodgkin’s lymphomas that are resistant/refractory/intolerant to other therapies. Under a separate Investigational New Drug, luxetpinib is being evaluated in a Phase 1a/b study for the treatment of patients with relapsed/refractory AML or high risk MDS. It is hoped luxetpinib can serve patients across lymphoid and myeloid malignancies and combine well with other agents to extend its application to multiple lines of therapy.

APTO-253 is a small molecule MYC oncogene inhibitor at the Phase 1a/b clinical trial stage of development for the treatment of patients with relapsed or refractory blood cancers, including AML and high-risk MDS. The clinical program was discontinued effective December 20, 2021, following a prioritization of the Company’s other more advanced pipeline assets. We were incorporated under the *Business Corporations Act* (Ontario) on September 5, 1986 under the name RML Medical Laboratories Inc. On October 28, 1991, we amalgamated with Mint Gold Resources Ltd., which caused us to become a reporting issuer in Ontario. On August 25, 1992, we changed our name to IMUTEC Corporation. On November 27, 1996, we changed our name to Imutec Pharma Inc., and on November 19, 1998, we changed our name to Lorus Therapeutics Inc. On October 1, 2005, we continued under the *Canada Business Corporations Act* and on July 10, 2007 we completed a plan of arrangement and corporate reorganization with, among others, 6650309 Canada Inc., 6707157 Canada Inc. and Pinnacle International Lands, Inc. On May 25, 2010, we consolidated our outstanding common shares on the basis of one post-consolidation common share for each 30 pre-consolidation common shares.

On August 28, 2014 we changed our name from Lorus Therapeutics Inc. to Aptose Biosciences Inc. and on October 1, 2014 we consolidated our outstanding common shares on the basis of one post-consolidation common share for each twelve pre-consolidation common shares.

We have two subsidiaries: Aptose Biosciences U.S. Inc., a corporation incorporated under the laws of Delaware; and NuChem Pharmaceuticals Inc., a corporation incorporated under the laws of Ontario, Canada. Aptose Biosciences Inc. owns 100% of the issued and outstanding voting share capital of Aptose Biosciences U.S. Inc., and 80% of the issued and outstanding voting share capital of NuChem Pharmaceuticals Inc.

Our head, registered and records office is located at 251 Consumers Road, Suite 1105, Toronto, Ontario, Canada, M2J 4R3. Our executive office is located at 12770 High Bluff Drive, Suite 120, San Diego, CA 92130. We maintain a website at www.aptose.com. Information contained on our website is not part of this prospectus.

USE OF PROCEEDS

Unless otherwise specified in a prospectus supplement, the net proceeds that we receive from the sale of our securities will be used for working capital and general corporate purposes, including, but not limited to, progressing our research and development programs, and supporting our clinical programs and manufacturing activities.

More specific allocations may be included in a prospectus supplement relating to a specific offering of securities. All expenses relating to an offering of securities and any compensation paid to underwriters, dealers or agents, as the case may be, will be paid out of our general funds, unless otherwise stated in the applicable prospectus supplement.

DESCRIPTION OF SHARE CAPITAL

The descriptions below of our share capital, warrants and related information are summaries and are qualified by reference to documents incorporated by reference to the registration statement of which this prospectus is a part.

Authorized Capital

Our authorized share capital consists of an unlimited number of common shares, no par value, of which 92,294,734 were issued and outstanding as at October 20, 2022. None of our common shares are held by us or on our behalf.

Common Shares

The holders of our common shares are entitled to receive notice of and to attend and vote at all annual and special meetings of our shareholders. Our common shares carry one vote per common share and do not have cumulative voting rights. The holders of our common shares are entitled, at the discretion of our board of directors, to receive out of any or all of our profits or surplus properly available for the payment of dividends, any dividend declared by the board of directors and payable by us on our common shares. The holders of our common shares will participate on a pro rata basis in any distribution of our remaining property upon our liquidation, dissolution or winding-up or any other return of capital or distribution of our assets among our shareholders for the purpose of winding up our affairs.

Dividend Policy

We have not paid any dividends since our incorporation. At the discretion of our board of directors, we will consider paying dividends in the future as our operational circumstances may permit, having regard to, among other things, our earnings, cash flow and financial requirements. It is the current policy of our board of directors to retain all earnings to finance our business plan.

Description of Warrants

The following description of the terms of warrants provides some general terms and provisions of warrants in respect of which a prospectus supplement may be filed. This summary is not complete. The particular terms and provisions of warrants offered by any prospectus supplement, and the extent to which the general terms and provisions described below may apply to them, will be described in the applicable prospectus supplement. Warrants may be offered separately or in combination with common shares.

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The description of general terms and provisions of warrants described in any prospectus supplement will include, but is not limited to, where applicable:

- the designation and aggregate number of warrants offered;
- the price at which the warrants will be offered;
- the currency or currencies in which the warrants are denominated;
- the number of common shares that may be purchased on the exercise of the warrants and conditions and procedures that will result in an adjustment of that number;
- the exercise price of the warrants and the dates or periods during which the warrants are exercisable;
- any minimum or maximum amount of warrants that may be exercised at any one time;
- any terms, procedures and limitations relating to the transferability, exchange or exercise of the warrants; and
- any other material terms of the warrants.

If the warrants are issued pursuant to warrant agreements or warrant indentures, we will so specify in the prospectus supplement relating to the warrants being offered pursuant to the prospectus supplement. We will file any warrant agreement or warrant indenture with the SEC and incorporate them by reference as an exhibit to the registration statement of which this prospectus is a part, on or before the time we issue a series of warrants.

Each warrant will entitle the holder to acquire such number of common shares at such exercise price and in accordance with such terms as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the warrants offered by the prospectus supplement. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the prospectus supplement relating to the warrants offered thereby. After the close of business on the expiration date, unexercised warrants will become void.

The warrants may be exercised as set forth in the prospectus supplement relating to the warrants offered thereby. Upon receipt of payment and the taking of other action specified in the applicable prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon exercise. If less than all of the warrants represented by such warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Before the exercise of their warrants, holders of warrants will not have any of the rights of holders of common shares. Therefore, holders of warrants will not be entitled, by virtue of being such holders, to vote, consent, receive dividends, receive notice as shareholders with respect to any meeting of shareholders for the election of our directors or any other matter, or to exercise any rights whatsoever as our shareholders. We reserve the right to include in a prospectus supplement specific terms of the warrants that are not within the options and parameters described in this prospectus. In addition, to the extent that any particular terms of the warrants described in a prospectus supplement differ from any of the terms described in this prospectus, the description of those terms included in this prospectus shall be deemed to have been superseded by the description of the differing terms set forth in such prospectus supplement with respect to such warrants.

Description of Units

We may issue units comprised of one or more of the securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement, if any, under which a unit is issued may provide that the securities comprising the unit may not be held or transferred separately, at any time or at any time before a specified date.

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The particular terms and provisions of units offered by any prospectus supplement, and the extent to which the general terms and provisions described below may apply thereto, will be described in the prospectus supplement filed in respect of such units. This description will include, where applicable:

- the designation and aggregate number of units offered;
- the price at which the units will be offered;
- the currency or currencies in which the units are denominated;
- the terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- the number of securities that may be purchased upon exercise of each unit and the price at which the currency or currencies in which that amount of securities may be purchased upon exercise of each unit;
- any provisions for the issuance, payment, settlement, transfer, adjustment or exchange of the units or of the securities comprising the units; and
- any other material terms of the units.

We reserve the right to set forth in a prospectus supplement specific terms of the units that are not within the options and parameters set forth in this prospectus. In addition, to the extent that any particular terms of the units described in a prospectus supplement differ from any of the terms described in this prospectus, the description of such terms set forth in this prospectus shall be deemed to have been superseded by the description of the differing terms set forth in such prospectus supplement with respect to such units.

GLOBAL SECURITIES

Book-Entry, Delivery and Form

Unless we indicate differently in any applicable prospectus supplement or free writing prospectus, the securities initially will be issued in book-entry form and represented by one or more global notes or global securities, or, collectively, global securities. The global securities will be deposited with, or on behalf of, The Depository Trust Company, New York, New York, or DTC, as depository, and registered in the name of Cede & Co., the nominee of DTC. Unless and until it is exchanged for individual certificates evidencing securities under the limited circumstances described below, a global security may not be transferred except as a whole by the depository to its nominee or by the nominee to the depository, or by the depository or its nominee to a successor depository or to a nominee of the successor depository.

DTC has advised us that it is:

- a limited-purpose trust company organized under the New York Banking Law;
- a “banking organization” within the meaning of the New York Banking Law;
- a member of the Federal Reserve System;
- a “clearing corporation” within the meaning of the New York Uniform Commercial Code; and
- a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934.

DTC holds securities that its participants deposit with DTC. DTC also facilitates the settlement among its participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in participants’ accounts, thereby eliminating the need for physical movement of securities certificates. “Direct participants” in DTC include securities brokers and dealers, including

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underwriters, banks, trust companies, clearing corporations and other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation, or DTCC. DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others, which we sometimes refer to as indirect participants, that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly. The rules applicable to DTC and its participants are on file with the SEC.

Purchases of securities under the DTC system must be made by or through direct participants, which will receive a credit for the securities on DTC's records. The ownership interest of the actual purchaser of a security, which we sometimes refer to as a beneficial owner, is in turn recorded on the direct and indirect participants' records. Beneficial owners of securities will not receive written confirmation from DTC of their purchases. However, beneficial owners are expected to receive written confirmations providing details of their transactions, as well as periodic statements of their holdings, from the direct or indirect participants through which they purchased securities. Transfers of ownership interests in global securities are to be accomplished by entries made on the books of participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates representing their ownership interests in the global securities, except under the limited circumstances described below.

To facilitate subsequent transfers, all global securities deposited by direct participants with DTC will be registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of securities with DTC and their registration in the name of Cede & Co. or such other nominee will not change the beneficial ownership of the securities. DTC has no knowledge of the actual beneficial owners of the securities. DTC's records reflect only the identity of the direct participants to whose accounts the securities are credited, which may or may not be the beneficial owners. The participants are responsible for keeping account of their holdings on behalf of their customers.

So long as the securities are in book-entry form, you will receive payments and may transfer securities only through the facilities of the depository and its direct and indirect participants. We will maintain an office or agency in the location specified in the prospectus supplement for the applicable securities, where notices and demands in respect of the securities and the indenture may be delivered to us and where certificated securities may be surrendered for payment, registration of transfer or exchange.

Conveyance of notices and other communications by DTC to direct participants, by direct participants to indirect participants and by direct participants and indirect participants to beneficial owners will be governed by arrangements among them, subject to any legal requirements in effect from time to time.

Redemption notices will be sent to DTC. If less than all of the securities of a particular series are being redeemed, DTC's practice is to determine by lot the amount of the interest of each direct participant in the securities of such series to be redeemed.

Neither DTC nor Cede & Co. (or such other DTC nominee) will consent or vote with respect to the securities. Under its usual procedures, DTC will mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those direct participants to whose accounts the securities of such series are credited on the record date, identified in a listing attached to the omnibus proxy.

So long as securities are in book-entry form, we will make payments on those securities to the depository or its nominee, as the registered owner of such securities, by wire transfer of immediately available funds. If securities are issued in definitive certificated form under the limited circumstances described below and unless if otherwise provided in the description of the applicable securities herein or in the applicable prospectus supplement, we will have the option of making payments by check mailed to the addresses of the persons entitled

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to payment or by wire transfer to bank accounts in the United States designated in writing to the applicable trustee or other designated party at least 15 days before the applicable payment date by the persons entitled to payment, unless a shorter period is satisfactory to the applicable trustee or other designated party.

Redemption proceeds, distributions and dividend payments on the securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit direct participants' accounts upon DTC's receipt of funds and corresponding detail information from us on the payment date in accordance with their respective holdings shown on DTC records. Payments by participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with securities held for the account of customers in bearer form or registered in "street name." Those payments will be the responsibility of participants and not of DTC or us, subject to any statutory or regulatory requirements in effect from time to time. Payment of redemption proceeds, distributions and dividend payments to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC, is our responsibility, disbursement of payments to direct participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of direct and indirect participants.

Except under the limited circumstances described below, purchasers of securities will not be entitled to have securities registered in their names and will not receive physical delivery of securities. Accordingly, each beneficial owner must rely on the procedures of DTC and its participants to exercise any rights under the securities and the indenture.

The laws of some jurisdictions may require that some purchasers of securities take physical delivery of securities in definitive form. Those laws may impair the ability to transfer or pledge beneficial interests in securities.

DTC may discontinue providing its services as securities depository with respect to the securities at any time by giving reasonable notice to us. Under such circumstances, in the event that a successor depository is not obtained, securities certificates are required to be printed and delivered.

As noted above, beneficial owners of a particular series of securities generally will not receive certificates representing their ownership interests in those securities. However, if:

- DTC notifies us that it is unwilling or unable to continue as a depository for the global security or securities representing such series of securities or if DTC ceases to be a clearing agency registered under the Securities Exchange Act of 1934 at a time when it is required to be registered and a successor depository is not appointed within 90 days of the notification to us or of our becoming aware of DTC's ceasing to be so registered, as the case may be;
- we determine, in our sole discretion, not to have such securities represented by one or more global securities; or
- an event of default has occurred and is continuing with respect to such series of securities,

we will prepare and deliver certificates for such securities in exchange for beneficial interests in the global securities. Any beneficial interest in a global security that is exchangeable under the circumstances described in the preceding sentence will be exchangeable for securities in definitive certificated form registered in the names that the depository directs. It is expected that these directions will be based upon directions received by the depository from its participants with respect to ownership of beneficial interests in the global securities.

Euroclear, Clearstream and CDS

If so provided in the applicable prospectus supplement, you may hold interests in a global security through the Canadian Depository for Securities, which we refer to as "CDS", Clearstream Banking S.A., which we refer

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to as “Clearstream,” or Euroclear Bank S.A./N.V., as operator of the Euroclear System, which we refer to as “Euroclear,” either directly if you are a participant in CDS, Clearstream or Euroclear or indirectly through organizations which are participants in CDS, Clearstream or Euroclear. CDS, Clearstream and Euroclear will hold interests on behalf of their respective participants through customers’ securities accounts in the names of CDS, Clearstream and Euroclear, respectively, on the books of their respective U.S. depositaries (if applicable), which in turn will hold such interests in customers’ securities accounts in such depositaries’ names on DTC’s books.

CDS, Clearstream and Euroclear are securities clearance systems in Canada (CDS) and Europe (Clearstream and Euroclear). CDS, Clearstream and Euroclear hold securities for their respective participating organizations and facilitate the clearance and settlement of securities transactions between those participants through electronic book-entry changes in their accounts, thereby eliminating the need for physical movement of certificates.

Payments, deliveries, transfers, exchanges, notices and other matters relating to beneficial interests in global securities owned through CDS, Euroclear or Clearstream must comply with the rules and procedures of those systems. Transactions between participants in CDS, Euroclear or Clearstream, on one hand, and other participants in DTC, on the other hand, are also subject to DTC’s rules and procedures.

Investors will be able to make and receive through CDS, Euroclear and Clearstream payments, deliveries, transfers and other transactions involving any beneficial interests in global securities held through those systems only on days when those systems are open for business. Those systems may not be open for business on days when banks, brokers and other institutions are open for business in the United States.

Cross-market transfers between participants in DTC, on the one hand, and participants in CDS, Euroclear or Clearstream, on the other hand, will be effected through DTC in accordance with the DTC’s rules on behalf of CDS, Euroclear or Clearstream, as the case may be, by their respective U.S. depositaries (if applicable); however, such cross-market transactions will require delivery of instructions to CDS, Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (if applicable) of such system. CDS, Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements and if applicable, deliver instructions to its U.S. depository to take action to effect final settlement on its behalf by delivering or receiving interests in the global securities through DTC, and making or receiving payment in accordance with normal procedures for same-day fund settlement. If applicable, participants in CDS, Euroclear or Clearstream may not deliver instructions directly to their respective U.S. depositaries.

Due to time zone differences, the securities accounts of a participant in Euroclear or Clearstream purchasing an interest in a global security from a direct participant in DTC will be credited, and any such crediting will be reported to the relevant participant in Euroclear or Clearstream, during the securities settlement processing day (which must be a business day for Euroclear or Clearstream) immediately following the settlement date of DTC. Cash received in Euroclear or Clearstream as a result of sales of interests in a global security by or through a participant in Euroclear or Clearstream to a direct participant in DTC will be received with value on the settlement date of DTC but will be available in the relevant Euroclear or Clearstream cash account only as of the business day for Euroclear or Clearstream following DTC’s settlement date.

Other

The information in this section of this prospectus concerning DTC, CDS, Clearstream, Euroclear and their respective book-entry systems has been obtained from sources that we believe to be reliable, but we do not take responsibility for this information. This information has been provided solely as a matter of convenience. The rules and procedures of DTC, CDS, Clearstream and Euroclear are solely within the control of those organizations and could change at any time. Neither we nor the trustee nor any agent of ours or of the trustee has any control over those entities and none of us takes any responsibility for their activities. You are urged to

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contact DTC, CDS, Clearstream and Euroclear or their respective participants directly to discuss those matters. In addition, although we expect that DTC, CDS, Clearstream and Euroclear will perform the foregoing procedures, none of them is under any obligation to perform or continue to perform such procedures and such procedures may be discontinued at any time. Neither we nor any agent of ours will have any responsibility for the performance or nonperformance by DTC, CDS, Clearstream and Euroclear or their respective participants of these or any other rules or procedures governing their respective operations.

PLAN OF DISTRIBUTION

We may sell securities to or through underwriters or dealers, and also may sell securities to one or more other purchasers directly or through agents, including sales pursuant to ordinary brokerage transactions and transactions in which a broker-dealer solicits purchasers. Underwriters may sell securities to or through dealers. Each prospectus supplement for a particular offering of securities will set forth the terms of the offering, including:

- the name or names of any underwriters, dealers, or agents;
- the purchase price of, and form of consideration for, the securities and the proceeds to us;
- any delayed delivery arrangements;
- any underwriting commissions, fees, discounts and other items constituting underwriters' compensation;
- the offering price for the securities (or the manner of determination of the offering price if offered on an non-fixed price basis);
- any discounts or concessions allowed or re-allowed or paid to dealers;
- the expected delivery date of the sale of the offered securities; and
- any securities exchanges on which the securities may be listed.

The securities may be sold, from time to time, in one or more transactions at a fixed price or prices that may be changed or at market prices prevailing at the time of sale, at prices related to such prevailing market prices, at varying prices determined at the time of sale, or at negotiated prices, including sales made directly on NASDAQ or other existing trading markets for the securities. We may engage in at-the-market offerings of our securities. The prices at which the securities may be offered may vary as between purchasers and during the period of distribution. If, in connection with the offering of securities at a fixed price or prices, the underwriters have made a *bona fide* effort to sell all of the securities at the initial offering price fixed in the applicable prospectus supplement, the public offering price may be decreased and thereafter further changed, from time to time, to an amount not greater than the initial public offering price fixed in such prospectus supplement, in which case the compensation realized by the underwriters will be decreased by the amount that the aggregate price paid by purchasers for the securities is less than the gross proceeds paid by the underwriters to us.

Underwriters, dealers and agents who participate in the distribution of the securities may be entitled under agreements to be entered into with us to indemnification by us against certain liabilities, including liabilities under the Securities Act of 1933, or to contribution with respect to payments that such underwriters, dealers or agents may be required to make in respect thereof. Such underwriters, dealers and agents may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

In connection with any offering of securities, other than an at-the-market offering, the underwriters may over-allot or effect transactions that stabilize or maintain the market price of the securities offered at a level above that which might otherwise prevail in the open market. Such transactions, if commenced, may be discontinued at any time.

MATERIAL INCOME TAX CONSIDERATIONS

The applicable prospectus supplement may describe material U.S. federal income tax consequences of the acquisition, ownership and disposition of any of the securities offered by this prospectus by an investor who is subject to U.S. federal taxation.

The applicable prospectus supplement may also describe material Canadian federal income tax considerations generally applicable to investors described therein of purchasing, holding and disposing of the applicable securities, including, in the case of an investor who is not a resident of Canada, Canadian non-resident withholding tax considerations.

LEGAL MATTERS

Unless otherwise specified in a prospectus supplement, certain legal matters relating to the securities will be passed upon for us by Dorsey & Whitney LLP, Vancouver, B.C., and Denver, Colorado, with respect to matters of United States law, and McCarthy Tétrault LLP, Toronto, Ontario, with respect to matters of Canadian law.

EXPERTS

Our consolidated financial statements as of December 31, 2021 and December 31, 2020 and for each of the years in the two-year period ended December 31, 2021, have been audited by KPMG LLP as set forth in their report dated March 22, 2022 thereon and incorporated herein by reference.

Such consolidated financial statements have been incorporated by reference herein in reliance upon the report of KPMG LLP, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We are subject to the information requirements of the Securities Exchange Act of 1934 and, accordingly, we file reports with and furnish other information to the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act of 1933 with respect to the securities offered by this prospectus. This prospectus does not contain all of the information contained in the registration statement that we filed. For further information regarding us and the securities covered by this prospectus, you may desire to review the full registration statement, including its exhibits. The registration statement, including its exhibits, as well as the documents that we file with the SEC, may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling 1-800-SEC-0330. Copies of such materials are also available by mail from the Public Reference Branch of the SEC at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. In addition, the SEC maintains a website (<http://www.sec.gov>) from which interested persons can electronically access the registration statement, including the exhibits to the registration statement.

INCORPORATION BY REFERENCE

The SEC allows us to “incorporate by reference” information we file with the SEC. This means that we can disclose important information to you by referring you to those documents.

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We incorporate by reference into this prospectus the documents listed below:

- (a) our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on [March 22, 2022](#);
- (b) our Definitive Proxy Statement on Schedule 14A for our 2022 Annual Meeting of the Shareholders held on May 31, 2022, filed with the SEC on [April 20, 2022](#);
- (c) our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2022 and June 30, 2022, filed with the SEC on, respectively [May 9, 2022](#) and [August 2, 2022](#);
- (d) our Current Reports on Form 8-K filed on [April 11, 2022](#), [May 2, 2022](#), [May 31, 2022](#), [June 28, 2022](#), [July 22, 2022](#), and [September 16, 2022](#); and
- (e) the description of our common shares contained in Exhibit 4.1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, filed with the SEC on [March 22, 2022](#), including any amendments or reports for the purpose of amending such description.

In addition, all documents filed by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, after the date of this prospectus but before the termination of the offering of the securities covered by this prospectus, are hereby incorporated by reference into this prospectus.

We have not authorized anyone to provide you with any different or additional information other than that contained in or incorporated by reference into this prospectus. We take no responsibility for, and can provide no assurance as to the reliability of, any information that others may provide.

Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

The documents incorporated by reference into this prospectus are available from us upon request. We will provide a copy of any and all of the information that is incorporated by reference into this prospectus to any person, including a beneficial owner, to whom a prospectus is delivered, without charge, upon written or oral request. If exhibits to the documents incorporated by reference into this prospectus are not themselves specifically incorporated by reference in this prospectus, then the exhibits will not be provided.

Requests for any of these documents should be directed to:

Investor Relations
Aptose Biosciences Inc.
251 Consumers Road, Suite 1105
Toronto, Ontario, Canada M2J 4R3
(647) 479-9828

1,800,000 Common Shares

2,055,000 Pre-Funded Warrants to Purchase up to 2,055,000 Common Shares

Common Shares Underlying the Pre-Funded Warrants



PROSPECTUS

H.C. Wainwright & Co.

May 30, 2024
