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Registration No. 333-221783

PROSPECTUS

Aptose Biosciences Inc.

6,041,567 Common Shares

This prospectus relates to the sale, from time to time, of up to 6,041,567 of our common shares by the selling shareholder, Aspire Capital Fund, LLC, an Illinois limited liability company, or "***Aspire Capital***." Aspire Capital is also referred to in this prospectus as the selling shareholder. The prices at which the selling shareholder may sell the shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive proceeds from the sale of the shares by the selling shareholder. However, we may receive proceeds of up to $15,500,000 from the sale of our common shares to the selling shareholders, pursuant to a common shares purchase agreement entered into with the selling shareholder on October 27, 2017 (referred to as the "***Purchase Agreement***"). Under the terms of the Purchase Agreement, on October 31, 2017, Aspire Capital made an initial purchase of 357,143 common shares at a price of $1.40 per share, representing gross proceeds of approximately $500,000.

Aspire Capital is an "***underwriter***" within the meaning of Section 2(a)(11) of the United States Securities Act of 1933, as amended, or the "***Securities Act***." Aspire Capital may sell the common shares described in this prospectus in a number of different ways and at varying prices. See "Plan of Distribution" for more information about how Aspire Capital may sell the common shares being registered pursuant to this prospectus. We will pay the expenses incurred in registering the common shares to which this prospectus relates, including legal and accounting fees. See "Plan of Distribution."

Our common shares are listed on Toronto Stock Exchange, which we refer to as the "TSX" under the symbol "APS" and the Nasdaq Capital Market under the symbol "APTO." On December 28, 2017, the last reported sale price per share of our common shares was CDN$2.84 per share on the TSX and $2.25 per share on the Nasdaq Capital Market.

You should read this prospectus and any prospectus supplement, together with additional information described under the headings "Incorporation of Certain Documents by Reference" and "Where You Can Find More Information," carefully before you invest in any of our securities.

We are an "emerging growth company" as defined under the federal securities laws and, as such, are subject to reduced public company reporting requirements. See "Prospectus Summary—Implications of Being an "Emerging Growth Company" and a Foreign Private Issuer."

Investing in our common shares involves a high degree of risk. See "Risk Factors" beginning on page 9.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is December 29, 2017

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PRESENTATION OF FINANCIAL AND OTHER INFORMATION

Our financial statements and other financial information are prepared in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board, or "***IFRS***", in Canadian dollars. None of our consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles, and our financial statements may therefore not be comparable to financial statements of Untied States companies.

In this prospectus, the terms "dollar" or "$" refer to US dollars, and CDN$ refers to Canadian dollars. Unless otherwise indicated, all references to currency amounts in this prospectus are in US dollars.

We have made rounding adjustments to some of the figures included in this prospectus. Accordingly, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that preceded them.

EXCHANGE RATES

The following table sets forth: (i) the rates of exchange for Canadian dollars, expressed in United States dollars, in effect at the end of the periods indicated; (ii) the average exchange rates in effect during such periods; (iii) the high rate of exchange in effect during such periods; and (iv) the low rate of exchange in effect during such periods, in each case, based on the rates of exchange for conversion of one Canadian dollar to United States dollars as reported by the Bank of Canada and, in the case of rates for 2017, based on the daily average exchange rate reported by the Bank of Canada as being in effect at approximately 4:30 p.m. (Eastern time) on each trading day.

On December 21, 2017, the rate of exchange was CDN$1.00 = $0.7852.

	Nine Months Ended September 30,	Year Ended December 31,		
	2017	2016	2015	2014
End of Period	$ 0.8013	$0.7448	$0.7225	$0.8620
Average	$ 0.7649	$0.7550	$0.7821	$0.9053
High	$ 0.8245	$0.7977	$0.8511	$0.9399
Low	$ 0.7276	$0.6869	$0.7161	$0.8579

FORWARD-LOOKING STATEMENTS

This prospectus contains statements that constitute forward-looking statements, including statements concerning our industry, our operations, our anticipated financial performance and financial condition, and our business plans and growth strategy and product development efforts. These statements constitute forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended. The words "may," "might," "will," "should," "estimate," "project," "plan," "anticipate," "expect," "intend," "outlook," "believe" and other similar expressions are intended to identify forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates. These forward-looking statements are based on estimates and assumptions by our management that, although we believe to be reasonable, are inherently uncertain and subject to a number of risks and uncertainties. Such statements include, but are not limited to, statements relating to:

- ability to obtain the substantial capital we require to fund research and operations;
- our business strategy;
- our clinical development plans;
- our plans to secure strategic partnerships to assist in the further development of our product candidates and to build our pipeline;
- our plans to conduct clinical trials andpre-clinical programs;
- our reliance on external contract research/manufacturing organizations for certain activities;

- our expectations regarding the progress and the successful and timely completion of the various stages of our drug discovery, pre-clinical and clinical studies and the regulatory approval process;

The forward-looking statements 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;
- clinical studies are long, expensive and uncertain processes and the FDA or Health Canada 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;
- 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 "emerging growth 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 status as a foreign private issuer may limit the information which would be publicly available to our shareholders;
- our broad discretion in how we use the proceeds of the sale of the common shares to Aspire Capital pursuant to the Purchase Agreement;
- 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 quarterly filings, annual information forms, annual reports and annual filings with Canadian securities regulators and the United States Securities and Exchange Commission, and those which are discussed under the heading "***Risk Factors***" in this document.

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 our Annual Report on Form 20-F for the fiscal year ended December 31, 2016 underlying those forward-looking statements prove incorrect, actual results may vary materially from those described in the forward-looking statements. These forward-looking statements are made as of the date of this prospectus or, in the case of documents incorporated by reference into this prospectus, as of the date of those documents, and we do not intend, and do not assume any obligation, to update these forward-looking statements, except as required by law. We cannot assure you that our forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in the forward-looking statements. Forward-looking statements are not guarantees of future performance, and accordingly undue reliance should not be placed upon forward-looking statements.

SUMMARY

This summary highlights certain information about us, this offering and selected information contained in the prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common shares. For a more complete understanding of our company and this offering, we encourage you to read and consider the more detailed information in the prospectus and the documents incorporated by reference into this prospectus, including "Risk Factors" and the financial statements and related notes. Unless we specify otherwise, all references in this prospectus to "Aptose," "we," "our," "us" and "our company" refer to Aptose Biosciences, Inc. and the subsidiaries through which it conducts its business.

Company Overview

Aptose is a science-driven biotechnology company advancing highly differentiated agents to treat unmet medical needs in life-threatening cancers, such as acute myeloid leukemia, or "AML", high-risk myelodysplastic syndromes, or "MDS", and other hematologic malignancies. Based on insights into the genetic and epigenetic profiles of certain cancers and patient populations, we are building a pipeline of novel and targeted oncology therapies directed at dysregulated processes and signaling pathways in cancer cells, and this strategy is intended to optimize efficacy and quality of life by minimizing the cytotoxic side effects associated with conventional therapies and minimize the emergence of drug resistance. Our product pipeline includes cancer drug candidates that exert potent activity as stand-alone agents and that enhance the activities of other anticancer agents without causing overlapping toxicities. Indeed, we believe our targeted products can emerge as first-in-class or best-in-class agents that deliver single agent benefit and may serve as part of a combination therapeutic strategy for specific populations of cancer patients.

We believe the future of cancer treatment and management lies in the prospective selection and treatment of patients having genotype-specific malignancies that are genetically or epigenetically predisposed to response based on a drug's unique mechanism of action. We are of the view that many drugs currently approved for the treatment and management of cancer are not selective for the specific genetic alterations (targets) that cause the patient's tumor and hence lead to significant toxicities due to off-target effects. Aptose's strategy is to develop agents that target underlying disease-promoting mutations or altered pathways within a patient population, and we intend to apply this strategy across several therapeutic indications in oncology, including hematologic malignancies and solid tumor indications, particularly those cancers that offer orphan drug designation opportunities.

We have a clinical-stage program, a late preclinical stage program, and a third program that is discovery-stage and positioned for partnering. Aptose'span-FLT3 / BTK program, CG'806, is currently in preclinical development and moving toward Investigational New Drug, or "***IND***" submission, with anticipation of commencing a Phase 1 trial during 2018. APTO-253 is our second program and at the Phase 1b clinical stage for the treatment of patients with relapsed / refractory blood cancers, including AML and high-risk MDS, under an IND allowed by the United States Food and Drug Administration to evaluate APTO-253 as a therapeutic agent dosed on a weekly administration schedule for the treatment of certain hematologic malignancies. The APTO-253 program has received orphan drug designation from the FDA for the treatment of AML, and is currently on clinical hold while attempts are made to manufacture a newly formulated and stable clinical supply.

As noted above, we are committed to the development of anticancer drugs that target aberrant oncologic signaling processes that underlie a particular life-threatening malignancy. This targeted approach is intended to impact the disease-causing events in cancer cells without affecting normal processes within cells. Such an approach requires that we first identify critical underlying oncogenic mechanisms in cancer cells and then develop a therapeutic that selectively impacts such oncogenic mechanisms. As a multi-kinase pan-FLT3 / pan-BTK inhibitor, CG'806 targets multiple critical pathways that overlap to lead to the proliferation of cancer cells, including theB-cell receptor signaling pathways (drive certain B cell malignancies) and FLT3 receptor pathways (drive AML) that converge at various points in the signaling cascade. Further, we created the APTO-253 small molecule targeted drug that inhibits expression of the c-Myc oncogene and is under development as a novel therapy for AML and the related MDS.

In June 2016, we announced an exclusive global option and license agreement focused on the development of CG'806. CG'806 is a highly potenfirst-in-class pan-FLT3 / pan-BTK inhibitor. This small molecule therapeutic agent, exhibits a picomolar IC50 toward theFMS-like tyrosine kinase 3 with the Internal Tandem Duplication(FLT3-ITD) mutation and significant potency against other mutant forms of FLT3 and the wild type form of FLT3.

Because of the potency of CG'806 against the FLT3 enzyme, it may become an effective therapy for AML patients, including the subset of patients having the FLT3-ITD, which occurs in approximately 30% of patients with AML and is associated with poor prognosis. Importantly, CG'806 targets the wild type and all mutant types of FLT3, as well as other oncogenic kinases which are operative in AML. Consequently, CG'806 has potential to treat a broad range of AML patients, including the difficult-to-treat genotype-specific AML patient population having altered FLT3.

In addition to potent inhibition of wild type and mutant forms of the FLT3 enzyme, CG'806 is a highly potent, reversible,non-covalent inhibitor of the wild type and mutant forms of the BTK enzymes. Overexpression of BTK drives certain B cell malignancies, including chronic lymphocytic leukemia, or "CLL", mantle cell lymphoma, or "MCL", diffuse large B cell lymphoma, or "DLBCL", and others. Treatment of such B cell malignancies with covalent BTK inhibitors that target the cysteine residue in the active site of BTK can lead to drug resistance via mutation of the cysteine amino acid residue to a serine residue (BTK-C481S mutant). CG'806 targets the ATP-binding pocket of BTK through a reversible, non-covalent mechanism, thereby allowing CG'806 to retain low nM potency against theBTK-C481S mutant enzyme. In addition, CG'806 inhibits other kinase driven oncogenic pathways (BTK, ERK, AURK, FLT3 and others) on which the malignant B cells depend. Thus, CG'806 may serve as a novel therapeutic agent to treat B cell malignancy patients that are refractory, resistant or intolerant to covalent BTK inhibitors.

APTO-253, our second therapeutic program, is a small molecule therapeutic agent that inhibits expression of thec-Myc oncogene without causing general myelosuppression of the healthy bone marrow, and APTO-253 is currently allowed for development to treat AML in a Phase Ib trial under an IND with the FDA. Thec-Myc oncogene is overexpressed in hematologic cancers, including AML. C-Myc is a transcription factor that regulates cell growth, proliferation, differentiation and apoptosis, and overexpression amplifies new sets of genes to promote oncogenesis. APTO-253 dramatically down-regulates expression of the c-Myc oncogene in AML cells and depletes those cells of the c-Myc oncoprotein, leading to apoptotic cell death in AML cells. Thus,APTO-253 may serve as safe and effectivec-Myc inhibitor for AML that combines well with other agents and does not impact the normal bone marrow.

Corporate Information

Our principal office is located at 5955 Airport Road, Suite 228, Mississauga, Ontario, Canada, L4V 1R9 and our phone number is (647)479-9828. We maintain a website at www.aptose.com where general information about us is available. Investors can obtain copies of our filings with the Securities and Exchange Commission from this site free of charge, as well as from the SEC website at www.sec.gov. The contents of our website are not incorporated by reference into this prospectus.

Recent Developments

CG'806

We have invested significant time, effort and capital to create a scalable synthetic route for the manufacture of CG'806 drug substance, to develop an oral formulation for clinical development, and to study the actions of CG'806 in various preclinical biological pathway studies. We now have solved the synthetic route, have manufactured okg levels of API, and have initiated in-life preclinical pharmacokinetic, Dose Range Finding Studies and toxicology studies. Likewise, we also reported that we selected the oral formulation that we intend to take into first-in-human clinical trials. Provided the studies continue on the anticipated timeline, we expect to initiate afirst-in-human clinical trial during 2018, and greater granularity on the timing of the IND submission and clinical trial will be provided in the coming months. CG'806 is being developed with the intent to deliver the agent as an oral therapeutic and to develop it in parallel for AML and for appropriate B cell malignancies (likely CLL).

On May 7, 2017, we presented preclinical data for ourpan-FLT3/pan-BTK inhibitor CG'806 at the 2017 American Association for Cancer Research, or "AACR", Conference for Hematologic Malignancies: Translating Discoveries to Novel Therapies in Boston, MA. Two separate presentations highlighting CG'806 were presented. In one presentation, our scientists, with researchers from the Knight Cancer Institute at Oregon Health & Science University, or "OHSU", presented data relating to the potency of CG'806 against samples derived from patients with various hematologic malignancies. In a separate presentation, our scientists, with researchers from the MD Anderson Cancer Center, presented data demonstrating CG'806's potent activity against AML cells harboring wild type or specific mutant forms of FLT3.

On August 4, 2017 we received a notice from the United States Patent and Trademark Office (the "***USPTO***") stating that our U.S. Patent Application is allowed for issuance as a patent. The allowed application claims numerous compounds, including the CG'806 compound, pharmaceutical compositions comprising the CG'806 compound, and methods of treating various diseases caused by abnormal or uncontrolled activation of protein kinases. The notice of allowance is not a grant of patent rights and although it is uncommon, the USPTO can withdraw the allowed application from issuance.

We announced on November 1, 2017, five abstracts related to the mechanistic properties of CG'806 in AML cells and in B cell malignancy cells have been accepted for publication by the 2017 Meeting of the American Society of Hematology, or "ASH", and three of the abstracts will be presented in three posters during the meeting. These presentations demonstrate that CG'806 is a true pan-FLT3 inhibitor that inhibits the wild type and all mutant forms of FLT3, making the agent potentially useful across the entire disease spectrum of AML patients. In addition, the presentations show that CG'806 is synergistic in combination with venetoclax (bcl2 inhibitor), as well as cytaribine and idarubicin (1L chemo agents for treatment of AML), thereby positioning CG'806 to serve as a key component of combination therapy for AML patients.

APTO-253

Clinical Hold and Current Status

In 2016, our Phase Ib trial for APTO-253 was placed on clinical hold in order to solve a chemistry-based formulation issue, and the chemistry of the API and the formulation had undergone minor modifications to deliver a stable and soluble drug product for return to the clinical setting. In December 2016, we announced that we had successfully manufactured multiple non-GMP batches of a new drug product formulation for APTO-253, including a batch that had been stable and soluble for over six months. However, the 40L batch that was the intended clinical supply encountered an unanticipated mishap during the filling process that compromised the stability of that batch of drug product. On January 23, 2017, we announced that the root cause and corrective action studies would take longer than originally expected and that we would temporarily delay clinical activities with APTO-253 in order to elucidate the cause of manufacturing setback, with the intention of restoring the molecule to a state supporting clinical development and partnering. Formal root cause analyses studies have now been completed and we have identified the mishap that resulted in drug product stability failure, and we have established a corrective and prevention action plan for the manufacture of future batches of drug product that avoid the earlier mishap. Given these findings, we plan to manufacture a new clinical supply of drug product, perform all of the anticipated studies required to demonstrate fitness of the drug product for clinical usage, and then present the findings to the FDA with the hope of having the clinical hold removed and returning APTO-253 to the clinical trial. Although the Company expects the clinical supply to perform favorably and the clinical hold to be lifted during the first half of 2018, there can be no assurance that the FDA will remove the clinical hold.

Finally, two abstracts related to the mechanistic properties of APTO-253 were submitted to the 2017 Meeting of ASH and accepted for publication on the ASH abstracts website.

THE OFFERING

*This summary highlights information presented in greater detail elsewhere in this prospectus. This summary is not complete and does not contain all the information you should consider before investing in our common shares. You should carefully read this entire prospectus before investing in our common shares including the section entitled "**Risk Factors**," our consolidated financial statements and the documents incorporated herein.*

Common shares offered by the selling shareholder:	Up to 6,041,567 common shares.
Common shares outstanding:	27,049,724 (as of November 22, 2017)
Use of proceeds:	The selling shareholder will receive all of the proceeds from the sale of the shares offered for sale by it under this prospectus. We will not receive proceeds from the sale of the shares by the selling shareholder. However, we may receive up to $15,500,000 in proceeds from the sale of our common shares to the selling shareholder under the Purchase Agreement. Any proceeds from the selling shareholder that we receive under the Purchase Agreement are expected be used to fund our growth plans, for working capital, and for other general corporate purposes, including capital expenditures related to our research and development activities.
Toronto Stock Exchange symbol:	"APS"
Nasdaq Capital Market symbol:	"APTO"
Risk factors:	An investment in our securities involves risk. Before you invest in our securities, you should carefully consider the risks involved. Accordingly, you should carefully consider the information contained in or incorporated by reference into this prospectus, including the risks described below and in our Annual Report on Form 20-F for the fiscal year ended December 31, 2016, which is incorporated by reference into this prospectus. The discussion of risks related to our business contained in or incorporated by reference into this prospectus comprises material risks of which we are aware. If any of the events or developments described actually occurs, our business, financial condition or results of operations would likely be adversely affected.

On October 27, 2017, we entered into the Purchase Agreement with Aspire Capital, which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $15,500,000 of our common shares over the approximately thirty-month term of the Purchase Agreement. In consideration for entering into the Purchase Agreement, concurrently with the execution of the Purchase Agreement, we issued to Aspire Capital 321,429 common shares as a commitment fee (referred to in this prospectus as the "***Commitment Shares***"). Upon execution of the Purchase Agreement, the Company agreed to sell to Aspire Capital 357,143 common shares (referred to in this prospectus as the "***Initial Purchase Shares***"), at $1.40 per share for proceeds of $500,000. Concurrently with entering into the Purchase Agreement, we also entered into a registration rights agreement with Aspire Capital (referred to in this prospectus as the "***Registration Rights Agreement***"), in which we agreed to file one or more registration statements, including the registration statement of which this prospectus is a part, as permissible and necessary to register under the Securities Act, the sale of the common shares that have been and may be issued to Aspire Capital under the Purchase Agreement.

As of November 22, 2017, there were 26,371,152 common shares outstanding (26,063,870 shares held bynon-affiliates) excluding the 678,572 shares offered that have been issued to Aspire Capital pursuant to the Purchase Agreement. If all of such the 6,041,567 common shares offered hereby were issued and outstanding as of the date hereof, such shares would represent 23% of the total common shares outstanding or 23% of the non-affiliate shares of common shares outstanding as of the date hereof. The number of common shares ultimately offered for sale by Aspire Capital is dependent upon the number of shares purchased by Aspire Capital under the Purchase Agreement.

Pursuant to the Purchase Agreement and the Registration Rights Agreement, we have registered 6,041,567 common shares under the Securities Act, which includes the Commitment Shares and the Initial Purchase Shares that have already been issued to Aspire Capital and 5,362,995 common shares which we may issue to Aspire Capital. All 6,041,567 common shares are being offered pursuant to this prospectus.

On December 29, 2017, the conditions necessary for purchases under the Purchase Agreement to commence were satisfied. On any trading day on which the closing sale price of our common shares is not less than $0.25 per share, we have the right, in our sole discretion, to present Aspire Capital with a purchase notice (each, a "**Purchase Notice**"), directing Aspire Capital (as principal) to purchase up to 200,000 common shares per trading day, up to $15,500,000 of our common shares in the aggregate at a per share price, or the "Purchase Price", calculated by reference to the prevailing market price of our common shares (as more specifically described below).

In addition, on any date on which we submit a Purchase Notice for 200,000 shares to Aspire Capital, we also have the right, in our sole discretion, to present Aspire Capital with a volume-weighted average price purchase notice, or a "**VWAP Purchase Notice**", directing Aspire Capital to purchase a number of common shares equal to up to 30% of our aggregate common shares traded on Nasdaq Capital Market on the next trading day, or the "**VWAP Purchase Date**", subject to a maximum number of shares we may determine, which we refer to as the "**VWAP Purchase Share Volume Maximum**", and a minimum trading price, or the "**VWAP Minimum Price Threshold**" (as more specifically described below). The purchase price per Purchase Share pursuant to such VWAP Purchase Notice, or the "**VWAP Purchase Price**", is calculated by reference to the prevailing market price of our common shares (as more specifically described below).

The Purchase Agreement provides that we and Aspire Capital shall not effect any sales under the Purchase Agreement on any purchase date where the closing sale price of our common shares is less than $0.25 per share, which we refer to as the "**Floor Price**". This Floor Price and the respective prices and share numbers in the preceding paragraphs shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction. There are no trading volume requirements or restrictions under the Purchase Agreement, and we will control the timing and amount of any sales of our common shares to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future fundings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. Aspire Capital may not assign its rights or obligations under the Purchase Agreement. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us. The Purchase Agreement may be terminated by Aspire Capital in case of default by us. The TSX has approved the transaction, but under no circumstance shall we issue, or make issuable, more than 6,041,567 common shares in aggregate, without shareholder approval.

RISK FACTORS

An investment in our securities involves risk. Before you invest in our securities, you should carefully consider the risks involved. Accordingly, you should carefully consider the information contained in or incorporated by reference into this prospectus, including the risks described below and in our Annual Report on Form 20-F for the fiscal year ended December 31, 2016, which is incorporated by reference into this prospectus. The discussion of risks related to our business contained in or incorporated by reference into this prospectus comprises material risks of which we are aware. If any of the events or developments described actually occurs, our business, financial condition or results of operations would likely be adversely affected.

Risks Related to our Business

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

We have not been profitable since our inception in 1986. We reported net losses of CDN$10.9 million in the nine months ended September 30, 2017, CDN$18.7 million in the fiscal year ended December 31, 2016, CDN$14.6 million in the fiscal year ended December 31, 2015, CDN$7.8 million in the 7 months ended December 31, 2014 and CDN$10.6 million in the fiscal year ended May 31, 2014, and as of September 30, 2017, we had an accumulated deficit of CDN$262 million.

We have not generated any significant revenue to date and it is possible that we will never have sufficient product sales revenue (if any) to achieve profitability. We expect to continue to incur losses for at least the next several years as we or our collaborators and licensees pursue clinical trials and research and development efforts. To become profitable, we, either alone or with our collaborators and licensees, must successfully develop, manufacture and market our current product candidates APTO-253 or CG'806 as well as continue to identify, develop, manufacture and market new product candidates. It is possible that we will never have significant product sales revenue or receive royalties on our licensed product candidates. If funding is insufficient at any time in the future, we may not be able to develop or commercialize our products, take advantage of business opportunities or respond to competitive pressures.

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

We are an early stage development company.

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

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

Our product candidates require significant funding to reach regulatory approval assuming positive clinical results. For example, our clinical candidate APTO-253 began enrolment in a Phase I clinical trial in patients with relapsed or refractory hematologic malignancies and was placed on clinical hold by the FDA following a voluntary suspension of dosing by us. We are currently working with the FDA to have such hold lifted but significant additional funding or a partnership will be necessary to complete, if required, Phase II or Phase III clinical trials. Such funding for our product candidates may be difficult, or impossible to raise in the public or private markets or through partnerships. If funding or partnerships are not readily attainable, the development of our product candidates may be significantly delayed or stopped altogether. The announcement of a delay or discontinuation of development would likely have a negative impact on our share price.

We need to raise additional capital.

We have an ongoing need to raise additional capital. To obtain the necessary capital, we must rely on some or all of the following: additional share issues, debt issuances (including promissory notes), collaboration agreements or corporate partnerships and grants and tax credits to provide full or partial funding for our activities. Additional funding may not be available on terms that are acceptable to us or in amounts that will enable us to carry out our business plan.

Our need for capital may require us to:

- engage in equity financings that could result in significant dilution to existing investors;
- delay or reduce the scope of or eliminate one or more of our development programs;
- obtain funds through arrangements with collaborators or others that may require us to relinquish rights to technologies, product candidates or products that we would otherwise seek to develop or commercialize ourselves;
- license rights to technologies, product candidates or products on terms that are less favorable to us than might otherwise be available;
- utilize investigator-sponsored or government-sponsored clinical trials that are not under our control;
- collaborate with academic groups that have the ability to publish findings with our product candidates without our ability to prevent such publications;
- considerably reduce operations; or
- cease our operations.

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

We cannot predict whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Our product development costs will increase if we experience delays in clinical testing. Significant clinical trial delays could shorten any periods during which we may have the exclusive right to commercialize our product candidates or allow our competitors to bring products to market before us, which would impair our ability to successfully commercialize our product candidates and may harm our financial condition, results of operations and prospects. The recommencement and completion of clinical trials for our products, including the APTO-253 phase I clinical trial and the IND submission for CG'806, may be delayed for a number of reasons, including delays related, but not limited, to:

- failure by regulatory authorities to grant permission to proceed or placing the clinical trial on hold;
- patients failing to enroll or remain in our trials at the rate we expect;
- suspension or termination of clinical trials by regulators for many reasons, including concerns about patient safety or failure of our contract manufacturers to comply with cGMP requirements;
- any changes to our manufacturing process that may be necessary or desired;
- delays or failure to obtain GMP-grade clinical supply from contract manufacturers of our products necessary to conduct clinical trials;
- product candidates demonstrating a lack of safety or efficacy during clinical trials;
- patients choosing an alternative treatment for the indications for which we are developing any of our product candidates or participating in competing clinical trials;
- patients failing to complete clinical trials due to dissatisfaction with the treatment, side effects or other reasons;
- reports of clinical testing on similar technologies and products raising safety and/or efficacy concerns;
- competing clinical trials and scheduling conflicts with participating clinicians;
- clinical investigators not performing our clinical trials on their anticipated schedule, dropping out of a trial, or employing methods not consistent with the clinical trial protocol, regulatory requirements or other third parties not performing data collection and analysis in a timely or accurate manner;
- failure of our contract research organizations, or CROs, to satisfy their contractual duties or meet expected deadlines;

- inspections of clinical trial sites by regulatory authorities or Institutional Review Boards, or IRBs, or ethics committees finding regulatory violations that require us to undertake corrective action, resulting in suspension or termination of one or more sites or the imposition of a clinical hold on the entire study;
- one or more IRBs or ethics committees rejecting, suspending or terminating the study at an investigational site, precluding enrollment of additional subjects, or withdrawing its approval of the trial; or
- failure to reach agreement on acceptable terms with prospective clinical trial sites.

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

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

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

We contracted with multiple CMOs for the manufacture of APTO-253 and CG'806 to supply drug supply and then drug product for our clinical trials. The synthesis of CG'806 drug supply is challenging from a scale-up synthetic chemistry perspective. The formulation and manufacture of APTO-253 is a complex process with many variables involved. We pre-qualified CMOs to have the capacity, the systems and the experience to supply CG'806 and APTO-253 for our clinical trials. We have qualified the manufacturing facilities and the FDA has also performed site audits for our selected CMOs. In spite of the efforts to prequalify CMOs, delays and errors may occur, and any such manufacturing failures, delays or compliance issues could cause delays in the completion of our clinical trial programs.

There can be no assurances that CMOs will be able to meet our timetable and requirements. We have contracted with alternate suppliers in the event our current CMOs are unable to scale up production, or if our current CMOs otherwise experience any other significant problems in the manufacture of CG'806 and APTO-253. However, it is possible that all third-party manufacturing sources may experience failure or delays and may demand commercially unreasonable terms, which may lead to further delays in the development of our product candidates. Further, contract manufacturers must operate in compliance with cGMP and failure to do so could result in, among other things, the disruption of product supplies. Our dependence upon third parties for the manufacture of our products may adversely affect our profit margins and our ability to develop and deliver products on a timely and competitive basis.

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

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

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

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

Our preclinical studies and clinical trials may not generate positive results that will allow us to move towards the commercial use and sale of our product candidates. Furthermore, negative preclinical or clinical trial results may cause our business, financial condition, or results of operations to be materially adversely affected. For example, our Phase Ib clinical trial of APTO-253 in patients with AML was placed on clinical hold by the FDA in November 2015 and since that time the Company has encountered manufacturing setbacks which have further delayed the return of APTO-253 to the clinic. There can be no assurance that the clinical hold will be lifted by the FDA, that the Company will have the resources, or that we will decide, to continue the development of APTO-253. Even if the Phase Ib of APTO-253 is continued, there is a long development path ahead that will take many years to complete and is prone to the risks of failure or delays inherent in drug development. Likewise, our CG'806 product candidate has not yet entered clinical trials and it is expected to undergo many years of testing and regulatory examinations prior to any potential regulatory approvals.

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

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

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

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

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

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

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

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

- size and nature of the patient population;
- eligibility and exclusion criteria for the trial;

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

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

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

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

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

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

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

We are subject to exchange rate risk, which could expose us to currency exchange losses.

We are exposed to fluctuations of the United States dollar against certain other currencies because we hold most of our cash and cash equivalents in US dollars, while we incur some of our expenses in foreign currencies, primarily the Canadian dollar. Fluctuations in the value of currencies could cause us to incur currency exchange losses. We do not currently employ a hedging strategy against exchange rate risk. We cannot assert with any assurance that we will not suffer losses as a result of unfavorable fluctuations in the exchange rates between the Canadian dollar, the United States dollar and other currencies.

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

We may in the future seek to expand our pipeline and capabilities by acquiring one or more companies or businesses, entering into collaborations or in-licensing one or more product candidates. For example, in June 2016, we entered into a definitive agreement with South Korean company, CrystalGenomics, Inc., or "CG", granting Aptose an exclusive option to research, develop and commercialize CG026806, or "CG'806", in all countries of the world except Korea and China, for all fields of use.

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

- substantial cash expenditures;
- technology development risks;
- potentially dilutive issuances of equity securities;
- incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;
- difficulties in assimilating the operations of the acquired companies;
- potential disputes regarding contingent consideration;
- diverting our management's attention away from other business concerns;
- entering markets in which we have limited or no direct experience;
- potential loss of our key employees or key employees of the acquired companies or businesses; and
- failure of the in-licenses agents or technologies to deliver the desired activities or functions.

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

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

From time to time, studies or clinical trials on various aspects of biopharmaceutical products are conducted by academic researchers, competitors or others. The results of these studies or trials, when published, may have a significant effect on the market for the biopharmaceutical product that is the subject of the study. The publication of negative results of studies or clinical trials or adverse safety events related to our product candidates, or the therapeutic areas in which our product candidates compete, could adversely affect our share price and our ability to finance future development of our product candidates, and our business and financial results could be materially and adversely affected.

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

Many of our competitors have:

- drug products that have already been approved or are in development, and operate large, well-funded research and development programs in the biotechnical and pharmaceutical fields;
- substantially greater financial, technical and management resources, stronger intellectual property positions and greater manufacturing, marketing and sales capabilities, areas in which we have limited or no experience; and
- significantly greater experience than we do in undertaking preclinical testing and clinical trials of new or improved pharmaceutical products and obtaining required regulatory approvals.

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

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

Any product candidate that we develop and that obtains regulatory approval must then compete for market acceptance and market share. Our products may not gain market acceptance among physicians, patients, healthcare payers, insurers, the medical community and other stakeholders. Further, any products we develop may become obsolete before we recover any expenses we incurred in connection with the development of these products. As a result, we may never achieve profitability.

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

Patent protection

The patent positions of pharmaceutical and biotechnology companies are uncertain and involve complex legal and factual questions. The USPTO and many other patent offices in the world have not established a consistent policy regarding the breadth of claims that they will allow in biotechnology patents.

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

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

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

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

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

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

Enforcement of intellectual property rights

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

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

We may incur substantial cost in defending our intellectual property.

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

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

Our success also depends on avoiding infringement of the proprietary technologies of others. In particular, there may be certain issued patents and patent applications claiming subject matter which we or our collaborators may be required to license in order to research, develop or commercialize APTO-253 or CG'806. In addition, third parties may assert infringement or other intellectual property claims against us. An adverse outcome in these proceedings could subject us to significant liabilities to third-parties, require disputed rights to be licensed from third-parties or require us to cease or modify our use of the technology. If we are required to license third-party technology, a license under such patents and patent applications may not be available on acceptable terms or at all. Further, we may incur substantial costs defending ourselves in lawsuits against charges of patent infringement or other unlawful use of another's proprietary technology. We may also need to bring claims against others who we believe are infringing our rights in order to become or remain competitive and successful. Any such claims can be time consuming and expensive to pursue.

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

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

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

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

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

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

If we cannot negotiate collaboration, license or partnering agreements, we may never achieve profitability and we may not be able to continue to develop our product candidates. Continuing Phase Ib, and commencing Phase II and Phase III clinical trials for APTO-253 would require significant amounts of funding and such funding may not be available to us.

We are subject to extensive government regulation which may increase our costs or cause delays.

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

Requirements for regulatory approval vary widely from country to country. Whether or not approved in Canada or the United States, regulatory authorities in other countries must approve a product prior to the commencement of marketing the product in those countries. The time required to obtain any such approval may be longer or shorter than in Canada or the United States. Approved drugs, as well as their manufacturers, are subject to continuing and ongoing review, and discovery of problems with these products or the failure to adhere to manufacturing or quality control requirements may result in regulatory restrictions being imposed.

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

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

The Company is subject to privacy and security regulations with respect to the use and disclosure of protected health information. Subject to limited exceptions, the regulations restrict our ability to use or disclose patient identifiable information without patient consent for purposes other than treatment or health-care operations. Any breach of our systems that results in personal information being obtained by unauthorized persons could adversely affect our reputation and lead to litigation, fines and liability for failure to comply with privacy and information security laws.

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

Possible U.S. federal income tax reform could adversely affect us.

The new U.S. administration and certain members of the U.S. House of Representatives have stated that one of their top legislative priorities is significant reform of the Code. Proposals by members of Congress have included, among other things, changes to U.S. federal tax rates, imposing significant additional limitations on the deductibility of interest, allowing for the expensing of capital expenditures, the migration of a "worldwide" system of taxation to a territorial system, and the use of certain border adjustments. There is substantial uncertainty regarding both the timing and the details of any such tax reform. The impact of any potential tax reform on Aptose's business and on holders of Aptose's common shares is uncertain and could be adverse. Prospective investors should consult their own tax advisors regarding potential changes in U.S. tax laws.

Risks Related to Our Common Shares

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

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

- our ability to continue as a going concern;
- our ability to raise additional capital;
- the progress of our pre-clinical and clinical trials;
- our ability to obtain partners and collaborators to assist with the future development of our products;
- general market conditions;
- announcements of technological innovations or new product candidates by us, our collaborators or our competitors;
- published reports by securities analysts;
- developments in patent or other intellectual property rights;

- the cash and investments held by us and our ability to secure future financing;
- public concern as to the safety and efficacy of drugs that we and our competitors develop;
- shareholder interest in our common shares; and
- low liquidity in the daily trading volume of our common shares.

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

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

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

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

An active trading market in our common shares may not be sustained.

Our common shares are listed for trading on the Nasdaq Capital Market and the TSX. However, an active trading market in our common shares on the stock exchanges may not be sustained and we may not be able to maintain our listings.

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

We are a corporation existing under the laws of Canada. Some of our directors, and many of the experts named in this prospectus and the documents incorporated by reference into this prospectus, are residents of Canada, and all or a substantial portion of their assets, and a substantial portion of our assets, are located outside the United States. Consequently, although we have appointed an agent for service of process in the United States, it may be difficult for holders of our common shares who reside in the United States to effect service within the United States upon our directors and officers and experts who are not residents of the United States. It may also be difficult for holders of our common shares who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers and experts under the United States federal securities laws. Investors should not assume that Canadian courts (i) would enforce judgments of United States courts obtained in actions against us or our directors, officers or experts predicated upon the civil liability provisions of the United States federal securities laws or the securities or “blue sky” laws of any state within the United States or (ii) would enforce, in original actions, liabilities against us or our directors, officers or experts predicated upon the United States federal securities laws or any such state securities or “blue sky” laws.

We are likely a “passive foreign investment company” which may have adverse U.S. federal income tax consequences for U.S. shareholders.

U.S. investors in our common shares should be aware that the Company believes it was classified as a passive foreign investment company, or “PFIC”, during the tax year ended December 31, 2016 and based on the nature of our business, the projected composition of our gross income and the projected composition and estimated fair market value of our assets, the Company expects to be a PFIC for the current tax year ending December 31, 2017 and may be a PFIC in subsequent tax years. If the Company is a PFIC for any year during a U.S. shareholder’s holding period, then such U.S. shareholder generally will be required to treat any gain realized upon a disposition of common shares, or any so-called “excess distribution” received on its common shares, as ordinary income, and to pay an interest charge on a portion of such gain or distributions, unless the shareholder makes a timely and effective “qualified electing fund” election, or “QEF election”, or a “mark-to-market” election with respect to the common shares. A U.S. shareholder who makes a QEF election generally must report on a current basis its share of the Company’s net capital gain and ordinary earnings for any year in which the Company is a PFIC, whether or not the Company distributes any amounts to its shareholders. However, U.S. shareholders should be aware that we do not intend to satisfy record keeping requirements that apply to a qualified electing fund, and we do not intend to supply U.S. shareholders with information that such U.S. shareholders require to report under the QEF election rules, in the event that we are a PFIC and a U.S. shareholder wishes to make a QEF election. Thus, U.S. shareholders should assume that they will not be able to make a QEF election with respect to their common shares. A U.S. shareholder who makes the mark-to-market election generally must include as ordinary income each year the excess of the fair market value of the common shares over the taxpayer’s basis therein. This paragraph is qualified in its entirety by the discussion below under the heading “Certain United States Federal Income Tax Considerations.” Each U.S. shareholder should consult its own tax advisor regarding the U.S. federal, U.S. local, and foreign tax consequences of the PFIC rules and the acquisition, ownership, and disposition of our common shares.

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common shares less attractive to investors

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012, or the "JOBS Act". For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, not being subject to the SEC's rules for proxy solicitations, not being subject to Section 16 of the Exchange Act, reduced disclosure obligations regarding executive compensation in our periodic reports and exemptions from the requirements of holding a non-binding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We will cease to be an emerging growth company upon the earliest of:

- the last day of the fiscal year during which we have total annual gross revenues of $1,000,000,000 (as such amount is indexed for inflation every five years by the SEC or more);
- the last day of our fiscal year following the fifth anniversary of the completion of our first sale of common equity securities pursuant to an effective registration statement under the Securities Act, which will be in September 2020;
- the date on which we have, during the previous three-year period, issued more than $1,000,000,000 innon- convertible debt; or
- the date on which we are deemed to be a "large accelerated filer", as defined in Rule 12b–2 of the Exchange Act, which would occur if the market value of our common shares and ADSs that are held by non-affiliates exceeds $700,000,000 as of the last day of our most recently-completed second fiscal quarter.

We cannot predict if investors will find our common shares less attractive because we may rely on these exemptions. If some investors find our common shares less attractive as a result, there may be a less active trading market for our common shares and our share price may be more volatile.

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

Section 404(a) of the Sarbanes-Oxley Act requires that our management assess and report annually on the effectiveness of our internal control over financial reporting and identify any material weaknesses in our internal control over financial reporting. Section 404(b) of the Sarbanes-Oxley Act requires an issuer's independent registered public accounting firm to issue an annual report that addresses the effectiveness of the issuer's internal control over financial reporting. However, as an emerging growth company, we are exempt from such auditor attestation requirement.

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

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

As a foreign private issuer, we are not subject to certain United States securities law disclosure requirements that apply to a domestic United States issuer, which may limit the information that would be publicly available to our shareholders.

As a foreign private issuer, we are exempt from certain rules under the Exchange Act that impose disclosure requirements as well as procedural requirements for proxy solicitations under Section 14 of the Exchange Act. In addition, our officers, directors and principal shareholders are exempt from the reporting and "short-swing" profit recovery provisions of Section 16 of the Exchange Act. Moreover, we are not required to file periodic reports and financial statements with the SEC as frequently or as promptly as a company that files as a domestic issuer whose securities are registered under the Exchange Act, nor are we generally required to comply with the SEC's Regulation FD, which restricts the selective disclosure of material non-public information. For as long as we are a "foreign private issuer" we intend to file our annual financial statements on Form 20-F and furnish our quarterly updates on Form 6-K to the SEC for so long as we are subject to the reporting requirements of Section 13(g) or 15(d) of the Exchange Act. However, the information we file or furnish is not the same as the information that is required in annual and quarterly reports on Form 10-K or Form 10-Q for U.S. domestic issuers. Accordingly, there may be less information publicly available concerning us than there is for a company that files as a domestic issuer.

Risks Related to this Offering

We will need to raise substantial additional capital in the future to fund our operations and we may be unable to raise such funds when needed and on acceptable terms.

Our ability to utilize the Purchase Agreement with Aspire Capital as a source of funding will depend on a number of factors, including the prevailing market price of our common shares, the volume of trading in our common shares and continuing the listing of our common stock on the Nasdaq Capital Market or an equivalent stock exchange. The number of shares that we may sell to Aspire Capital under the Purchase Agreement on any given day and during the term of the agreement is limited. See "The Aspire Capital Transaction" section of this prospectus for additional information. Additionally, we and Aspire Capital may not effect any sales of our common shares under the Purchase Agreement during the continuance of an event of default or on any trading day that the closing sale price of our common shares is less than $0.25 per share, but under no circumstances shall we issue, or make issuable, more than 6,041,567 common shares in aggregate. Even if we are able to access the full committed amount of $15,500,000 under the Purchase Agreement, we will still need additional capital to fully implement our business, operating and development plans.

We will have broad discretion in how we use the proceeds, and we may use the proceeds in ways in which you and other shareholders may disagree.

We intend to use the net proceeds we receive from the issuance of common shares to Aspire Capital pursuant to the Purchase Agreement for working capital and general corporate purposes. Our management will have broad discretion in the application of the proceeds from this offering and could spend the proceeds in ways that do not necessarily improve our operating results or enhance the value of our common shares.

The sale of our common shares to Aspire Capital may cause substantial dilution to our existing shareholders and the sale of common shares acquired by Aspire Capital could cause the price of our common shares to decline.

We have registered for sale the Commitment Shares and Initial Purchase Shares that we have issued and 5,362,995 shares that we may sell to Aspire Capital under the Purchase Agreement. It is anticipated that shares registered in this offering will be sold over a period of up to approximately thirty months from the date of this prospectus. The number of shares ultimately offered for sale by Aspire Capital under this prospectus is dependent upon the number of shares we elect to sell to Aspire Capital under the Purchase Agreement. Depending on a variety of factors, including market liquidity of our common shares, the sale of shares under the Purchase Agreement may cause the trading price of our common shares to decline.

Aspire Capital may ultimately purchase all, some or none of the common shares that, together with the Commitment Shares and Initial Purchase Shares (for aggregate value, including the Commitment Shares and Initial Purchase Shares, of up to $15,500,000), is the subject of this prospectus. Aspire Capital may sell all, some or none of our shares that it holds or comes to hold under the Purchase Agreement. Sales by Aspire Capital of shares acquired pursuant to the Purchase Agreement under the registration statement, of which this prospectus is a part, may result in dilution to the interests of other holders of our common shares. The sale of a substantial number of common shares by Aspire Capital in this offering, or anticipation of such sales, could cause the trading price of our common shares to decline or make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise desire. However, we have the right under the Purchase Agreement to control the timing and amount of sales of our shares to Aspire Capital, and the Purchase Agreement may be terminated by us at any time at our discretion without any penalty or cost to us.

USE OF PROCEEDS

This prospectus relates to our common shares that may be offered and sold from time to time by Aspire Capital. We will receive no proceeds from the sale of our common shares by Aspire Capital in this offering. However, we may receive gross proceeds of up to $15,500,000 from Aspire Capital under the Purchase Agreement. We estimate that the net proceeds to us from the sale of our common shares to Aspire Capital pursuant to the Purchase Agreement will be up to $15,353,458 over an approximately 30-month period, assuming that we sell the full amount of our common shares that we have the right, but not the obligation, to sell to Aspire Capital under the Purchase Agreement and other estimated fees and expenses. See "***Plan of Distribution***" elsewhere in this prospectus for more information.

Unless otherwise indicated in the applicable prospectus supplement, information incorporated by reference or free writing prospectus, we expect to use any proceeds that we receive under the Purchase Agreement to fund our growth plans, for working capital, and for other general corporate purposes, including capital expenditures related to our research and development activities.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

Our selected consolidated financial information, including the balance sheets as at December 31, 2016 and 2015, and the statements of operations for the each of the years in the two-year period ended December 31, 2016, and the seven-month period ended December 31, 2014, are included in our Annual Report on Form 20-F for the fiscal year ended December 31, 2016, which is incorporated by reference into this prospectus.

The following table presents a summary of our consolidated statements of operations derived from our audited consolidated financial statements for the fiscal years ended December 31, 2016 and 2015, the seven months ended December 31, 2014 and fiscal years ended May 31, 2014 and 2013.

Consolidated statements of operations data

	Year ended December 31, 2016	Year ended December 31, 2015	Seven months ended December 31, 2014	Year ended May 31, 2014	Year ended May 31, 2013
In accordance with IFRS					
Revenue	CDN$ —	CDN$ —	CDN$ —	CDN$ —	CDN$ —
Research and development	10,322	6,254	2,404	3,015	3,317
General and administrative	8,344	9,845	5,542	7,317	2,272
Operating Expenses	18,666	16,099	7,946	10,332	5,589
Finance expense	66	43	104	297	6
Finance income	(105)	(1,516)	(279)	(76)	(30)
Net earnings (loss)	(18,627)	(14,626)	(7,771)	(10,553)	(5,565)
Foreign currency translation loss	—	—	—	—	—
Comprehensive loss for the period	(18,627)	(14,626)	(7,771)	(10,553)	(5,565)
Basic and diluted loss per Common Share (post-consolidation)	CDN$ (1.46)	CDN$ (1.23)	CDN$ (0.67)	CDN$ (2.02)	CDN$ (1.58)
Weighted average number of common shares outstanding (post)	12,743	11,906	11,605	5,216	3,521

The following table presents a summary of our consolidated balance sheets as at December 31, 2016, 2015 and 2014, May 31, 2014 and 2013.

Consolidated balance sheet data

(in thousands) As at	December 31, 2016	December 31, 2015	December 31, 2014	May 31, 2014	May 31, 2013
Cash and cash equivalents	CDN$10,662	CDN$11,503	CDN$14,365	CDN$19,367	CDN$ 653
Investments	CDN$ —	CDN$ 8,245	CDN$16,180	CDN$11,019	CDN$ —
Total assets	CDN$11,610	CDN$21,249	CDN$31,600	CDN$30,899	CDN$1,035
Total liabilities	CDN$ 1,770	CDN$ 2,356	CDN$ 2,328	CDN$ 2,460	CDN$1,816
Total shareholders' equity (deficit)	CDN$ 9,840	CDN$18,893	CDN$29,272	CDN$28,439	CDN$ (781)
Number of Common Shares outstanding (post-consolidation)	15,721	12,048	11,700	10,338	3,521
Dividends paid on Common Shares	—	—	—	—	—

The following table presents a summary of our consolidated statement of operations for the three and nine months ended September 30, 2017 and 2016. You should read these tables in conjunction with our unaudited consolidated interim financial statements and accompanying notes. The financial data as at September 30, 2017 and for the nine months ended September 30, 2017 and 2016 have been derived from, and are qualified in their entirety by reference to, our unaudited consolidated interim financial statements for those periods, which have been prepared in accordance with IFRS included with the financial statements, and which are included in Exhibit 99.1 to our Report of Foreign Issuer on Form 6-K furnished on November 14, 2017 and incorporated by reference in this prospectus.

Consolidated statements of operations data (unaudited)
(In thousands, except per share data)

	Three months ended September 30, 2017 (unaudited)	Nine months ended September 30, 2017 (unaudited)	Three months ended September 30, 2016 (unaudited)	Nine months ended September 30, 2016 (unaudited)
In accordance with IFRS				
Revenue	CDN$ —	CDN$ —	CDN$ —	CDN$ —
Research and development	1,744	5,501	2,164	7,772
General and administrative	1,652	5,586	1,932	6,883
Operating Expenses	3,396	11,087	4,096	14,665
Finance expense	—	—		138
Finance income	(86)	(181)	(79)	(92)
Net earnings (loss)	3,310	10,906	4,017	14,701
Foreign currency translation loss	531	1,019	—	—
Comprehensive loss for the period	3,841	11,925	4,017	14,701
Basic and diluted loss per common share (post-consolidation)	CDN$ 0.14	CDN$ 0.52	CDN$ 0.31	CDN$ 1.19
Weighted average number of common shares outstanding (post)	24,061	20,954	12,882	12,390

The following table presents a summary of our consolidated balance sheet as at September 30, 2017 and December 31, 2016.

Consolidated balance sheet data
(In Thousands, except for common share data)

	As at September 30, 2017 (unaudited)	As at December 31, 2016
In accordance with IFRS		
Cash and cash equivalents	CDN$ 9,857	CDN$10,662
Investments	CDN$ 3,734	CDN$ —
Total assets	CDN$13,908	CDN$11,610
Total liabilities	CDN$ 1,656	CDN$ 1,770
Total shareholders' equity (deficit)	CDN$12,252	CDN$ 9,840
Number of common shares outstanding	24,730	15,721
Dividends paid on common shares	—	—

CAPITALIZATION AND INDEBTEDNESS

The following provides our capitalization at September 30, 2017 in accordance with IFRS as issued by the IASB.

U.S. dollar amounts included in the determination of the Proforma As Adjusted column in the table below have been translated into Canadian dollars at the exchange rate quoted as of November 22, 2017 by the Bank of Canada**.** Such Canadian dollar amounts are not necessarily indicative of the amounts of Canadian dollars that could actually have been purchased upon exchange of U.S. dollars at the dates indicated.

(in thousands other than securities numbers)(1)	Actual	Proforma As Adjusted(2)
Common shares (unlimited authorized, 24,729,640 issued and outstanding, without par value)	CDN$ 244,705	CDN$ 262,213
Stock options (exchangeable into 2,300,090 common shares)	CDN$ 7,134	CDN$ 7,134
Contributed surplus	CDN$ 23,874	CDN$ 23,874
Accumulated other comprehensive income	CDN$ (1,019)	CDN$ (1,019)
Deficit	CDN$(262,442)	CDN$(262,442)
Total capitalization	CDN$ 12,252	CDN$ 29,760

(1) The table above is based on 24,729,640 common shares outstanding on September 30, 2017.

(2) The Proforma and As Adjusted column reflects 1,641,512 common shares that have been issued under the ATM for the period October 1, 2017 to November 22, 2017 at an average price of $1.51, the 357,143 Initial Purchase shares issued to Aspire Capital at a price of $1.40 as part of the Purchase Agreement and assumes we sell the remaining 5,362,995 common shares that we have the right, but not the obligation, to sell to Aspire Capital under the Purchase Agreement, at a price of $2.05 USD per common share, over a period of 30 months, less estimated share issue costs.

You should read this table in conjunction with our audited consolidated financial statements as at and for the year ended December 31, 2016, which are incorporated by reference in this prospectus along with our unaudited consolidated financial statements for the nine months September 30, 2017, incorporated by reference in this prospectus.

RELATED PARTY TRANSACTIONS

We utilize Moores Cancer Center at the University of California San Diego to provide us with pharmacology lab services. Dr. Stephen Howell is the Acting Chief Medical Officer of Aptose and is also a Professor of Medicine at UCSD and oversees the laboratory work. The work is completed under the terms of research services agreements. In March 2015, we entered into a research services agreement that provided for an annual fee of $154,456 to be paid to UCSD in monthly installments. In February 2016, this research services was extended for an additional 12 month period beginning April 1, 2016 for an annual fee of up to $200,000. In May 2017, we entered into another agreement with UCSD for an additional twelve month period for an annual fee of $300,000. These transactions are in the normal course of business and are measured at the amount of consideration established and agreed to by the related parties.

PRICE RANGE OF OUR COMMON SHARES AND TRADING MARKETS

Our common shares qualified for listing on the Nasdaq Capital Market on October 23, 2014 under the symbol "APTO." "Our common shares began trading on the Nasdaq Capital Market on October 23, 2014. Our shares are also listed on the TSX under the symbol "APS."

The following table sets out the price ranges of our common shares on the TSX for the periods indicated below, as adjusted to reflect the 1 for 12 share consolidation of our common shares that occurred on October 1, 2014.

	TSX (CDN$)	
	High	**Low**
Five most recent full fiscal years:		
Year ended December 31, 2016	5.13	1.12
Year ended December 31, 2015	8.73	3.06
Seven months ended December 31, 2014	9.14	4.80
Year ended May 31, 2014	12.48	2.04
Year ended May 31, 2013	7.68	2.28
Year ended December 31, 2016	5.13	1.12
Quarter ended December 31, 2016	4.02	1.12
Quarter ended September 30, 2016	3.65	2.51
Quarter ended June 30, 2016	5.13	2.80
Quarter ended March 31, 2016	4.21	2.74
Year ended December 31, 2015	8.73	3.06
Quarter ended December 31, 2015	8.33	3.06
Quarter ended September 30, 2015	7.50	5.66
Quarter ended June 30, 2015	8.32	6.40
Quarter ended March 31, 2015	8.73	5.00

	High	**Low**
Most recent six months:		
November 1, 2017 through November 27	2.92	1.95
October 2017	2.07	1.64
September 2017	2.12	1.69
August 2017	2.2	1.69
July 2017	2.19	1.63
June 2017	2.20	1.36
May 2017	1.79	1.16

The following table sets out the price ranges of our common shares on the Nasdaq Capital Market following our listing on October 23, 2014.

Nasdaq Capital Market
(US$)

	High	Low
Three most recent full fiscal years:		
Year ended December 31, 2016	4.30	0.83
Year ended December 31, 2015	6.81	2.17
Seven months ended December 31, 2014		

	High	Low
Year ended December 31, 2016	**4.30**	**0.83**
Quarter ended December 31, 2016	3.20	0.83
Quarter ended September 30, 2016	2.82	1.92
Quarter ended June 30, 2016	4.30	2.12
Quarter ended March 31, 2016	3.41	1.93

	High	Low
Year ended December 31, 2015	6.81	2.17
Quarter ended December 31, 2015	6.40	2.17
Quarter ended September 30, 2015	5.72	4.09
Quarter ended June 30, 2015	6.63	5.01
Quarter ended March 31, 2015	6.81	4.01

	High	Low
Most recent six months		
November 1, 2017 through November 27	2.30	1.50
October 2017	1.61	1.30
September 2017	1.75	1.38
August 2017	1.75	1.36
July 2017	1.75	1.25
June 2017	1.70	1.00
May 2017	1.32	0.86

THE ASPIRE CAPITAL TRANSACTION

General

On October 27, 2017, we entered into the Purchase Agreement which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of $15,500,000 of our common shares over the term of the Purchase Agreement. In consideration for entering into the Purchase Agreement, concurrently with the execution of the Purchase Agreement, we issued to Aspire Capital the Commitment Shares. Upon execution of the Purchase Agreement, we agreed to sell to Aspire Capital 357,143 initial Purchase Shares at a price of $1.40 per share, for proceeds of $500,000. Concurrently with entering into the Purchase Agreement, we also entered into the Registration Rights Agreement, in which we agreed to file one or more registration statements as permissible and necessary to register under the Securities Act, the sale of the shares of our common shares that have been and may be issued to Aspire Capital under the Purchase Agreement.

As of November 22, 2017, there were 26,371,152 common shares outstanding (26,063,870 shares held bynon-affiliates) excluding the 678,572 shares offered that have been issued to Aspire Capital pursuant to the Purchase Agreement. If all of the 6,041,567 common shares offered hereby were issued and outstanding as of the date hereof, such shares would represent 23% of the total common shares outstanding or 23% of the non-affiliate common shares outstanding as of the date hereof. The number of common shares ultimately offered for sale by Aspire Capital is dependent upon the number of shares purchased by Aspire Capital under the Purchase Agreement.

Pursuant to the Purchase Agreement and the Registration Rights Agreement, we have registered 6,041,567 common shares under the Securities Act, which includes the Commitment Shares and Initial Purchase Shares that have already been issued to Aspire Capital and 5,362,995 common shares which we may issue to Aspire Capital. All 6,041,567 common shares are being offered pursuant to this prospectus. Under the Purchase Agreement, we have the right but not the obligation to issue more than the 6,041,567 common shares included in this prospectus to Aspire Capital. As of the date hereof, we do not have any plans or intent to issue to Aspire Capital any common shares in addition to the 6,041,567 common shares offered hereby.

On December 29, 2017, the conditions necessary for purchases under the Purchase Agreement to commence were satisfied. On any trading day on which the closing sale price of our common shares is not less than $0.25 per share, we have the right, in our sole discretion, to present Aspire Capital with a Purchase Notice, directing Aspire Capital (as principal) to purchase up to 200,000 common shares per business day, up to $15,500,000 of our common shares in the aggregate over the term of the Purchase Agreement, at a Purchase Price calculated by reference to the prevailing market price of our common shares over the preceding 10-business day period (as more specifically described below); however, no sale pursuant to a Purchase Notice may exceed $500,000 per trading day.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for 200,000 Purchase Shares, we also have the right, in our sole discretion, to present Aspire Capital with a VWAP Purchase Notice directing Aspire Capital to purchase a number of common shares equal to up to 30% of the aggregate common shares of the Company traded on the Nasdaq Capital Market on the next trading day, subject to the VWAP Purchase Share Volume Maximum and the VWAP Minimum Price Threshold. The VWAP Purchase Price is calculated by reference to the prevailing market price of our common shares (as more specifically described below).

The Purchase Agreement provides that we and Aspire Capital shall not effect any sales under the Purchase Agreement on any purchase date where the closing sale price of our common shares is less than the Floor Price. There are no trading volume requirements or restrictions under the Purchase Agreement, and we will control the timing and amount of any sales of our common shares to Aspire Capital. Aspire Capital has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the Purchase Agreement. There are no limitations on use of proceeds, financial or business covenants, restrictions on future financings, rights of first refusal, participation rights, penalties or liquidated damages in the Purchase Agreement. Aspire Capital may not assign its rights or obligations under the Purchase Agreement. The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

Purchases of Common Shares Under the Common Shares Purchase Agreement

Under the Purchase Agreement, on any trading day selected by us on which the closing sale price of our common shares is not less than $0.25 per share, we may direct Aspire Capital to purchase up to 200,000 common shares per trading day. The Purchase Price of such shares is equal to the lesser of:

- the lowest sale price of our common shares on the purchase date; or
- the arithmetic average of the three lowest closing sale prices for our common shares on the Nasdaq Capital Market (or successor principal market) during the ten consecutive trading days ending on the trading day immediately preceding the purchase date.

In addition, on any date on which we submit a Purchase Notice to Aspire Capital for purchase of 200,000 shares, we also have the right to direct Aspire Capital to purchase a number of common shares equal to up to 30% of the aggregate common shares of the Company traded on the Nasdaq Capital Market on the next trading day, subject to the VWAP Purchase Share Volume Maximum and the VWAP Minimum Price Threshold, which is equal to the greater of (a) 80% of the closing price of our common shares on the business day immediately preceding the VWAP Purchase Date or (b) such higher price as set forth by us in the VWAP Purchase Notice. The VWAP Purchase Price of such shares is the lower of:

- the Closing Sale Price on the VWAP Purchase Date; or
- 97% of the volume-weighted average price for our common shares traded on the Nasdaq Capital Market:
  - on the VWAP Purchase Date, if the aggregate shares to be purchased on that date have not exceeded the VWAP Purchase Share Volume Maximum or
  - during that portion of the VWAP Purchase Date until such time as the sooner to occur of (i) the time at which the aggregate shares traded on the Nasdaq Capital Market exceed the VWAP Purchase Share Volume Maximum or (ii) the time at which the sale price of the Company's common shares falls below the VWAP Minimum Price Threshold.

The TSX has approved the transaction and the Nasdaq Capital Market has completed its review of the listing of the common shares issuable in connection with the transaction, but under no circumstance shall we issue, or make issuable, more than 6,041,567 common shares in aggregate, without shareholder approval.

Maximum Number of Shares

The TSX has approved the transaction, but under no circumstance shall we issue, or make issuable, more than 6,041,567 common shares in aggregate, without shareholder approval.

Minimum Share Price

Under the Purchase Agreement, we and Aspire Capital may not effect any sales of common shares under the Purchase Agreement on any trading day that the closing sale price of our common shares is less than $0.25 per share.

Events of Default

Generally, Aspire Capital may terminate the Purchase Agreement upon the occurrence of any of the following, among other, events of default:

- the effectiveness of any registration statement that is required to be maintained effective pursuant to the terms of the Registration Rights Agreement between us and Aspire Capital lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable to Aspire Capital for sale of common shares, and such lapse or unavailability continues for a period of ten consecutive business days or for more than an aggregate of thirty business days in any 365-day period, which is not in connection with a post-effective amendment to any such registration statement; in connection with any post-effective amendment to such registration statement that is required to be declared effective by the SEC such lapse or unavailability may continue for a period of no more than 40 consecutive business days;
- the suspension from trading or failure of our common shares to be listed on our principal market for a period of three consecutive business days;
- the delisting of our common shares from our principal market (currently the Nasdaq Capital Market), provided our common shares are not immediately thereafter trading on the New York Stock Exchange, the NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Select Market, the Nasdaq Global Market, the OTB Bulletin Board or the OTCQB marketplace or OTCQX marketplace of the OTC Markets Group;

- our transfer agent's failure to issue to Aspire Capital common shares which Aspire Capital is entitled to receive under the Purchase Agreement within five business days after an applicable purchase date;
- any breach by us of the representations or warranties or covenants contained in the Purchase Agreement or any related agreements which could have a material adverse effect on us, subject to a cure period of five business days;
- if we become insolvent or are generally unable to pay our debts as they become due; or
- any participation or threatened participation in insolvency or bankruptcy proceedings by or against us.

Our Termination Rights

The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us.

No Short-Selling or Hedging by Aspire Capital

Aspire Capital has agreed that neither it nor any of its agents, representatives and affiliates shall engage in any direct or indirect short-selling or hedging of our common shares during any time prior to the termination of the Purchase Agreement.

Effect of Performance of the Purchase Agreement on Our Shareholders

The Purchase Agreement does not limit the ability of Aspire Capital to sell any or all of the 6,041,567 common shares registered in this offering. It is anticipated that common shares registered in this offering will be sold over a period of up to approximately thirty months from the date of this prospectus. The sale by Aspire Capital of a significant amount of shares registered in this offering at any given time could cause the market price of our common shares to decline and/or to be highly volatile. Aspire Capital may ultimately purchase all, some or none of the 5,362,995 common shares not yet issued but registered in this offering. After it has acquired such common shares, it may sell all, some or none of such shares. Therefore, sales to Aspire Capital by us pursuant to the Purchase Agreement also may result in substantial dilution to the interests of other holders of our common shares. However, we have the right to control the timing and amount of any sales of our shares to Aspire Capital and the Purchase Agreement may be terminated by us at any time at our discretion without any penalty or cost to us.

Percentage of Outstanding Shares After Giving Effect to the Purchased Shares Issued to Aspire Capital.

In connection with entering into the Purchase Agreement, we authorized the sale to Aspire Capital of up to $15,500,000 of our common shares. However, we estimate that we will sell no more than 5,362,995 shares to Aspire Capital under the Purchase Agreement (exclusive of the Commitment Shares and Initial Purchase Shares), all of which are included in this offering. Subject to any required approval by our board of directors, we have the right but not the obligation to issue more than the 6,041,567 shares included in this prospectus to Aspire Capital under the Purchase Agreement. In the event we elect to issue more than 6,041,567 shares under the Purchase Agreement, we will be required to file a new registration statement and have it declared effective by the SEC. The number of shares ultimately offered for sale by Aspire Capital in this offering is dependent upon the number of shares purchased by Aspire Capital under the Purchase Agreement. The following table sets forth the number and percentage of outstanding shares to be held by Aspire Capital after giving effect to the sale of common shares issued to Aspire Capital at varying purchase prices:

Assumed Average Purchase Price	Proceeds from the Sale of Shares to Aspire Capital Under the Purchase Agreement Registered in this Offering	Number of Shares to be Issued in this Offering at the Assumed Average Purchase Price(1)	Percentage of Outstanding Shares After Giving Effect to the Purchased Shares Issued to Aspire Capital(2)
$0.25	$ 1,340,749.00	5,362,995	*
$0.50	$ 2,681,498.00	5,362,995	16.5%
$1.00	$ 5,362,995.00	5,362,995	16.5%
$1.50	$ 8,044,493.00	5,362,995	16.5%
$2.50	$ 13,407,488.00	5,362,995	16.5%
$5.00	$ 15,000,000.00	3,000,000	10.0%
$10.00	$ 15,000,000.00	1,500,000	5.3%

(1) Excludes 321,429 Commitment Shares and 357,143 Initial Purchase Shares issued under the Purchase Agreement between us and Aspire Capital.

(2) The denominator is based on 27,049,724 shares outstanding as of November 22, 2017, which includes the 678,572 shares previously issued to Aspire Capital and the number of shares set forth in the adjacent column which we would have sold to Aspire Capital. The numerator is based on the number of shares which we may issue to Aspire Capital under the Purchase Agreement (that are the subject of this offering) at the corresponding assumed purchase price set forth in the adjacent column.

SELLING SHAREHOLDER

The selling shareholder may from time to time offer and sell any or all of the common shares set forth below pursuant to this prospectus. When we refer to the "selling shareholder" in this prospectus, we mean the entity listed in the table below, and its respective pledgees, donees, permitted transferees, assignees, successors and others who later come to hold any of the selling shareholder's interests in common shares other than through a public sale.

The following table sets forth, as of the date of this prospectus, the name of the selling shareholder for whom we have registered shares for sale to the public, the number of common shares beneficially owned by the selling shareholder prior to this offering, the total number of common shares that the selling shareholder may offer pursuant to this prospectus and the number of common shares that the selling shareholder will beneficially own after this offering. Except as noted below, the selling shareholder does not have, or within the past three years has not had, any material relationship with us or any of our predecessors or affiliates and the selling shareholder is not or was not affiliated with registered broker-dealers.

Based on the information provided to us by the selling shareholder, assuming that the selling shareholder sells all of the common shares beneficially owned by it that have been registered by us and does not acquire any additional shares during the offering, the selling shareholder will not own any shares other than those appearing in the column entitled "Beneficial Ownership After This Offering." We cannot advise you as to whether the selling shareholder will in fact sell any or all of such common shares. In addition, the selling shareholder may have sold, transferred or otherwise disposed of, or may sell, transfer or otherwise dispose of, at any time and from time to time, the common shares in transactions exempt from the registration requirements of the Securities Act after the date on which it provided the information set forth in the table below.

Name	Shares of Common Stock Owned Prior to this Offering	Shares of Common Stock Being Offered	Beneficial Ownership After this Offering(1)	
			Number of Shares	%(2)(3)(*)
Aspire Capital Fund, LLC(4)	978,572(5)	6,041,567	0	0%

* Represents less than 1% of outstanding shares.

(1) Assumes the sale of common shares registered pursuant to this prospectus, although the selling shareholder is under no obligation known to us to sell any common shares at this time.

(2) Based on 27,049,724 common shares outstanding on November 22, 2017.

(3) Under the terms of the Purchase Agreement, Aspire Capital will limit its share ownership in Aptose to 9.99%.

(4) Aspire Capital Partners LLC ("***Aspire Partners***") is the Managing Member of Aspire Capital Fund LLC ("***Aspire Fund***"). SGM Holdings Corp ("***SGM***") is the Managing Member of Aspire Partners. Mr. Steven G. Martin ("Mr. Martin") is the president and sole shareholder of SGM, as well as a principal of Aspire Partners. Mr. Erik J. Brown ("Mr. Brown") is the president and sole shareholder of Red Cedar Capital Corp ("***Red Cedar***"), which is a principal of Aspire Partners. Mr. Christos Komissopoulos ("Mr. Komissopoulos") is president and sole shareholder of Chrisko Investors Inc. ("***Chrisko***"), which is a principal of Aspire Partners. Each of Aspire Partners, SGM, Red Cedar, Chrisko, Mr. Martin, Mr. Brown, and Mr. Komissopoulos may be deemed to be a beneficial owner of common shares held by Aspire Fund. Each of Aspire Partners, SGM, Red Cedar, Chrisko, Mr. Martin, Mr. Brown, and Mr. Komissopoulos disclaims beneficial ownership of the common shares held by Aspire Fund.

(5) As of the date hereof, 678,572 of our common shares have been acquired by Aspire Capital under the Purchase Agreement, consisting of the Commitment Shares and Initial Purchase Shares and 300,000 of our common shares were acquired by Aspire Capital on the open market. We may elect in our sole discretion to sell to Aspire Capital up to an additional 5,362,995 shares under the Purchase Agreement but Aspire Capital does not presently beneficially own those shares as determined in accordance with the rules of the SEC.

PLAN OF DISTRIBUTION

The common shares offered by this prospectus are being offered by the selling shareholder, Aspire Capital. The common shares may be sold or distributed from time to time by the selling shareholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the common shares offered by this prospectus could be effected in one or more of the following methods:

- ordinary brokers' transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents
- "*at the market*" into an existing market for the common shares;
- in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the registration or qualification requirement is available and complied with.

The selling shareholder may also sell common shares under Rule 144 under the Securities Act, if available, rather than under this prospectus. In addition, the selling shareholder may transfer the common shares by other means not described in this prospectus.

Aspire Capital has informed us that it intends to use an unaffiliated broker-dealer to effectuate all sales, if any, of the common shares that it may purchase from us pursuant to the Purchase Agreement. Such sales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such unaffiliated broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the Securities Act. Aspire Capital has informed us that each such broker-dealer will receive commissions from Aspire Capital that will not exceed customary brokerage commissions.

Brokers, dealers, underwriters or agents participating in the distribution of the common shares as agents may receive compensation in the form of commissions, discounts, or concessions from the selling shareholder and/or purchasers of the common shares for whom the broker-dealers may act as agent. The compensation paid to a particular broker-dealer may be less than or in excess of customary commissions. Neither we nor Aspire Capital can presently estimate the amount of compensation that any agent will receive.

Aspire Capital is an "underwriter" within the meaning of the Securities Act.

Neither we nor Aspire Capital can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between Aspire Capital, any other shareholder, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares offered by this prospectus. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any compensation from the selling shareholder, and any other required information.

We will pay all of the expenses incident to the registration, offering, and sale of the shares to the public other than commissions or discounts of underwriters, broker-dealers, or agents. We have agreed to indemnify Aspire Capital and certain other persons against certain liabilities in connection with the offering of common shares offered hereby, including liabilities arising under the Securities Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Aspire Capital has agreed to indemnify us against liabilities under the Securities Act that may arise from certain written information furnished to us by Aspire Capital specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the Securities Act and is therefore, unenforceable.

Aspire Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common shares during the term of the Purchase Agreement.

We have advised Aspire Capital that while it is engaged in a distribution of the shares included in this prospectus it is required to comply with Regulation M promulgated under the Exchange Act. With certain exceptions, Regulation M precludes the selling shareholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby this prospectus.

We may suspend the sale of shares by Aspire Capital pursuant to this prospectus for certain periods of time for certain reasons, including if the prospectus is required to be supplemented or amended to include additional material information.

This offering will terminate on the date that all shares offered by this prospectus have been sold by Aspire Capital.

DESCRIPTION OF SHARE CAPITAL

We are authorized to issue an unlimited number of common shares, no par value. As of November 22, 2017, we had 27,049,724 common shares issued and outstanding.

The holders of our common shares are entitled to one vote per share at meetings of shareholders, to receive such dividends as declared by us and to receive our remaining property and assets upon dissolution or winding up. Our common shares are not subject to any future call or assessment and there are no pre-emptive, conversion or redemption rights attached to such common shares.

The transfer agent for our common shares in Canada is Computershare Investor Services Inc. at its principal office in Toronto, Canada.

Common Shares

On October 27, 2017, we entered into the Common Stock Purchase Agreement with Aspire Capital Fund, LLC, or Aspire Capital. Pursuant to the terms of this agreement, Aspire Capital purchased 357,143 shares of our common stock at $1.40 per share and we issued 321,429 shares of our common stock to Aspire Capital in consideration for entering into the agreement.

On April 2, 2015, we entered into an ATM equity facility with Cowen and Company, LLC, acting as sole agent. Under the terms of this facility, Aptose may, from time to time, sell shares of our common stock having an aggregate offering value of up to $20 million on the Nasdaq Capital Market. We have issued a total of 14,175,201 common shares at an average price of $1.35 on this facility between April 2, 2015 and November 22, 2017.

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following discussion is limited to certain material U.S. federal income tax considerations relating to the purchase, ownership and disposition of the common shares by U.S. Holders (as defined below). This discussion applies to U.S. Holders that hold common shares as capital assets. 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 and relating to the acquisition, ownership, and disposition of common shares. 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 U.S. Holder.

No legal opinion from U.S. 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. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and 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.

This discussion is based on the U.S. Internal Revenue Code of 1986, as amended (the "***Code***"), U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, all as in effect on the date hereof and all of which are subject to change, possibly with retroactive effect. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation.

This discussion does not address all of the U.S. federal income tax considerations that may be relevant to specific U.S. Holders in light of their particular circumstances or to U.S. Holders subject to special treatment under U.S. federal income tax law (such as certain financial institutions, insurance companies, broker-dealers and traders in securities or other persons that generally mark their securities to market for U.S. federal income tax purposes, tax-exempt entities, retirement plans, regulated investment companies, real estate investment trusts, certain former citizens or residents of the United States, persons who hold common shares as part of a "straddle," "hedge," "conversion transaction," "synthetic security" or integrated investment, persons that have a "functional currency" other than the U.S. dollar, persons that own (or are deemed to own) 10% or more (by voting power or value) of our common shares, corporations that accumulate earnings to avoid U.S. federal income tax, partnerships and other pass-through entities, and investors in such pass-through entities). This discussion does not address any U.S. state or local or non-U.S. tax considerations or any U.S. federal estate, gift or alternative minimum tax considerations. In addition, except as specifically set forth below, this summary does not discuss applicable tax reporting requirements.

As used in this discussion, the term "***U.S. Holder***" means a beneficial owner of the common shares that is, for U.S. federal income tax purposes, (1) an individual who is a citizen or resident of the United States, (2) a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof, or the District of Columbia, (3) an estate the income of which is subject to U.S. federal income tax regardless of its source or (4) a trust (x) with respect to which a court within the United States is able to exercise primary supervision over its administration and one or more United States persons have the authority to control all of its substantial decisions or (y) that has elected under applicable U.S. Treasury regulations to be treated as a domestic trust for U.S. federal income tax purposes.

If an entity treated as a partnership for U.S. federal income tax purposes holds the common shares, the U.S. federal income tax considerations relating to an investment in the common shares will depend in part upon the status and activities of such entity and the particular partner. Any such entity should consult its own tax advisor regarding the U.S. federal income tax considerations applicable to it and its partners of the purchase, ownership and disposition of the common shares.

Persons holding common shares should consult their own tax advisors as to the particular tax considerations applicable to them relating to the purchase, ownership and disposition of common shares, including the applicability of U.S. federal, state and local tax laws and non-U.S. tax laws.

Distributions

Subject to the discussion below under "***Passive Foreign Investment Company Considerations***," a U.S. Holder that receives a distribution with respect to the common shares generally will be required to include the gross amount of such distribution (before reduction for any Canadian withholding taxes) in gross income as a dividend when actually or constructively received to the extent of the U.S. Holder's pro rata share of our current and/or accumulated earnings and profits (as determined under U.S. federal income tax principles). To the extent a distribution received by a U.S. Holder is not a dividend because it exceeds the U.S. Holder's pro rata share of our current and accumulated earnings and profits, it will be treated first as a tax-free return of capital and reduce (but not below zero) the adjusted tax basis of the U.S. Holder's common shares. To the extent the distribution exceeds the adjusted tax basis of the U.S. Holder's common shares, the remainder will be taxed as capital gain. Because we may not calculate our earnings and profits under U.S. federal income tax principles, U.S. Holders should expect all distributions to be reported to them as dividends.

The U.S. dollar value of any distribution on the common shares made in Canadian dollars generally should be calculated by reference to the exchange rate between the U.S. dollar and the Canadian dollar in effect on the date of receipt (or deemed receipt) of such distribution by the U.S. Holder regardless of whether the Canadian dollars so received are in fact converted into U.S. dollars at that time. If the Canadian dollars received are converted into U.S. dollars on the date of receipt (or deemed receipt), a U.S. Holder generally should not recognize currency gain or loss on such conversion. If the Canadian dollars received are not converted into U.S. dollars on the date of receipt (or deemed receipt), a U.S. Holder generally will have a basis in such Canadian dollars equal to the U.S. dollar value of such Canadian dollars on the date of receipt (or deemed receipt). Any gain or loss on a subsequent conversion or other disposition of such Canadian dollars by such U.S. Holder generally will be treated as ordinary income or loss and generally will be income or loss from sources within the United States for U.S. 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.

Distributions on the common shares that are treated as dividends generally will constitute income from sources outside the United States for foreign tax credit purposes and generally will constitute passive category income. Such dividends will not be eligible for the "dividends received" deduction generally allowed to corporate shareholders with respect to dividends received from U.S. corporations. Dividends paid by a "qualified foreign corporation" are eligible for taxation at a reduced capital gains rate rather than the marginal tax rates generally applicable to ordinary income provided that a holding period requirement (more than 60 days of ownership, without protection from the risk of loss, during the 121-day period beginning 60 days before the ex-dividend date) and certain other requirements are met. However, if we are a PFIC for the taxable year in which the dividend is paid or the preceding taxable year (see discussion below under "***Passive Foreign Investment Company Considerations***"), we will not be treated as a qualified foreign corporation, and therefore the reduced capital gains tax rate described above will not apply. Each U.S. Holder is advised to consult its own tax advisors regarding the availability of the reduced tax rate on dividends.

If a U.S. Holder is subject to Canadian withholding tax on dividends paid on the holder's common shares, the U.S. Holder may be eligible, subject to a number of complex limitations, to claim a credit against its U.S. federal income tax for the Canadian withholding tax imposed on the dividends. A U.S. Holder may claim a deduction for the Canadian withholding tax in lieu of a credit, but only for a year in which the U.S. Holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex. Each U.S. Holder is advised to consult its tax advisor regarding the availability of the foreign tax credit under its particular circumstances.

Sale, Exchange or Other Disposition of Common Shares

Subject to the discussion below under "***Passive Foreign Investment Company Considerations***," a U.S. Holder generally will recognize capital gain or loss for U.S. federal income tax purposes upon the sale, exchange or other disposition of common shares. The amount of gain recognized will equal the excess of the amount realized (i.e., the amount of cash plus the fair market value of any property received) over the U.S. Holder's adjusted tax basis in the common shares sold or exchanged. The amount of loss recognized will equal the excess of the U.S. Holder's adjusted tax basis in the common shares sold or exchanged over the amount realized. Such capital gain or loss generally will be long-term capital gain or loss if, on the date of sale, exchange or other disposition, the common shares were held by the U.S. Holder for more than one year. Net long-term capital gain derived by a non-corporate U.S. Holder currently is subject to tax at reduced rates. The deductibility of a capital loss is subject to limitations. Any gain or loss recognized from the sale, exchange or other disposition of common shares will generally be gain or loss from sources within the United States for U.S. foreign tax credit purposes, except as otherwise provided in an applicable income tax treaty and if an election is properly made under the Code.

Passive Foreign Investment Company Considerations

In general, a corporation organized outside the United States will be treated as a PFIC in any taxable year in which either (1) at least 75% of its gross income is "passive income" or (2) at least 50% of the average quarterly value of its assets is attributable to assets that produce passive income or are held for the production of passive income. Passive income for this purpose generally includes, among other things, dividends, interest, royalties, rents, and gains from commodities transactions and from the sale or exchange of property that gives rise to passive income. In determining whether a foreign corporation is a PFIC, a proportionate share of the items of gross income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) are taken into account.

We believe we were a PFIC for our taxable year ended December 31, 2016 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 taxable year ending December 31, 2017 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. However, the determination of our PFIC status is made annually after the close of each taxable year and it is difficult to predict before such determination whether we will be a PFIC for any given taxable year. Even if we determine that we are not a PFIC after the close of a taxable year, there can be no assurance that the IRS will agree with our conclusion. No assurance can be provided regarded our PFIC status, and neither we nor our United States counsel expresses any opinion with respect to our PFIC status for the taxable year ended December 31, 2016 or for any other taxable year.

If we are a PFIC at any time when a U.S. Holder owns common shares, such U.S. Holder will generally be subject to federal tax under the excess distribution regime on (1) distributions paid during a taxable year that are greater than 125% of the average annual distributions paid in the three preceding taxable years, or, if shorter, the U.S. Holder's holding period for the common shares, and (2) any gain recognized on a sale, exchange or other disposition (which would include a pledge) of common shares. Under the excess distribution regime, the U.S. Holder's tax liability will be determined by allocating such distribution or gain ratably to each day in the U.S. Holder's holding period for the common shares. The amount allocated to the current taxable year (i.e., the year in which the distribution occurs or the gain is recognized) and any year prior to the first taxable year in which we were a PFIC in the holding period will be taxed as ordinary income earned in the current taxable year. The amount allocated to other taxable years will be taxed at the highest marginal rate in effect (for individuals or corporations as applicable) for ordinary income in each such taxable year, and an interest charge, generally that applicable to the underpayment of tax, will be added to the tax. Once we are a PFIC with respect to a particular U.S. Holder, we generally will remain a PFIC with respect to the U.S. Holder, unless we cease to meet the gross income and asset tests described above and the U.S. Holder makes a "deemed sale" election with respect to all of the U.S. Holder's common shares. If such election is made, the U.S. Holder will be deemed to have sold the common shares held at their fair market value on the last day of the last taxable year in which we qualified as a PFIC, and any gain from such deemed sale would be taxed under the excess distribution regime described above. After the deemed sale election, the U.S. Holder's common shares would not be treated as common shares of a PFIC unless we subsequently became a PFIC.

If we are a PFIC for any taxable year during which a U.S. Holder holds the common shares and one of our non-United States subsidiaries is also a PFIC (i.e., a lower-tier PFIC), the U.S. Holder will be treated as owning a proportionate amount (by value) of the common shares of the lower-tier PFIC and will be subject to the rules described above on certain distributions by the lower-tier PFIC and a disposition (or deemed disposition) of common shares of the lower-tier PFIC, even though the U.S. Holder would not receive the distributions or the proceeds from the disposition of the common shares of the lower-tier PFIC. Each U.S. Holder is advised to consult its tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

The tax considerations that would apply if we were a PFIC would be different from those described above if a U.S. Holder were able to make a valid "qualified electing fund," or "QEF election." We do not intend to provide U.S. Holders with the information required to permit them to make a QEF election and, accordingly, prospective investors should assume that a QEF election will not be available.

A U.S. Holder may avoid taxation under the excess distribution regime if the holder makes a valid "mark-to-market" election. An electing U.S. Holder generally would take into account as ordinary income each year, the excess of the fair market value of the common shares held at the end of the taxable year over the adjusted tax basis of such common shares. The U.S. Holder would also take into account, as an ordinary loss each year, the excess of the adjusted tax basis of such common shares over their fair market value at the end of the taxable year, but only to the extent of the excess of amounts previously included in income over ordinary losses deducted as a result of the mark-to-market election. The U.S. Holder's tax basis in the common shares would be adjusted to reflect any income or loss recognized as a result of the mark-to-market election. Any gain from a sale, exchange or other disposition of the common shares in any taxable year in which we are a PFIC, (i.e., when we meet the gross income test or asset test described above) would be treated as ordinary income and any loss from a sale, exchange or other disposition would be treated first as an ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as a capital loss. If we cease to be a PFIC, any gain or loss recognized by a U.S. Holder on the sale or exchange of the common shares would be classified as a capital gain or loss.

A mark-to-market election is available to a U.S. Holder only for "marketable stock." Generally, stock will be considered marketable stock if it is "regularly traded" on a "qualified exchange" within the meaning of applicable U.S. Treasury regulations. A class of stock is regularly traded during any calendar year during which such class of stock is traded, other than in de minimis quantities, on at least 15 days during each calendar quarter. The common shares should be marketable stock as long as they are listed on the TSX and are regularly traded. A mark-to-market election will not apply to the common shares for any taxable year during which we are not a PFIC, but will remain in effect with respect to any subsequent taxable year in which we again become a PFIC. Such election will not apply to any subsidiary that we own. Accordingly, a U.S. Holder may continue to be subject to the PFIC rules with respect to any lower-tier PFICs notwithstanding the U.S. Holder's mark-to-market election.

Each U.S. person who is a shareholder of a PFIC generally must file an annual report with the IRS containing certain information, and the failure to file such report could result in the imposition of penalties on such U.S. person and in the extension of the statute of limitations with respect to federal income tax returns filed by such U.S. person.

The U.S. federal income tax rules relating to PFICs are very complex. U.S. Holders are urged to consult their own tax advisors with respect to the purchase, ownership and disposition of common shares, the consequences to them of an investment in a PFIC, any elections available with respect to the common shares and the IRS information reporting obligations with respect to the purchase, ownership and disposition of common shares in the event we are considered a PFIC.

Additional Tax on Passive Income

Certain U.S. Holders that are individuals, estates or trusts (other than trusts that are exempt from tax) will be subject to a 3.8% tax on all or a portion of their "net investment income," which includes dividends on the common shares, and net gains from the disposition of the common shares. Further, excess distributions treated as dividends, gains treated as excess distributions, and mark-to-market inclusions and deductions are all included in the calculation of net investment income.

Treasury regulations provide, subject to the election described in the following paragraph, that solely for purposes of this additional tax, that distributions of previously taxed income will be treated as dividends and included in net investment income subject to the additional 3.8% tax. Additionally, to determine the amount of any capital gain from the sale or other taxable disposition of common shares that will be subject to the additional tax on net investment income, a U.S. Holder who has made a QEF election will be required to recalculate its basis in the common shares excluding QEF election basis adjustments.

Alternatively, a U.S. Holder may make an election which will be effective with respect to all interests in controlled foreign corporations and QEF election held in that year or acquired in future years. Under this election, a U.S. Holder pays the additional 3.8% tax on QEF election income inclusions and on gains calculated after giving effect to related tax basis adjustments. U.S. Holders that are individuals, estates or trusts should consult their own tax advisors regarding the applicability of this tax to any of their income or gains in respect of the common shares.

Information Reporting with Respect to Foreign Financial Assets

U.S. individuals that own "specified foreign financial assets" with an aggregate fair market value exceeding certain threshold amounts generally are required to file an information report on IRS Form 8938 with respect to such assets with their tax returns. Significant penalties may apply to persons who fail to comply with these rules. Specified foreign financial assets include 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. Upon the issuance of future U.S. Treasury regulations, these information reporting requirements may apply to certain U.S. entities that own specified foreign financial assets. The failure to report information required under the current regulations could result in substantial penalties and in the extension of the statute of limitations with respect to federal income tax returns filed by a U.S. Holder. U.S. Holders should consult their own tax advisors regarding the possible implications of these U.S. Treasury regulations for an investment in our common shares.

Special Reporting Requirements for Transfers to Foreign Corporations

A U.S. Holder that acquires common shares generally will be required to file Form 926 with the IRS if (1) immediately after the acquisition such U.S. Holder, directly or indirectly, owns at least 10% of the common shares, or (2) the amount of cash transferred in exchange for common shares during the 12-month period ending on the date of the acquisition exceeds US$100,000. Significant penalties may apply for failing to satisfy these filing requirements. U.S. Holders are urged to contact their tax advisors regarding these filing requirements.

Information Reporting and Backup Withholding

Dividends on and proceeds from the sale or other disposition of common shares may be reported to the IRS unless the U.S. Holder establishes a basis for exemption. Backup withholding may apply to amounts subject to reporting if (1) the holder fails to provide an accurate taxpayer identification number or otherwise establish a basis for exemption, or (2) is described in certain other categories of persons.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules generally will be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability if the required information is furnished by the U.S. Holder on a timely basis to the IRS.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL TAX MATTERS THAT MAY BE OF IMPORTANCE TO A US HOLDER. EACH US HOLDER IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN COMMON SHARES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

The following is, as of the date hereof, a summary of the principal Canadian federal income tax considerations under the *Income Tax Act* (Canada) (the "***Tax Act***") generally applicable to a holder of common shares of the Company who, for purposes of the Tax Act and at all relevant times, is neither resident in Canada nor deemed to be resident in Canada for purposes of the Tax Act and any applicable income tax treaty or convention, and who does not use or hold (and is not deemed to use or hold) common shares in carrying on a business in Canada, deals at arm's length with and is not affiliated with the Company and holds common shares as capital property (a "***Holder***"). Generally, common shares will be considered to be capital property to a Holder thereof provided that the Holder does not hold common shares in the course of carrying on a business of buying and selling securities and such Holder has not acquired them in one or more transactions considered to be an adventure or concern in the nature of trade.

This summary does not apply to a Holder (i) that is a "financial institution" for purposes of the mark-to-market rules contained in the Tax Act; (ii) that is a "specified financial institution" as defined in the Tax Act; (iii) an interest in which is a "tax shelter investment" as defined in the Tax Act; or (iv) that has elected to report its tax results in a functional currency other than Canadian currency. Special rules, which are not discussed in this summary, may apply to a Holder that is an "authorized foreign bank" within the meaning of the Tax Act or an insurer carrying on business in Canada and elsewhere. Such Holders should consult their own tax advisors.

This summary is based upon the provisions of the Tax Act (including the regulations ("***Regulations***") thereunder) in force as of the date hereof and our understanding of the current administrative policies and assessing practices of the Canada Revenue Agency (the "***CRA***") published in writing by the CRA prior to the date hereof. This summary takes into account all specific proposals to amend the Tax Act (and the Regulations) publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "***Tax Proposals***") and assumes that the Tax Proposals will be enacted in the form proposed, although no assurance can be given that the Tax Proposals will be enacted in their current form or at all. This summary does not otherwise take into account any changes in law or in the administrative policies or assessing practices of the CRA, whether by legislative, governmental or judicial decision or action. This summary is not exhaustive of all possible Canadian federal income tax considerations, and does not take into account other federal or any provincial, territorial or foreign income tax legislation or considerations, which may differ materially from those described in this summary.

This summary is of a general nature only and is not, and is not intended to be, and should not be construed to be, legal or tax advice to any particular Holder, and no representations concerning the tax consequences to any particular Holder are made. **Holders should consult their own tax advisors regarding the income tax considerations applicable to them having regard to their particular circumstances.**

Dividends

Dividends paid or credited (or deemed to be paid or credited) to a Holder by the Company are subject to Canadian withholding tax at the rate of 25% unless reduced by the terms of an applicable tax treaty. For example, under the Canada-United States Income Tax Convention (1980) (the "***US Treaty***"), as amended, the dividend withholding tax rate is generally reduced to 15% in respect of a dividend paid or credited to a Holder beneficially entitled to the dividend who is resident in the U.S. for purposes of the US Treaty and whose entitlement to the benefits of the US Treaty is not limited by the limitation of benefits provisions of the US Treaty. **Holders are urged to consult their own tax advisors to determine their entitlement to relief under the US Treaty or any other applicable tax treaty as well as their ability to claim foreign tax credits with respect to any Canadian withholding tax, based on their particular circumstances.**

Disposition of Common Shares

A Holder generally will not be subject to tax under the Tax Act in respect of a capital gain realized on the disposition or deemed disposition of a common share, unless the common share constitutes or is deemed to constitute "taxable Canadian property" to the Holder thereof for purposes of the Tax Act, and the gain is not exempt from tax pursuant to the terms of an applicable tax treaty or convention.

In general, provided the common shares are listed on a "designated stock exchange" (which currently includes the TSX) at the date of the disposition, the common shares will only constitute "taxable Canadian property" of a Holder if, at any time within the 60-month period preceding the disposition: (i) such Holder, persons with whom the Holder did not deal at arm's length, partnerships in which the Holder or a person with whom the Holder did not deal at arm's length holds a membership interest directly or indirectly through one or more partnerships, or any combination thereof, owned 25% or more of the issued shares of any class or series of the Company's share capital, and (ii) more than 50% of the fair market value of the common shares was derived directly or indirectly from one or any combination of (A) real or immovable property situated in Canada, (B) Canadian resource properties, (C) timber resource properties, and (D) options in respect of, or interests in, or for civil law rights in, property described in any of subparagraphs (ii)(A) to (C), whether or not the property exists. However, and despite the foregoing, in certain circumstances the common shares may be deemed to be "taxable Canadian property" under the Tax Act.

Holders whose common shares may be "taxable Canadian property" should consult their own tax advisers.

MATERIAL CONTRACTS

Other than (i) the Purchase Agreement; (ii) the Registration Rights Agreement; and (iii) the agreements described under the heading "Additional Information—Material Contracts" in our Annual Report on Form 20-F for the fiscal year ended December 31, 2016, which is incorporated by reference into this prospectus, we have not, in the two years preceding the date of this prospectus, entered into any material contracts other than contracts in the ordinary course of business.

DIVIDEND POLICY

We have never paid a dividend, and we do not anticipate paying dividends in the foreseeable future. We intend to retain all available funds and any future earnings to fund the development and expansion of our business. As a result, investors in our common shares will benefit in the foreseeable future only if our common shares appreciate in value.

Dividends paid or credited (or deemed to be paid or credited) to a holder by the Company are subject to Canadian withholding tax at the rate of 25% unless reduced by the terms of an applicable tax treaty. For example, under the Canada-United States Income Tax Convention (1980) (the "***US Treaty***"), as amended, the dividend withholding tax rate is generally reduced to 15% in respect of a dividend paid or credited to a holder beneficially entitled to the dividend who is resident in the U.S. for purposes of the US Treaty and whose entitlement to the benefits of the US Treaty is not limited by the limitation of benefits provisions of the US Treaty. Holders are urged to consult their own tax advisors to determine their entitlement to relief under the US Treaty or any other applicable tax treaty as well as their ability to claim foreign tax credits with respect to any Canadian withholding tax, based on their particular circumstances.

EXPERTS

The financial statements incorporated into this prospectus by reference to the Annual Report on Form20-F for the year ended December 31, 2016, have been so incorporated in reliance on the reports of KPMG, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting. The offices of KPMG are located at 100 New Park Place, Suite 1400, Vaughan, Ontario, L4K 0J3, Canada.

LEGAL MATTERS

The validity of the common shares and certain other matters of Canadian law will be passed upon for us by McCarthy Tetrault LLP, Toronto, Ontario, our Canadian counsel. Certain matters of United States law will be passed upon for us by Dorsey & Whitney LLP, Vancouver, B.C. and Denver, Colorado, our United States counsel.

EXPENSES RELATING TO THIS OFFERING

The following table sets forth the estimated costs and expenses payable by us in connection with the sale of the securities being registered. All amounts are estimates.

SEC registration fee	$ 1,542
Legal fees and expenses	100,000
Accounting fees and expenses	30,000
Miscellaneous expenses	15,000
Total	$146,542

ADDITIONAL INFORMATION

We are subject to the reporting requirements of the Exchange Act, and, in accordance therewith, we file reports and other information with the SEC through its Electronic Document Gathering Retrieval System, which is commonly known by the acronym EDGAR and may be accessed at www.sec.gov. In addition, we are subject to continuous disclosure obligations under Canadian securities laws. Therefore, we file disclosure documents, reports, statements and other information with the securities commissions or similar regulatory authorities in Canada. We make our filings on the Canadian System for Electronic Document Analysis and Retrieval, which is commonly known by the acronym SEDAR and which may be accessed at www.sedar.com. SEDAR is the Canadian equivalent of EDGAR. In addition, our documents may be viewed at our head office located at 5955 Airport Road Suite #228, Mississauga, Ontario, Canada, L4V 1R9.

We have filed with the SEC a registration statement on Form F-1 under the Securities Act, with respect to the resale by the selling shareholder of our common shares pursuant to this prospectus. This prospectus, which is a part of the registration statement, does not contain all of the information contained in the registration statement or the exhibits and schedules to the registration statement, and you should refer to the complete registration statement. Statements made in this prospectus concerning the contents of any contract, agreement or other document filed as an exhibit to the registration statement are summaries of all of the material terms of such contracts, agreements or documents, but do not repeat all of their terms. Reference is made to each such exhibit for a more complete description of the matters involved and the summary statements are qualified in their entirety by reference to the complete document filed as an exhibit. The registration statement and its exhibits, and the reports and other information we have filed with the SEC under the Exchange Act, may be inspected and copied by the public at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 or access its website at www.sec.gov for further information about the public reference rooms. Our filings are also available from commercial document retrieval services.

We are a “foreign private issuer” as defined in the Exchange Act. Therefore, notwithstanding the fact that we may be required to file reports and other information with the SEC, we and our officers, directors and principal shareholders are exempt from some requirements of the Exchange Act, as described elsewhere in this prospectus.

DOCUMENTS INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" into this prospectus the information we file with, and furnish to, it, which means that we can disclose important information to you by referring you to those filed documents. The information incorporated by reference is considered to be a part of this prospectus, and certain information that we file or furnish with SEC after the date of this prospectus may update and supersede the information in this prospectus, as indicated in that filing. We hereby incorporate by reference the documents listed below:

- our Annual Report on Form 20-F for the fiscal year ended December 31, 2016, filed with the SEC on March 31, 2017;
- Exhibits 99.1 and 99.2 to our Report of Foreign Issuer on Form 6-K containing our interim financial statements and management's discussion and analysis, furnished to the SEC on November 14, 2017;
- Exhibits 99.1 and 99.2 to our Report of Foreign Issuer on Form 6-K, furnished to the SEC on August 9, 2017;
- Exhibits 99.1 and 99.2 to our Report of Foreign Issuer on Form 6-K, furnished to the SEC on May 12, 2017;
- our Report of Foreign Issuer on Form 6-K furnished to the SEC on June 7, 2017; and
- our Report of Foreign Issuer on Form 6-K furnished to the SEC on May 10, 2017.

Documents incorporated by reference in this prospectus are available from us without charge upon written or oral request, excluding any exhibits to those documents that are not specifically incorporated by reference into those documents. You can obtain documents incorporated by reference in this document by requesting them from us in writing or at 5955 Airport Road Suite #228, Mississauga, Ontario, Canada, L4V 1R9. These reports may also be obtained on our website at www.aptosebiosciences.com. We have included our website address only as an inactive textual reference and none of the information on our website is a part of this prospectus or the registration statement of which this prospectus forms a part.

This prospectus may contain information that updates or modifies information in one or more of the documents incorporated by reference in this prospectus.

ENFORCEABILITY OF CIVIL LIABILITIES

We are incorporated under the laws of Canada. Many of our directors and officers, and some of the experts named in this prospectus, are residents of Canada or otherwise reside outside the United States, and all or a substantial portion of their assets, and all or a substantial portion of our assets, are located outside the United States. We have appointed an agent for service of process in the United States, but it may be difficult for shareholders 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. It may also be difficult for shareholders who reside in the United States to realize in the United States upon judgments of courts of the United States predicated upon our civil liability and the civil liability of our directors, officers and experts under the United States federal securities laws.

We have been advised by our Canadian counsel, McCarthy Tétrault LLP, that a judgment of a United States court predicated solely upon civil liability under United States federal securities laws or the securities or "blue sky" laws of any state within the United States, would probably be enforceable in Canada if the United States court in which the judgment was obtained has a basis for jurisdiction in the matter that would be recognized by a Canadian court for the same purposes. Notwithstanding this, we have also been advised by McCarthy Tétrault LLP, that there is doubt whether an action could be brought in Canada in the first instance on the basis of liability predicated solely upon United States federal securities laws.

MATERIAL CHANGES

Except as otherwise described in our Annual Report on Form 20-F for the fiscal period ended December 31, 2016, in our Reports on Form 6-K filed or furnished under the Exchange Act and incorporated by reference herein and as disclosed in this prospectus, no reportable material changes have occurred since December 31, 2016.

December 29, 2017