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

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# Form 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 OF THE SECURITIES EXCHANGE ACT OF 1934**

**For the month of November 2015**

**Commission File Number: 001-32001**

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**Aptose Biosciences Inc.**
*(Translation of registrant's name into English)*

**5955 Airport Road, Suite 228**
**Mississauga, Ontario L4V 1R9**
**Canada**
(*Address of principal executive offices*)

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Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.
Form 20-FR £ Form 40-F £

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1) £

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7) £

**INCORPORATION BY REFERENCE**

Exhibits 99.1 and 99.2 to this Report of Foreign Issuer on Form 6-K of Aptose Biosciences Inc. (the "Registrant") are each hereby incorporated by reference into the registration statement on Form F-3 of the Registrant (File No. 333-200660) and the prospectus, forming a part thereof.

**DOCUMENTS FILED AS PART OF THIS FORM 6-K**

See Exhibit Index hereto.

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

**Aptose Biosciences Inc.**

Date: November 10, 2015

By: "*Gregory Chow*"
Name: Gregory Chow
Title: Senior Vice President and Chief Financial Officer

**EXHIBIT INDEX**

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| 99.1 | Interim Financial Statements |
| 99.2 | Management's Discussion and Analysis |
| 99.3 | CEO and CFO Certificates |

**Aptose Biosciences Inc.**
**Condensed Consolidated Interim Statements of Financial Position**
(unaudited)

| *(amounts in 000's of Canadian Dollars)* | **as at September 30, 2015** | December 31, 2014 |
|---|---|---|
| **ASSETS** | | |
| **Current** | | |
| Cash and cash equivalents (note 4(a)) | **$ 15,147** | $ 14,365 |
| Investments (note 4(b)) | **8,205** | 16,180 |
| Prepaid expenses and other assets | **588** | 855 |
| **Total Current Assets** | **23,940** | 31,400 |
| **Non-current** | | |
| Equipment | **400** | 200 |
| **Total Non-Current Assets** | **400** | 200 |
| **Total Assets** | **$ 24,340** | $ 31,600 |
| | | |
| **LIABILITIES** | | |
| **Current** | | |
| Accounts payable | **$ 136** | $ 256 |
| Accrued liabilities | **1,566** | 1,662 |
| Convertible promissory notes | **-** | 410 |
| **Total Current Liabilities** | **1,702** | 2,328 |
| | | |
| **SHAREHOLDERS' EQUITY** | | |
| **Share capital (note 6)** | | |
| Common shares | **223,238** | 221,259 |
| Equity portion of convertible promissory notes | **-** | 64 |
| Stock options (note 7) | **5,754** | 4,078 |
| Contributed surplus | **21,773** | 21,653 |
| Warrants | **351** | 501 |
| Deficit | **(228,478)** | (218,283) |
| **Total Equity** | **22,638** | 29,272 |
| **Total Liabilities and Equity** | **$ 24,340** | $ 31,600 |

*See accompanying notes to the condensed consolidated interim financial statements (unaudited)*
*Commitments, contingencies and guarantees (Note 10)*

**Aptose Biosciences Inc.**
**Condensed Consolidated Interim Statements of Loss and Comprehensive Loss**
(unaudited)

| *(amounts in 000's of Canadian Dollars except for per common share data)* | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| **REVENUE** | **$ -** | $ - | **$ -** | $ - |
| | | | | |
| **EXPENSES** | | | | |
| Research and development (note 9) | **1,722** | 1,311 | **3,914** | 2,920 |
| General and administrative (note 9) | **2,248** | 2,988 | **7,481** | 7,931 |
| **Operating expenses** | **3,970** | 4,299 | **11,395** | 10,851 |
| Finance expense (note 9) | **8** | 49 | **43** | 225 |
| Finance income (note 9) | **(717)** | (161) | **(1,243)** | (235) |
| **Net financing income** | **(709)** | (112) | **(1,200)** | (10) |
| **Net loss and comprehensive loss for the period** | **3,261** | 4,187 | **10,195** | 10,841 |
| **Basic and diluted loss per common share** | **$ 0.27** | $ 0.36 | **$ 0.86** | $ 1.58 |
| | | | | |
| **Weighted average number of common shares outstanding used in the calculation of basic and diluted loss per common share (000's) (note 6(d))** | **11,909** | 11,610 | **11,852** | 6,849 |

*See accompanying notes to the condensed consolidated interim financial statements (unaudited)*

**Aptose Biosciences Inc.**
**Condensed Consolidated Interim Statement of Changes in Equity**
(unaudited)

| *(amounts in 000's of Canadian Dollars)* | Common Shares | Stock Options | Warrants | Contributed Surplus | Equity Portion of Convertible Promissory Notes | Deficit | Total |
|---|---|---|---|---|---|---|---|
| Balance, January 1, 2015 | $ 221,259 | $ 4,078 | $ 501 | $ 21,653 | $ 64 | $ (218,283) | $ 29,272 |
| Warrant and stock option exercises | 1,531 | (493) | (150) | - | - | - | 888 |
| Common shares issued under the ATM (note 6(a)) | 10 | - | - | - | - | - | 10 |
| Stock-based compensation (note 7) | - | 2,235 | - | - | - | - | 2,235 |
| Promissory note conversion (note 6(e)) | 438 | - | - | 54 | (64) | - | 428 |
| Expiry of vested stock options | - | (66) | - | 66 | - | - | - |
| Net loss | - | - | - | - | - | (10,195) | (10,195) |
| **Balance, September 30, 2015** | **$ 223,238** | **$ 5,754** | **$ 351** | **$ 21,773** | **$ -** | **$ (228,478)** | **$ 22,638** |
| Balance, December 1, 2013 | $ 176,923 | $ 1,983 | $ 2,000 | $ 21,280 | $ 88 | $ (203,858) | $ (1,584) |
| Public equity offerings | 32,511 | - | 350 | - | - | - | 32,861 |
| Stock-based compensation (note 7) | - | 1,907 | - | - | - | - | 1,907 |
| Warrant and stock option exercises | 11,259 | (18) | (1,648) | - | - | - | 9,593 |
| Expiry of warrants | - | - | (190) | 190 | - | - | - |
| Cancellation/Expiry of stock options | - | (175) | - | 175 | | - | - |
| Net loss | - | - | - | - | - | (10,841) | (10,841) |
| **Balance, September 30, 2014** | **$ 220,693** | **$ 3,697** | **$ 512** | **$ 21,645** | **$ 88** | **$ (214,699)** | **$ 31,936** |

*See accompanying notes to the condensed consolidated interim financial statements (unaudited)*

**Aptose Biosciences Inc.**
**Condensed Consolidated Interim Statements of Cash Flows**
(unaudited)

| *(amounts in 000's of Canadian Dollars)* | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| **Cash flows from operating activities:** | | | | |
| Net loss for the period | **$ (3,261)** | $ (4,187) | **$ (10,195)** | $ (10,841) |
| Items not involving cash and other adjustments: | | | | |
| Stock-based compensation | **651** | 1,084 | **2,235** | 1,907 |
| Depreciation of equipment | **29** | 8 | **64** | 21 |
| Finance income | **(717)** | (161) | **(1,243)** | (235) |
| Finance expense | **8** | 49 | **43** | 225 |
| Other | **-** | - | **-** | 1 |
| Change in non-cash operating working capital (note 8) | **723** | (719) | **51** | (1,100) |
| **Cash used in operating activities** | **(2,567)** | (3,926) | **(9,045)** | (10,022) |
| **Cash flows from financing activities:** | | | | |
| Public equity offerings | **10** | - | **10** | 32,861 |
| Exercise of warrants and stock options | **40** | 6,600 | **888** | 9,593 |
| Repayment of promissory notes | **-** | - | **-** | (1,068) |
| Interest on promissory notes | **(5)** | (20) | **(25)** | (94) |
| **Cash provided by financing activities** | **45** | 6,580 | **873** | 41,292 |
| **Cash flows from investing activities:** | | | | |
| (Acquisitions) divestiture of short-term investments | **(40)** | (5,089) | **7,975** | (16,108) |
| Purchase of fixed assets | **(52)** | (134) | **(264)** | (153) |
| Interest received | **56** | 161 | **232** | 235 |
| **Cash (used in) provided by investing activities** | **(36)** | (5,062) | **7,943** | (16,026) |
| **Foreign exchange gains (losses) on cash and cash equivalents** | **661** | (12) | **1,011** | (35) |
| **(Decrease) increase in cash and cash equivalents during the period** | **(1,897)** | (2,420) | **782** | 15,209 |
| **Cash and cash equivalents, beginning of period** | **17,044** | 19,367 | **14,365** | 1,738 |
| **Cash and cash equivalents, end of period** | **$ 15,147** | $ 16,947 | **$ 15,147** | $ 16,947 |

*See accompanying notes to the condensed consolidated interim financial statements (unaudited)*

## 1. Reporting Entity

Aptose Biosciences Inc. ("Aptose" or the "Company") is a clinical-stage biotechnology company committed to discovering and developing personalized therapies addressing unmet medical needs in oncology. Aptose is a publicly listed company incorporated under the laws of Canada. The Company's shares are listed on the Nasdaq Capital Markets and the Toronto Stock Exchange. The head office, principal address and records of the Company are located at 5955 Airport Road, Suite 228, Mississauga, Ontario, Canada, L4N 1R9.

Aptose changed its name from Lorus Therapeutics Inc. effective August 28, 2014.

Effective July 17, 2014 the Company changed its fiscal year end from May 31 to December 31. As a result of that change the current reporting fiscal period is for the three and nine months ended September 30, 2015 while the prior year comparative period is for the four and ten months ended September 30, 2014 and therefore are not directly comparable to the current period.

## 2. Basis of presentation

***(a) Statement of Compliance***

These unaudited condensed consolidated interim financial statements of the Company as at September 30, 2015 were prepared in accordance with International Financial Reporting Standards ("IFRS") and International Accounting Standard ("IAS") 34, *Interim Financial Reporting* as issued by the International Accounting Standards Board ("IASB") and does not include all of the information required for full annual financial statements. These unaudited condensed consolidated interim financial statements should be read in conjunction with the Company's audited annual consolidated financial statements and accompanying notes.

The unaudited condensed consolidated interim financial statements of the Company were reviewed by the Audit Committee and approved and authorized for issue by the Board of Directors on November 9, 2015.

***(b) Functional and presentation currency***

The functional and presentation currency of the Company is the Canadian dollar ("$").

***(c) Significant accounting judgments, estimates and assumptions***

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

The key assumptions concerning the future, and other key sources of estimation uncertainty as of the date of the statement of financial position that have a significant risk of causing material adjustment to the carrying amounts of assets and liabilities within the next fiscal year arise in connection with the valuation of contingent liabilities and valuation of tax accounts. Significant estimates also take place in connection with the valuation of share-based compensation and share purchase warrants.

## 3. Significant accounting policies

The accompanying unaudited condensed consolidated interim financial statements are prepared in accordance with IFRS and follow the same accounting policies and methods of application as the audited consolidated financial statements of the Company for the seven months ended December 31, 2014. They do not include all of the information and disclosures required by IFRS for annual financial statements. In the opinion of management, all adjustments considered necessary for fair presentation have been included in these unaudited condensed consolidated interim financial statements. Operating results for the three and nine month periods ended September 30, 2015 are not necessarily indicative of the results that may be expected for the full year ended December 31, 2015. For further information, see the Company's audited consolidated financial statements including notes thereto for the seven months ended December 31, 2014.

***Standards and Interpretations Adopted in Fiscal 2015***

There were no new accounting standards adopted during the nine months ended September 30, 2015.

## 4. Capital disclosures

The Company's objectives when managing capital are to:

- Maintain its ability to continue as a going concern;
- Maintain a flexible capital structure which optimizes the cost of capital at acceptable risk; and
- Ensure sufficient cash resources to fund its research and development activities, to pursue partnership and collaboration opportunities and to maintain ongoing operations.

The capital structure of the Company consists of cash and cash equivalents, investments and equity comprised of share capital, share purchase warrants, stock options, contributed surplus and deficit. The Company manages its capital structure and makes adjustments to it in light of economic conditions. The Company, upon approval from its Board of Directors, will balance its overall capital structure through new share issuances, acquiring or disposing of assets, adjusting the amount of cash balances or by undertaking other activities as deemed appropriate under the specific circumstances.

In December 2014, Aptose filed a short form base shelf prospectus (the "Base Shelf") that qualifies for the distribution of up to US$100,000,000 of common shares, warrants, or units comprising any combination of common shares and warrants ("Securities"). The distribution of Securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, or at prices related to such prevailing market prices to be negotiated with purchasers and as set forth in an accompanying prospectus supplement, including transactions that are deemed to be "at-the-market" distributions. The Base Shelf provides us with additional flexibility when managing our cash resources as, under certain circumstances, it shortens the time period required to close a financing and is expected to increase the number of potential investors that may be prepared to invest in our company. Funds received from a Prospectus Supplement will be used in line with our Board approved budget and multi-year plan. Our Base Shelf expires in December, 2017. The Base Shelf allowed us to enter into an "At-The-Market" Facility ("ATM") equity distribution agreement (see Note 6). We intend to use this equity arrangement as an additional option to assist us in achieving our capital objectives. The ATM provides the Company with the opportunity to regularly raise capital on the Nasdaq National Market, at prevailing market prices, at it's sole discretion providing the ability to better manage cash resources.

The Company is not subject to externally imposed capital requirements and the Company's overall strategy with respect to capital risk management remains unchanged from the seven months ended December 31, 2014.

**(a) Cash and cash equivalents:**

Cash and cash equivalents consists of cash of $765 thousand (December 31, 2014 - $293 thousand) and funds in both Canadian and US dollars deposited into high interest savings accounts totaling $14.382 million (December 31, 2014 - $14.072 million). The current interest rate earned on these deposits is between 1.2% and 1.25% (December 31, 2014 – 1.2 and 1.25%).

**(b) Investments:**

As at September 30, 2015 and December 31, 2014, investments consist of guaranteed investment certificates with Canadian financial institutions having high credit ratings. Investments include six investments (December 31, 2014 – twelve investments) with maturity dates from April 22, 2016 to June 19, 2016 (December 31, 2014 – April 22, 2015 to June 19, 2016), bearing an interest rate from 1.80% to 2.10% (December 31, 2014 – 1.56% to 2.10%) per annum. Investments are recorded at the principle amount plus accrued interest.

(Tabular amounts are in 000s)

## 5. Financial instruments

### (a) Financial instruments

The Company has classified its financial instruments as follows:

| | As at September 30, 2015 | As at December 31, 2014 |
|---|---|---|
| **Financial assets** | | |
| Cash and cash equivalents (consisting of deposits in high interest savings accounts), measured at amortized cost | **$ 15,147** | $ 14,365 |
| Investments, consisting of guaranteed investment certificates, measured at amortized cost including accrued interest | **8,205** | 16,180 |
| **Financial liabilities** | | |
| Accounts payable, measured at amortized cost | **136** | 256 |
| Accrued liabilities, measured at amortized cost | **1,566** | 1,662 |
| Convertible promissory notes, measured at amortized cost | **-** | 410 |

At September 30, 2015, there are no significant differences between the carrying values of these amounts and their estimated market values.

### (b) Financial risk management

The Company has exposure to credit risk, liquidity risk and market risk. The Company's Board of Directors has the overall responsibility for the oversight of these risks and reviews the Company's policies on an ongoing basis to ensure that these risks are appropriately managed.

#### (i) Credit risk

Credit risk is the risk of financial loss to the Company if a customer, partner or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's cash and cash equivalents and investments. The carrying amount of the financial assets represents the maximum credit exposure.

The Company manages credit risk for its cash and cash equivalents and investments by maintaining minimum standards of R1-low or A-low investments and the Company invests only in highly rated Canadian corporations with debt securities that are traded on active markets and are capable of prompt liquidation.

#### (ii) Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. To the extent that the Company does not believe it has sufficient liquidity to meet its current obligations, the Board considers securing additional funds through equity, debt or partnering transactions. The Company manages its liquidity risk by continuously monitoring forecasts and actual cash flows.

#### (iii) Market risk

Market risk is the risk that changes in market prices, such as interest rates, foreign exchange rates and equity prices will affect the Company's income or the value of its financial instruments.

The Company is subject to interest rate risk on its cash and cash equivalents and investments. The Company does not believe that the results of operations or cash flows would be affected to any significant degree by a sudden change in market interest rates relative to interest rates on the investments, owing to the relative short-term nature of the investments. The Company does not have any interest bearing liabilities subject to interest rate fluctuations.

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. We are exposed to currency risk from employee costs as well as the purchase of goods and services primarily in the United States and the cash balances held in foreign currencies. Fluctuations in the US dollar exchange rate could potentially have a significant impact on the Company's results. Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the US dollar would result in an increase or decrease in loss for the year and comprehensive loss of $880 thousand (December 31, 2014- $58 thousand). Balances in foreign currencies at September 30, 2015 are as follows:

| | **US$ balances at September 30, 2015** | US$ balances at December 31, 2014 |
|---|---|---|
| Cash and cash equivalents | **$ 7,196** | $ 66 |
| Accounts payable and accrued liabilities | **(583)** | (565) |
| | **$ 6,613** | $ (499) |

The Company does not have any forward exchange contracts to hedge this risk.

The Company does not invest in equity instruments of other corporations.

## 6. Share capital

The Company is authorized to issue an unlimited number of common shares.

**Continuity of common shares and warrants**

| | Common shares | | Warrants | |
|---|---|---|---|---|
| | Number | Amount | Number | Amount |
| | (In thousands) | | (In thousands) | |
| **Balance, May 31, 2014** | **10,388** | **$ 212,938** | **1,630** | **$ 1,857** |
| Warrant exercises | 1,231 | 7,814 | (1,231) | (1,166) |
| Warrant expiry | - | - | (190) | (190) |
| Option exercises | 36 | 345 | - | - |
| Promissory note conversion | 45 | 162 | - | - |
| **Balance, December 31, 2014** | **11,700** | **$ 221,259** | **209** | **$ 501** |
| Warrant exercises (b) | 8 | 33 | (8) | (8) |
| Option exercises | 117 | 1,018 | - | - |
| Promissory note conversion | 42 | 150 | - | - |
| **Balance, March 31, 2015** | **11,867** | **$ 222,460** | **201** | **$ 493** |
| Warrant exercises (b) | 62 | 394 | (62) | (132) |
| Option exercises | 3 | 36 | - | - |
| **Balance, June 30, 2015** | **11,932** | **$ 222,890** | **139** | **$ 361** |
| Warrant exercises (b) | 8 | 50 | (8) | (10) |
| Promissory note conversion | 80 | 288 | - | - |
| Common shares under ATM (a) | 2 | 10 | - | - |
| **Balance, September 30, 2015** | **12,022** | **$ 223,238** | **131** | **$ 351** |

### (a) At The Market Facility ("ATM")

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, we may, from time to time, sell shares of our common stock having an aggregate offering value of up to US$20 million through Cowen and Company, LLC on the Nasdaq National Market. We determine, at our sole discretion, the timing and number of shares to be sold under this ATM facility. During the nine months ended September 30, 2015 the Company issued 1,504 common shares under the ATM at a price of US$5.20 per share for gross proceeds of approximately Cdn $10 thousand.

### (b) Exercise of Warrants

*Warrants exercised during the nine months ended September 30, 2015:*

| (in thousands) | Number | Proceeds |
|---|---|---|
| August 2011 warrants (i) | 13 | $ 68 |
| June 2013 private placement warrants (ii) | 47 | 141 |
| December 2013 broker warrants (iii) | 18 | 118 |
| Total | 78 | $ 327 |

In addition to the cash proceeds received, the original fair value related to these warrants of $150 thousand was transferred from warrants to share capital. This resulted in a total amount of $477 thousand credited to share capital.

*Summary of outstanding warrants:*

| (in thousands) | **September 30, 2015** | December 31, 2014 |
|---|---|---|
| August 2011 warrants (i) | **76** | 89 |
| June 2013 private placement warrants (ii) | **-** | 47 |
| December 2013 broker warrants (iii) | **55** | 73 |
| Number of warrants outstanding, end of period | **131** | 209 |

(i) August 2011 warrants are exercisable into common shares of Aptose at a price per share of $5.40 and expire in August 2016.

(ii) June 2013 private placement warrants were exercisable into common shares of Aptose at a price per share of $3.00 and expired in June 2015. All June 2013 private placement warrants had been exercised by the end of June 2015.

(iii) December 2013 broker warrants are exercisable into common shares of Aptose at a price per share of $6.60 and expire in December 2015.

**(b) Continuity of contributed surplus**

Contributed surplus is comprised of the cumulative grant date fair value of expired share purchase warrants and expired stock options as well as the cumulative amount of previously expensed and unexercised equity settled share-based payment transactions.

| | **Nine months ended September 30, 2015** | Ten months ended September 30, 2014 |
|---|---|---|
| Balance, beginning of period | **$ 21,653** | $ 21,280 |
| Exercise of convertible promissory notes | **54** | **–** |
| Expiry of warrants | **–** | 103 |
| Cancellation of stock options | **–** | 190 |
| Expiry of vested stock options | **66** | 72 |
| Balance, end of period | **$ 21,773** | $ 21,645 |

**(c) Continuity of stock options**

| | **Nine months ended September 30, 2015** | Ten months ended September 30, 2014 |
|---|---|---|
| Balance, beginning of period | **$ 4,078** | $ 1,983 |
| Stock based compensation | **2,235** | 1,907 |
| Exercise of stock options | **(493)** | (18) |
| Cancellation of stock options | **-** | (103) |
| Expiry of vested stock options | **(66)** | (72) |
| Balance, end of period | **$ 5,754** | $ 3,697 |

**(d) Loss per share**

Loss per common share is calculated using the weighted average number of common shares outstanding for the three and four month periods ended September 30, 2015 and September 30, 2014 and the nine and ten month periods ending September, 2015 and September 30, 2014 calculated as follows:

| | **Three months ended Sept 30,2015** | Four months ended Sept 30,2014 | **Nine months ended Sept 30, 2015** | Ten months ended Sept 30,2014 |
|---|---|---|---|---|
| Issued common shares, beginning of period | **11,932** | 10,388 | **11,700** | 3,891 |
| Effect of April public offering | **—** | — | **—** | 2,825 |
| Effect of December public offering | **—** | — | **—** | 1,204 |
| Effect of warrant and option exercises | **4** | 1,222 | **145** | 833 |
| Effect of ATM issuances | **1** | — | **—** | — |
| Effect of promissory note conversions | **27** | — | **44** | — |
| | **11,964** | 11,610 | **11,889** | 8,753 |

(Tabular amounts are in 000s)

The effect of any potential exercise of our stock options and warrants outstanding during the year has been excluded from the calculation of diluted loss per common share as it would be anti-dilutive.

**(e) Convertible promissory notes**

During the nine months ended September 30, 2015, $437.5 thousand promissory notes due in September 2015 incurring interest at a rate of 10% were converted into 122 thousand common shares of the Company.

## 7. Stock options

**(a) Stock options transactions for the period:**

| | **Nine months ended September 30, 2015** | | Ten months ended September 30, 2014 | |
|---|---|---|---|---|
| | **Number of Options** | **Weighted average exercise price** | Number of Options | Weighted average exercise price |
| Outstanding, Beginning of period | **1,374** | **$ 5.95** | 417 | $ 6.00 |
| Granted | **478** | **6.92** | 1,039 | 5.93 |
| Exercised | **(121)** | **4.66** | (6) | 3.72 |
| Expired | **(4)** | **21.69** | (1) | 32.17 |
| Cancelled | **-** | **-** | (21) | 6.00 |
| Outstanding, end of period | **1,727** | **$ 6.28** | 1,428 | $ 5.88 |

**(b) Stock options outstanding at September 30, 2015:**

| | Options outstanding | | | Options exercisable | |
|---|---|---|---|---|---|
| Range of exercise prices | Number of Options | Weighted average remaining contractual life (years) | Weighted average exercise price | Number of Options | Weighted average exercise price |
| $2.16 - $3.48 | 121 | 6.8 | $ 2.78 | 121 | $ 2.78 |
| $3.49 - $5.70 | 643 | 8.6 | 5.59 | 343 | 5.60 |
| $5.71 - $9.36 | 959 | 8.9 | 6.96 | 307 | 7.35 |
| $9.37 - $118.80 | 4 | 2.5 | 60.00 | 4 | 60.00 |
| | 1,727 | 8.7 | $ 6.28 | 775 | $ 6.13 |

**(c) Fair value assumptions**

The following assumptions were used in the Black-Scholes option-pricing model to determine the fair value of stock options granted during the following periods:

| | **Nine months ended September 30, 2015** | Ten months ended September 30, 2014 |
|---|---|---|
| Exercise price | **$ 6.77-7.14** | $ 5.16-7.32 |
| Grant date share price | **$ 6.77-7.14** | $ 5.16-7.32 |
| Risk free interest rate | **0.75-1.5%** | 1.5% |
| Expected dividend yield | **—** | — |
| Expected volatility | **103-113%** | 53-135% |
| Expected life of options | **5 years** | 5 years |
| Weighted average fair value of options granted in the period | **$ 5.33** | $ 4.94 |

(Tabular amounts are in 000s)

Stock options granted by the Company during the nine months ended September 30, 2015, consist of 128,000 options that vest 50%, 25% and 25% on each of the next three anniversaries and 350,000 options that vest 50% on the first anniversary and 16.67% on each of the next three anniversaries (total four year vesting).

Stock options granted by the Company during the ten months ended September 30, 2014 consisted of 897,381 options that vested 50% upon the first anniversary and 25% on each of the next two anniversaries, 70,834 options which vest monthly over thirty six months and 70,834 of options of which 33,334 vested immediately and the remaining 37,500 vests 50% upon the first anniversary and 25% on each of the next two anniversaries.

Refer to Note 9 for a breakdown of stock option expense by function.

The Company has reserved up to 2,080,050 common shares for issuance relating to outstanding options, rights and other entitlements under the stock based compensation plans of the Company as of September 30, 2015.

## 8. Additional cash flow disclosures

Net change in non-cash operating working capital is summarized as follows:

| | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| Prepaid expenses and other assets | **$ 271** | $ (91) | **$ 267** | $ (91) |
| Accounts payable | **(14)** | (210) | **(120)** | 249 |
| Accrued liabilities | **466** | (418) | **(96)** | (1,258) |
| | **$ 723** | $ (719) | **$ 51** | $ (1,100) |

## 9. Other expenses

*Components of research and development expenses:*

| | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| APTO-253 development costs | **$ 1,633** | $ 1,272 | **$ 3,750** | $ 2,475 |
| Severance costs | — | — | — | 326 |
| Stock-based compensation | 79 | 37 | 145 | 92 |
| Deferred share unit costs | — | — | — | 17 |
| Depreciation of equipment | **10** | 2 | **19** | 10 |
| | **$ 1,722** | $ 1,311 | **$ 3,914** | $ 2,920 |

*Components of general and administrative expenses:*

| | **Three months ended Sept. 30,2015** | Four months ended Sept. 30,2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30,2014 |
|---|---|---|---|---|
| General and administrative excluding salaries | **$ 819** | $ 1,099 | **$ 2,997** | $ 2,947 |
| Salaries | **838** | 836 | **2,348** | 2,383 |
| Severance costs | — | — | — | 762 |
| Stock-based compensation | 572 | 1,047 | 2,091 | 1,814 |
| Deferred share unit costs | — | — | — | 14 |
| Depreciation of equipment | **19** | 6 | **45** | 11 |
| | **$ 2,248** | $ 2,988 | **$ 7,481** | $ 7,931 |

*Components of finance income:*

| | **Three months ended Sept. 30,2015** | Four months ended Sept. 30,2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30,2014 |
|---|---|---|---|---|
| Interest income | **$ 56** | $ 161 | **$ 232** | $ 235 |
| Foreign exchange gain on cash and cash equivalents | **661** | — | **1,011** | — |
| | **$ 717** | $ 161 | **$ 1,243** | $ 235 |

*Components of finance expense:*

| | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| Interest expense | **$ 8** | $ 37 | **$ 43** | $ 190 |
| Foreign exchange loss | — | 12 | — | 35 |
| | **$ 8** | $ 49 | **$ 43** | $ 225 |

**10. Commitments, contingencies and guarantees.**

| (in thousands) | **Less than 1 year** | **1-3 years** | **3-5 years** | **Total** |
|---|---|---|---|---|
| **Operating leases** | $ 553 | 890 | 376 | $ 1,819 |

The Company has entered into various contracts with service providers with respect to the clinical development of APTO-253. These contracts will result in future payment commitments of up to approximately $3.7 million over the related service period. Of this amount, $419 thousand has been paid and $186 thousand has been accrued at September 30, 2015. The payments are based on services performed and amounts may be higher or lower based on actual services performed.

**11. Related Party Transactions**

In March 2015, the Company entered into an agreement with the Moores Cancer Center at the University of California San Diego (UCSD) to provide pharmacology lab services to the Company. Dr. Stephen Howell is the Acting Chief Medical Officer of Aptose and is also a Professor of Medicine at UCSD and will be overseeing the laboratory work. The research services will be provided from April 1, 2015 to March 31, 2016 for an annual fee of US$154,456 to be paid to UCSD in monthly installments.

This transaction is in the normal course of business and will be measured at the amount of consideration established and agreed to by the related parties.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

## For the three and nine months ended September 30, 2015

**November 10, 2015**

*This Management's Discussion and Analysis ("MD&A") of Aptose Biosciences Inc. ("Aptose", the "Company", "we", "us" and similar expressions) for the interim period should be read in conjunction with the Company's unaudited condensed consolidated interim financial statements for the three and nine months ended September 30, 2015 and the four and ten months ended September 30, 2014. The September 30, 2015 interim financial statements and additional information about the Company, including the annual audited financial statements and MD&A as at December 31, 2014 and for the seven months then ended, and the annual report on form 20-F of the Company as at December 31, 2014 and for the seven months then ended can be found on SEDAR at www.sedar.com and EDGAR at www.sec.gov/edgar.shtml.*

This MD&A is prepared as of November 10, 2015. It contains certain forward-looking statements that involve known and unknown risks and uncertainties which are beyond the control of the Company. This MD&A should be read in conjunction with the unaudited condensed consolidated interim financial statements of the Company for the three and nine months ended September 30, 2015 which are incorporated by reference herein and form an integral part of this MD&A.

Effective July 17, 2014 the Company changed its fiscal year end from May 31 to December 31. As a result of that change, the current interim periods being reported are for the three and nine months ended September 30, 2015, while the prior year comparative periods are for the four and ten months ended September 30, 2014.

## CAUTION REGARDING FORWARD-LOOKING STATEMENTS

*This management's discussion and analysis may contain forward-looking statements within the meaning of securities laws. Such statements include, but are not limited to, statements relating to:*

- *our business strategy;*
- *our ability to obtain the substantial capital we require to fund research and operations;*
- *our plans to secure strategic partnerships to assist in the further development of our product candidates;*
- *our plans to conduct clinical trials and preclinical programs;*
- *our expectations regarding the progress and the successful and timely completion of the various stages of our drug discovery, preclinical and clinical studies and the regulatory approval process;*
- *our plans, objectives, expectations and intentions; and*
- *other statements including words such as "anticipate", "contemplate", "continue", "believe", "plan", "estimate", "expect", "intend", "will", "should", "may", and other similar expressions.*

*The forward-looking statements reflect our current views with respect to future events, are subject to 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 ability to obtain the substantial capital we require to fund research and operations;*
- *our lack of product revenues and 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 drug candidates require time-consuming and costly preclinical and clinical testing and regulatory approvals before commercialization;*
- *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 delay our ability to generate revenue;*
- *the regulatory approval process;*
- *our ability to recruit patients for clinical trials;*
- *our exposure to fluctuations of the Canadian dollar against certain other currencies as we hold our investments in Canadian dollars, while we incur many of our expenses in foreign currencies, primarily the United States dollar;*
- *the progress of our clinical trials;*
- *our liability associated with the indemnification of our predecessor and its directors, officers and employees in respect of an arrangement completed in 2007;*
- *our ability to find and enter into agreements with potential partners;*
- *our ability to attract and retain key personnel;*
- *our ability to obtain and maintain patent protection;*
- *our ability to protect our intellectual property rights and not infringe on the intellectual property rights of others;*
- *our ability to comply with applicable governmental regulations and standards;*

- *development or commercialization of similar products by our competitors, many of which are more established and have or have access to greater financial resources than us;*
- *commercialization limitations imposed by intellectual property rights owned or controlled by third parties;*
- *potential product liability and other claims;*
- *our ability to maintain adequate insurance at acceptable costs;*
- *further equity financing, which may substantially dilute the interests of our existing shareholders;*
- *changing market conditions; 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 set out in the section entitled "Risk Factors" underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this management's discussion and analysis or, in the case of documents incorporated by reference herein, as of the date of such 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 such statements will prove to be accurate as actual results and future events could differ materially from those anticipated in such statements. Investors are cautioned that forward-looking statements are not guarantees of future performance and accordingly investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.**

## CORPORATE UPDATE

### *Orphan Drug Designation*

On June 2, 2015, we announced that the U.S. Food and Drug Administration ("FDA") had granted Aptose orphan drug designation for APTO-253 for the treatment of acute myeloid leukemia ("AML"). APTO-253, a first-in-class inducer of the Krüppel-like factor 4 ("KLF4") gene, is the Company's lead product candidate in a Phase Ib clinical trial in patients with AML, high-risk myelodysplastic syndrome ("MDS") and other hematologic malignancies in which KLF4 silencing is reported as operative.

Orphan drug designation is granted by the FDA to encourage companies to develop therapies for the treatment of diseases that affect fewer than 200,000 individuals in the United States. Orphan drug status provides research and development tax credits, an opportunity to obtain grant funding, exemption from FDA application fees and other benefits. If APTO-253 is approved to treat AML, the orphan drug designation provides Aptose with seven years of marketing exclusivity.

### *At-The-Market-Facility*

In early April, Aptose entered into an at-the-market ("ATM") facility for up to US $20,000,000 of common shares. The ATM will, along with the effective shelf prospectus that was filed in December 2014, provides us with the added flexibility to quickly access the market and raise capital at market price. During the nine months ended September 30, 2015, we issued 1,504 common shares under the ATM at a price of US$5.20 per share for gross proceeds of approximately Cdn $10 thousand.

### *LALS and Moffit*

On November 10, 2015 we announced collaborations with Moffitt Cancer Center, a prominent research institute that provides us with exclusive rights to multi-targeting epigenetic inhibitors and with Laxai-Avanti Life Sciences, a medicinal chemistry institution that will focus on the discovery and optimization of novel epigenetic-based therapies.

## PROGRAM UPDATES

## APTO-253

### *Phase Ib Hematologic Malignancy Trial*

On July 28, 2014, we announced that the FDA had completed its review and cleared the Investigational New Drug ("IND") application of APTO-253 for the treatment of hematologic malignancies, including AML, MDS, lymphomas and multiple myeloma. Clearance of the IND allowed us to initiate a Phase Ib, multi-center, open-label, clinical study of APTO-253 in patients with relapsed or refractory hematologic malignancies. The trial is expected to enroll 45-60 patients as part of a dose-escalation program and two separate disease-specific single-agent expansion cohorts.

The dose escalation study includes two separate arms: one group of up to 15 patients dedicated to AML and high-risk MDS and another group of up to 15 patients for lymphomas and multiple myelomas. The two separate arms will allow for a focused look at AML and high-risk MDS and exploration of the effect of APTO-253 on lymphomas and myelomas. We have enrolled patients on both arms of the trial.

The primary objectives of the Phase Ib trial are: (i) to further assess safety on an optimized dosing schedule relative to the prior Phase 1 solid tumor trial, and (ii) to identify the recommended dose for APTO-253 for the upcoming Phase Ib single-agent expansion and Phase 2 combination trials. The Phase 1b expansion studies are planned to include up to 15 patients each in dedicated AML and MDS cohorts.

In the Phase 1b dose escalation portion of the study, we plan to monitor levels of expression of the KLF4 gene and of the embryonic gene Cdx2 in cells from patients upon entry, throughout the study, and during a post-treatment period. We do not exclude patients based on KLF4 or CDX2 status from participating in this first study as we believe this approach may be useful in further validating our companion diagnostic and observing potential responses among the broader population. Subsequent to the dose escalation portion of the Phase 1b study, we plan on screening patients in the expansion portions of the trial, and in the Phase 2 combination trials, for levels of KLF4 and CDX2 anticipated to confer maximal sensitivity to APTO-253.

On January 13, 2015 we announced that we had dosed the first patient in the Phase Ib dose-escalation study at Baylor Cancer Center in Dallas. During the three months ended March 31, 2015 we added three additional sites at MD Anderson Cancer Center in Houston, Knight Cancer Institute at Oregon Health & Science University ("OHSU") and the University of Michigan. We expect to add additional sites in both the fourth quarter ending December 31, 2015 and first quarter ending March 31, 2016 and will continue to seek to add additional high quality institutions as clinical sites.

At this point in time, we have dosed patients at the 20mg/m2, 40mg/m2, 66 mg/m2 and 100 mg/m2 dose levels of APTO-253. Patients are being dosed on a schedule in which they receive APTO-253 on days 1 and 2 of each week of a 28 day cycle, and their bone marrow and peripheral blood samples are being collected and processed for biomarker analysis. The next anticipated dose level is 140mg/m2. Based on our preclinical data with heme cancer cells and our prior clinical experience using a different dosing schedule, we believe that we may be entering the therapeutic range for heme cancer patients at the 100mg/m2 dose level.

We anticipate completing enrollment of the Phase Ib dose-escalation study by the first half of 2016 and starting the single agent expansion and Phase 2 combination studies in 2016.

***Beat AML Initiative***

In parallel to the single agent dose escalating Phase Ib trial with APTO-253, we have been performing studies through the Beat AML Initiative, a groundbreaking initiative that was formed in collaboration with The Leukemia & Lymphoma Society and the Knight Cancer Institute at OHSU to better understand AML. Beat AML is designed to leverage the expertise of functional genomic technologies and pharmaceutical collaborators to take a next-generation personalized medicine approach to improve outcomes for AML patients. Our efforts with the Beat AML initiative, and with Dr. Brian Druker and his group at OHSU, have allowed us to evaluate the effect of APTO-253 as a monotherapy and in combination with other anti-cancer agents. APTO-253 has been evaluated against a large number of fresh bone marrow samples from patients with AML, MDS, chronic myeloid leukemia ("CML") and chronic lymphocytic leukemia ("CLL"). In addition, genomic sequencing of these primary isolates is helping to provide a rationale for APTO-253 for use as a single agent or in drug combination against specific hematologic malignancies.

In November we announced that preclinical data for our lead investigational anticancer therapeutic APTO-253 will be presented at the 57th American Society of Hematology (ASH) Annual Meeting and Exposition by researchers from the Knight Cancer Institute at Oregon Health & Science University (OHSU). Data demonstrate the ability of APTO-253 to kill acute myeloid leukemia (AML) cells in the majority of patient samples, with a trend toward correlation with baseline KLF4 expression level. Moreover, APTO-253 demonstrated enhanced efficacy against AML in patient samples when combined with either the BET inhibitor JQ1 or with the FLT3 inhibitor quizartinib. Such findings suggest APTO-253 has the potential to exert efficacy as a single agent, and will be useful in combination with certain other anticancer agents..

## FINANCING ACTIVITIES

During the nine months ended September 30, 2015, we received cash proceeds of $888 thousand related to stock option and warrant exercises. In addition, during a two (2) day period we issued 1,504 common shares under the ATM facility described above at a price of US$5.20 per share for proceeds of approximately Cdn $10 thousand.

## LIQUIDITY AND CAPITAL RESOURCES

Since its inception, Aptose has financed its operations and technology acquisitions primarily from equity and debt financing, proceeds from the exercise of warrants and stock options, and interest income on funds held for future investment.

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 currently believe we have capital resources sufficient to fund our research and development and operations into early 2017.

## CASH POSITION

At September 30, 2015, we had cash and cash equivalents and investments of $23.4 million compared to $30.5 million at December 31, 2014. We generally invest our cash in excess of current operational requirements in highly rated and liquid instruments. Investment decisions are made in accordance with an established investment policy administered by senior management and overseen by our Board of Directors. As at September 30, 2015, our cash and cash equivalents consisted of cash of $765 thousand (December 31, 2014 - $293 thousand) and funds in both Canadian and US dollars deposited into high interest savings accounts totaling $14.382 million (December 31, 2014 - $14.072 million). Working capital (representing primarily cash, cash equivalents, investments and other current assets less current liabilities) at September 30, 2015 was $22.2 million (December 31, 2014 –$29.1 million).

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

## RESULTS OF OPERATIONS

Our net loss for the three months ended September 30, 2015 was $3.3 million ($0.27 per share) compared with $4.2 million ($0.36 per share) during the four months ended September 30, 2014. Net loss for the nine months ended September 30, 2015 was $10.2 million ($0.86 per share) compared with $10.8 million ($1.58 per share) during the ten months ended September 30, 2014.

The decrease in net loss during the three months ended September 30, 2015 in comparison to the four months ended September 30, 2014 is primarily due to a four month period in the prior year compared to a three month period in the current year as well as an increase in finance income associated with foreign exchange gains on our US dollar cash balances.

The decrease in net loss during the nine months ended September 30, 2015 compared with the ten month period ended September 30, 2014 is due to a nine month period in the current year compared with a ten month period in the prior year. Research and development activities were significantly higher in the current year period due to the clinical development of APTO-253 and supporting activities and this increase was offset by a significant increase in finance income in the current year period associated with foreign currency gains on our US dollar cash balances.

We utilized cash of $2.6 million in our operating activities in the three month period ended September 30, 2015 compared with $3.9 million during the four months ended September 30, 2014. For the nine months ended September 30, 2015 we utilized cash of $9.0 million compared with $10.0 million in the ten months ended September 30, 2014. The cash utilized in the three month period is lower than the four months ended September 30, 2014 due to a lower net loss as well as cash used to reduce accounts payable and accrual balances in the prior year period.

### *Research and Development*

Research and development expenses totaled $1.7 million in the three months ended September 30, 2015 compared to $1.3 million during the four months ended September 30, 2014 and totaled $3.9 million for the nine month period ended September 30, 2015 compared with $2.9 million in the ten months ended September 30, 2014. Research and development costs consist of the following:

*Components of research and development expenses:*

| | **Three months ended** | Four months ended | **Nine months ended** | Ten months ended |
|---|---|---|---|---|
| | **Sept. 30,2015** | Sept. 30,2014 | **Sept 30, 2015** | Sept 30,2014 |
| APTO-253 development costs | **$ 1,633** | $ 1,272 | **$ 3,750** | $ 2,475 |
| Severance costs | — | — | — | 326 |
| Stock-based compensation | 79 | 37 | 145 | 92 |
| Deferred share unit costs | — | — | — | 17 |
| Depreciation of equipment | **10** | 2 | **19** | 10 |
| | **$ 1,722** | $ 1,311 | **$ 3,914** | $ 2,920 |

Research and development costs in the three months ended September 30, 2015 increased compared with the four months ended September 30, 2014 due to increased APTO-253 development costs including the ongoing Phase 1b clinical trial of APTO-253 in the current year period compared with no ongoing clinical development in the prior year period including supplementary personnel to support the trial. In addition we have initiated studies to develop an optimized formulation of APTO-253 for which no comparable work was ongoing in the prior year period.

The increase in research and development costs during the nine months ended September 30, 2015 compared with the ten months ended September 30, 2014 is the result of increased APTO-253 development costs primarily related to the ongoing Phase 1b clinical trial and associated activities including formulation studies and research support. Increased program expenditures were offset by no severance costs in the nine months ended September 30, 2015 compared with $326 thousand in the ten months ended September 30, 2014 related to severance payments made to our former President and COO.

***General and Administrative***

General and administrative expenses totaled $2.2 million in the three month period ended September 30, 2015 compared to $3.0 million in the four months ended September 30, 2014. For the nine month period ended September 30, 2015, general and administrative expenses were $7.5 million compared with $7.9 million in the ten months ended September 30, 2014. General and administrative expenses consist of the following:

*Components of general and administrative expenses:*

| | **Three months ended Sept. 30,2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| General and administrative excluding salaries | **$ 819** | $ 1,099 | **$ 2,997** | $ 2,947 |
| Salaries | **838** | 836 | **2,348** | 2,383 |
| Severance costs | — | — | — | 762 |
| Stock-based compensation | 572 | 1,047 | 2,091 | 1,814 |
| Deferred share unit costs | — | — | — | 14 |
| Depreciation of equipment | **19** | 6 | **45** | 11 |
| | **$ 2,248** | $ 2,988 | **$ 7,481** | $ 7,931 |

General and administrative expenses excluding salaries decreased in the three months ended September 30, 2015 compared with the four months ended September 30, 2014. The decrease over the prior year is attributable to a four month reporting period in the prior year compared with a three month reporting period in the current year.

General and administrative expenses excluding salaries were consistent in the nine months ended September 30, 2015 compared with the ten months ended September 30, 2014 despite the shorter time frame in the current year. Comparing on a three month to three month basis expenses in the current period increased. The increase is attributable primarily to higher insurance and other costs associated with our NASDAQ listing.

Salary charges in the three and nine month periods ended September 30, 2015 were consistent with salary charges in the four and ten month periods ended September 30, 2014 despite the shorter reporting periods in the current year. Our general and administrative salary costs are primarily incurred in US dollars and the weakening of the Canadian dollar has increased these costs in the current year compared with the prior year.

Severance costs were incurred in the ten months ended September 30, 2014 as the former President and COO left in March 2014. There are no ongoing costs related to the severance payments.

Stock-based compensation costs were lower in the three months ended September 30, 2015 compared with the four months ended September 30, 2014. This decrease is the result of large option grants in June and July 2014 which vested 50% in the first year and contribute to higher stock-based compensation expense during the first twelve month period.

Stock-based compensation costs were higher in the nine months ended September 30, 2015 compared with the ten months ended September 30, 2014 due to the option grants in June and July 2014 for which 6-7 months of expense were incurred in the current year compared with only 2-3 months of expense in the prior year period.

Deferred share unit costs relate to the marked-to-market adjustment on units which were settled in April 2014. There were no deferred share units outstanding in the nine month period ending September 30, 2015.

***Finance Expense***

Finance expense for the three months ended September 30, 2015 was $8 thousand compared with $49 thousand for the four months ended September 30, 2014 and $43 thousand for the nine months ended September 30, 2015 compared with $225 thousand for the ten months ended September 30, 2014. Finance expense includes the following items:

| | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| Interest expense | **$ 8** | $ 37 | **$ 43** | $ 190 |
| Foreign exchange loss | **—** | 12 | **—** | 35 |
| | **$ 8** | $ 49 | **$ 43** | $ 225 |

Finance expense for the three and nine months ended September 30, 2015 relates to interest expense of $6 thousand accrued at a rate of 10% on the remaining balance of convertible promissory notes issued in September 2013 as well as accretion expense related to the conversion feature of the notes. All of the promissory notes had been converted into common shares as of September 30, 2015.

Finance expense for the four and ten months ended September 30, 2014 relates to interest accrued at a rate of 10% as well as accretion expense on the $918 thousand promissory notes issued in June 2013 and repaid in April 2014 as well as interest on the convertible promissory notes issued in September 2013 as described above.

Foreign exchange loss is the result of the fluctuation of rates of exchange between US and Canadian dollars.

***Finance Income***

Finance income totaled $717 thousand in the three months ended September 30, 2015 compared to $161 thousand in the four months ended September 30, 2014 and $1.2 million in the nine months ended September 30, 2015 compared with $235 thousand in the ten months ended September 30, 2014. Finance income includes the following items:

| | **Three months ended Sept. 30, 2015** | Four months ended Sept. 30, 2014 | **Nine months ended Sept. 30, 2015** | Ten months ended Sept. 30, 2014 |
|---|---|---|---|---|
| Interest income | **$ 56** | $ 161 | **$ 232** | $ 235 |
| Foreign exchange gain on cash and cash equivalents | 661 | — | **1,011** | — |
| | **$ 717** | $ 161 | **$ 1,243** | $ 235 |

Interest income represents interest earned on our cash and cash equivalent and investment balances. Foreign exchange gains are the result of an increase in the value of our US dollar denominated cash and cash equivalents balances during the three and nine months ended September 30, 2015 due to a depreciation of the Canadian dollar compared to the US dollar.

***Net loss for the period***

For the reasons discussed above, our net loss for the three months ended September 30, 2015 decreased to $3.3 million ($0.27 per share) compared to $4.2 million ($0.36 per share) in the four months ended September 30, 2014 and decreased in the nine months ended September 30, 2015 to $10.2 million ($0.86 per share) from $10.8 million ($1.58 per share) in the ten months ended September 30, 2014.

## QUARTERLY FINANCIAL INFORMATION (UNAUDITED)

The selected financial information provided below is derived from our unaudited quarterly financial statements for each of the last eight quarters.

| *(Amounts in 000's except for per common share data)* | **Q3 Sept 30, 2015** | **Q2 June 30, 2015** | **Q1 Mar 31, 2015** | **Dec 31, 2014** | **Four months ended Sept 30, 2014** | **Q4 May 31, 2014** | **Q3 Feb 28, 2014** | **Q2 Nov 30, 2013** |
|---|---|---|---|---|---|---|---|---|
| Revenue | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ — |
| Research and development expense | 1,722 | 1,308 | 884 | 1,093 | 1,311 | 1,012 | 597 | 791 |
| General and administrative expense | 2,248 | 2,504 | 2,729 | 2,554 | 2,988 | 3,192 | 1,751 | 1,938 |
| Net loss | (3,261) | (3,365) | (3,569) | (3,584) | (4,187) | (4,221) | (2,433) | (2,798) |
| Basic and diluted net loss per share | $ (0.27) | $ (0.28) | $ (0.30) | $ (0.31) | $ (0.36) | $ (0.49) | $ (0.48) | $ (0.77) |
| Cash (used in) operating activities | $ (2,567) | $ (4,296) | $ (2,182) | $ (2,745) | $ (3,926) | $ (3,926) | $ (2,168) | $ (1,484) |

Research and development expenditures were lower in the quarters ended November 30, 2013 and February 28, 2014 as the Company focused its efforts on a strategic review and securing adequate financing for future development. In the quarter ended May 31, 2014, expenditures increased due to the allocation of severance costs related to the former President and COO of the Company to research and development of $326 thousand. In the four months ended September 30, 2014 and in following quarters, research and development activities have increased as we prepared and subsequently launched the APTO-253 Phase Ib clinical trial. In the three months ended September 30, 2015 research and development expenditures increased further as the Phase Ib clinical trial advances.

The increase in general and administrative expense in the three months ended May 31, 2014 is due to severance costs associated with the former President and COO of the Company ($762 thousand), bonus costs, and increased Board, consulting and legal fees associated with activities during the quarter. In the four months ended September 30, 2014, the general and administrative expense is higher due to a four-month vs. three-month period in relation to the change in the financial year of the Company discussed above as well as option grants during the quarter which increased option-related expenses. During the three months ended December 31, 2014, we incurred additional expenses related to our listing on NASDAQ and recognized an increase in expected costs to terminate our current Toronto lease which led to higher general and administrative expenses in the quarter. General and administrative costs in the three months ended March 31, 2015 again were higher due to the relocation of the Toronto office and related clean-up costs as well as costs related to our NASDAQ listing.

Cash used in operating activities fluctuates significantly due primarily to timing of payments and increases and decreases in the accounts payables and accrued liabilities balances.

### *Contractual Obligations and Off-Balance Sheet Financing*

At September 30, 2015, we had contractual obligations requiring annual payments as follows:

| (in thousands) | Less than 1 year | 1-3 years | 3-5 years | Total |
|---|---|---|---|---|
| **Operating leases** | $ 553 | 890 | 376 | $ 1,819 |

The Company has entered into various contracts with service providers with respect to the clinical development of APTO-253. These contracts will result in future payment commitments of up to approximately $3.7 million over the related service period. Of this amount, $419 thousand has been paid and $186 thousand has been accrued at September 30, 2015. The payments are based on services performed and amounts may be higher or lower based on actual services performed.

As at September 30, 2015, we have not entered into any off-balance sheet arrangements other than the operating leases for our offices and labs and certain office equipment.

## RISK FACTORS

Before making an investment decision with respect to our common shares, you should carefully consider the following risk factors, in addition to the other information included or incorporated by reference into this report. The risks set out below are not the only risks we face. If any of the following risks should be realized, our business, financial condition, prospects or results of operations would likely suffer. In that case, the trading price of our common shares could decline and you may lose all or part of the money you paid to buy our common shares.

**Please refer to our December 31, 2014 MD&A for a complete discussion of risks and uncertainties.**

- We are at an early stage of development. Significant additional investment will be necessary to complete the development of any of our products to approval.
- We need to raise additional capital. Due to our lack of product revenues, 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, 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.
- We have a history of operating losses. We expect to incur net losses and we may never achieve or maintain profitability.
- Clinical trials are long in duration, expensive and uncertain processes and the FDA may ultimately not approve any of our product candidates. We may never develop any commercial drugs or other products that generate revenues.
- We may not achieve our projected development goals in the time frames we announce and expect.
- 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.
- If we fail to attract and retain key employees, the development and commercialization of our products may be adversely affected.
- 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.

- 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.
- 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.
- We have no manufacturing capabilities and face supply risks. We depend on third-parties, including a number of sole suppliers, for manufacturing and storage of our product candidates used in our clinical trials. Product introductions may be delayed or suspended if the manufacture of our products is interrupted or discontinued.
- We are subject to extensive government regulation.
- We may be exposed to fluctuations of the Canadian dollar against certain other currencies because we publish our consolidated financial statements and hold our investments in Canadian dollars, while we incur many of our expenses in foreign currencies, primarily the United States dollar. Fluctuations in the value of currencies could cause us to incur currency exchange losses.
- We may be unable to obtain partnerships for one or more of our product candidates which could curtail future development and negatively impact our share price. In addition, our partners might not satisfy their contractual responsibilities or devote sufficient resources to our partnership.
- We have agreed to indemnify our predecessor, old Lorus and its directors, officers and employees.
- Our share price has been and may continue to be volatile and an investment in our common shares could suffer a decline in value.
- Future sales of our common shares by us or by our existing shareholders could cause our share price to fall.
- We are susceptible to stress in the global economy therefore, our business may be affected by the current and future global financial condition.
- There is no assurance that an active trading market in our common shares will be sustained.
- It may be difficult for non-Canadian investors to obtain and enforce judgments against us because of our Canadian incorporation and presence.
- We are likely a “passive foreign investment company” which may have adverse U.S. federal income tax consequences for U.S. shareholders.

## FINANCIAL INSTRUMENTS

### (a) Financial instruments

We have classified our financial instruments as follows:

| (in thousands) | September 30, 2015 | December 31, 2014 |
|---|---|---|
| **Financial assets:** | | |
| Cash and cash equivalents, consisting of high interest savings accounts, measured at amortized cost | $ 15,147 | $ 14,365 |
| Investments, consisting of guaranteed investment certificates, measured at amortized cost including accrued interest | 8,205 | 16,180 |
| | | |
| **Financial liabilities:** | | |
| Accounts payable, measured at amortized cost | 136 | 256 |
| Accrued liabilities, measured at amortized cost | 1,566 | 1,662 |
| Convertible promissory notes, measured at amortized cost | - | 410 |

At September 30, 2015, there are no significant differences between the carrying values of these amounts and their estimated market values due to their short-term nature.

**(b) Financial risk management**

We have exposure to credit risk, liquidity risk and market risk. Our Board of Directors has the overall responsibility for the oversight of these risks and reviews our policies on an ongoing basis to ensure that these risks are appropriately managed.

**(i) Credit risk**

Credit risk is the risk of financial loss to us if a customer, partner or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from our cash and cash equivalents and investments. The carrying amount of the financial assets represents the maximum credit exposure.

We manage credit risk for our cash and cash equivalents and investments by maintaining minimum standards of R1-low or A-low investments and we invest only in highly rated Canadian corporations with debt securities that are traded on active markets and are capable of prompt liquidation.

**(ii) Liquidity risk**

Liquidity risk is the risk that we will not be able to meet our financial obligations as they come due. To the extent that we do not believe we have sufficient liquidity to meet our current obligations, the Board considers securing additional funds through equity, debt or partnering transactions. We manage our liquidity risk by continuously monitoring forecasts and actual cash flows. All of our financial liabilities are due within the current operating period.

**(iii) Market risk**

Market risk is the risk that changes in market prices, such as interest rates, foreign exchange rates and equity prices will affect our income or the value of our financial instruments.

We are subject to interest rate risk on our cash and cash equivalents however we do not believe that the results of operations or cash flows would be affected to any significant degree by a sudden change in market interest rates relative to interest rates on the investments, owing to the relative short-term nature of the investments. We do not have any material interest bearing liabilities subject to interest rate fluctuations.

Currency risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. We are exposed to currency risk from employee costs as well as the purchase of goods and services primarily in the U.S. and on cash held in foreign currencies. Fluctuations in the US dollar exchange rate could potentially have a significant impact on the Company's results. Assuming all other variables remain constant, a 10% depreciation or appreciation of the Canadian dollar against the U.S. dollar would result in an increase or decrease in loss for the year and comprehensive loss of $880 thousand (December 31, 2014- $58 thousand). Balances in foreign currencies at September 30, 2015 are as follows:

| | **US$ balances at September 30, 2015** | US$ balances at December 31, 2014 |
|---|---|---|
| Cash and cash equivalents | **$ 7,196** | $ 66 |
| Accounts payable and accrued liabilities | **(583)** | (565) |
| | **$ 6,613** | $ (499) |

We do not have any forward exchange contracts to hedge this risk and we do not invest in equity instruments of other corporations.

**(c) Capital management**

Our primary objective when managing capital is to ensure that we have sufficient cash resources to fund our development activities and to maintain our ongoing operations. To secure the additional capital necessary to pursue these plans, we may attempt to raise additional funds through the issuance of equity or by securing strategic partners.

We include cash and cash equivalents and short-term deposits in the definition of capital.

We are not subject to externally imposed capital requirements and there has been no change with respect to the overall capital management strategy during the three and nine months ended September 30, 2015.

## USE OF PROCEEDS

The following table provides an update on the anticipated use of proceeds raised in the December 2013 and April 2014 equity offerings along with amounts actually expended.

As of September 30, 2015 the following expenditures have been incurred:

| (in thousands) | Previously disclosed | Additional Costs | Spent to Date | Remaining to be spent |
|---|---|---|---|---|
| Phase Ib clinical trial | **$ 1,750** | $ 1,600 | $ 1,368 | **$ 1,982** |
| Depending on the Phase Ib clinical trial of APTO-253 results, fund single agent expansion and drug combination focused Phase 2 Trials in both AML and MDS patients | **7,800** | - | nil | **7,800** |
| APTO-253 manufacturing program[(1)] | **2,250** | - | 1,555 | **695** |
| Research and development programs | **2,000** | - | 2,000 | **-** |
| General and corporate purposes | **15,869** | - | 12,778 | **3,091** |
| | **$ 29,669** | $ 1,600 | $ 17,701 | **$ 13,568** |

[(1)] We have utilized all of the funds allocated from the December 3013 and April 2014 equity offerings to Research and Development programs and continue to fund expenses through proceeds related to warrant and stock option exercises for which no allocations were stipulated.

We currently anticipate that the total direct costs associated with the Phase Ib trial will range between $3.05 million and $3.35 million as opposed to the previously disclosed amount of approximately $1.75-2.0 million. The variance is due to the addition of a separate dose escalation arm to the Phase Ib clinical trial with lymphoma and myeloma patients.

We do not anticipate initiating the Phase 2 trials until the results of the Phase Ib are available and only then if the results warrant further clinical investigation. It is currently anticipated that the remaining balances of the research and development programs and general and corporate costs will be allocated in accordance with the previously disclosed use of proceeds.

## EVALUATION OF DISCLOSURE CONTROLS AND INTERNAL CONTROLS

There have been no changes in the Company's internal control over financial reporting that occurred during the three months ended September 30, 2015 that have materially affected or are reasonably likely to materially affect the Company's internal controls over financial reporting.

## UPDATED SHARE INFORMATION

As at November 10, 2015, we had 12.0 million common shares issued and outstanding. In addition there were 1.7 million common shares issuable upon the exercise of outstanding stock options and a total of 130 thousand common shares issuable upon the exercise of common share purchase warrants.

## ADDITIONAL INFORMATION

Additional information relating to Aptose, including Aptose' December 31, 2014 annual report on form 20-F and other disclosure documents, are available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar.shtml.

**FORM 52-109F2**
***CERTIFICATION OF INTERIM FILINGS– FULL CERTIFICATE***

I, William G. Rice, Chairman, President and Chief Executive Officer of Aptose Biosciences Inc. certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Aptose Biosciences Inc. (the "issuer") for the interim period ended September 30, 2015.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.

5. ***Design:*** Subject to the limitations, if any described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the end of the period covered by the interim filings

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared;

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

5.2 ***ICFR -- material weakness relating to design:*** N/A

5.3 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on July 1, 2015 and ended on September 30, 2015 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: November 10, 2015

*/s/ William G. Rice*

William G. Rice
Chairman, President and Chief Executive Officer

**FORM 52-109F2**
***CERTIFICATION OF INTERIM FILINGS– FULL CERTIFICATE***

I, Gregory K. Chow, Senior Vice President and Chief Financial Officer of Aptose Biosciences Inc. certify the following:

1. ***Review:*** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of Aptose Biosciences Inc. (the "issuer") for the interim period ended September 30, 2015.

2. ***No misrepresentations:*** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.

3. ***Fair presentation:*** Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

4. ***Responsibility:*** The issuer's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*, for the issuer.

5. ***Design:*** Subject to the limitations, if any described in paragraphs 5.2 and 5.3, the issuer's other certifying officer(s) and I have, as at the end of the period covered by the interim filings

   (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that

      (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared;

      (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and

   (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer's GAAP.

5.1 ***Control framework:*** The control framework the issuer's other certifying officer(s) and I used to design the issuer's ICFR is Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

5.2 ***ICFR -- material weakness relating to design:*** N/A

5.2 ***Limitation on scope of design:*** N/A

6. ***Reporting changes in ICFR:*** The issuer has disclosed in its interim MD&A any change in the issuer's ICFR that occurred during the period beginning on July 1, 2015 and ended on September 30, 2015 that has materially affected, or is reasonably likely to materially affect, the issuer's ICFR.

Date: November 10, 2015

*/s/ Gregory K. Chow*

Gregory K. Chow
Senior Vice President and Chief Financial Officer