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

FORM 10-Q

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period Ended September 30, 2019

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Transition Period from to

Commission File Number: 1-35447

APTOSE BIOSCIENCES INC.

(Exact Name of Registrant as Specified in Its Charter)

Canada	**98-1136802**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

251 Consumers Road, Suite 1105
Toronto, Ontario, Canada M2J 4R3
(Address of Principal Executive Offices)

647-479-9828
(Registrant's Telephone Number, Including Area Code)

Not applicable
(Former Name, Former Address and Former Fiscal Year, if Changed Since Last Report)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares, no par value	APTO	Nasdaq Capital Market

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

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

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of November 5, 2019, the registrant had 55,486,564 shares of common stock outstanding.

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PART I—FINANCIAL INFORMATION

ITEM 1 – FINANCIAL STATEMENTS

Condensed Consolidated Interim Financial Statements

(Unaudited)

APTOSE BIOSCIENCES INC.

For the three and nine months ended September 30, 2019 and 2018

APTOSE BIOSCIENCES INC.
Condensed Consolidated Interim Statements of Financial Position
(Expressed in thousands of US dollars)
(unaudited)

		September 30, 2019		December 31, 2018
Assets				
Current assets:				
Cash and cash equivalents	$	20,686	$	15,299
Investments		9,528		440
Prepaid expenses		285		646
Other current assets		109		101
Total current assets		30,608		16,486
Non-current assets:				
Property and equipment		361		384
Right-of-use assets, operating leases		1,491		-
Total non-current assets		1,852		384
Total assets	$	32,460	$	16,870
Liabilities and Shareholders' Equity				
Current liabilities:				
Accounts payable	$	1,174	$	1,315
Accrued liabilities		2,221		1,474
Current portion of lease liability, operating leases		513		-
Total current liabilities		3,908		2,789
Non-current liabilities:				
Lease liability, operating leases		1,124		-
Total liabilities		5,032		2,789
Shareholders' equity:				
Share capital:				
Common shares, no par value, unlimited authorized shares, 55,486,564 and 38,161,808 shares issued and outstanding at September 30, 2019 and December 31, 2018, respectively		291,344		261,072
Additional paid-in capital		34,593		32,963
Accumulated other comprehensive loss		(4,303)		(4,316)
Deficit		(294,206)		(275,638)
Total shareholders' equity		27,428		14,081
Total liabilities and shareholders' equity	$	32,460	$	16,870

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

APTOSE BIOSCIENCES INC.
Condensed Consolidated Interim Statement of Loss and Comprehensive Loss
(Expressed in thousands of US dollars, except for per common share data)
(unaudited)

	Three months ended September 30		Nine months ended September 30	
	2019	2018	2019	2018
Revenue	$ -	$ -	$ -	$ -
Expenses:				
Research and development	4,751	3,591	11,582	14,549
General and administrative	2,276	2,020	7,391	8,233
Operating Expenses	7,027	5,611	18,973	22,782
Other income (expense):				
Interest income	187	80	407	198
Foreign exchange losses	(4)	-	(2)	(23)
Total other income	183	80	405	175
Net loss	$ (6,844)	(5,531)	$ (18,568)	$ (22,607)
Other comprehensive gain/(loss):				
Unrealized gain/(loss) on securities available-for-sale	(5)	9	13	3
Total comprehensive loss	$ (6,849)	(5,522)	$ (18,555)	$ (22,604)
Basic and diluted loss per common share	$ (0.12)	$ (0.16)	$ (0.39)	$ (0.71)
Weighted average number of common shares outstanding used in the calculation of basic and diluted loss per common share (in thousands)	55,454	34,587	47,315	32,039

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

APTOSE BIOSCIENCES INC.
Condensed Consolidated Interim Statements of Changes in Shareholders' Equity
(Expressed in thousands of US dollars)
(unaudited)

	Common Shares					
	Shares (thousands)	Amount	Additional paid-in capital	Accumulated other comprehensive loss	Deficit	Total
Balance, December 31, 2018	38,162	$261,072	$ 32,963	$ (4,316)	$(275,638)	$ 14,081
Common shares issued pursuant to the public offering	11,500	19,594	-	-	-	19,594
Common shares issued pursuant to 2019 share purchase agreement	171	360	-	-	-	360
Common shares issued under the 2018 ATM	77	178	-	-	-	178
Common shares issued pursuant to 2018 share purchase agreement	5,502	10,000	-	-	-	10,000
Common shares issued upon exercise of stock options	34	60	(24)	-	-	36
Common shares issued on redemption of restricted share units	40	80	(80)	-	-	-
Stock-based compensation	-	-	1,734	-	-	1,734
Other comprehensive gain	-	-	-	13	-	13
Net loss	-	-	-	-	(18,568)	(18,568)
Balance, September 30, 2019	55,486	$291,344	$ 34,593	$ (4,303)	$(294,206)	$ 27,428
Balance, December 31, 2017	27,502	$231,923	$ 29,365	$ (4,316)	$(246,770)	$ 10,202
Common shares issued under the 2018 ATM	2,017	6,818	-	-	-	6,818
Common shares issued pursuant to 2017 share purchase agreement	5,232	14,995	-	-	-	14,995
Common shares issued pursuant to 2018 purchase agreement	170	600	-	-	-	600
Common shares issued upon exercise of stock options	96	379	(160)	-	-	219
Stock-based compensation	-	-	3,695	-	-	3,695
Other comprehensive gain	-	-	-	3	-	3
Net loss	-	-	-	-	(22,607)	(22,607)
Balance, September 30, 2018	35,017	$254,715	$ 32,900	$ (4,313)	$(269,377)	$ 13,925

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

APTOSE BIOSCIENCES INC.
Condensed Consolidated Interim Statements of Cash Flows
(Expressed in thousands of US dollars)
(unaudited)

	Three months ended September 30		Nine months ended September30	
	2019	2018	2019	2018
Cash flows from (used in) operating activities:				
Net loss for the period	$ (6,844)	$ (5,531)	$ (18,568)	$ (22,607)
Items not involving cash:				
Stock-based compensation	504	952	1,734	3,695
Shares issued to Aspire Capital as commitment fees	-	-	360	600
Depreciation and amortization	33	29	115	64
Amortization of right-of-use assets	115	-	346	-
Interest on lease liabilities	22	-	69	-
Operating lease payments amortized to lease liabilities	(126)	-	(345)	-
Unrealized foreign exchange (loss) gain	5	(19)	2	1
Accrued interest on investments	(58)	-	(77)	-
Change in non-cash operating working capital:				
Prepaid expenses	437	68	361	2
Other current assets	59	66	(8)	(65)
Account payable	(66)	40	(141)	598
Accrued liabilities	735	(73)	825	7
Cash used in operating activities	(5,184)	(4,468)	(15,327)	(17,705)
Cash flows from financing activities:				
Issuance of common shares pursuant to Public Offering, net of broker commission and agent legal fees	-	-	19,736	-
Issuance of common shares under 2018 Share Purchase Agreement	-	-	10,000	-
Issuance of common shares under 2017 Share Purchase Agreement	-	-	-	15,000
Issuance of common shares under the 2018 ATM, net of broker commission	-	1,579	178	6,827
Cost of offerings	-	(7)	(142)	(14)
Issuance of common shares upon exercise of stock options	17	36	36	219
Cash provided by financing activities	17	1,608	29,808	22,032
Cash flows from (used in) investing activities:				
Maturity (acquisition) of investments	(1,000)	-	(9,000)	250
Purchase of property and equipment	(42)	(28)	(92)	(152)
Cash provided by (used in) investing activities	(1,042)	(28)	(9,092)	98
Effect of exchange rate fluctuations on cash and cash equivalents held	(3)	-	(2)	-
Increase/(decrease) in cash and cash equivalents	(6,212)	(2,888)	5,387	4,425
Cash and cash equivalents, beginning of period	26,898	17,944	15,299	10,631
Cash and cash equivalents, end of period	$ 20,686	$ 15,056	$ 20,686	$ 15,056

See accompanying notes to 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. The Company's executive offices are located in San Diego, California and its head office is located in Toronto, Canada.

Aptose has two clinical-stage programs and a second program that is discovery-stage and partnered with another company. CG026806 ("CG-806"), Aptose's pan-FMS-like tyrosine kinase 3 / pan-Bruton's tyrosine kinase inhibitor, is currently enrolling patients in a Phase 1a/b, multicenter, open label, dose-escalation study with expansions to assess the safety, tolerability, PK, and preliminary efficacy of CG-806 in patients with chronic lymphocytic leukemia (CLL/SLL) or non-Hodgkin lymphomas (NHL). Aptose plans to seek allowance from the FDA to move into patient populations that include relapsed or refractory acute myeloid leukemia (AML) and myelodysplastic syndromes (MDS) in a separate Phase 1 trial. APTO-253, Aptose's second program, is a small molecule MYC inhibitor and is currently enrolling patients in a Phase 1b clinical trial for the treatment of patients with R/R blood cancers, including AML and high-risk Myelodysplastic Syndrome.

2. Significant accounting policies

(a) Basis of consolidation:

These condensed consolidated interim financial statements include the accounts of its subsidiaries. All intercompany transactions, balances, revenue and expenses are eliminated on consolidation.

(b) Basis of presentation:

The accompanying unaudited condensed consolidated interim financial statements have been prepared in conformity with generally accepted accounting principles in the United States, or GAAP, for the interim financial information and the rules and regulations of the Securities and Exchange Commission, or SEC, related to quarterly reports on Form 10-Q. Accordingly, they do not include all of the information and disclosures required by GAAP for annual audited financial statements and should be read in conjunction with the Company's audited consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K, or Annual Report, filed with the SEC on March 12, 2019. In the opinion of management, these condensed consolidated interim financial statements include all adjustments (consisting of normal recurring adjustments) necessary for a fair statement of the financial position, results of operations and cash flows for the periods presented. The results of operations for the interim periods shown in this report are not necessarily indicative of the results that may be expected for any future period, including the full year.

(c) Significant accounting policies, estimates and judgments:

During the three and nine months ended September 30, 2019, there have been no changes to our significant accounting policies as described in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, except as described below for Lease accounting.

The preparation of the condensed consolidated interim financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and reported amounts of assets and liabilities at the date of the consolidated financial statements and reported amounts of revenue and expenses during the reporting period. Actual outcomes could differ from those estimates. The condensed consolidated interim financial statements include estimates, which, by their nature, are uncertain.

The impacts of such estimates are pervasive throughout the 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.

(d) Foreign currency:

The functional and presentation currency of the Company is the US dollar.

(Tabular amounts in thousands of US dollars, unless otherwise noted)

(e) Leases

Effective January 1, 2019, the Company adopted Financial Accounting Standards Board, or FASB, standard ASU No. 2016-02, "Leases (Topic 842)". The Company's operating leases of tangible property with terms greater than twelve months are recognized as right of use assets, which represents the lessee's right to use, or control the use of, a specified asset for the lease term, and a corresponding lease liability, which represents the lessee's obligation to make lease payments under a lease, measured on a discounted basis. The Company adopted the new standard using the alternative transition method, which permits a company to use its effective date as the date of initial application without restating comparative period financial statements. Landlord inducements in the form of free rent periods are netted against lease payments to the landlord in measuring right-of-use assets and lease liabilities.

Impact of adoption:

As a result of adopting Topic 842, we recorded as of January 1, 2019, a right of use asset of approximately $1.570 million, and a lease liability of approximately $1.647 million. Upon adoption, landlord inducements of approximately $78 thousand were de-recognized, and a corresponding adjustment was made to right-of-use assets.

(f) Concentration of risk:

The Company is subject to credit risk 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 associated with 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 which are capable of prompt liquidation.

3. Cash and cash equivalents:

Cash and cash equivalents consists of cash of $323 thousand (December 31, 2018 - $621 thousand), deposits in high interest savings accounts and other term deposits with maturities less than 90 days totaling of $20.363 million (December 31, 2018 - $14.678 million).

4. Right-of-use assets, operating leases:

	Nine months ended September 30, 2019	Year ended December 31, 2018
Right-of-use assets, January 1, 2019	$ 1,570	-
Additions to right-of-use assets	267	-
Right-of-use assets, September 30, 2019	1,837	-
Accumulated amortization	(346)	-
Right-of use assets, NBV	1,491	-

(Tabular amounts in thousands of US dollars, unless otherwise noted)

5. Investments:

Investments consisted of the following as of September 30, 2019 and December 31, 2018:

		September 30, 2019		
		Cost	Unrealized gain	Market value
Guaranteed investment certificate(s)	$	9,515	13	9,528

		December 31, 2018		
		Cost	Unrealized loss	Market value
Guaranteed investment certificate(s)	$	458	(18)	440

6. Fair value measurements and financial instruments:

The fair value hierarchy establishes three levels to classify the inputs to valuation techniques used to measure fair value.

Level 1 - inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 - inputs are quoted prices in markets that are not active, quoted prices for similar assets or liabilities in active markets, inputs other than quoted prices that are observable for the asset or liability, or inputs that are derived principally from or corroborated by observable market data or other means; and

Level 3 - inputs are unobservable (supported by little or no market activity).

The fair value hierarchy gives the highest priority to Level 1 inputs and the lowest priority to Level 3 inputs.

The following table presents the Company's assets that are measured at fair value on a recurring basis for the periods presented:

		September 30, 2019		Level 1		Level 2		Level 3
Assets								
High interest savings account	$	1,889	$	-	$	1,889		-
Commercial notes		9,977		-		9,977		-
Canadian provincial promissory notes		4,489		-		4,489		-
Guaranteed investment certificates, issued by a Canadian financial institution		13,536		-		13,536		-
	$	29,891	$	-	$	29,891	$	-

(Tabular amounts in thousands of US dollars, unless otherwise noted)

	December 31, 2018	Level 1	Level 2	Level 3
Assets	$	$	$	$
High interest savings account	496	-	496	-
United States treasury bills	3,989	-	3,989	-
Canadian provincial promissory notes	5,991	-	5,991	-
Guaranteed investment certificates, Royal Bank of Canada	4,642	-	4,642	-
	$ 15,118	$ -	$ 15,118	$ -

7. Accrued liabilities:

Accrued liabilities as of September 30, 2019 and December 31, 2018 consisted of the following:

	September 30, 2019	December 31, 2018
Accrued personnel related costs	$ 1,038	$ 955
Accrued research and development expenses	888	257
Other accrued expenses	295	262
	$ 2,221	$ 1,474

8. Lease liability

Aptose leases office space and lab space in San Diego, California. The lease for the office space expires on March 31, 2023 and can be extended for an additional 5 year period. The lease for our lab space expired on February 29, 2019, and on February 18, 2019 was renewed until February 28, 2022. We lease office space in Toronto, Ontario, Canada. The lease for this location expires on June 30, 2023 with an option to renew for another 5-year period. The Company has not included any extension periods in calculating its right-to-use assets and lease liabilities. The Company also enters into leases for small office equipment.

Minimum payments, undiscounted, under our operating leases are as follows:

Years ending December 31,	
2019	$ 127
2020	534
2021	545
2022	463
2023	119
Thereafter	-
	$ 1,788

To calculate the lease liability, the lease payments in the table above were discounted over the remaining term of the leases using the Company's incremental borrowing rate as at January 1, 2019 for existing leases at the time of adopting the Topic 842, and for new leases after the date adoption, as at the date of the execution date of the new lease. The following table presents the weighted average remaining term of the leases and the weighted average discount rate:

(Tabular amounts in thousands of US dollars, unless otherwise noted)

	Nine months ended September 30, 2019
Weighted-average remaining term – operating leases (years)	3.5
Weighted-average discount rate – operating leases	5.43%
Lease liability, current portion	513
Lease liability, long term portion	1,124
Lease liability, total	1,637

Right-of-use assets obtained in exchange for new operating lease liabilities are as follows:

		Nine months ended September 30, 2019
Right-of-use assets recorded upon adoption of Topic 842, January 1, 2019	$	1,570
Right-of-use assets obtained in exchange for new operating lease liabilities in the period	$	267

Operating lease costs and operating cash flows from our operating leases are as follows:

		Nine months ended September 30, 2019
Operating lease cost	$	431
Operating cash flows from operating leases	$	345

Comparable figures are not presented as the Company adopted the new standard using the alternative transition method, which permits a company to use its effective date as the date of initial application without restating comparative period financial statements.

9. Share capital:

The Company has authorized share capital of an unlimited number of common voting shares.

(a) Equity issuances:

(i) 2019 Confidentially Marketed Public Offering (CMPO)

On June 3, 2019, the Company completed a confidentially marketed public offering through the issuance of 11,500,000 common shares at a price of $1.85 per share for gross proceeds of $21.275 million and net proceeds of approximately $19.736 million (approximately $19.594 million net of share issue costs). Costs associated with the proceeds consisted of a 7% cash commissions and share issue costs, which consisted of agent commission, legal and professional fees and listing fees.

(ii) 2019 Share Purchase agreement

On May 7, 2019, the Company entered into the 2019 Aspire 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 $20 million of Common Shares over approximately 30 months. The 2019 Purchase Agreement limits the amount of Aptose's common shares that Aspire can own at one time to 9.99% of the issued and outstanding common shares of the Company, and limits the maximum number of common shares that can be issued under the Agreement to 19.99% of the Company's outstanding common shares on the date of the 2019 Purchase Agreement unless shareholder approval is obtained or the shares issued to date once the 19.99% threshold is reached have an average purchase price equal to or exceeding $2.10. Pursuant to the terms of this agreement, on May 13, 2019, the Company issued 171,428 Common Shares ("Commitment Shares") to Aspire Capital in consideration for entering into the 2019 Aspire Purchase Agreement. The Company recorded $360 thousand in general and administrative expenses related to the issuance of the Commitment Shares. As at September 30, 2019, the Company had not issued any shares under the 2019 Aspire Purchase Agreement, other than the Commitment Shares.

(iii) 2018 Share Purchase agreement

On May 30, 2018, the Company entered into the 2018 Aspire 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 $20 million of Common Shares over approximately 30 months. Pursuant to the terms of this agreement, on June 8, 2018, the Company issued 170,261 Common Shares ("Commitment Shares") to Aspire Capital in consideration for entering into the 2018 Aspire Purchase Agreement. The Company recorded $600 thousand in general and administrative expenses related to the issuance of the Commitment Shares. During the period from January 1, 2019 up to May24, 2019, the date the 2018 Aspire Purchase Agreement was terminated, the Company issued 5,502,433 common shares under the agreement at an average price of $1.82 per share for gross and net proceeds of $10 million. On a cumulative basis up to May24, 2019, the Company raised a total of approximately $11.9 million gross and net proceeds under the 2018 Aspire Purchase Agreement. As of May24, 2019, the Company has issued 6,409,980, the maximum number of shares issuable under this facility without shareholder approval.

(iv) 2017 Share purchase agreement

On October 27, 2017, the Company entered into the 2017 Aspire Purchase Agreement, which provided 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 Common Shares over approximately 30 months. During the year ended December 31, 2017, and pursuant to the terms of the Aspire Purchase Agreement, Aspire Capital purchased 357,143 Common Shares for gross proceeds of $500 thousand ($324 thousand net of cash share issue costs) and the Company also issued 321,429 Common Shares to Aspire Capital in consideration for entering into the Aspire Purchase Agreement.

During the nine months ended September 30, 2018, the Company issued 5,231,953 common shares under the Aspire Purchase Agreement at an average price of $2.87 per share for gross and net proceeds of approximately $15 million. On a cumulative basis to September 30, 2018, the Company has raised a total of $15.5 million gross proceeds under the Aspire Purchase Agreement, the total amount that was available under the Agreement.

(v) 2019 At-The-Market ("ATM") Facility

On May 24, 2019, the Company entered into an "At-The-Market" Facility ("ATM") equity distribution agreement with Piper Jaffray and Canaccord Genuity acting as co-agents. Under the terms of this facility, the Company may, from time to time, sell shares of our common stock having an aggregate offering value of up to $40 million through Piper Jaffray and Cannacord Gennuity on the Nasdaq Capital Market. During the nine months ended September 30, 2019, the Company did not issue any shares under this ATM equity.

(vi) 2018 At-The-Market ("ATM") Facility

On March 27, 2018, the Company entered into an "At-The-Market" Facility ("ATM") equity distribution agreement with Cantor Fitzgerald acting as sole agent. Under the terms of this facility, the Company may, from time to time, sell shares of our common stock having an aggregate offering value of up to $30 million through Cantor Fitzgerald on the Nasdaq Capital Market. During the nine months ended September 30, 2019, the Company issued 77,349 shares under this ATM equity facility at an average price of $2.37 for gross proceeds of $183 thousand ($178 thousand net of share issue costs). During the nine months ended September 30, 2018, the Company issued 2,017,046 shares under this ATM equity facility at an average price of $3.49 for gross proceeds of $7.0 million ($6.8 million net of share issue costs). Costs associated with the proceeds consisted of a 3% cash commission. On a cumulative basis to September 30, 2019, the Company has raised a total of $11.2 million gross proceeds ($10.9 million net of share issue costs) under the ATM Facility. The Company terminated this agreement on May 24, 2019.

(b) Loss per share:

Loss per common share is calculated using the weighted average number of common shares outstanding and is presented in the table below:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2019	2018	2019	2018
Net loss	$ (6,844)	$ (5,531)	$ (18,568)	$ (22,607)
Weighted-average common shares – basic and diluted	55,454	34,587	47,315	32,039
Net loss per share – basic and diluted	$ (0.12)	$ (0.16)	$ (0.39)	$ (0.71)

The effect of any potential exercise of the Company's stock options outstanding during the three and nine month periods ended September 30, 2019 and September 30, 2018 has been excluded from the calculation of diluted loss per common share as it would be anti-dilutive.

10. Stock-based compensation:

(a) Stock options

Under the Company's stock option plan, options, rights and other entitlements may be granted to directors, officers, employees and consultants of the Company to purchase up to a maximum of 17.5% of the total number of outstanding common shares, estimated at 9.7 million options, rights and other entitlements as at September 30, 2019. Options are granted at the fair market value of the common shares on the closing trading price of the Company's stock on the day prior to the grant if the grant is made during the trading day or the closing trading price on the day of grant if the grant is issued after markets have closed. Options vest at various rates (immediate to four years) and have a term of 10 years.

(Tabular amounts in thousands of US dollars, unless otherwise noted)

Stock option transactions for the nine months ended September 30, 2019, are summarized as follows:

Option numbers are in (000's)

	Options	Nine months ended September 30, 2019 Weighted average exercise price	Weighted average remaining contractual life (years)
Outstanding, beginning of period	4,489	$ 3.11	
Granted	2,018	1.97	
Exercised	(34)	1.11	
Forfeited	(322)	2.36	
Expired	(47)	4.33	
Outstanding, end of the period	6,104	2.81	7.82
Exercisable, end of the period	3,340	3.34	6.82
Vested and expected to vest, end of period	5,689	2.86	7.66

As of September 30, 2019, there was $1.7 million of total unrecognized compensation cost related to non-vested stock options, which is expected to be recognized over an estimated weighted-average period of 1.65 years.

The following table presents the weighted average assumptions that were used in the Black-Scholes option pricing model to determine the fair value of stock options granted during the period, and the resultant weighted average fair values:

	Nine months ended September 30, 2019	Nine months ended September 30, 2018
Risk-free interest rate	2.21%	2.43%
Expected dividend yield	-	-
Expected volatility	83.9%	93.4%
Expected life of options (years)	5	5
Grant date fair value	$ 1.32	$ 2.23

The Company uses historical data to estimate the expected dividend yield and expected volatility of its common shares in determining the fair value of stock options. The expected life of the options represents the estimated length of time the options are expected to remain outstanding.

Stock options granted by the Company during the nine months ended September 30, 2019, vest 50% after one year and 16.67% on each of the next three anniversaries, except for 160,000 options which vest 50% after one year and 25% on each of the next two anniversaries and 335,000 options which vest 100% after one year.

Stock options granted by the Company during the nine months ended September 30, 2018 vest 50% after one year and 16.67% on each of the next three anniversaries, except for 166,000 options which vest 50% after one year and 25% on each of the next two anniversaries and 850,000 options which vested immediately on the grant date.

(b) Restricted share units

The Company has a stock incentive plan (SIP) pursuant to which the Board may grant stock-based awards comprised of restricted stock units or dividend equivalents to employees, officers, consultants, independent contractors, advisors and non-employee directors of the Company. Each restricted unit is automatically redeemed for one common share of the Company upon vesting. The following table presents the activity under the SIP plan for the nine months ended September 30, 2019 and 2018 the units outstanding.

	Nine months ended, September 30, 2019		Nine months ended, September 30, 2018	
	Number (in thousands)	Weighted average grant date fair value	Number (in thousands)	Weighted average grant date fair value
Outstanding, beginning of period	-	$-	-	$-
Granted	80	2.0	150	3.35
Redeemed	(40)	2.0	-	-
Outstanding, end of period	40	$ 2.0	150	$ 3.35

On June 3, 2019, the Company granted 80,000 restricted share units (RSUs), 40,000 restricted share units of which have a vesting term of three months and the balance having a vesting term of one year. On September 3, 2019, 50% of these restricted share units were vested and were redeemed for 40,000 common shares.

On July 13, 2018, the Company granted 150,000 restricted share units with a vesting term of three months.

The grant date fair value of the June 3, 2019 RSUs and July 13, 2018 were respectively determined as the closing value of the common shares of the Company on the Nasdaq Stock Market on the date prior to the date of grant.

(c) Share-based payment expense

The Company recorded share-based payment expense related to stock options and RSUs as follows:

	Three months ended September 30,		Nine months ended September 30,	
	2019	2018	2019	2018
Research and development	$ 34	$ 307	$ 309	$ 826
General and administrative	470	644	1,425	2,869
	$ 504	$ 951	$ 1,734	$ 3,695

11. Related party transactions:

The Company uses 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 oversees the laboratory work. The work is completed under the terms of research services agreements executed in March 2015 and has been extended annually. In March 2019, the Board approved an extension of this agreement for twelve months for services up to $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.

During the nine months ended September 30, 2019, the Company recorded $154 thousand (2018 – $215 thousand) in research and development expenses related to the agreement.

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

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

The following discussion should be read in conjunction with our unaudited condensed consolidated interim financial statements and accompanying notes contained in this Quarterly Report on Form 10-Q and our audited financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2018.

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

OVERVIEW

Aptose Biosciences Inc. ("we", "our", "us", "Aptose" or the "Company") is a science-driven biotechnology company advancing first-in-class targeted agents to treat life-threatening cancers, such as acute myeloid leukemia ("AML"), high-risk myelodysplastic syndromes ("MDS"), chronic lymphocytic leukemia ("CLL") and other hematologic malignancies. Based on insights into the genetic and epigenetic profiles of certain cancers and patient populations, Aptose is building a pipeline of novel oncology therapies directed at dysregulated processes and signaling pathways. Aptose is developing targeted medicines for precision treatment of these diseases to optimize efficacy and quality of life by minimizing the side effects associated with conventional therapies. We currently have in development two molecules: CG026806 ("CG-806") and APTO-253, both being evaluated for safety, tolerability, pharmacokinetics and signals of efficacy in Phase 1 clinical trials. Each molecule is described below:

CG-806 is an orally administered, highly potent first-in-class pan-FLT3/pan-BTK inhibitor that targets defined clusters of kinases that are operative in hematologic malignancies. This mutationally agnostic small molecule anticancer agent is currently being evaluated in a Phase 1a/b study for the treatment of patients having B-cell malignancies including CLL, small lymphocytic lymphoma ("SLL") and certain non-Hodgkin's lymphomas ("NHL") that are resistant/refractory/intolerant to other therapies. Aptose also is planning for a Phase 1 study for the development of CG-806 for the treatment of patients with relapsed/refractory acute myeloid leukemia ("R/R AML"), including the emerging populations resistant to FMS-like tyrosine kinase 3 ("FLT3") inhibitors.

Overexpression of Bruton's tyrosine kinase ("BTK") drives certain B cell malignancies, and treatment of such B cell malignancies with covalent BTK inhibitors that target the cysteine residue in the active site of BTK have heralded dramatic responses in many patients, but also can lead to drug resistance via mutation of the cysteine amino acid residue to a serine residue ("BTK-C481S mutant") thus rendering such covalent inhibitors less effective. CG-806 targets the ATP-binding pocket of BTK through a reversible, non-covalent mechanism, thereby allowing CG-806 to retain low nanomolar potency against the BTK-C481S mutant and the BTK-wild type enzymes. Simultaneously, CG-806 inhibits aberrant intracellular BTK signaling and selects other oncogenic signaling pathways, thereby allowing CG-806 to exert potent and direct killing of the cancer cells without targeting pathways often associated with toxicities. 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 and other non-covalent BTK inhibitors currently in development. In addition to potent inhibition of wild type and mutant forms of BTK, CG-806 exhibits high potency (picomolar to low nanomolar IC_{50} values) inhibition of the FLT3 cell surface receptor with an internal tandem duplication ("FLT3-ITD") and significant potency against FLT3-wild type and all known mutant forms of FLT3. Because of the potency of CG-806 against FLT3, 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. As noted above, CG-806 also suppresses the initiation and intracellular transmission of other oncogenic signaling pathways which are operative in AML, thereby potentially allowing the agent to become a broadly active and important therapeutic option for difficult-to-treat AML patient populations, including those with FLT3-wild type, and hopefully slowing the pace of drug resistance in patients.

APTO-253 is our Phase 1/b-stage small molecule therapeutic agent that inhibits expression of the MYC oncogene without causing general myelosuppression of the bone marrow. The MYC oncogene is overexpressed in hematologic cancers, including AML and certain B cell malignancies. MYC is a transcription factor that regulates cell growth, proliferation, differentiation and apoptosis, and overexpression amplifies new sets of genes to promote survival of cancer cells. APTO-253 downregulates expression of the MYC oncogene in AML cells and depletes those cells of the MYC oncoprotein, leading to apoptotic cell death. Indeed, the first AML patient administered the lowest dose level (20 mg/m2) of APTO-253 experienced a significant reduction in the expression of MYC in blood cells ("PBMCs") during the 28-day cycle of therapy, and no drug-related adverse events were noted. Likewise, the second patient administered APTO-253, this time an MDS patient administered the second dose level (40 mg/m2), also showed a significant reduction in the expression of MYC in PBMCs during the 28-day cycle of therapy, and no drug-related adverse events were noted. Similarly, MYC inhibition was observed in patients in the 66 mg/m2 dose level. Aptose now is planning to dose patients with the fourth dose level (100 mg/m2). Thus, APTO-253 may serve as a safe and effective MYC inhibitor for AML/MDS patients that combines well with other agents and does not significantly impact the normal bone marrow.

PROGRAM UPDATES

CG-806

Indication and Clinical Trials:

CG-806 is being developed with the intent to deliver the agent as an oral therapeutic and to develop it for relapsed and refractory (R/R) AML/ MDS and for appropriate B cell malignancies (including CLL, SLL and NHL).

On March 25, 2019, we announced that the U.S Food and Drug Administration ("FDA") granted Aptose Investigational New Drug ("IND") allowance to initiate its Phase 1 clinical trial for CG-806. The Phase 1 clinical trial is a multicenter, open label, dose-escalation study with expansions to assess the safety, tolerability, PK, and preliminary efficacy of CG-806 in patients with CLL, SLL or NHL. The initial goal of the trial is to evaluate safety, tolerability and pharmacokinetics of CG-806 in these patient populations and to observe for signals of efficacy. CG-806 in gelatin capsules will be dosed every 12 hours during a 28-day cycle, and the starting dose will be 150mg. Pending the collection of predictive pharmacokinetic data in humans, Aptose plans to seek allowance from the FDA to move CG-806 into the AML/MDS patient population in a separate Phase I trial.

As of the date of this report, we have initiated ten sites for the Phase 1a/b trial in patients with CLL/SLL or NHL and have completed enrollment of CLL patients on the first and second dose levels. The first CLL patient at the first dose level received 150mg taken twice daily ("BID") during a 28-day cycle and is continuing on study in their fifth cycle. Only one patient is required at this dose level. A second CLL patient was enrolled at the second dose level (300mg BID) during a 28-day cycle, and this patient also continues on study. In the CLL patient on the second dose level, we observed an increase in peripheral blood lymphocytes (or lymphocytosis), classically ascribed as a response to inhibition of BTK, and a reduction in tumor burden across multiple index nodes and no new hypermetabolic foci, as assessed by FDG-PET/CT at the first scheduled scan.

Our Clinical Safety Review Committee reviews relevant data following completion of each cohort, and the committee approved escalation to the third dose level (450mg BID). Aptose is now screening for three patients to be enrolled at this dose level.

Additionally, we are finalizing our efforts to perform clinical studies in patients with AML/MDS. The FDA granted orphan drug designation to CG-806 for the treatment of patients with AML. 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 CG-806 is approved to treat AML, the orphan drug designation provides us with seven years of marketing exclusivity.

Manufacturing:

We created a scalable chemical synthetic route for the manufacture of CG-806 drug substance and have scaled the manufacture of API (active pharmaceutical ingredient, or drug substance) to kg levels. We manufactured and delivered a batch of API which was used for Dose Range Finding Studies that were performed and completed in early January 2018. We completed in March 2018 the manufacture of a multi-kg batch of Good Laboratory Practice ("GLP") grade API and then formulated that API into a drug product for use in IND-enabling GLP toxicology studies. We also completed the manufacture of a multi-kg batch of API under Good Manufacturing Product ("GMP") conditions as our API supply for our first-in-human clinical trials, and we manufactured under GMP conditions two dosage strengths of capsules to serve as our clinical supply in those human studies. In June 2018, we completed a second GMP batch of drug product to supply the trial. Although we have been able to manufacture API and capsules to support clinical supplies under GMP conditions, research and development funds are being utilized to support further exploratory formulation studies in an ongoing effort to craft a superior formulation for CG-806. During the year ended December 31, 2018, we completed the in-life dosing phase of the IND-enabling GLP toxicology studies and received audited reports for such studies early in fiscal 2019.

Intellectual Property:

In May 2018, we paid $2.0 million in cash and obtained the rights to CG-806, for all fields of use, in all territories outside of the Republic of Korea and China, by exercising an option we obtained through a June 2016 option-license agreement with South Korean company CrystalGenomics, Inc. ("CG"), granting us an exclusive option to research, develop and commercialize (collectively, the "Rights") CG-806.

In June 2018, we entered into a separate license agreement with CG for Aptose to gain a license for Rights to CG-806 in the People's Republic of China, Hong Kong and Macau (the "China Rights"). Under the license agreement, Aptose made an upfront payment to CG of $3.0 million for the China Rights. CG is eligible for payments upon the achievement of developmental, regulatory and commercial-based milestones, as well as single-digit royalties on product sales in China. Aptose now owns worldwide Rights to CG-806, including an issued patent in China but excluding any Rights in Korea.

We have continued to augment our patent protection on CG-806. On September 12, 2017, we announced that we received a notice from the United States Patent and Trademark Office ("USPTO") stating that our U.S. Patent Application had been issued as a patent. The patent 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. On July 9, 2018, we received a notice from the Japan Patent Office stating that our Japan Patent Application has been issued as a patent. The patent claims the CG-806 compound, pharmaceutical compositions comprising the CG-806 compound, and uses for treating various diseases caused by abnormal or uncontrolled activation of protein kinases. On September 27, 2018, we announced that the European Patent Office had issued a patent. The granted patent claims the CG-806 compound, pharmaceutical compositions comprising the CG-806 compound, and uses for treating diseases caused by abnormal or uncontrolled activation of protein kinases, such as cancer. This European patent will be nationalized in, and cover, approximately forty European countries including the United Kingdom, France, Germany, Italy, the Netherlands and Spain. The patent is expected to provide protection until the end of 2033. Finally, on March 4, 2019, we announced that the Australian Patent Office had issued a patent that claims various compounds, including the CG-806 compound, pharmaceutical compositions comprising the CG-806 compound, and uses for the treatment of various diseases, such as lymphoma or leukemia. The patent is expected to provide protection until December 2033.

We have completed several studies that demonstrate the highly differentiated profile of CG-806. Key studies that have been presented at scientific forums are as follows:

- On April 15, 2018, at the 2018 Annual Meeting of the American Association for Cancer Research ("AACR"), we presented with the OHSU Knight Cancer Institute preclinical data demonstrating that CG-806, a pan-FLT3/pan-BTK inhibitor, demonstrates broader activity and superior potency to other FLT3 and BTK inhibitors against primary bone marrow samples from patients with hematologic malignancies. We also presented preclinical data demonstrating CG-806 targets multiple pathways to kill diverse subtypes of AML and B-cell malignancies in vitro.

- On June 15, 2018, at the 23rd Congress of the European Hematology Association ("EHA"), we presented, during a poster presentation, preclinical data demonstrating CG-806 unique binding to wild type and C481S mutant BTK. Further, we presented that CG-806 suppresses the BCR, AKT/PI3K, ERK and NFkB signaling pathways and exerts broader and far greater potency of direct cancer cell killing that Ibrutinib against malignant bone marrow cells from patients with CLL, ALL and a host of other hematologic malignancies.

- On December 3, 2018, we announced two separate poster presentations at the American Society of Hematology (ASH) Annual Meeting being held on December 1-4, 2018. The OHSU Knight Cancer Institute and Aptose presented data in one poster and the team at The University of Texas MD Anderson Cancer Center ("MDACC") presented data in a separate poster. These presentations highlighted several key findings. First, in collaboration with the MDACC, orally administered CG-806 demonstrated efficacy in a patient derived xenograft ("PDX") study in which the bone marrow cells from a patient with AML having dual ITD and D835 mutations in FLT3 were implanted into a mouse. The dual FLT3 mutant form of AML represents a very difficult to treat population that has shown resistance to other FLT3 inhibitors, and data from the PDX model suggest that CG-806 may be useful in treating such patients. Secondly, Aptose presented high level data from preclinical GLP toxicology studies that demonstrate orally administered CG806 is a well-tolerated targeted molecule. Finally, in collaboration with the OHSU Knight Cancer Center, studies of CG-806 on 124 samples of freshly isolated bone marrow from CLL patients demonstrated both broader and greater cell killing potency for CG-806 than Ibrutinib.

- On April 1, 2019, at the 2019 Annual Meeting of the AACR, Aptose, along with our collaborators at OHSU Knight Cancer Institute, presented data highlighting CG-806 was more potent than other FLT3 inhibitors including midostaurin, sorafenib, sunitinib, dovitinib, quizartinib, crenolanib and gilteritinib. CG-806 was equally potent against cells from patients in the adverse, intermediate and favorable risk groups (2017 ELN risk stratification), and cells from patients with relapsed or transformed AML (World Health Organization classification) were as sensitive as those from patients with de novo AML. The data demonstrated potency in primary AML patient samples across all AML subgroups including relapsed/refractory/transformed AML and those with genetic abnormalities related to poor prognosis. While patient samples with FLT3-ITD mutations were expected to have greater sensitivity to CG-806, the most surprising correlation was the sensitivity of patient samples with IDH1 R132 mutations. The enhanced sensitivity of IDH-1 mutant AML to CG-806 warrants investigation in the clinical setting. Moreover, in studies of CG-806 on AML patient bone marrow samples, we demonstrated that mutations in p53, ASXL1 and NPM1 do not hinder the potency of CG-806.

- On June 14, 2019, we presented new preclinical data for CG-806 in a poster presentation at the 24th Congress of the European Hematology Association (EHA) in Amsterdam, the Netherlands. The poster, *CG-806, preclinical in vivo efficacy and safety profile as a pan-FLT3 / pan-BTK inhibitor*, highlights the in vivo anti-leukemic efficacy of CG-806 and its GLP toxicology and toxicokinetic profile. In a preclinical MV4-11 FLT3-ITD AML xenograft mouse model, CG-806 suppressed leukemia growth at all doses tested throughout the 28-day period of dosing. In the mice treated with 100 mg/kg, 5 of 11 (45%) were cured through day 120, and in the 300 mg/kg group, 10 of 11 (91%) of the mice were cured. Retreating the "uncured' mice in these two dose groups for an additional 28 days beginning on day 88 led to rapid and robust antitumor response in all retreated mice through day 120. In the "re-treated" mice, no drug resistance and no toxicities were observed. GLP 28-day toxicology and TK studies mice and dogs showed no adverse CG-806-related effects on body weight, ophthalmic, respiratory or neurological examinations, clinical pathology (coagulation, clinical chemistry, or urinalysis), organ weight or macroscopic evaluations. No CG-806-related cardiovascular effects were noted in the 28-day GLP toxicology study or in a separate preclinical cardiovascular safety study.

- On October 24, 2019, we presented in a poster presentation at the 5th International Conference on Acute Myeloid Leukemia "Molecular and Translational" Advances in Biology and Treatment in Estoril, Portugal on the preclinical data for CG-806.

APTO-253

Phase IB Trial

APTO-253, a small molecule inhibitor of MYC gene expression, is being evaluated by Aptose in a Phase Ib clinical trial in patients with relapsed / refractory ("R/R") hematologic malignancies, particularly R/R-AML and high-risk MDS. The Phase Ib, multicenter, open-label, dose-escalation clinical trial of APTO-253 is designed to assess the safety, tolerability, pharmacokinetics and pharmacodynamic responses and efficacy of APTO-253 as a single agent and determine the recommended Phase II dose. APTO-253 will be administered once weekly, over a 28-day cycle. The dose escalation stage of the study could potentially enroll up to 20 patients with R/R-AML or high-risk MDS. The study is designed to then transition, as appropriate, to single-agent expansion cohorts in R/R-AML and/or high-risk MDS.

As of the date of this report, we have seven active sites recruiting patients in the dose escalation stage of the trial. The first patient, having AML, was dosed with 20mg/m2 and successfully completed the 28-day cycle. As only one patient was required at the first dose level, we then placed an MDS patient on the second dose level of 40mg/m2, and that patient successfully completed the 28-day cycle. We then successfully fulfilled the third cohort with three patients completing the 28-day cycle at a dose level of 66mg/m2. Following review of relevant data by our Clinical Safety Review Committee, we plan to begin enrollment of three patients into the fourth cohort at a dose level of 100mg/m2. We observed meaningful reductions in MYC expression in the PBMC from patients at all dose levels with the new formulation of APTO-253.

We are continuing to manufacture additional drug substance and drug product for use in the ongoing trial. We have completed a second 2kg GMP batch of drug substance and are in the process of manufacturing two additional batches of GMP drug product.

We are exploring additional drug delivery methods for APTO-253 and plan to initiate additional non-clinical studies for solid tumor and hematologic cancer development. As preparing, submitting, and advancing applications for regulatory approval, developing drugs and drug product and clinical trials are sometimes complex, costly, and time-consuming processes, an estimate of the future costs is not reasonable at this time.

As reported previously, APTO-253 was placed on clinical hold by the FDA in November 2015 due to deficiencies in the drug product that was manufactured prior to 2013. Those shortcomings of the drug product were addressed and the clinical hold was lifted. More specifically, the Phase Ib trial of APTO-253 was placed on clinical hold as a consequence of an event that occurred at a clinical site with the infusion procedure. Ultimately, a root cause investigation determined that the event resulted from chemistry and manufacturing based issues, all of which were incorporated into a Chemistry, Manufacturing and Control amendment to the IND application. Effective June 29, 2018, the clinical hold was lifted and the APTO-253 clinical trial was re-initiated.

The Phase Ib trial 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 had successfully manufactured multiple non-GMP batches of a new drug product formulation for APTO-253; however, a 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. We conducted formal root cause analyses studies, identified the reason for the drug product stability failure, and established a corrective and prevention action plan for the manufacture of future batches of drug product. During the first quarter of 2018, we manufactured a new GMP clinical supply of drug product and performed studies required to demonstrate the fitness of the drug product for clinical usage. The release specifications for the new clinical supply were met, and we presented the findings to the FDA in the second quarter of 2018. On June 28, 2018, the FDA notified us that it had lifted the clinical hold on APTO-253.

We then completed all tasks required to return APTO-253 to the Phase Ib clinical trial.

Preclinical data presented at scientific forums are as follows:

- On April 17, 2018, at the 2018 Annual Meeting of the AACR, we presented preclinical data demonstrating that APTO-253 is a new addition to the repertoire of drugs that can exploit DNA BRCA1/2 deficiency, broadening the potential applicability of APTO-253 towards solid cancer indications.

- On June 4, 2018, we announced that preclinical data elucidating the mechanism of action of APTO-253 were published in two separate articles in the June 2018 issue (Volume 17, Number 6) of Molecular Cancer Therapeutics, a peer-reviewed journal of the American Associate for Cancer Research. The most important finding disclosed in the published articles is the ability of the APTO-253 small molecule to bind to and stabilize a G-quadruplex DNA motif found in the promoter regulatory region of the MYC oncogene and to inhibit expression of the MYC gene, thereby depleting the cells of the MYC oncoprotein and leading to cancer cell death. These findings make APTO-253 the only clinical stage molecule that can directly target the MYC gene and inhibit its expression.

- On April 1, 2019, at the 2019 Annual Meeting of the AACR, we presented in vitro studies that further define the mechanism of action of APTO-253. Researchers found that APTO-253 targets a G-quadruplex motif in the P1/P2 promoter region of the MYC gene and inhibits MYC gene expression to induce apoptosis, resulting in its ability to potently kill hematologic malignant cell lines and primary samples from AML and CLL patients. In this study, researchers performed long-term in vitro studies to determine if and how cells might develop resistance to APTO-253. MYC driven Raji cells required three years in increasing concentrations of APTO-253 in order to adopt multiple modifications and develop high level resistance to APTO-253. These modifications include up-regulation of the ABCG2 transporter, acquisition of a more stable MYC protein lacking the conserved core sequence of MYC Box III generated by deletion of an internal region of the MYC gene exon 2, and utilization of alternate P3 promoter not inhibited by G4 binding and stabilization.

Multi-Targeting Epigenetic Program

In November 2015, we announced an exclusive drug discovery partnership with Laxai Avanti Life Sciences ("LALS") for the development of next generation epigenetic-based therapies. Under the agreement, LALS was responsible for optimizing candidates derived from our collaboration with the Moffitt Cancer Center, which was terminated in January 2017, for the development of dual-targeting single agent inhibitors for the treatment of hematologic and solid tumor cancers and we would own global rights to all newly discovered candidates characterized and optimized under the collaboration, including all generated intellectual property. As of November 2016, LALS and we had generated novel compounds that inhibit both the bromodomain proteins and oncogenic kinases, while improving pharmaceutical properties that could serve as a basis for further optimization towards a lead preclinical candidate. However, due to a prioritization of development efforts, LALS and we suspended work on the program in January 2017, and the collaboration with LALS was terminated. However, the program delivered novel intellectual property and compelling hit molecules for further optimization.

On March 7, 2018, we entered into an exclusive global license agreement with Ohm Oncology ("OHM"), an affiliate of LALS that was formed in 2016 to advance the clinical development of compelling molecules derived from the LALS initiative, for the development, manufacture and commercialization of APL-581, as well as related molecules from our dual bromodomain and extra-terminal domain motif protein and kinase inhibitor program. Under the agreement, we will retain reacquisition rights to certain molecules, while OHM/LALS will have the rights to develop and sublicense all other molecules. We have received two separate upfront cash payments and are eligible to receive up to $125 million of additional payments based on the achievement of certain development, regulatory and sales milestones, as well as significant royalties on future sales generated from the program, if any.

LIQUIDITY AND CAPITAL RESOURCES

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

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

Sources of liquidity:

The following table presents our cash and cash equivalents, investments and working capital as at September 30, 2019 and December 31, 2018.

(in thousands)	Balances at September 30, 2019	Balances at December 31, 2018
Cash and cash equivalents	$ 20,686	$ 15,299
Investments	9,528	440
Total	$ 30,214	$ 15,739
Working capital	$ 26,700	$ 13,697

Working capital reflects cash, cash equivalents, investments and prepaid expenses and other current assets less current liabilities. Current liabilities of approximately $3.9 million as at September 30, 2019 include approximately $513 thousand related to the current portion of the Company's lease liability. There is no comparable amount in current liabilities of approximately $2.79 million as at December 31, 2018. See "Critical Accounting Policies" below.

In addition to the cash and cash equivalent and investments on hand as at September 30, 2019, we have access to additional funds through two financing arrangements completed in May of 2019.

On May 24, 2019, we entered into an at-the-market equity facility (the "2019 ATM Facility") with Piper Jaffray & Co. ("Piper Jaffray") and Canaccord Genuity LLC ("Canaccord Genuity"), acting as co-agents. The 2019 ATM Facility allows us to instruct our co-agents to offer up to approximately 20.2 million common shares of the Company (the "Common Shares"), having an aggregate offering value of up to $40 million, at the prevailing market price from time to time. Use of this facility is dependent on a liquid market for Common Shares and our ability to use the effective registration statement from which the Common Shares under the ATM Facility are sold. As of the date of this report, we have not issued any Common Shares under the 2019 ATM Facility. The 2019 ATM Facility replaces the previous at-the-market facility that we entered into with Cantor Fitzgerald & Co. ("Cantor Fitzgerald") in 2018 (the "2018 ATM Facility").

On May 7, 2019, we entered into a common share purchase agreement (the "2019 Purchase Agreement") with Aspire Capital Fund, LLC ("Aspire Capital") where Aspire Capital has committed to purchase up to $20 million of Common Shares of Aptose from time to time for up to 30 months. Additional terms of the financing are described below in the section "Common Share Purchase Agreements". As consideration for Aspire Capital's obligation under the 2019 Purchase Agreement we issued 171,428 Common Shares to Aspire Capital as a commitment fee (the "Commitment Shares"). As at September 30, 2019, we had not issued any shares under the 2019 Purchase Agreement, other than the Commitment Shares. The 2019 Purchase Agreement replaces the previous common share purchase agreement that we entered into with Aspire Capital in May 2018 (the "2018 Purchase Agreement").

In managing our liquidity risk, we have considered our available cash and cash equivalents and investments as at September 30, 2019. We have also considered our ability to continue to raise funds in 2019 and 2020 through the 2019 ATM Facility with Piper Jaffray and Canaccord Genuity and through the 2019 Purchase Agreement with Aspire Capital, each of which is described further below, in assessing whether we will have sufficient resources to fund research and development operations and general and administrative costs through to at least the twelve-month period ending from the date of this report.

We believe that our cash and cash equivalents and investment holdings, and use of full proceeds from the 2019 ATM Facility and from the 2019 Purchase Agreement, will be enough to fund our planned operations into 2021. We have based these estimates on assumptions and plans which may change and which could impact the magnitude and/or timing of operating expenses and our cash runway. These estimates include the rate of enrolment and timing and release of the results of our clinical trials, and our reliance on our manufacturers. We are also reliant on the ability of Aspire Capital to purchase shares under the 2019 Purchase Agreement and also the availability of a liquid market for Common Shares for use of the 2019 ATM facility.

We will need additional cash in order to execute our research and development plans for our CG-806 and APTO-253 programs and associated general and administrative overhead costs. We will use the most efficient source of capital available to us, which may include funds from the use of the 2019 ATM Facility, subject to a liquid market for our Common Shares.

Cash flows:

The following table presents a summary of our cash flows for the three months and nine months ended September 30, 2019 and 2018:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2019	2018	2019	2018
Net cash provided by (used in):				
Operating activities	$ (5,184)	$ (4,468)	$ (15,327)	$ (17,705)
Investing activities	(1,042)	(28)	(9,092)	98
Financing activities	17	1,608	29,808	22,032
Effect of exchange rates changes on cash and cash equivalents	(3)	-	(2)	-
Net increase (decrease) in cash and cash equivalents	$ (6,212)	$ (2,888)	$ 5,387	$ 4,425

We do not expect to generate positive cash flow from operations for the foreseeable future due to the early stage of our clinical trials. These trials may incur additional research and development costs, including costs related to drug discovery, preclinical testing, clinical trials, and manufacturing, as well as 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.

Net cash used in operating activities was higher in the three-month period ended September 30, 2019 as compared with the three-month period ending September 30, 2018, mostly as a result of a higher net loss in the current period, and offset by an increase in accrued liabilities during the current period. See “Results of Operations”.

Net cash used in operating activities was lower in the nine-month period ended September 30, 2019 as compared with the nine-month period ending September 30, 2018, resulting mostly from a lower net loss in the current nine-month period. See “Results of Operations”.

Net cash used in investing activities in the nine-month period ended September 30, 2019 of approximately $9.0 million reflects the purchase of securities with an original term of greater than 90 days. In the comparative period cash provided by financing activities was the result of the maturity of a $250 thousand investment offset by $152 thousand in purchases of property and equipment.

Net cash provided by financing activities in the nine-month period ended September 30, 2019 reflects mostly the 11,500,000 shares issued pursuant to the public offering of our Common Shares in June 2019 for net proceeds of approximately $19.6 million, 5,502,433 shares issued to Aspire Capital pursuant to the 2019 Purchase Agreement for net proceeds of approximately $10 million, 77,349 shares issued pursuant to the 2018 ATM Facility with Cantor Fitzgerald for net proceeds of approximately $178 thousand. Net cash provided by financing activities in the nine-month period ended September 30, 2018 reflects 5,231,953 shares issued pursuant to the 2018 Purchase Agreement with Aspire Capital for net proceeds of approximately $15 million and 2,017,046 shares issued pursuant to the 2018 ATM Facility with Cantor Fitzgerald for net proceeds of approximately $6.8 million and approximately $219 thousand related to the exercise of stock options.

Common Share Purchase Agreements

In October 2017, we entered into a Common Shares Purchase Agreement (the “2017 Purchase Agreement”) with Aspire Capital to sell up to $15.5 million of Common Shares to Aspire Capital. During the year ended December 31, 2018, we issued 5,231,953 Common Shares under the 2017 Purchase Agreement at an average price of $2.87 for gross proceeds of approximately $15 million. On a cumulative basis, we raised a total of $15.5 million under the 2017 Purchase Agreement, the total amount that was available under the 2017 Purchase Agreement.

In May 2018, we entered into the 2018 Purchase Agreement with Aspire Capital to sell up to $20 million of Common Shares to Aspire Capital. Under the terms of the 2018 Purchase Agreement, Aspire Capital committed to purchase up to an aggregate of $20 million of our Common Shares, at our request from time to time during a 30-month period beginning on June 8, 2018. Under the terms of the 2018 Purchase Agreement, we issued 170,261 Common Shares at a value of $3.524 per Common Share to Aspire Capital as consideration for Aspire Capital entering into the 2018 Purchase Agreement, and during the year ended December 31, 2018, we issued 907,547 Common Shares at an average price of $2.12 for gross proceeds of approximately $1.9 million. During the period from January 1, 2019 to May 24, 2019, the date the 2018 Purchase Agreement was terminated, we issued 5,502,433 Common Shares under the 2018 Purchase Agreement at an average price of $1.82 per share for gross and net proceeds of $10 million. On a cumulative basis up to May 24, 2019, we raised in total, approximately $11.9 million gross and net proceeds under the 2018 Purchase Agreement. As of May 7, 2019, we have issued 6,409,980, the maximum number of shares issuable under this facility without shareholder approval.

On May 7, 2019, we entered into the 2019 Purchase Agreement with Aspire Capital where Aspire Capital has committed to purchase up to $20 million of Common Shares of Aptose, at our request from time to time, for up to 30 months. The 2019 Purchase Agreement limits the amount of Common Shares that Aspire Capital can own at one time to 9.99% of the issued and outstanding Common Shares, and limits the maximum number of Common Shares that can be issued under the 2019 Purchase Agreement to 19.99% of the outstanding Common Shares on the date of the 2019 Purchase Agreement unless shareholder approval is obtained or the Common Shares issued to date once the 19.99% threshold is reached have an average purchase price equal to or exceeding $2.10. As consideration for Aspire Capital's obligation under the 2019 Purchase Agreement we issued 171,428 Common Shares to Aspire Capital as a commitment fee. The Company recorded $360 thousand in general and administrative expenses related to the issuance of the Commitment Shares. As at September 30, 2019, the Company had not issued any shares under the 2019 Purchase Agreement, other than the Commitment Shares.

At-The-Market Facilities

On March 27, 2018, we entered into the 2018 ATM Facility with Cantor Fitzgerald, acting as sole agent. Under the terms of this facility, we could, from time to time, sell our Common Shares having an aggregate offering value of up to $30 million through Cantor Fitzgerald.

During the year ended December 31, 2018, we issued 4,085,615 Common Shares under the 2018 ATM Facility at an average price of $2.71 for gross proceeds of approximately $11.1 million ($10.7 million net of share issue costs). During the nine months ended September 30, 2019, we issued 77,349 additional Common Shares under the 2018 ATM Facility at an average price of $2.37 for gross proceeds of $183 thousand ($178 thousand net of share issue costs). On a cumulative basis to September 30, 2019, we have raised a total of $11.2 million gross proceeds ($10.9 million net of share issue costs) under the 2018 ATM Facility. We terminated this agreement on May 24, 2019.

On May 24, 2019, we entered into the 2019 ATM Facility with Piper Jaffrey and Canaccord Genuity, acting as co-agents. Under the terms of this facility, we may, from time to time, sell our Common Shares having an aggregate offering value of up to $40 million through the co-agents. We determine, at our sole discretion, the timing and number of Common Shares to be sold under the 2019 ATM Facility. As of the date of this report, we have not issued any Common Shares under the 2019 ATM Facility.

Public Offering of Common Stock

On June 3, 2019, we completed the Offering through the issuance of 11,500,000 Common Shares at a price to the public of $1.85 per Common Share, which includes the exercise in full by the Underwriters of their option to purchase 1,500,000 additional Common Shares. The gross proceeds from the offering were approximately $21.3 million. ($19.6 million net of underwriting discounts and commissions and share-issue costs).

RBC Capital Markets LLC and Canaccord Genuity acted as joint book-runners for the Offering. H.C. Wainwright & Co. and Jones Trading Institutional Services LLC acted as co-managers.

Contractual Obligations

During the nine-month period ended September 30, 2019, we entered into an operating lease agreement to renew our existing laboratory space for a three-year period. Minimum lease payments are as follows: $24 thousand for the remaining three months of 2019, $97 thousand for the year ended December 31, 2020; $100 thousand for the year ended December 31, 2021 and $17 thousand for the year ended December 31, 2022. These lease payments, along with our lease payments for our other operating leases, have been recorded as a right-of-use asset and lease liability on the statement of financial position. See "Critical Accounting Policies" below.

Other than the above, there were no material changes to our contractual obligations and commitments described under Item 7 – Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, which can be found on EDGAR at https://www.sec.gov and on SEDAR at www.sedar.com.

RESULTS OF OPERATIONS

A summary of the results of operations for the three-month and nine-month periods ended September 30, 2019 and 2018 is presented below:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2019	2018	2019	2018
Revenues	$ -	$ -	$ -	$ -
Research and development expenses	4, 751	3,591	11,582	14,549
General and administrative expenses	2,276	2,020	7,391	8,233
Net finance income	183	80	405	175
Net loss	(6,844)	(5,531)	(18,568)	(22,607)
Other comprehensive gain/(loss)	(5)	9	13	3
Total comprehensive loss	$ (6,849)	$ (5,522)	$ (18,555)	$ (22,604)
Basic and diluted loss per common share	$ (0.12)	$ (0.16)	$ (0.39)	$ (0.71)

The net loss for the three-month period ended September 30, 2019 increased by approximately $1.3 million to $6.8 million as compared with $5.5 million for the comparable period. The increase is primarily the result of higher research and development expenses on both our APTO-253 and CG-806 programs and higher administrative costs associated with supporting the increased research activities.

The net loss for the nine-month period ended September 30, 2019 decreased by $4 million to $18.6 million compared with $22.6 million for the comparable period. The decrease is primarily as a result of $5 million in license fees to Crystal Genomics paid in the comparable period and higher stock option compensation in the comparable period, offset by higher costs in the current nine-month period associated with our CG-806 and APTO-253 development programs which are both now in Phase 1 clinical trials.

Research and Development

The research and development expenses for the three-month and nine-month periods ended September 30, 2019 and 2018 are as follows:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2019	2018	2019	2018
License fees – CG-806	$ -	$ -	$ -	$ 5,000
Program costs – CG-806	2,223	1,707	5,287	4,164
Program costs – APTO-253	1,446	1,066	3,296	3,085
Personnel related expenses	1,042	502	2,666	1,448
Stock-based compensation	34	307	309	826
Depreciation of equipment	6	9	24	26
	$ 4,751	3,591	$ 11,582	$ 14,549

Research and development expenses increased by approximately $1.2 million to approximately $4.8 million for the three-month period ended September 30, 2019 as compared with $3.6 million for the comparative period. Research and development expenses decreased by $3.0 million to $11.6 million for the nine-month period ended September 30, 2019 as compared with $14.5 million for the comparative period. Changes to the components of our research and development expenses presented in the table above are primarily as a result of the following events:

- We paid a total of $5 million in license fees to CG in the nine-month period ended September 30, 2018 which is comprised of $2 million for the Rights and $3 million for the China Rights. CG is eligible for development, regulatory and commercial-based milestones as well as royalties on future product sales.

- An increase in research and development activities related to our CG-806 development program. In the three-month period ended March 31, 2019, program costs consisted mostly of costs to complete the preclinical studies and to prepare regulatory filings in support of an IND filing, and the manufacturing of drug product for the Phase 1 clinical trial. In the three-month period ended June 30, 2019 and in the three-month period ended September 30, 2019, program costs consisted mostly of contractors in support of the B cell Malignancy clinical trial, which was approved by the FDA in March 2019, and in ongoing manufacturing costs of CG-806 to supply the trial. In the three-month period ended March 31, 2018, program costs reflected the completion of two dose range finding studies and the manufacturing of a batch of the drug substance to be used in toxicity studies. In the three-month period ended June 30, 2018, we manufactured a GLP batch of CG-806 to be used in toxicity studies, we initiated the manufacturing of a GMP batch of the drug substance for future clinical trials, and we initiated a toxicity study in rodents. In the three-month period ended September 30, 2018, we completed the manufacturing of GMP batch of drug substance and completed several toxicity studies in rodents and dogs.

- An increase in research and development activities related to our APTO-253 development program. In the three-month period ended March 31, 2019, program costs for our APTO-253 program consisted mostly of costs related to the Phase 1b clinical trial, and manufacturing costs for a second GMP batch of APTO-253. In the three-month period ended June 30, 2019, program costs for APTO-253 consisted mostly of costs associated with the clinical trial which was actively enrolling patients during this period. In the three month period ended September 30, 2019, program costs were comprised mostly of costs associated with the clinical trial and for manufacturing costs of drug product for the trial. In the three-month period ended March 31, 2018, we completed production of a GMP batch of drug product, and initiated necessary studies to present to the FDA in support of removing the clinical hold. In the three-month period ended June 30, 2018, we completed the required studies for the FDA, we initiated the manufacturing of an additional clinical batch of APTO-253 and we increased clinical activities in preparation to return APTO-253 to the clinic. In the three-month period ended September 30, 2018, we manufactured additional API, and initiated two clinical sites.

- An increase in personnel expenses in the three and nine-month periods ended September 30, 2019, as compared with the three and nine-month periods ended September 30, 2018 mostly related to additional clinical research staff to support two Phase 1 clinical trials.

- Stock option compensation is lower in the three-month period ended September 30, 2019 due to higher forfeitures in the current period. For the nine-month period ended September 30, 2019, there was a decrease in stock option compensation of approximately $517 thousand as compared with the nine-month period ended September 30, 2018, related mostly to higher forfeitures in the current period and to stock options granted in the three-month period ended March 31, 2018, of which 100,000 with a grant date fair value of $2.03 vested immediately, contributing to higher expenses in that period.

General and Administrative

The general and administrative expenses for the three and nine-month periods ending September 30, 2019 and 2018 are as follows:

	Three months ended September 30,		Nine months ended September 30,	
(in thousands)	2019	2018	2019	2018
General and administrative, excluding non-cash items	$ 1,780	$ 1,356	$ 5,515	$ 4,726
Common Shares issued under the 2019 and 2018 Aspire share purchase agreements	-	-	360	600
Stock-based compensation	470	644	1,425	2,869
Depreciation of equipment	26	20	91	38
	$ 2,276	$ 2,020	$ 7,391	$ 8,233

General and administrative expenses increased in the three-month period ended September 30, 2019 as compared with the three-month period ended September 30, 2018, mostly as a result of higher personnel related expenses, consulting, professional fees, rent and office costs supporting our increased activities, and offset by lower stock-based compensation.

General and administrative expenses decreased in the nine-month period ended September 30, 2019 as compared with the nine-month period ended September 30, 2018, mostly as a result of lower stock-based compensation expense and lower legal and regulatory costs from financing activities and offset by higher personnel related expenses, consulting and rent and office costs.

In the nine-month period ended September 30, 2019, we issued 171,428 Commitment Shares to Aspire Capital as a commitment fee for entering into the 2019 Purchase Agreement. We recorded $360 thousand in general and administrative expenses related to the issuance of these shares. In the nine-month period ended September 30, 2018, we issued 170,261 Common Shares to Aspire Capital as a commitment fee for entering into the 2018 Purchase Agreement. We recorded $600 thousand in general and administrative expenses related to the issuance of these Common Shares.

Stock option compensation for the three-month period ended September 30, 2019 was $470 thousand as compared with $644 thousand for the three-month period ended September 30, 2018. For the nine-month period ended September 30, 2019, stock-based compensation decreased by approximately $1.4 million compared with $2.9 million for the nine-month period ended September 30, 2018. The decrease is mostly related to 750,000 stock options with a grant date fair value of $2.03, that were granted to directors and executives and vested immediately in the three-month period ended March 31, 2018. The Company granted a total of 1,376,000 stock options to directors and administrative employees in the nine-month period ended September 30, 2019, with an average grant date fair value of $1.30 as compared with a total of 1,700,000 stock options with an average grant date fair value of $2.14 in the nine month-period ended September 30, 2018. In addition, the Company granted 80,000 restricted share units (“RSUs”) in the current nine-month period as compared with 150,000 in the comparative nine-month period.

OFF-BALANCE SHEET ARRANGEMENTS

As at September 30, 2019, we are not party to any off-balance sheet arrangements.

CRITICAL ACCOUNTING POLICIES

Critical Accounting Policies and Estimates

We periodically review our financial reporting and disclosure practices and accounting policies to ensure that they provide accurate and transparent information relative to the current economic and business environment. As part of this process, we have reviewed our selection, application and communication of critical accounting policies and financial disclosures. Management has discussed the development and selection of the critical accounting policies with the Audit Committee of the Board of Directors and the Audit Committee has reviewed the disclosure relating to critical accounting policies in this Management’s Discussion and Analysis.

Significant accounting judgments and estimates

A "critical accounting policy" is one which is both important to the portrayal of our financial condition and results and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. For additional information, please see the discussion of our significant accounting policies in Note 2 to the Financial Statements included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed with the United States Securities Exchange Commission (the "SEC") on March 12, 2019. With the exception of the change to our accounting policy noted below as a result of the adoption of Accounting Standards Update, or ASU, No. 2016-02, Leases (Topic 842) there were no material changes to our critical accounting policies and estimates during the nine-months ended September 30, 2019.

Effective January 1, 2019, the Company adopted Financial Accounting Standards Board, or FASB, standard ASU No. 2016-02, "Leases (Topic 842)". The Company's operating leases of tangible property with terms greater than twelve months are recognized as right-of-use assets, which represents the lessee's right to use, or control the use of, a specified asset for the lease term, and a corresponding lease liability, which represents the lessee's obligation to make lease payments under a lease, measured on a discounted basis. The Company adopted the new standard using the alternative transition method, which permits a company to use its effective date as the date of initial application without restating comparative period financial statements. Landlord inducements in the form of free rent periods are netted against lease payments to the landlord in measuring right-of-use assets.

As a result of adopting Topic 842, we recorded as of January 1, 2019, a right-of-use asset of approximately $1.570 million, and a lease liability of approximately $1.647 million. Upon adoption, landlord inducements of approximately $78 thousand were de-recognized and a corresponding adjustment was made to right-of-use assets. The impact of the adopting Topic 842 on the Statement of Loss and Comprehensive Loss was nominal.

Management's assessment of our ability to continue as a going concern involves making a judgment, at a particular point in time, about inherently uncertain future outcomes and events or conditions. Please see the "Liquidity and Capital Resources" section in this Quarterly Report on Form 10-Q for a discussion of the factors considered by management in arriving at its assessment.

Other important accounting policies and estimates made by management are the valuation of contingent liabilities, the valuation of tax accounts, and the assumptions used in determining the valuation of share-based compensation.

Updated share information

As at November 5, 2019, we had 55,486,564 Common Shares issued and outstanding. In addition, there were 6,143,137 Common Shares issuable upon the exercise of outstanding stock options and upon the vesting of restricted share units.

ITEM 3. QUALITATIVE AND QUANTITATIVE DISCLOSURES ABOUT MARKET RISK

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

ITEM 4. CONTROLS AND PROCEDURES

As of the end of our fiscal quarter ended September 30, 2019, an evaluation of the effectiveness of our "disclosure controls and procedures" (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the United States Securities Exchange Act of 1934 (the "Exchange Act")) was carried out by our management, with the participation of our principal executive officer and principal financial officer. Based upon that evaluation, our principal executive officer and principal financial officer have concluded that as of the end of our fiscal quarter ended September 30, 2019, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officers, to allow timely decisions regarding required disclosure.

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

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) during our fiscal quarter ended September 30, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II—OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

We are not currently party to any material legal proceedings.

ITEM 1A. RISK FACTORS

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

ITEM 6. – EXHIBITS

Exhibit Number	Description of Document
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

+ Management contract or compensatory plan.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on the 5th day of November, 2019.

Aptose Biosciences Inc.

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

Exhibit 31.1

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, William G. Rice, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aptose Biosciences Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 5, 2019

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

Exhibit 31.2

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Gregory K. Chow, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Aptose Biosciences Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 5, 2019

/s/ Gregory K. Chow
Name: Gregory K. Chow
Title: Senior Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, William G. Rice, the President and Chief Executive Officer of Aptose Biosciences Inc. (the "Company"), hereby certify that, to my knowledge:

1. The Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 (the "Report") of the Company fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 5, 2019

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

Exhibit 32.2

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Gregory K. Chow, the Senior Vice President and Chief Financial Officer of Aptose Biosciences Inc. (the "Company"), hereby certify that, to my knowledge:

1. The Quarterly Report on Form 10-Q for the quarter ended September 30, 2019 (the "Report") of the Company fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 5, 2019

/s/ Gregory K. Chow
Name: Gregory K. Chow
Title: Senior Vice President and Chief Financial Officer