Consolidated Financial Statements

APTOSE BIOSCIENCES INC.

Years ended December 31, 2019 and 2018

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Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors Aptose Biosciences Inc.

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Aptose Biosciences Inc. (the "Company") as of December 31, 2019 and 2018, the related consolidated statements of loss and comprehensive loss, changes in shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for leases on January 1, 2019, due to the adoption of Financial Accounting Standards Board, ASU No. 2016-02, Leases (Topic 842).

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2003.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants
Vaughan, Canada
March 10, 2020

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

	December 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 79,842	$ 15,299
Investments	17,758	440
Prepaid expenses	1,025	646
Other current assets	141	101
Total current assets	98,766	16,486
Non-current assets:		
Property and equipment	334	384
Right-of-use assets, operating leases	1,376	-
Total non-current assets	1,710	384
Total assets	$ 100,476	$ 16,870
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 1,960	$ 1,315
Accrued liabilities	3,058	1,474
Current portion of lease liability, operating leases	521	-
Total current liabilities	5,539	2,789
Non-current liabilities:		
Lease liability, operating leases	1,011	-
Total liabilities	6,550	2,789
Shareholders' equity:		
Share capital:		
Common shares, no par value, unlimited authorized shares, 76,108,031 and 38,161,808 shares issued and outstanding at December 31, 2019 and December 31, 2018	365,490	261,072
Additional paid-in capital	34,649	32,963
Accumulated other comprehensive loss	(4,298)	(4,316)
Deficit	(301,915)	(275,638)
Total shareholders' equity	93,926	14,081
Total liabilities and shareholders' equity	$ 100,476	$ 16,870

See accompanying notes to consolidated financial statements
Subsequent events (note 16)

APTOSE BIOSCIENCES INC.

Consolidated Statements of Loss and Comprehensive Loss

(Expressed in thousands of US dollars, except for per common share data)

	Year ended December 31, 2019	Year ended December 31, 2018
Revenue	$ -	$ -
Expenses:		
Research and development	16,835	18,733
General and administrative	10,022	10,374
Operating expenses	26,857	29,107
Other income (expense):		
Interest income	574	283
Foreign exchange gain/(loss)	6	(44)
Total other income	580	239
Net loss	(26,277)	(28,868)
Other comprehensive loss:		
Unrealized gain on securities available-for-sale	18	-
Total comprehensive loss	$ (26,259)	$ (28,868)
Basic and diluted loss per common share	$ (0.52)	$ (0.86)
Weighted average number of common shares outstanding used in the calculation of (in thousands)		
Basic and diluted loss per common share	50,160	33,391

See accompanying notes to consolidated financial statements.

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

	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 December 2019 public offering	18,544		68,588		-		-		-		68,588
Common shares issued pursuant to the June 2019 public offering	11,500		19,594		-		-		-		19,594
Common shares issued pursuant to 2019 share purchase agreement	1,971		4,730		-		-		-		4,730
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	312		1,248		(530)		-		-		718
Common shares issued on redemption of restricted share units	40		80		(80)		-		-		-
Stock-based compensation	-		-		2,296		-		-		2,296
Other comprehensive gain	-		-		-		18		-		18
Net loss	-		-		-		-		(26,277)		(26,277)
Balance, December 30, 2019	76,108	$	365,490	$	34,649	$	(4,298)	$	(301,915)	$	93,926
Balance, December 31, 2017	27,502	$	231,923	$	29,365	$	(4,316)	$	(246,770)	$	10,202
Common shares issued under the 2018 ATM	4,086		10,710		-		-		-		10,710
Common shares issued pursuant to 2017 share purchase agreement	5,232		14,995		-		-		-		14,995
Common shares issued pursuant to 2018 purchase agreement	1,078		2,526		-		-		-		2,526
Shares issued on redemption of restricted share units	150		503		(503)		-		-		-
Common shares issued upon exercise of stock options	114		415		(175)		-		-		240
Stock-based compensation	-		-		4,276		-		-		4,276
Net loss	-		-		-		-		(28,868)		(28,868)
Balance, December 31, 2018	38,162	$	261,072	$	32,963	$	(4,316)	$	(275,638)	$	14,081

See accompanying notes to consolidated financial statements.

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

	Year ended December 31, 2019	Year ended December 31, 2018
Cash flows from operating activities:		
Net loss for the year	$ (26,277)	$ (28,868)
Items not involving cash:		
Stock-based compensation	2,296	4,276
Shares issued to Aspire Capital as commitment fees	360	600
Depreciation and amortization	152	87
Amortization of right-of-use assets	461	-
Interest on lease liabilities	90	-
Unrealized foreign exchange gain/(loss)	(23)	25
Accrued interest on investments	(34)	-
Change in operating working capital:		
Prepaid expenses	(379)	(324)
Operating lease payments	(471)	-
Other assets	(40)	(27)
Accounts payable	645	726
Accrued liabilities	1,662	298
Cash used in operating activities	(21,558)	(23,207)
Cash flows from financing activities:		
Issuance of common shares pursuant to December 2019 Public Offering, net of broker commission and agent legal fees	68,883	-
Issuance of common shares pursuant to June 2019 Public Offering, net of broker commission and agent legal fees	19,736	-
Issuance of common shares under the 2018 ATM, net of broker commission	178	10,720
Issuance of common shares under 2019 share purchase agreement	4,370	-
Issuance of common shares under 2018 share purchase agreement	10,000	1,926
Issuance of common shares under 2017 share purchase agreement	-	15,000
Offering costs paid	(437)	(15)
Issuance of common shares pursuant to exercise of stock options	718	240
Cash provided by financing activities	103,448	27,871
Cash flows from (used in) investing activities:		
Maturity (acquisition) of investments, net	(17,268)	341
Purchase of property and equipment	(102)	(329)
Cash provided by (used in) investing activities	(17,370)	12
Effect of exchange rate fluctuations on cash and cash equivalents held	23	(8)
Increase in cash and cash equivalents	64,543	4,668
Cash and cash equivalents, beginning of year	15,299	10,631
Cash and cash equivalents, end of year	$ 79,842	$ 15,299

See accompanying notes to consolidated financial statements.

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 office is located in San Diego, California and its corporate office is located in Toronto, Canada.

Aptose has two clinical-stage programs and a third program that is discovery-stage and partnered with another company. CG026806 ("CG-806"), Aptose's mutation-agnostic FMS-like tyrosine kinase 3 (FLT3 / Bruton's tyrosine kinase (BTK) 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.

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. Our uses of cash for operating activities have primarily consisted of salaries and wages for our employees, facility and facility-related costs for our offices and laboratories, fees paid in connection with preclinical and clinical studies, drug manufacturing costs, laboratory supplies and materials, and professional fees.

During the year ended December 31, 2019, the Company completed two confidentially marketed public offering (CMPO) through the issuance of 30,043,750 common shares for gross proceeds of \$95.45 million (approximately \$88.18 million net of share issue costs). The Company also raised capital pursuant to two separate share purchase agreement with Aspire Capital (Aspire) through the issuance of 7,302,433 common shares for gross and net proceeds of \$14.4 million.

We do not expect to generate positive cash flow from operations for the foreseeable future due to the early stage of our clinical trials. 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.

We believe that our cash, cash equivalents and investments on hand at December 31, 2019 will be sufficient to finance our operations for at least 12 months from the issuance date of these financial statements. 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 expect that we will need to raise additional capital or incur indebtedness to continue to fund our operations in the future. Our ability to raise additional funds could be affected by adverse market conditions, the status of our product pipeline and various other factors and we may be unable to raise capital when needed, or on terms favorable to us. If necessary funds are not available, we may have to delay, reduce the scope of, or eliminate some of our development programs, potentially delaying the time to market for any of our product candidates.

2. **Significant accounting policies**

(a) Basis of consolidation:

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

(b) Basis of presentation:

These consolidated financial statements have been prepared in conformity with generally accepted accounting principles in the United States, or GAAP and the rules and regulations of the Securities and Exchange Commission, or SEC, related to annual reports filed on Form 10-K. The functional and presentation currency of the Company is the US dollar.

(c) Significant accounting policies, estimates and judgments:

The preparation of the consolidated 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 consolidated financial statements include estimates, which, by their nature, are uncertain.

The impacts of such estimates are pervasive throughout the consolidated 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) 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.

(e) Cash and cash equivalents:

Cash and cash equivalents are short-term highly liquid investments with original maturities of 90 days or less as at the date of purchase. Cash equivalents are accounted for on amortized cost basis, which approximates its fair value due to their short-term maturities.

(f) Investments:

Investments consist of time deposits with original maturities greater than 90 days are classified by management as securities available-for-sale. These available-for-sale securities are recorded at estimated fair values. Unrealized gains and losses on these investments are recorded in accumulated other comprehensive income (AOCI) in shareholder’s equity. Realized gains and losses and declines in value that are judged to be other than temporary are included in interest income.

(g) 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.

(h) Property and equipment:

Property and equipment is measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The Company records depreciation at rates that charge operations with the cost of the assets over their estimated useful lives on a straight-line basis as follows:

Office furniture (years)	5
Laboratory equipment (years)	5
Computer hardware (years)	3
Computer software (years)	3
Leasehold improvements	Life of lease

The residual value, useful life and methods of depreciation of the assets are reviewed at each reporting period and adjusted prospectively if appropriate.

(i) Research and development:

Research and development (R&D) costs are expensed as incurred. R&D costs consist primarily of salaries and benefits, stock-based compensation, manufacturing, contract services, clinical trials, intangibles, and research related overhead. Non-refundable advance payments for goods and services that will be used in future research are recorded in prepaid and other assets and are expensed when the services are performed.

(j) Fair value:

The Company measures its financial assets and liabilities at fair value. The carrying amounts for the Company's financial instruments, including cash and cash equivalents, accounts payable and accrued liabilities approximate their fair value due to their short maturities. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

(k) Stock-based compensation:

The Company has a stock-based compensation plan (the "Plan") available to officers, directors, employees and consultants with grants under the Plan approved by the Company's Board of Directors. Under the Plan, the exercise price of each option equals 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. Vesting is provided for at the discretion of the Board of Directors and the expiration of options is to be no greater than 10 years from the date of grant.

The Company uses the fair value based method of accounting for employee awards granted under the Plan. The Company calculates the fair value of each stock option grant using the Black-Scholes option pricing model at the grant date. The stock-based compensation cost of the options is recognized as stock-based compensation expense over the relevant vesting period of the stock options using an estimate of the number of options that will eventually vest.

Stock options awarded to non-employees are accounted for at the fair value of the goods received or the services rendered. The fair value is measured at the grant date. In June 2018, FASB issued accounting standards update No 2018-07, Improvements to Nonemployee Share-Based Payment Accounting. The amendment establishes that nonemployee share-based payment awards within the scope of Topic 718 be measured at grant-date fair value of the equity instruments issued. The amendments are effective for fiscal years beginning after December 15, 2018. Early adoption is permitted and the Company elected to early adopt this policy. The early adoption did not result in any changes in retained earnings or other components of equity as the accounting.

The Company has a stock incentive plan 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. Compensation cost for restricted share units is measured at fair value at the date of grant, which is the market price of the underlying security, and is expensed over the award's vesting period on a straight-line basis using an estimate of the number of awards that will eventually vest.

(l) Segment reporting:

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision-maker, or CODM. The Company's Chief Executive Officer serves as its CODM. The Company views its operations and manages its business as one segment, which is the discovery and development of personalized therapies addressing unmet medical needs in oncology. The Company operates primarily in the US.

(m) Loss per share:

Basic loss per share is computed by dividing the net loss available to common shareholders by the weighted average number of shares outstanding during the year. Diluted loss per share is computed similarly to basic loss per share except that the weighted average share outstanding is increased to include additional shares for the assumed exercise of stock options and warrants, if dilutive. The number of additional shares is calculated by assuming that outstanding stock options and warrants were exercised and that the proceeds from such exercises were used to acquire common stock at the average market price during the year. The inclusion of the Company's stock options and warrants in the computation of diluted loss per share has an anti-dilutive effect on the loss per share and, therefore, they have been excluded from the calculation of diluted loss per share.

(n) Income taxes:

The Company accounts for income taxes under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which these temporary differences are expected to be recovered or settled. Valuation allowances are provided if, based on the weight of available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company provides reserves for potential payments of tax to various tax authorities related to uncertain tax positions and other issues. Reserves are based on a determination of whether and how much of a tax benefit taken by the Company in its tax filing is more likely than not to be realized following resolution of any potential contingencies present related to the tax benefit. Potential interest and penalties associated with such uncertain tax positions are recorded as components of income tax expense. As at December 31, 2019 and December 31, 2018, the Company has not recorded any reserves for potential payments as the Company has a history of losses and does not have any revenue from operations.

3. Cash and cash equivalents:

Cash and cash equivalents consists of cash of $1.640 million (December 31, 2018 - $621 thousand) and deposits in high interest savings accounts and other term deposits with maturities less than 90 days totaling of $78.202 million (December 31, 2018 - $14.678 million).

4. Property and equipment:

December 31, 2019	Cost	Accumulated depreciation	Net book value
Laboratory equipment	$ 185	$ 160	$ 25
Computer hardware	122	60	62
Computer software	222	128	94
Office furniture	116	51	65
Leasehold improvements	177	89	88
	$ 822	$ 488	$ 334

December 31, 2018	Cost	Accumulated depreciation	Net book value
Laboratory equipment	$ 176	$ 129	$ 47
Computer hardware	80	40	40
Computer software	222	80	142
Office furniture	82	28	54
Leasehold improvements	160	59	101
	$ 720	$ 336	$ 384

5. **Right of-use assets, operating leases:**

		Year ended December 31, 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, December 31, 2019		1,837	-
Accumulated amortization		(461)	-
Right-of use assets, NBV		1,376	-

6. **Investments:**

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

	December 31, 2019		
	Cost	Unrealized gain/(loss)	Market value
Guaranteed investment certificate(s)	12,008	18	12,026
Commercial notes	3,736	-	3,736
Canadian promissory note	1,996	-	1,996
	17,740	18	17,758

	December 31, 2018		
	Cost	Unrealized gain (loss)	Market value
Guaranteed investment certificate(s)	440	-	440

7. **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:

	December 31, 2019	Level 1	Level 2	Level 3
Assets				
High interest savings account	$ 2,989	$ -	$ 2,989	-
Commercial notes	6,235	-	6,235	-
Canadian provincial promissory notes	5,493	-	5,493	-
Guaranteed investment certificates, issued by a Canadian financial institution	81,243	-	81,243	-
	$ 95,960	$ -	$ 95,960	$ -

	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	$ -

8. Accrued liabilities:

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

	December 31, 2019	December 31, 2018
Accrued personnel related costs	$ 1,739	$ 955
Accrued research and development expenses	1,062	257
Other accrued expenses	257	262
	$ 3,058	$ 1,474

9. 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 and 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,		
2020	$	534
2021		545
2022		463
2023		119
Thereafter		-
	$	1,661

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:

	Year ended December 31, 2019
Weighted-average remaining term – operating leases (years)	3.3
Weighted-average discount rate – operating leases	5.43%
Lease liability, current portion	521
Lease liability, long term portion	1,011
Lease liability, total	1,532

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

		Year ended December 31, 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:

		Year ended December 31, 2019
Operating lease cost	$	551
Operating cash flows from operating leases	$	471

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.

10. Share capital:

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

(a) Equity issuances:

(i) December 2019 Confidentially Marketed Public Offering (CMPO)

On December 19, 2019, the Company completed a confidentially marketed public offering through the issuance of 18,543,750 common shares at a price of $4.00 per share for gross proceeds of $74.175 million (approximately $68.588 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) June 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 (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.

(iii) 2019 Share Purchase agreement

On May 7, 2019, the Company entered into the 2019 Aspire Purchase Agreement, which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital was 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 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 for a total cost of $360 thousand. During the period from May 7, 2019 up to December 16, 2019, the date the 2019 Aspire Purchase Agreement was terminated, the Company issued 1,800,000 common shares under the agreement at an average price of $2.43 per share for gross and net proceeds of $4.37 million.

(iv) 2018 Share Purchase agreement

On May 30, 2018, the Company entered into the 2018 Aspire Purchase Agreement, which provided that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital was 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 for a total cost of $600 thousand. During the period from January 1, 2019 up to May 24, 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 May 24, 2019, the Company raised a total of approximately $11.9 million gross and net proceeds under the 2018 Aspire Purchase Agreement. As of May 24, 2019, the Company has issued 6,409,980, the maximum number of shares issuable under this facility without shareholder approval.

(v) 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 was 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 year ended December 31, 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 December 31, 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.

(vi) 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 Canaccord Genuity on the Nasdaq Capital Market. During the period from May 24, 2019 to December 16, 2019, the date the “ATM” Facility was terminated, the Company did not issue any shares under this ATM equity.

(vii) 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 year ended December 31, 2018, the Company issued 4,085,615 shares under this ATM equity facility at an average price of $2.71 for gross proceeds of $11 million ($10.7 million net of share issue costs). During the period from January 1, 2019 to May 24, 2019, the date the Agreement was terminated, 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). Costs associated with the proceeds consisted of a 3% cash commission. As of May 24, 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.

(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:

(in thousands)	Year ended Dec 31, 2019	Year ended Dec 31, 2018
Net loss	$ (26,277)	$ (28,868)
Weighted-average common shares – basic and diluted	50,160	33,391
Net loss per share – basic and diluted	$ (0.52)	$ (0.86)

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

11. 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 13.3 million options, rights and other entitlements as at December 31, 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.

Stock option transactions for the years ended December 31, 2018 and 2019 are summarized as follows:

Option numbers are in (000's)

	Options	Year ended December 31, 2019 Weighted average exercise price	Weighted average remaining contractual life(years)	Aggregate Intrinsic Value
Outstanding, December 31, 2017	2,344	$ 3.46		
Granted	2,320	2.98		
Exercised	(114)	2.04		
Expired	(51)	2.34		
Forfeited	(10)	4.97		
Outstanding, December 31, 2018	4,489	$ 3.11		
Granted	2,160	2.00		
Exercised	(312)	2.32		
Expired	(67)	4.61		
Forfeited	(329)	2.36		
Outstanding, December 31, 2019	5,941	2.84	7.6	16,866,623
Exercisable, December 31, 2019	3,057	3.44	6.5	6,853,978
Vested and expected to vest, December 31, 2109	5,508	2.89	7.5	15,364,726

Aggregate intrinsic value represents the excess of the value of the closing stock price on the previous trading day of the respective balance sheet dates over the exercise price of the stock options. Total intrinsic value of options exercised was $259 thousand for 2019 (2018 – $255 thousand).

As of December 31, 2019, there was $1.38 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 1.77 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 year, and the resultant weighted average fair values:

	Year ended December 31, 2019	Year ended December 31, 2018
Risk-free interest rate	2.18%	2.43%
Expected dividend yield	-	-
Expected volatility	83.9%	93.3%
Expected life of options (years)	5	5
Grant date fair value	$ 1.34	$ 2.22

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 year ended December 31, 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 year ended December 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 year ended December 31, 2019 and 2018 the units outstanding.

	Year ended, December 31, 2019		Year ended, December 31, 2018	
	Number (in thousands)	Weighted average grant date fair value	Number (in thousands)	Weighted average grant date fair value
Outstanding, December 31. 2018	-	$ -	-	$ -
Granted	80	2.00	150	3.35
Redeemed	(40)	2.00	(150)	3.35
Outstanding, December 31, 2019	40	$ 2.00	-	$ -

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:

	Year ended December 31, 2019	Year ended December 31, 2018
Research and development	$ 474	$ 1,026
General and administrative	1,822	3,250
Total	$ 2,296	$ 4,276

12. 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 year ended December 31, 2019, the Company recorded $223 thousand (2018 – $279 thousand) in research and development expenses related to the agreement.

13. Collaborative agreements:

The Company enters into research, development and license agreements in the ordinary course of business where the Company receives research services and rights to proprietary technologies. Milestone and royalty payments that may become due under various agreements are dependent on, among other factors, clinical trials, regulatory approvals and ultimately the successful development of a new drug, the outcome and timing of which is uncertain.

Under the Company's license agreement with CrystalGenomics for rights to CG-806, in all territories outside of the Republic of Korea and China, the Company has obligations for development milestones of $16 million related to the initiation of Phase 2 and pivotal clinical trials, and regulatory milestones totaling $44 million. The Company also has an obligation to pay royalty payments on sales of commercialized product. The timing of any milestone or royalty payments that may become due is not yet determinable.

On June 13, 2018, the Company entered into a license agreement with CrystalGenomics to gain an exclusive license to CG-806 in China. The Company has potential future obligations of development milestones of $6 million related to approval of an Investigational New Drug ("IND") and to the initiation of Phase 2 and pivotal clinical trials, and regulatory milestones totaling $20 million. The Company also has an obligation to pay sales milestones and royalty payments on sales of commercialized product. The timing or likelihood of any milestone or royalty payments that may become due is not yet determinable.

On March 7, 2018, we entered into an exclusive global license agreement with Ohm Oncology (OHM), for the development, manufacture and commercialization of APL-581, as well as related molecules from our dual bromodomain and extra-terminal domain motif (BET) 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 nominal 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.

14. Income taxes:

(a) Recent tax legislation

In December 2017 the U.S. government enacted comprehensive tax legislation, the Tax Cuts and Jobs Act (the "Tax Act"), which significantly revises the U.S. tax code, generally effective January 1, 2018, by lowering the U.S. federal corporate income tax rate from 35% to 21%, implementing a territorial tax system and setting limitations on the deductibility of certain costs (e.g. Interest expenses) among other things. As a Canadian entity, we generally would be classified as a foreign entity (and, therefore, a non-U.S. tax resident) under general rules of U.S. federal income taxation. However, we have a branch and U.S. subsidiary subject to U.S. federal income taxation. The Tax Act has impacted our consolidated results of operations during 2017 and 2018, and is expected to continue to impact our consolidated results of operations in future periods. The ultimate impact of the Tax Act on our effective tax rate in future periods will depend on interpretations and regulatory changes from the Internal Revenue.

(b) Income taxes

For the years ended December 31, 2018 and 2019, the total comprehensive loss is as follows:

	December 31, 2019	December 31, 2018
Loss attributed to US foreign operations	$ (20,470)	$ (21,807)
Loss attributed to Canadian operations	(5,807)	(7,061)
Income (loss) before income taxes	(26,277)	(28,868)

(c) Tax rate reconciliation

Major items causing the Company's income tax rate to differ from the statutory rate of approximately 26.5% (December 31, 2018 – 26.5%) are as follows:

	Year ended December 31, 2019	Year ended December 31, 2018
Net loss	$ (26,277)	$ (28,868)
Statutory Canadian corporate tax rate	26.5%	26.5%
Computed expected tax recovery	$ (6,963)	$ (7,650)
Non-deductible permanent differences	(1,305)	1,422
Change in valuation allowance	12,146	4,528
Foreign tax rate differential	(286)	(325)
Foreign exchange differences	-	2,183
Prior year true-up adjustments	(3,563)	-
Other	(29)	(158)
	$ -	$ -

(d) Significant components of deferred taxes

The tax effects of temporary differences that give rise to significant portions of the unrecognized deferred tax assets are presented below:

	December 31, 2019	December 31, 2018
Net operating losses carried forward	$ 26,786	$ 19,567
Research and development expenditures	5,031	5,024
Property, equipment, and other intangible assets	4,191	4,161
Research and development tax credits	3,685	394
Financing costs	2,010	452
Right-of-use assets	41	-
Total deferred tax assets	41,744	29,598
Valuation allowance	(41,744)	(29,598)
Net deferred tax asset	$ -	$ -

The valuation allowance at December 31, 2019 was primarily related to net operating loss carryforwards that, in the judgment of management, are not more-likely than-not to be realized. In assessing the realizability of deferred tax assets, management considers whether it is more-likely than-not that all or some portion of the deferred assets will not be realized. This ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which those deductible temporary difference become deductible. Based on the history of losses and projections for future taxable income, management believes that it is not more-likely than-not that the Company will realize the benefits of these deductible temporary differences (e.g. deferred tax assets).

The Company has undeducted research and development expenditures, totaling $18.958 million that can be carried forward indefinitely. The Company also has Canadian non-refundable federal and provincial investment tax credits of approximately $4.113 million which are available to reduce future federal taxes payable and begin to expire in 2020, as well as non-refundable US research and development tax credits of approximately $0.557 million which are available to reduce future US taxes payable and begin to expire in 2038.

In addition, the Company has Canadian non-capital loss carryforwards of $97.127 million. To the extent that the non-capital loss carryforwards are not used, they begin to expire in 2026. The Company also has US non-capital loss carryforward of $0.586 million, To the extent that the non-capital loss carryforwards are not used, they begin to expire in 2034.

The Company files income tax returns with Canada and its provinces and territories. Generally we are subject to routine examinations by the Canada Revenue Agency ("CRA"). Income tax returns filed with various provincial jurisdictions are generally open to examination for periods of four to five years subsequent to the filing of the respective return.

The Company also files income tax returns for our U.S. operations and subsidiary with the U.S. federal and state tax jurisdictions. Generally, we are subject to routine examination by taxing authorities in the U.S. jurisdictions. There are presently no examination of our U.S. federal and U.S. state returns. We believe that our tax positions comply with the applicable tax law.

15. Selected quarterly financial data (unaudited):

Selected financial data (unaudited) for the periods presented was as follows:

	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Revenue	$ -	$ -	$ -	$ -
Net loss	(5,506)	(6,218)	(6,844)	(7,709)
Basic and diluted loss per common share	(0.14)	(0.13)	(0.12)	(0.13)

	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018
Revenue	$ -	$ -	$ -	$ -
Net loss	(6,814)	(10,262)	(5,531)	(6,261)
Basic and diluted loss per common share	(0.23)	(0.30)	(0.16)	(0.17)

16. Subsequent events

(a) Subsequent to the year end, the Company issued 5,808,834 stock options with an average exercise price of $6.82. The stock options vest 50% after one year and 16.67% on each of the next three anniversaries, except for 861,834 options which vest 50% after one year and 25% on each of the next two anniversaries.

(b) Subsequent to the year end, the Company issued 161,775 common shares upon the exercise of stock options, with an average exercise price of $2.68.