
Consolidated Financial Statements

**APTOSE BIOSCIENCES INC.**

Years ended December 31, 2021 and 2020

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**Report of Independent Registered Public Accounting Firm**

To the Shareholders 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. and subsidiaries (the Company) as of December 31, 2021 and 2020, 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

*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.

*Critical Audit Matter*

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

*Research and Development Prepaid and Accrued Costs*

As discussed in Notes 2(i), 4 and 9 to the consolidated financial statements, the Company records expenses for research and development activities based on Management's estimates of services received and efforts expended pursuant to contracts with vendors that conduct research and development on the Company's behalf. The financial terms vary from contract to contract and may result in uneven payment flows as compared with services performed or products delivered. As a result, the Company is required to estimate research and development expenses incurred during the period, which impacts the amount of accrued expenses and prepaid balances related to such costs as of each balance sheet date. Management estimates the amount of work completed through discussions with internal personnel and the contract research and contract manufacturing organizations as to the progress or stage of completion of the services. The Company's estimates are based on a number of factors, including the Company's knowledge of the status of each of the research and development project milestones, and contract terms together with related executed change orders. Management makes significant judgments and estimates in determining the accrued balance at the end of each reporting period.

We identified the evaluation of research and development prepaid and accrued costs as a critical audit matter. Higher degree of auditor judgment was required in evaluating the results of our audit procedures because of the subjectivity and estimation uncertainty associated with this estimate.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design of certain internal controls related to the critical audit matter. This included controls over the development of the estimated amount of prepaid and accrued costs incurred by the contract research and contract manufacturing organizations. For a selection of research and development projects, we assessed the Company's estimates of a selection of the research and development activities completed to date by:

- inquiring with Company personnel responsible for overseeing the research and development activities to understand progress of the activities including project milestones, and contract terms together with related executed change orders

- inspecting the terms of the contracts, including related executed change orders, between the Company and the respective contract research and contract manufacturing organizations, the correspondence between the Company and these organizations as to the completion status, and using this information to arrive at an independent estimate of the prepaid or accrual amounts and comparing it to the amounts recorded by the Company

We have served as the Company's auditor since 1994.

/s/KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

Vaughan, Canada
March 22, 2022

**APTOSE BIOSCIENCES INC.**

Consolidated Statements of Financial Position
(Expressed in thousands of US dollars)

| | | December 31, 2021 | | December 31, 2020 |
|---|---|---|---|---|
| Assets | | | | |
| Current assets: | | | | |
| Cash and cash equivalents | $ | 39,114 | $ | 117,393 |
| Investments | | 40,014 | | 5,000 |
| Prepaid expenses | | 2,476 | | 2,554 |
| Other current assets | | 133 | | 129 |
| Total current assets | | 81,737 | | 125,076 |
| Non-current assets: | | | | |
| Property and equipment | | 323 | | 261 |
| Right-of-use assets, operating leases | | 465 | | 925 |
| Total non-current assets | | 788 | | 1,186 |
| Total assets | $ | 82,525 | $ | 126,262 |
| Liabilities and Shareholders' Equity | | | | |
| Current liabilities: | | | | |
| Accounts payable | $ | 1,699 | | 2,171 |
| Accrued liabilities | | 6,016 | | 4,102 |
| Current portion of lease liability, operating leases | | 459 | | 539 |
| Total current liabilities | | 8,174 | | 6,812 |
| Non-current liabilities: | | | | |
| Lease liability, operating leases | | 115 | | 535 |
| Total liabilities | | 8,289 | | 7,347 |
| Shareholders' equity: | | | | |
| Share capital: | | | | |
| Common shares, no par value, unlimited authorized shares, 92,215,024 and 88,881,737 shares issued and outstanding at December 31, 2021 and December 31, 2020, respectively | | 437,386 | | 429,523 |
| Additional paid-in capital | | 63,673 | | 50,861 |
| Accumulated other comprehensive loss | | (4,316) | | (4,316) |
| Deficit | | (422,507) | | (357,153) |
| Total shareholders' equity | | 74,236 | | 118,915 |
| Total liabilities and shareholders' equity | $ | 82,525 | $ | 126,262 |

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, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Revenue | $ - | $ - |
| Expenses: | | |
| Research and development | 45,985 | 29,288 |
| General and administrative | 19,462 | 26,480 |
| Operating expenses | 65,447 | 55,768 |
| Other income : | | |
| Interest income | 94 | 522 |
| Foreign exchange gain/(loss) | (1) | 8 |
| Total other income | 93 | 530 |
| Net loss | (65,354) | (55,238) |
| Other comprehensive loss: | | |
| Unrealized loss on securities available-for-sale | - | (18) |
| Total comprehensive loss | $ (65,354) | $ (55,256) |
| Basic and diluted loss per common share | $ (0.73) | $ (0.67) |
| Weighted average number of common shares outstanding used in the calculation of (in thousands) | | |
| Basic and diluted loss per common share | 89,086 | 81,837 |

See accompanying notes to consolidated financial statements.

**APTOSE BIOSCIENCES INC.**
Consolidated Statements of Changes in Shareholders' Equity
(Expressed in thousands of US dollars, except for per common share data)

| | Common Shares | | | | | |
|---|---|---|---|---|---|---|
| | Shares (thousands) | Amount | Additional paid-in capital | Accumulated other comprehensive loss | Deficit | Total |
| Balance, December 31, 2020 | 88,882 | $ 429,523 | $ 50,861 | $ (4,316) | $ (357,153) | $ 118,915 |
| Common shares issued pursuant to the Hanmi licensing fees | 3,236 | 7,500 | - | - | - | 7,500 |
| Common shares issued under the May 2020 ATM | 15 | 36 | - | - | - | 36 |
| Common shares issued upon exercise of stock options | 82 | 327 | (137) | - | - | 190 |
| Stock-based compensation | - | - | 12,949 | - | - | 12,949 |
| Net loss | - | - | - | - | (65,354) | (65,354) |
| Balance, December 31, 2021 | 92,215 | $ 437,386 | $ 63,673 | $ (4,316) | $ (422,507) | $ 74,236 |
| Balance, December 31, 2019 | 76,108 | $ 365,490 | $ 34,649 | $ (4,298) | $ (301,915) | $ 93,926 |
| Common shares issued pursuant to the public offering | 11,854 | 58,234 | - | - | - | 58,234 |
| Common shares issued upon exercise of stock options | 235 | 998 | (425) | - | - | 573 |
| Stock-based compensation | - | - | 21,438 | - | - | 21,438 |
| Common shares issued upon redemption of restricted share units | 685 | 4,801 | (4,801) | - | - | - |
| Other comprehensive loss | - | - | - | (18) | - | (18) |
| Net loss | - | - | - | - | (55,238) | (55,238) |
| Balance, December 31, 2020 | 88,882 | $ 429,523 | $ 50,861 | $ (4,316) | $ (357,153) | $ 118,915 |

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, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Cash flows from operating activities: | | |
| Net loss for the year | $ (65,354) | (55,238) |
| Items not involving cash: | | |
| Stock-based compensation | 12,949 | 21,438 |
| Shares issued to Hanmi Pharmaceutical as license fees | 7,500 | - |
| Depreciation and amortization | 150 | 152 |
| Amortization of right-of-use assets | 472 | 462 |
| Interest on lease liabilities | 43 | 69 |
| Unrealized foreign exchange gain/(loss) | (7) | (8) |
| Accrued interest on investments | (18) | 33 |
| Change in operating working capital: | | |
| Prepaid expenses | 78 | (1,529) |
| Operating lease payments | (555) | (537) |
| Other assets | (4) | 12 |
| Accounts payable | (472) | 211 |
| Accrued liabilities | 1,914 | 1,044 |
| Cash used in operating activities | (43,304) | (33,891) |
| Cash flows from financing activities: | | |
| Issuance of common shares under 2020 ATM | 36 | - |
| Issuance of common shares under July/August 2020 Public Offering | - | 58,402 |
| Offering costs paid | - | (168) |
| Issuance of common shares pursuant to exercise of stock options | 190 | 573 |
| Cash provided by financing activities | 226 | 58,807 |
| Cash flows from (used in) investing activities: | | |
| Maturity (acquisition) of investments, net | (34,996) | 12,707 |
| Purchase of property and equipment | (212) | (79) |
| Cash provided by (used in) investing activities | (35,208) | 12,628 |
| Effect of exchange rate fluctuations on cash and cash equivalents held | 7 | 7 |
| Increase/(decrease) in cash and cash equivalents | (78,279) | 37,551 |
| Cash and cash equivalents, beginning of year | 117,393 | 79,842 |
| Cash and cash equivalents, end of year | $ 39,114 | $ 117,393 |

See accompanying notes to consolidated financial statements.

**1. Reporting entity:**

Aptose Biosciences Inc. ("Aptose" or the "Company") is a clinical-stage precision oncology company developing differentiated kinase inhibitors 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 third program in discovery-stage and partnered with another company. Luxeptinib (previously named CG-806), Aptose's dual lymphoid and myeloid kinome inhibitor, is currently evaluating the safety, tolerability, PK, and preliminary efficacy of luxeptinib in a Phase 1a/b, multicenter, dose-escalation trial with expansions to assess in patients with chronic lymphocytic leukemia (CLL/SLL) or non-Hodgkin lymphomas (NHL), and, in parallel, a separate Phase 1a/b multicenter, dose escalation trial in patients with relapse or refractory acute myeloid leukemia (AML) and high-risk Myelodysplastic Syndrome (MDS) . In November 2021, Aptose licensed in HM43239 from Hanmi Pharmaceutical Co. HM43239 is an oral potent myeloid kinome inhibitor, targeting a constellation of kinases operative in myeloid malignancies and known to be involved in tumor proliferation, resistance to therapy, and differentiation. Specifically, HM43239 is a potent inhibitor of FLT3, SYK, cKIT-MUT, JAK, and other kinases. HM43239 is currently being evaluated in an international Phase 1/2 dose-escalation clinical trial designed to assess the safety, tolerability, pharmacokinetics and pharmacodynamic responses of HM43239 as a single agent in patients with relapsed or refractory AML. Aptose assumed sponsorship of this trial effective January 1, 2022. In December 2021 Aptose announced that it was discontinuing further development of APTO-253, a small molecule MYC inhibitor, previously positioned in a Phase 1a/b clinical trial for the treatment of patients with R/R blood cancers, including AML and high risk MDS.

We are advancing first-in-class targeted agents to treat life-threatening cancers that, in most cases, are not elective for patients and require immediate treatment. However, COVID-19 has caused global economic and social disruptions that could adversely affect our ongoing and planned research and development of our clinical-stage programs including but not limited to drug manufacturing campaigns, clinical trial activities including enrollment of patients in our ongoing and planned clinical trials, collection and analysis of patient data and eventually, the reporting of results from our trials.

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.

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, 2021 will be sufficient to finance our operations for at least 12 months from the issuance date of these financial statements. Our cash needs for the next twelve months include estimates of the number of patients and rate of enrollment of our clinical trials, the amount of drug product that we will require to support our clinical trials, and our general corporate overhead costs to support our operations, and our reliance on our manufacturers. 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.

Our ability to raise additional funds could be affected by adverse market conditions, the status of our product pipeline, possible delays in enrollment in our trial related to COVID-19, 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

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. 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.

(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 an amortized cost basis, which approximates its fair value due to their short-term maturities.

(f) Investments:

Investments consist of term deposits with original maturities greater than 90 days and 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 and treasury bills, 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 | 5 years |
| Laboratory equipment | 5 years |
| Computer hardware | 3 years |
| Computer software | 3 years |
| 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 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.

The Company records expenses for research and development activities based on Management's estimates of services received and efforts expended pursuant to contracts with vendors that conduct research and development on the Company's behalf. The financial terms vary from contract to contract and may result in uneven payment flows as compared with services performed or products delivered. As a result, the Company is required to estimate research and development expenses incurred during the period, which impacts the amount of accrued expenses and prepaid balances related to such costs as of each balance sheet date. Management estimates the amount of work completed through discussions with internal personnel and the contract research and contract manufacturing organizations as to the progress or stage of completion of the services. The Company's estimates are based on a number of factors, including the Company's knowledge of the status of each of the research and development project milestones, and contract terms together with related executed change orders. Management makes significant judgments and estimates in determining the accrued balance at the end of each reporting period.

(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 measured at grant-date fair value of the equity instruments issued in accordance with FASB issued accounting standards update No 2018-07, Topic 718.

The Company has a stock incentive plan pursuant to which the Board may grant equity settled 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, 2021 and December 31, 2020, 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 $294 thousand (December 31, 2020 - $329 thousand), deposits in high interest savings accounts, money market funds and accounts with original maturities less than 90 days totaling $38.820 million (December 31, 2020 - $117.064 million).

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

**4. Prepaid expenses:**

| | December 31, 2021 | December 31, 2020 |
|---|---|---|
| Prepaid research and development expenses | $ 632 | $ 622 |
| Other prepaid expenses | 1,844 | 1,932 |
| | $ 2,476 | $ 2,554 |

**5. Property and equipment:**

| December 31, 2021 | Cost | Accumulated depreciation | Net book value |
|---|---|---|---|
| Laboratory equipment | $ 369 | $ 188 | $ 181 |
| Computer hardware | 198 | 144 | 54 |
| Computer software | 222 | 222 | - |
| Office furniture | 140 | 95 | 45 |
| Leasehold improvements | 184 | 141 | 43 |
| | $ 1,113 | $ 790 | $ 323 |

| December 31, 2020 | Cost | Accumulated depreciation | Net book value |
|---|---|---|---|
| Laboratory equipment | $ 185 | $ 177 | $ 8 |
| Computer hardware | 170 | 99 | 71 |
| Computer software | 222 | 174 | 48 |
| Office furniture | 140 | 72 | 68 |
| Leasehold improvements | 184 | 118 | 66 |
| | $ 901 | $ 640 | $ 261 |

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

| | Year ended December 31, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Right-of-use assets, beginning of year | $ 1,848 | $ 1,837 |
| Additions to right-of-use assets | 12 | 11 |
| Right-of-use assets, end of year | 1,860 | 1,848 |
| Accumulated amortization | (1,395) | (923) |
| Right-of use assets, NBV | $ 465 | $ 925 |

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

**7. Investments:**

Investments consisted of the following as of December 31, 2021 and December 31, 2020:

| | | December 31, 2021 | | |
|---|---|---|---|---|
| | | Cost | Unrealized gain | Market value |
| Guaranteed Investment Certificate | $ | 20,016 | - | 20,016 |
| Commercial notes | | 19,998 | | 19,998 |
| | $ | 40,014 | - | 40,014 |

| | | December 31, 2020 | | |
|---|---|---|---|---|
| | | Cost | Unrealized gain | Market value |
| United States Treasury Bills | $ | 5,000 | - | 5,000 |
| | $ | 5,000 | - | 5,000 |

**8. 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 fair value of the Company's financial instruments for the periods presented:

| | | December 31, 2021 | | Level 1 | | Level 2 | | Level 3 |
|---|---|---|---|---|---|---|---|---|
| Assets | | | | | | | | |
| Money Market accounts | $ | 17,974 | $ | - | $ | 17,974 | $ | - |
| Money Market Funds | | 15,801 | | - | | 15,801 | | - |
| High interest savings accounts | | 5,045 | | - | | 5,045 | | - |
| Commercial notes | | 19,998 | | - | | 19,998 | | - |
| Guaranteed Investment Certificate | | 20,016 | | | | 20,016 | | |
| | $ | 78,834 | $ | - | $ | 78,834 | $ | - |

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

| | December 31, 2020 | Level 1 | Level 2 | Level 3 |
|---|---|---|---|---|
| Assets | | | | |
| Money Market accounts | $ 668 | $ - | $ 668 | $ - |
| Money Market Funds | 44,000 | - | 44,000 | - |
| High interest savings accounts | 48,397 | - | 48,397 | - |
| United States Treasury Bill | 5,000 | - | 5,000 | - |
| Government of Canada Treasury Bill | 23,999 | - | 23,999 | - |
| | $ 122,064 | $ - | $ 122,064 | $ - |

**9. Accrued liabilities:**

Accrued liabilities as of December 31, 2021 and December 31, 2020 consisted of the following:

| | December 31, 2021 | December 31, 2020 |
|---|---|---|
| Accrued personnel related costs | $ 2,152 | $ 1,917 |
| Accrued research and development expenses | 3,520 | 1,932 |
| Other accrued expenses | 344 | 253 |
| | $ 6,016 | $ 4,102 |

**10. 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 28, 2022 and has been renewed for a twelve month period. 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, | |
|---|---|
| 2022 | $ 470 |
| 2023 | 123 |
| Thereafter | - |
| | $ 593 |

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:

| | December 31, 2021 | December 31, 2020 |
|---|---|---|
| Weighted-average remaining term – operating leases (years) | 1.2 | 2.1 |
| Weighted-average discount rate – operating leases | 5.37% | 5.40% |
| | | |
| Lease liability, current portion | $ 459 | $ 539 |
| Lease liability, long term portion | 115 | 535 |
| Lease liability, total | $ 574 | $ 1,074 |

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

| | Year ended December 31, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Operating lease cost | $ 515 | $ 530 |
| | | |
| Operating cash flows from operating leases | $ 555 | $ 537 |

**11. Share capital:**

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

(a) Equity issuances:

(i) On November 4, 2021, the Effective date, the Company entered into an exclusive license agreement with Hanmi Pharmaceutical Co. Ltd. (Hanmi) for global rights to its compound named HM43239. Pursuant to the terms of this agreement, on December 14, 2021, the Company issued 3,235,548 Common Shares as a partial upfront payment to Hanmi in consideration of the license and other rights granted for a total cost of $7.5 million. The number of common shares issued is determined using the average market closing price of the common shares on the NASDAQ stock market over the five (5) trading day period ending on the Effective Date.

(ii) 2020 At-The-Market ("ATM") Facility

On May 5, 2020, the Company entered into an equity distribution agreement with Piper Sandler and Canaccord Genuity acting as co-agents in connection with the 2020 ATM Facility. Under the terms of the 2020 ATM Facility, the Company may, from time to time, sell Common Shares having an aggregate offering value of up to $75 million through Piper Sandler and Canaccord Genuity on the Nasdaq Capital Market. During the year ended December 31, 2021, the Company issued 15,315 shares under this ATM Facility at an average price of $2.446 for gross proceeds of $37 thousand ($36 thousand net of share issue costs). Costs associated with the proceeds consisted of a 3% cash commission.

(iii) July/August 2020 Confidentially Marketed Public Offering (CMPO)

On July 20, 2020 and August 10, 2020, the Company completed a confidentially marketed public offering through the issuance of 11,854,472 common shares at a price of $5.25 per share for gross proceeds of $62.236 million (approximately $58.234 million net of share issue costs). Costs associated with the proceeds consisted of a 6% cash commissions and share issue costs, which consisted of agent commission, legal and professional fees and listing fees.

(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 December 31, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Net loss | $ (65,354) | $ (55,238) |
| Weighted-average common shares – basic and diluted | 89,086 | 81,837 |
| Net loss per share – basic and diluted | $ (0.73) | $ (0.67) |

The effect of any potential exercise of the Company's stock options outstanding during the year ended December 31, 2021 and December 31, 2020 has been excluded from the calculation of diluted loss per common share as it would be anti-dilutive.

**12. Stock-based compensation:**

(a) Stock option plan and employee stock purchase plan

Effective June 1, 2021, the Company adopted a new stock incentive plan (New Incentive Plan) and an employee stock purchase plan (ESPP).

The New Incentive Plan authorizes the Board of Directors to administer the New Incentive Plan to provide equity-based compensation in the form of stock options, stock appreciation rights., restricted stock, restricted stock units and Dividend Equivalents.

The Corporation currently maintains its existing Share Option Plan and 2015 Stock Incentive Plan (2015 SIP). Effective June 1, 2021 no further grants will be made under the Share Option Plan or 2015 SIP, though existing grants under the Share Option Plan will remain in effect in accordance with their terms.

The aggregate number of our common shares, no par value, that may be issued under all awards under the New Incentive Plan is (i) 6,343,242, plus (ii) any of our common shares subject to any outstanding award under our prior plans that, after June 1, 2021, are not purchased or are forfeited or reacquired by us, or otherwise not delivered to the participant due to termination, cancellation or cash settlement of such award subject to the share counting provisions of the New Incentive Plan.

Under both the Share Option Plan and the New Incentive 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 both plans. 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.

The ESPP, which will be administered by the Board of Directors, allows eligible employees of the Company with an opportunity to purchase Common Shares through accumulated payroll deductions up to a maximum 15% of eligible compensation. The ESPP will be implemented by consecutive offering periods with a new offering period commencing on the first trading day on or after February 1 and August 1 each year, or on such other date as the Board of Directors will determine, and continuing thereafter until terminated in accordance with the Plan. Unless the Board of Directors provides otherwise, the purchase price will be equal to eighty-five percent (85%) of the fair market value of a Common Share on the offering date or the exercise date, whichever is lower.

The maximum number of Common Shares which will be made available for sale under the ESPP will be 1,700,000 Common Shares.

The Company has not established a first offering period; there are no options outstanding under the ESPP as of December 31, 2021.

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

Stock option transactions for the year ended December 31, 2021 and December 31, 2020, are summarized as follows:

*Option numbers are in (000's)*

| | Options | Weighted average exercise price | Weighted average remaining contractual life (years) | Aggregate Intrinsic Value |
|---|---|---|---|---|
| Outstanding, December 31, 2019 | 5,941 | $ 2.84 | | |
| Granted | 6,362 | 6.81 | | |
| Exercised | (235) | 2.45 | | |
| Forfeited | (126) | 4.50 | | |
| Outstanding, December 31, 2020 | 11,942 | $ 4.97 | | |
| Granted | 4,659 | 3.84 | | |
| Exercised | (82) | 2.32 | | |
| Forfeited | (1,407) | 5.38 | | |
| Outstanding, December 31, 2021 | 15,112 | $ 4.61 | 6.6 | $ 96,117 |
| Exercisable, December 31, 2021 | 8,164 | $ 4.50 | 5.3 | $ 96,117 |
| Vested and expected to vest, December 31, 2021 | 14,068 | $ 4.60 | 6.5 | $ 96,117 |

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 $222 thousand for 2021 (2020 – $850 thousand).

As of December 31, 2021, there was $6.0 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 1.68 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:

| | Year ended December 31, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Risk-free interest rate | 0.59% | 1.27% |
| Expected dividend yield | - | - |
| Expected volatility | 81.8% | 85.9% |
| Expected life of options (years) | 5 | 5 |
| Grant date fair value | $ 2.47 | $ 4.59 |

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.

The following table presents the vesting terms of options granted in the period:

| *Option numbers are in (000's)* | Year ended December 31, 2021 Number of options | Year ended December 31, 2020 Number of options |
|---|---|---|
| Cliff vesting after one year anniversary | - | 300 |
| 3 year vesting (50%-25%-25%) | 430 | 862 |
| 4 year vesting (50%-16 2/3%-16 2/3%-16 2/3%) | 3,429 | 5,200 |
| Earlier of Performance criteria or 4 years | 800 | - |
| Total stock options granted in the year | 4,659 | 6,362 |

During the year ended December 31, 2021, the option agreements of one officer were modified as part of a separation and release agreement. Vested options of 1,679,169, with exercise prices ranging from $1.03 to $7.44, were allowed to continue to be exercisable for an additional 12 month period, and also 504,833 options that would have expired unvested, were allowed to continue to vest for a 12 month period. As there was no service requirement, during the year ended December 31, 2021, the company recorded $945 thousand and $663 thousand additional compensation related to these modifications for the vested and unvested options, respectively.

During the year ended December 31, 2021, the Company issued 800,000 performance stock option (PSO) to two officers of the Company. One officer received 400,000 PSOs, of which 200,000 PSOs will vest in tranches connected with financing events, and the remaining 200,000 PSOs will vest in connection with licensing and partnering events. The other officer received 400,000 PSOs, of which 200,000 PSOs will vest in tranches connected to dose escalation trials and the remaining 200,000 PSOs will vest in connection with expansion trials. If such performance triggers are not attained, such PSOs will vest on the fourth anniversary of the grant. On November 11, 2021, the performance criteria connected with the financing events were met, and 200,000 PSOs were vested.

(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, 2021 and 2020 the units outstanding.

| | Year ended, December 31, 2021 | | Year ended, December 31, 2020 | |
|---|---|---|---|---|
| | Number (in thousands) | Weighted average grant date fair value | Number (in thousands) | Weighted average grant date fair value |
| Outstanding, beginning of period | - | $ - | 40 | $ 2.00 |
| Granted | - | - | 645 | 7.32 |
| Vested | - | - | (685) | 7.01 |
| Outstanding, end of period | - | $ - | - | $ - |

On March 10, 2020, the Company granted 645,000 restricted share units (RSUs) with a vesting term of three months. On May 5, 2020, the vesting term on the RSUs was extended from three months to four months. On July 10, 2020, all of these restricted share units were vested and were redeemed for 645,000 common shares.

On June 3, 2019, the Company granted 80,000 restricted share units (RSUs), 40,000 of which have a vesting term of three months and the balance have a vesting term of one year. On May 5, 2020, the vesting term on the balance was extended from one year to one year and one month. On July 2, 2020, the remaining of these restricted share units were vested and were redeemed for 40,000 common shares.

The grant date fair value of the RSUs was 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.

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

(c) Share-based payment expense

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

| | Year ended December 31, 2021 | Year ended December 31, 2020 |
|---|---|---|
| Research and development | $ 3,789 | $ 3,720 |
| General and administrative | 9,160 | 17,718 |
| Total | $ 12,949 | $ 21,438 |

**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.

On November 4, 2021, the Effective Date, the Company entered into an exclusive license agreement with Hanmi Pharmaceutical Co. Ltd. (Hanmi) for global rights to its compound named HM43239. In consideration of the license and other rights granted, Aptose made an upfront payment to Hanmi in the amount of $12.5 million, including $5.0 million in cash and $7.5 million in Aptose common shares (the "Aptose Shares"). The number of Aptose Shares issued was determined using the average market closing price of the Aptose Shares on the NASDAQ stock market over the five (5) trading day period ending on the Effective Date. Accordingly, Aptose has issued 3,235,548 shares to Hanmi.

Under the Company's license agreement with Hanmi, the Company has maximum obligations for clinical development and global regulatory milestones totaling $64.5 million for the first potential clinical indication of HM43239, $34 million for the second indication, and $29 million for the third Indication. The company has maximum obligations for tiered global sales based milestones totaling $280 million. The Company also has an obligation for tiered royalty payments on global sales of commercialized product. The timing of any milestone or royalty payments that may become due is not yet determinable.

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.

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

**14. Income taxes:**

(a) Income taxes

For the years ended December 31, 2021 and 2020, the total comprehensive loss is as follows:

| | | December 31, 2021 | | December 31, 2020 |
|---|---|---|---|---|
| Loss attributed to US foreign operations | $ | (52,447) | $ | (39,757) |
| Loss attributed to Canadian operations | | (12,907) | | (15,481) |
| Income (loss) before income taxes | $ | (65,354) | $ | (55,238) |

(b) Tax rate reconciliation

Major items causing the Company's income tax rate to differ from the statutory rate of approximately 26.5% (December 31, 2020 – 26.5%) are as follows:

| | | Year ended December 31, 2021 | | Year ended December 31, 2020 |
|---|---|---|---|---|
| Net loss | $ | (65,354) | $ | (55,238) |
| Statutory Canadian corporate tax rate | | 26.5% | | 26.5% |
| | | | | |
| Computed expected tax recovery | $ | (17,319) | $ | (14,638) |
| Non-deductible permanent differences | | 3,707 | | 4,959 |
| Change in valuation allowance | | 15,274 | | 10,383 |
| Foreign tax rate differential | | (683) | | (428) |
| Prior year true-up adjustments | | (951) | | (230) |
| Other | | (28) | | (46) |
| | $ | - | $ | - |

(c) 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, 2021 | | December 31, 2020 |
|---|---|---|---|---|
| Net operating losses carried forward | $ | 49,286 | $ | 37,362 |
| Research and development expenditures | | 5,032 | | 5,032 |
| Property, equipment, and other intangible assets | | 7,261 | | 3,760 |
| Research and development tax credits | | 4,202 | | 3,597 |
| Financing costs | | 1,580 | | 2,336 |
| Right-of-use assets | | 40 | | 40 |
| Total deferred tax assets | | 67,401 | | 52,127 |
| Valuation allowance | | (67,401) | | (52,127) |
| Net deferred tax asset | $ | - | $ | - |

(Tabular amounts in thousands of United States dollars, except as otherwise noted)

The valuation allowance at December 31, 2021 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 Canadian undeducted research and development expenditures, totaling $19.0 million that can be carried forward indefinitely. The Company also has Canadian non-refundable federal and provincial investment tax credits of approximately $3.3 million which are available to reduce future federal taxes payable and begin to expire in 2022, as well as non-refundable US research and development tax credits of approximately $1.8 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 $177.9 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 $0.9 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, 2021 | June 30, 2021 | September 30, 2021 | December 31, 2021 |
|---|---|---|---|---|
| Revenue | $ - | $ - | $ - | $ - |
| Net loss | (16,227) | (13,470) | (11,333) | (24,324) |
| Basic and diluted loss per common share | (0.18) | (0.15) | (0.13) | (0.27) |

| | March 31, 2020 | June 30, 2020 | September 30, 2020 | December 31, 2020 |
|---|---|---|---|---|
| Revenue | $ - | $ - | $ - | $ - |
| Net loss | (11,526) | (15,750) | (13,249) | (14,713) |
| Basic and diluted loss per common share | (0.15) | (0.21) | (0.15) | (0.17) |

## 16. Subsequent events

Subsequent to the year end, the Company issued 3,870,000 stock options to directors, officers, employees and consultants with an average exercise price of $1.34. The stock options vest 50% after one year and 16.67% on each of the next three anniversaries, except for 425,000 options which vest 50% after one year and 25% on each of the next two anniversaries.