VENTRIPOINT DIAGNOSTICS LTD.

CONSOLIDATED FINANCIAL STATEMENTS

YEARS ENDED DECEMBER 31, 2021 AND 2020

(EXPRESSED IN CANADIAN DOLLARS)

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Independent Auditor's Report

To the Shareholders of Ventripoint Diagnostics Ltd.

Opinion

We have audited the consolidated financial statements of Ventripoint Diagnostic Ltd. and its subsidiary (the "Company"), which comprise the consolidated statements of financial position as at December 31, 2021 and 2020 and the consolidated statements of loss and comprehensive loss, changes in shareholders' equity (deficiency), and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as at December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards ("IFRS").

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Material Uncertainty Related to Going Concern

We draw attention to Note 1 in the consolidated financial statements, which indicates that the Company incurred a net loss of $3,877,539 and a negative operating cash flow of $3,146,764 during the year ended December 31, 2021. As at December 31, 2021 the Company had accumulated losses of $43,748,212. As stated in Note 1, these events or conditions, indicate that material uncertainties exist that may cast significant doubt on the Company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

Other Information

Management is responsible for the other information. The other information comprises the information included in the Management's Discussion and Analysis (the "MD&A").

Our opinion on the consolidated financial statements does not cover the other information and we will not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

We obtained the MD&A prior to the date of this auditor's report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in this auditor's report. We have nothing to report in this regard.

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Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Company to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

The engagement partner on the audit resulting in this independent auditor’s report is Rob Scupham.

BDO Canada LLP

Chartered Professional Accountants
Vancouver, British Colombia
May 2, 2022

Ventripoint Diagnostics Ltd.

Consolidated Statements of Financial Position
(Expressed in Canadian Dollars)

	As at December 31, 2021	As at December 31, 2020
ASSETS		
Current assets		
Cash	**$ 9,268,963**	$ 526,026
Accounts receivable (note 5)	**197,494**	165,341
Prepaid expenses	**35,871**	23,128
Total current assets	**9,502,328**	714,495
Non-current assets		
Property and equipment (note 6)	**16,026**	25,257
ROU leased asset (note 10)	**26,494**	61,818
Total assets	**$ 9,544,848**	$ 801,570
LIABILITIES AND SHAREHOLDERS' DEFICIENCY		
Current liabilities		
Accounts payable and accrued liabilities (note 7)	**$ 1,050,867**	$ 1,763,165
Warrant liabilities (note 8)	**-**	500
Leases (note 10)	**34,592**	42,755
Interest payable on debentures	**-**	16,661
Total current liabilities	**1,085,459**	1,823,081
Non-current liabilities		
Other loans (note 9)	**125,377**	148,106
Leases (note 10)	**-**	34,562
Convertible debentures (note 11)	**-**	1,144,446
Total liabilities	**1,210,836**	3,150,195
Shareholders' equity (deficiency)		
Share capital (note 12)	**42,213,957**	31,009,342
Contributed surplus	**9,755,930**	6,400,369
Accumulated other comprehensive income	**112,337**	108,846
Deficit	**(43,748,212)**	(39,867,182)
Total equity (deficiency)	**8,334,012**	(2,348,625)
Total equity (deficiency) and liabilities	**$ 9,544,848**	$ 801,570

Nature of operations and going concern (note 1)
Commitments (note 22)
Subsequent events (note 23)

Approved on behalf of the Board:

(Signed) "Dr. George Adams " Director

(Signed) "Robert Hodgkinson" Director

The accompanying notes are an integral part of these to the consolidated financial statements.

Ventripoint Diagnostics Ltd.

Consolidated Statements of Loss and Comprehensive Loss
(Expressed in Canadian Dollars)

	Year Ended December 31, 2021	Year Ended December 31, 2020
Revenue	**$ -**	$ 36,017
Cost of Sales	**-**	(9,747)
Gross Margin	**-**	26,270
Operating expenses		
General and administrative (note 20)	**2,709,835**	1,526,564
Research and development (note 20)	**457,341**	272,041
Sales and marketing (note 20)	**541,974**	116,762
Royalty payment	**6,268**	-
Total operating expenses	**3,715,418**	1,915,367
Loss from operations	**(3,715,418)**	(1,889,097)
Finance income (cost)	**31,968**	(219,740)
Warrant liabilities revaluation (note 8)	**(193,050)**	12,297
Other income (note 15)	**79,969**	234,193
Foreign currency differences	**(1,352)**	(2,906)
Loss on debt settlement (note 12)	**(83,147)**	-
Impairment of inventory	**-**	(20,752)
Gain on modification of convertible debentures (note 11)	**-**	35,329
Net loss for the year	**$ (3,881,030)**	$ (1,850,676)
Other comprehensive income		
Items that will be reclassified subsequently to income		
Currency translation	**$ 3,491**	$ 39,590
Total loss and comprehensive loss for the year	**$ (3,877,539)**	$ (1,811,086)
Basic and diluted net loss per share (note 18)	**$ (0.03)**	$ (0.02)
Weighted average number of common shares outstanding	**136,097,000**	74,515,947

The accompanying notes are an integral part of these to the consolidated financial statements.

Ventripoint Diagnostics Ltd.
Consolidated Statements of Cash Flows
(Expressed in Canadian Dollars)

	Year Ended December 31, 2021	Year Ended December 31, 2020
Operating activities		
Net loss for the year	**$ (3,881,030)**	$ (1,850,676)
Adjustments for:		
Depreciation and amortization	**13,488**	19,615
Depreciation of right of use asset	**35,324**	35,325
Loss on debt settlement	**83,147**	-
Share-based compensation	**898,300**	394,845
Derivative liabilities revaluation adjustment	**193,050**	(12,297)
Consulting fees and accrued salaries settled with shares	**-**	45,500
Impairment of inventory	**-**	20,752
Gain on modification of debenture	**-**	(35,329)
Accretion of debentures payable	**19,457**	218,831
Interest on debentures paid out in shares	**23,274**	-
Interest on leases	**6,141**	10,476
Emergency commercial rent assistance program	**-**	(48,090)
Interest free benefit included in income on forgivable loan	**(75,329)**	(22,294)
Changes in non-cash working capital items:		
Amounts receivable	**(32,153)**	(97,686)
Prepaid expenses	**(12,743)**	40,656
Inventory	**-**	30,828
Accounts payable and other liabilities	**(396,048)**	145,594
Interest payable	**(21,642)**	3,596
Net cash used in operating activities	**(3,146,764)**	(1,100,354)
Investing activities		
Additions to property and equipment	**(4,257)**	(3,763)
Net cash used in investing activities	**(4,257)**	(3,763)
Financing activities		
Funds from public offering	**8,055,060**	-
Share issue cost	**(803,314)**	-
Issuance of convertible debentures	**-**	1,000,000
Cash paid for debenture issuance costs	**-**	(66,747)
Lease payments	**(48,866)**	(13,169)
Federal loans received	**-**	170,000
Government grants	**52,600**	-
Proceeds received on exercise of warrants	**3,954,866**	505,800
Proceeds received on exercise of options	**680,124**	25,000
Net cash provided by financing activities	**11,890,470**	1,620,884
Effect of foreign exchange on cash	**3,488**	(4,502)
Net change in cash	**8,742,937**	512,265
Cash, beginning of year	**526,026**	13,761
Cash, end of year	**$ 9,268,963**	$ 526,026

The accompanying notes are an integral part of these to the consolidated financial statements.

Ventripoint Diagnostics Ltd.
Consolidated Statements of Changes in Equity (Deficit)
(Expressed in Canadian Dollars)

	Number of common shares	Share capital	Contributed surplus	Accumulated other comprehensive income	Deficit	Total
Balance, December 31, 2019	**69,486,747**	**$ 29,480,435**	**$ 5,997,379**	**$ -**	**$ (37,947,250)**	**$ (2,469,436)**
Re-class of accumulated other comprehensive income	-	-	-	69,256	(69,256)	-
Warrants exercised	5,058,000	505,800	-	-	-	505,800
Stock options exercised	250,000	34,722	(9,722)	-	-	25,000
Equity portion of convertible debentures	-	-	172,000	-	-	172,000
Finders warrants issued with sale of shares	-	-	6,000	-	-	6,000
Modification on convertible debt	-	-	(160,133)	-	-	(160,133)
Conversion of convertible debentures	13,426,664	842,476	-	-	-	842,476
Liabilities settled with shares	1,840,971	145,909	-	-	-	145,909
Share-based compensation	-	-	394,845	-	-	394,845
Currency translation adjustment	-	-	-	39,590	-	39,590
Net loss for the year	-	-	-	-	(1,850,676)	(1,850,676)
Balance, December 31, 2020	**90,062,382**	**31,009,342**	**$ 6,400,369**	**$ 108,846**	**$ (39,867,182)**	**$ (2,348,625)**
Units issued	15,490,500	4,930,128	3,124,932	-	-	8,055,060
Share issue costs	-	(1,349,392)	546,078	-	-	(803,314)
Warrants exercised	26,750,322	5,065,450	(760,784)	-	-	4,304,666
Stock options exercised	4,776,250	1,226,836	(446,712)	-	-	780,124
Deferred share units exercised	142,500	6,250	(6,250)	-	-	-
Conversion of convertible debentures	17,573,324	1,158,922	-	-	-	1,158,922
Liabilities settled with shares	763,627	166,421	-	-	-	166,421
Share-based compensation	-	-	898,297	-	-	898,297
Currency translation adjustment	-	-	-	3,491	-	3,491
Net loss for the year	-	-	-	-	(3,881,030)	(3,881,030)
Balance, December 31, 2021	**155,558,905**	**$ 42,213,957**	**$ 9,755,930**	**$ 112,337**	**$ (43,748,212)**	**$ 8,334,012**

The accompanying notes are an integral part of these to the consolidated financial statements.

1. Nature of operations and going concern

Ventripoint Diagnostics Ltd. (“Diagnostics” or the "Company") was incorporated by a Certificate of Incorporation pursuant to the provisions of the Business Corporations Act (Alberta) on May 4, 2005. Diagnostics acquired Ventripoint Inc. (“Ventripoint”, Diagnostics and Ventripoint, collectively referred to herein as the “Company” or “Companies”) on September 18, 2007. Diagnostics is a Canadian public company with its shares listed on the TSX Venture Exchange (“TSXV” or the “Exchange”) with the trading symbol “VPT” and on the OTC Markets in the U.S. with the trading symbol “VPTDF”. Ventripoint Inc. was incorporated in the State of Washington in July, 2004 and commenced operations in January, 2005. Ventripoint Inc.’s registration was migrated to the State of Delaware on December 21, 2017. The Companies’ registered office is at Livingston Place West, Suite 605, 2 Sheppard Avenue East., Toronto, ON, M2N 5Y7.

The Company is a medical device company engaged in the development and commercialization of diagnostic tools that monitor patients with heart disease. The system is based upon patented technology, the commercialization rights of which Ventripoint has licensed from the University of Washington.

In March 2020 the World Health Organization declared coronavirus COVID19 a global pandemic. This contagious disease outbreak, which has continued to spread, and any related adverse public health developments, has adversely affected workforces, economies, and financial markets globally, potentially leading to an economic downturn. The Company is dependent on the return of public access to hospitals and how quickly marketing and installations can proceed.

These consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities in the normal course of business as they come due. There is no certainty whether the Company will generate significant revenues or attain profitable operations in the near future and there can be no assurance that it will achieve profitability in the future, as it incurred a loss of $3,881,030 and had a negative cash flow from operating activities of $3,146,764 for the year ended December 31, 2021, and has accumulated $43,748,212 of losses as at December 31, 2021. The Company's ability to continue as a going concern is dependent on its raising of future required capital, bringing its products to market and achieving and maintaining profitable operations. The outcome of these matters cannot be predicted at this time. As a result there exists a material uncertainty which creates significant doubt regarding the Company’s ability to continue as a going concern. These consolidated financial statements do not include any adjustments and classifications of assets and liabilities, which might be necessary should the Company be unable to continue its operations. Such adjustments could be material.

2. Significant accounting policies

Statement of compliance

The Company applies International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board (“IASB”) and interpretations issued by the International Financial Reporting Interpretations Committee (“IFRIC”).

These consolidated financial statements were authorized and approved by the Board of Directors on May 2, 2022

2. Significant accounting policies (continued)

Basis of consolidation

These consolidated financial statements include the accounts of Diagnostics and Ventripoint Inc., its wholly-owned and controlled subsidiary. The financial statements of subsidiaries, including entities which the Company controls, are included in the consolidated financial statements from the date that control commences until the date that control ceases. The financial statements of the subsidiary are prepared for the same reporting period as the Company, using consistent accounting policies. All intercompany transactions and balances have been eliminated.

Functional and presentation currency

These consolidated financial statements are presented in Canadian dollars ("CDN$"), the Company's functional currency. The functional currency of the Company's wholly US owned subsidiary is US dollars ("US$") and has been translated to CDN$ using the closing rate, the spot exchange rate or the annual average exchange rate.

Critical accounting judgements and estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the reporting date and reported amounts of expenses during the reporting period. Actual outcomes could differ from these estimates. These 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. Revisions to accounting estimates are recognized in the period in which the estimate is revised and the revision affects both current and future periods.

The areas which require management to make significant judgements, estimates and assumptions in determining carrying values include, but are not limited to:

<u>Derivatives and debt valuation</u>
The valuation of debt and embedded derivatives for convertible instruments is based on the application of a recognized option valuation formula, which is highly dependent on, amongst other things, the expected volatility of the Company's registered shares and the expected life of the options. The Company uses an expected volatility rate for its shares based on past stock trading data, adjusted for future expectations, and actual volatility may be significantly different.

The resulting value calculated is not necessarily the value that the holder of the instrument could receive in an arm's length transaction. It is management's view that the value derived is highly subjective and dependent entirely upon the input assumptions made.

2. Significant accounting policies (continued)

Critical accounting judgements and estimates (continued)

Share-based payments
The fair value of share-based payments are estimated using the Black Scholes option pricing model and rely on a number of estimates, such as the expected life of the option, the volatility of the underlying share price, the risk free rate of return, and the estimated rate of forfeiture of options granted.

Foreign currency

At the transaction date, each asset, liability, revenue and expense denominated in a foreign currency is translated into the functional currency by the use of the exchange rate in effect at that date. At the year-end date, unsettled monetary assets and liabilities are translated into the functional currency by using the exchange rate in effect at the year-end date and the related translation differences are recognized in profit or loss.

Non-monetary assets and liabilities that are measured at historical cost are translated into the functional currency by using the exchange rate in effect at the date of the initial transaction and are not subsequently restated. Non-monetary assets and liabilities that are measured at fair value or a revalued amount are translated into the functional currency by using the exchange rate in effect at the date the value is determined and the related translation differences are recognized in profit or loss or other comprehensive loss consistent with where the gain or loss on the underlying non-monetary asset or liability has been recognized.

Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate in effect at the consolidated statements of financial position date. Non-monetary assets and liabilities, expenses and other income arising from foreign currency transactions are translated at the exchange rate in effect at the date of the transaction. Exchange gains or losses arising from the translation are included in the determination of losses in the current year.

Financial instruments

Financial assets

All financial assets are initially recorded at fair value and designated on acquisition to one of the following three categories: amortized cost, fair value through profit or loss, or fair value through other comprehensive income. The Company does not have any financial instruments classified as fair value through other comprehensive income.

Amortized cost
These assets incorporate other types of financial assets where the objective is to hold these assets in order to collect contractual cash flows and the contractual cash flows are solely the payments of principal and interest. They are initially recognized at fair value plus transaction costs that are directly attributable to their acquisition or issuance and are subsequently carried at amortized cost using the effective interest rate method, less provision for impairment.

2. Significant accounting policies (continued)

Financial instruments

Financial assets (continued)

Amortized cost (continued)
Impairment provisions for accounts receivable are recognized based on the simplified approach within IFRS 9 - *Financial Instruments* ("IFRS 9") using the lifetime expected credit losses. During the process of reviewing accounts receivable for impairment, the probability of the non-payment of the accounts receivable is assessed. This probability is then multiplied by the amount of the expected loss arising from default to determine the lifetime expected credit loss for accounts receivable. For accounts receivable, which are reported net, such provisions are recorded in a separate provision account with the loss being recognized within operating expenses in the consolidated statement of loss and comprehensive loss. On confirmation that a certain accounts receivable will not be collectable, the gross carrying value of the asset is written off against the associated provision.

The Company's financial assets measured at amortized cost are comprised of cash, which include balances with banks and a restricted term deposit with a maturity of three months or less, and accounts receivable.

Fair value through profit or loss
These assets are carried in the consolidated statement of financial position at their fair value with changes in fair value recognized in the consolidated statement of loss and comprehensive loss. Transaction costs associated with financial instruments measured at fair value through profit or loss are expensed as incurred.

A financial asset is derecognized when the rights to receive cash flows from the asset have expired or when the Company has transferred its rights to receive cash flows from the asset.

Financial liabilities

The Company classified its financial instruments into one of two categories, depending on the purpose for which the liabilities were acquired.

Fair value through profit or loss
These liabilities are classified and measured at fair value through profit or loss. As at December 31, 2020, the Company has classified its derivative financial liabilities and financial liabilities designated upon initial recognition at fair value through profit or loss to this category. A financial liability is derecognized when its contractual obligations are discharged, cancelled, or expire.

Other financial liabilities
Other financial liabilities are initially recognized at fair value and subsequently carried at amortized cost using the effective interest method. This category includes accounts payable and accrued liabilities, lease liability, convertible debentures, and interest payable on convertible debentures.

2. Significant accounting policies (continued)

Share capital

Common shares are classified as equity. Incremental costs directly attributable to the issue of common shares are recognized as a deduction from equity, net of any tax effects.

Revenue recognition

The Company derives revenue from product sales of its Ventripoint Medical System (“VMS”) equipment.

Applying the five-step model required by IFRS 15 *Revenue from Contracts with Customers*, revenue is recognized as follows for these contracts:

Identify the contract:
The contractual arrangement executed with the customer, specifying the equipment, scope and compensation.

Identify distinct performance obligations:
The contract may include multiple performance obligations including the sale of inventory and server access.

Estimate transaction price:
Transaction price is based on the observable stand-alone selling price as stated in the contract and is based on a fixed fee. No variable consideration exists.

Allocate price to performance obligations:
The transaction price is allocated to each performance obligation linked to customer commitments for each obligation under the contract based on stand-alone selling prices.

Recognize revenue as the performance obligations are satisfied:
Revenue is recognized at a point in time once control passes to the customer and when all significant contractual obligations have been satisfied, collection is probable and the amount of revenue can be estimated reliably.

Government grant and contribution recognition

Government grants for reimbursement of costs are recognized as other income in the period the expenses are incurred.

Property and equipment

Recognition and measurement

Items of property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. When parts of an item of property and equipment have different useful lives, they are accounted for as separate items (major components) of property and equipment. Gains and losses on disposal of an item of property and equipment are determined by comparing the proceeds from disposal with the carrying amount of property and equipment and are recognized in profit or loss. Property and equipment is assessed annually for indicators of impairment.

2. Significant accounting policies (continued)

Property and equipment (continued)

Depreciation

The estimated useful lives and the methods of depreciation for the current and comparative periods are as follows:

Asset	Basis
Computer and office equipment	Straight-line over 3 years
Equipment and software	Straight-line over 5 years
Furniture and fixtures	Straight-line over 3 years

Depreciation methods, useful lives and residual values are reviewed at each reporting period and adjusted as appropriate.

Research and development

Expenditure on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, is recognized in profit or loss as incurred.

Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. These criteria will be deemed by the Company to have been met when revenue is received by the Company and management has determined that it has sufficient resources to market and sell its product offerings.

Upon a determination that the criteria to capitalize development expenditures have been met, the expenditure capitalized will include the cost of materials, direct labour, and overhead costs that are directly attributable to preparing the asset for its intended use. Other development expenditures are expensed as incurred. Capitalized development expenditures will be measured at cost less accumulated amortization and accumulated impairment losses. No development costs have been capitalized to date.

Leases and right-of-use assets

At inception of a contract, the Company assesses whether a contract is, or contains, a lease. Contracts that convey the right to control the use of an identified asset for a period of time in exchange for consideration are accounted for as leases giving rise to right-of-use assets.

At the commencement date, a right-of-use asset is measured at cost, where cost comprises: (a) the amount of the initial measurement of the lease liability; (b) any lease payments made at or before the commencement date, less any lease incentives received; and (c) any initial direct costs incurred by the Company. The Company subsequently measures a right-of-use asset at cost less any accumulated depreciation and any accumulated impairment losses; and adjusted for any re-measurement of the lease liability. Right-of-use assets are depreciated over the shorter of the asset’s useful life and the lease term.

2. Significant accounting policies (continued)

Leases and right-of-use assets (continued)

A lease liability is initially measured at the present value of the unpaid lease payments using the Company's incremental borrowing rate. Subsequently, the Company measures a lease liability by: (a) increasing the carrying amount to reflect interest on the lease liability; (b) reducing the carrying amount to reflect the lease payments made; and (c) remeasuring the carrying amount to reflect any reassessment or lease modifications, or to reflect revised in-substance fixed lease payments. Each lease payment is allocated between repayment of the lease principal and interest. Interest on the lease liability in each period during the lease term is allocated to produce a constant periodic rate of interest on the remaining balance of the lease liability. Except where the costs are included in the carrying amount of another asset, the Company recognizes in profit or loss (a) the interest on a lease liability and (b) variable lease payments not included in the measurement of a lease liability in the period in which the event or condition that triggers those payments occurs.

Share-based compensation

The grant-date fair value of share-based payment awards granted to employees is recognized as an employee expense, with a corresponding increase in contributed surplus, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that met the related service and non-market performance conditions at the vesting date.

For equity-settled share-based payment transactions with non-employees, the Company measures the goods or services received, and the corresponding increase in contributed surplus, directly, at the fair value of the goods or services received, unless that fair value cannot be estimated reliably. If the Company cannot estimate reliably the fair value of the goods or services received, it measures their value by reference to the fair value of the equity instruments granted.

Finance costs

Finance costs comprise interest expense on borrowings, bank charges, loans and accretion on debentures.

Income taxes

Income tax expense comprises of current and deferred tax. Current tax and deferred tax are recognized in net loss except to the extent that it relates to a business combination or items recognized directly in equity or in other comprehensive loss.

Current income taxes are recognized for the estimated income taxes payable or receivable on taxable income or loss for the current year and any adjustment to income taxes payable in respect of previous years. Current income taxes are determined using tax rates and tax laws that have been enacted or substantively enacted by the year-end date.

2. Significant accounting policies (continued)

Income taxes (continued)

Deferred tax assets and liabilities are recognized where the carrying amount of an asset or liability differs from its tax base, except for taxable temporary differences arising on the initial recognition of goodwill and temporary differences arising on the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting nor taxable profit or loss.

Recognition of deferred tax assets for unused tax losses, tax credits and deductible temporary differences is restricted to those instances where it is probable that future taxable profit will be available against which the deferred tax asset can be utilized. At the end of each reporting year the Company reassesses unrecognized deferred tax assets. The Company recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

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 reporting period. Diluted loss per share is computed similar to basic loss per share except that the weighted average shares outstanding are 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 reporting periods. The inclusion of the Company's stock options and warrants in the computation of diluted loss per share has an anti-dilutive effect and therefore they have been excluded from the calculation of diluted loss per share.

New standards not yet adopted and interpretations issued but not yet effective

Certain pronouncements were issued by the IASB or the IFRIC that are mandatory for accounting periods commencing on or after January 1, 2022. There are no relevant IFRS's or IFRS interpretations that are not yet effective that would be expected to have a material impact on the consolidated financial statements.

3. Capital risk management

The Company’s objective in managing capital is to safeguard its ability to continue as a going concern and to sustain future development of the business. In the management of capital, the Company includes shareholders’ deficit, excluding accumulated other comprehensive income (loss). The Company’s objective is met by retaining adequate equity to provide for the possibility that cash flows from assets will not be sufficient to meet future cash flow requirements. In order to maintain or adjust its capital structure, the Company may issue new shares or units. The Board of Directors does not establish quantitative return on capital criteria for management. The Company is not subject to any externally imposed capital requirements and the Company’s overall strategy with respect to capital management remains unchanged from the year ended December 31, 2020.

4. Financial instruments

The Company's financial instruments consist of cash, accounts receivable, accounts payable and accrued liabilities, warrant liabilities, convertible debentures, and other loans. Cash and accounts receivable are classified as amortized cost. Accounts payable and accrued liabilities, interest payable on debentures, convertible debentures, leases, and other loans are classified as other financial liabilities, which are also measured at amortized cost. Warrant liabilities are measured at fair value.

IFRS 13 *Fair Value Measurement* ("IFRS 13") establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The three levels of the fair value hierarchy are as follows:

- Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly (ie. as prices) or indirectly (ie. derived from prices); and
- Level 3: Inputs that are not based on observable market data.

The Company measures its warrant liabilities at fair value through profit or loss and has determined this valuation to be a level 2 valuation as it is based on inputs that are observable. There has been no change in level from prior year.

The Company's financial instruments are exposed to certain financial risks, including credit risk, liquidity risk, market risk and foreign currency risk.

Credit risk

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

The Company limits its exposure to credit risk on cash by placing these financial instruments with high- credit quality financial institutions and only investing in liquid, investment grade securities.

The carrying amount of accounts receivable is reduced through the use of an allowance account and the amount of the loss is recognized in profit or loss within operating expenses. When a receivable balance is considered uncollectable it is written off against the allowance. Subsequent recoveries of amounts previously written off are credited against operating expenses in profit or loss. Within the accounts receivable, all amounts receivable are considered to be collectible.

Amounts receivable from the Government for grants or sales tax refunds are considered to have no credit risk.

Market risk

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

4. Financial instruments (continued)

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they come due. The Company manages its liquidity risk by monitoring forecasted and actual cash flows, as well as anticipated investing and financial activities. The majority of the Company's financial liabilities are due within 90 days.

The following table consists of accounts payable and accrued liabilities and sets out contractual maturities (representing undiscounted contractual cash flows) of the financial liabilities outstanding at December 31, 2021:

	2022	2023	2024	2025	Total
Accounts payable and accrued liabilities	$ 1,050,867	$ -	$ -	$ -	$ 1,050,867
Leases	37,350	-	-	-	37,350
Other loan	45,000	24,453	32,604	32,604	134,661
	$ 1,133,217	**$ 24,453**	**$ 32,604**	**$ 32,604**	**$ 1,222,878**

The contractual maturities of commitments at period end are included in (note 22).

Foreign currency risk

The majority of the Company's total expenditures were denominated in CDN$ in 2021 (2020 - CDN$). The Company's capital transactions are denominated in CDN$ and the Company now maintains most of its cash in CDN$. Foreign currency risk reflects the risk that the Company's earnings will be impacted by fluctuations in exchange rates.

With all other variables held constant, a 10% point increase in the value of the US$ relative to the CDN$ would have no significant impact.

The objective of the Company's foreign exchange risk management activities is to minimize transaction exposures and the resulting volatility of the Company's earnings. The Company manages this risk by pricing sales in CDN$ where possible. The Company has not entered into any forward foreign exchange contracts.

The Company was exposed to currency risk for the following assets (liabilities) as follows:

	December 31, 2021 US$	December 31, 2020 US$
Cash	**10,820**	3,399
Accounts payable and accrued liabilities	**(424,546)**	(424,819)
Total	**(413,726)**	(421,420)

(Expressed in Canadian Dollars)

5. Accounts receivable

	As at December 31, 2021	As at December 31, 2020
Government contribution receivable	**-**	103,010
Goods and services taxes receivable	**197,494**	62,331
Total	**197,494**	165,341

6. Property and equipment

Cost	**Total**
Balance, December 31, 2019	**$ 160,088**
Additions	3,764
Balance, December 31, 2020	163,852
Additions	4,257
Balance, December 31, 2021	**$ 168,109**
Accumulated Depreciation	
Balance, December 31, 2019	**$ 118,980**
Depreciation for the year	19,615
Balance, December 31, 2020	$ 138,595
Depreciation for the year	13,488
Balance, December 31, 2021	**$ 152,083**
Carrying Value	
Balance, December 31, 2020	$ 25,257
Balance, December 31, 2021	**$ 16,026**

7. Accounts payable and accrued liabilities

	As at December 31, 2021	As at December 31, 2020
Trade and other payables	**$ 988,587**	$ 1,013,543
Accrued management salaries and other payroll liabilities	**23,374**	590,314
Accrued liabilities	**38,906**	159,308
Total	**$ 1,050,867**	$ 1,763,165

8. Warrant liability

Warrants are issued in connection with private placements of common shares and convertible debentures with an exercise price in Canadian dollars. Certain warrants issued before 2020 have been treated as derivative financial liabilities as the exercise price of the warrants may be adjusted if the Company issues common shares at less than 95% of the quoted market price.

The following table summarizes the changes in the warrant liabilities for the periods ending December 31, 2021 and December 31, 2020:

	As at December 31, 2021	As at December 31, 2020
Opening balance	**$ 500**	$ 12,797
Fair value adjustment	**229,087**	(12,297)
Warrants exercises	**(229,587)**	-
Closing balance	**$ -**	$ 500

i) On March 8, 2019, the Company received final approval from the TSX Venture Exchange to amend the expiry date of 10,496,938 common share purchase warrants with an exercise price of $0.50 issued by the Company in connection with a Private Placement financing on March 23, 2017. The expiry date was amended from March 23, 2019 to March 23, 2021 with all other terms to remain the same. During the year ended December 31, 2021, the Company extended the expiry date again, from March 23, 2021, for 60 days to May 23, 2021. No other terms of the warrants are to be amended and the exercise price remained at $0.50.

ii) During the year ended December 31, 2021, certain holders of warrants exercised at $0.50 per share for a gross proceeds of $1,712,095. These warrants had an estimated fair value of $229,598 on the dates of exercise, determined using the Black-Scholes warrant pricing mode using the following assumptions: Share price between $0.44 and $0.60; Expected option life between 0.02 years and 0.17 years; Risk-free rate between 0.07% and 0.12%; Expected volatility between 83.95% and 179.65%; Dividend yield of nil. Of this amount $229,598 was transferred from derivative warrant liabilities to equity (common shares) and $229,078 was recorded through the statement of loss and comprehensive loss as a part of the change in estimated fair value of derivative warrant liabilities.

	As at December 31, 2021	As at December 31, 2020
Opening balance, outstanding warrants classified as a liability	**10,496,938**	11,646,938
Warrants exercised	**(3,424,190)**	-
Warrants expired	**(7,072,748)**	(1,150,000)
Closing balance, outstanding warrants classified as a liability	**-**	10,496,938

(Expressed in Canadian Dollars)

8. Warrant liability (continued)

A summary of the assumptions used in the valuation model for re-measuring the warrants at end of the period is set out below.

	As at December 31, 2021	As at December 31, 2020
Common share market price	**$ -**	$ 0.090
Weighted average risk free interest rate	**-** %	0.01 %
Estimated common share weighted average price volatility	**-** %	119.81 %
Expected dividend yield	**-** %	nil %
Estimated weighted average life in years	**-**	0.23

9. Federal loans

In April 2020, the Company received a $40,000 loan through the Canada Emergency Business Account program (“CEBA”). The CEBA was launched by the Government of Canada in response to the global COVID-19 health crisis, and has been implemented by financial institutions in cooperation with Export Development Canada. In December 2020, the Government of Canada increased the CEBA loan for eligible businesses from $40,000 to $60,000. In October 2021 the Company received an additional $20,000 loan. The loans have no repayment terms and are non-interest bearing during the initial term, until December 31, 2022. If the loan balances are repaid in full on or before December 31, 2022, 25% of the loans will be forgiven. The forgivable portion of the loan has been accounted for as a government grant. On December 31, 2022, any remaining outstanding loan balances will be converted into three-year term loans at fixed interest rates of 5% per annum.

The loan is summarized as follows:

	As at December 31, 2021	As at December 31, 2020
Loan payable	**$ 30,000**	$ 40,000
Government grant income	**(5,000)**	(10,000)
Loan payable received	**20,000**	-
	$ 45,000	$ 30,000

In December 2020, the Company received $130,400 as part of the Regional Economic Growth Through Innovation program (Regional Relief and Recovery Fund ("RRRF")) to support enterprises to enable recovery from economic disruptions associated with COVID-19. In April 2021, the company received the balance of $32,600 for a total loan of $163,000. The loan is repayable starting April 1, 2023 until March 1, 2028 at an amount of $2,717 per month. The loan has been recorded at its fair value on initial recognition based on the discounted future cash flow at a market rate of interest of 19.5%. The benefit of the below-market rate of interest was measured as the difference between the initial fair value of the loan and the proceeds received.

(Expressed in Canadian Dollars)

9. Federal loans (continued)

		As at December 31, 2021		As at December 31, 2020
Loan payable	**$**	**118,106**	$	130,400
Fair value adjustment		**(52,106)**		(12,294)
Accretion		**14,377**		-
	$	**80,377**	$	118,106

10. Leases

The Company entered in to a 5 year office lease on October 1, 2017. The Company used its incremental borrowing rate of 10.92% as the discount rate of determine the value of its five year office premises lease. The asset is depreciated on a straight-line basis over the lease term, starting October 1, 2017.

Right-of-use leased asset		**Total**
Balance, December 31, 2019	**$**	**97,143**
Depreciation		(35,325)
Balance, December 31, 2020		**61,818**
Depreciation		(35,324)
Balance, December 31, 2021	**$**	**26,494**

Lease liability		**Total**
Balance, December 31, 2019	**$**	**112,238**
Interest expense		12,701
Lease payments		(47,622)
Balance, December 31, 2020		**77,317**
Interest expense		6,141
Lease payments		(48,866)
Balance, December 31, 2021	**$**	**34,592**

		As at December 31, 2021		As at December 31, 2020
Short-term lease expense	**$**	**34,592**	$	42,755
Long-term lease expense		**-**		34,562
Total lease liability	**$**	**34,592**	$	77,317

11. Convertible debentures

a) Debenture

In January 2019, the Company issued $1,511,000 of convertible non-secured debentures ("Debentures I") which mature on January 25, 2022, and issued a total of 9,066,000 common share purchase warrants ("Warrants I") with an exercise price of $0.175, exercisable until July 25, 2020. The securities issued were subject to a four month hold period which expired on May 26, 2019.

During the fiscal 2020, Debenture I was amended with the same terms as Debenture II (see note 11(b)). As a result, the Company treated it as a modification with: a maturity date of February 9, 2022; an annual interest rate of 6.5% for the first year and 10% in the second year; and a conversion feature of $0.075 for the first year and $0.10 in the second year. The amendment was treated as an extinguishment of the old debenture and recognition of a new debenture with a gain on modification of $35,329 recognized in the statement of profit and comprehensive loss. The warrants held by the debentures from the original debenture issuance were also modified to have the same terms as the warrants issued under Debenture II.

The Company used the residual value method to allocate the principal amount of the modified convertible debentures between the liability and equity components. The Company valued the debt component of the debentures by calculating the present value of the principal and interest payments, discounted at a rate of 19%. Based on this calculation, the liability component was $916,000 and the residual equity component was $179,000.

On January 24, 2020, the Company issued 139,197 common shares at a price of $0.075 per common shares in payment of $19,940 of interest owing on the Convertible Debentures I.

On September 28, 2020 the Company issued 503,019 common shares at a price of $0.075 per common shares in payment of $37,727 of interest owing on the Convertible Debentures I.

On December 1, 2020 the Company issued 128,526 common shares at a price of $0.10 per common shares in payment of $12,852 of interest owing on the Convertible Debentures I.

During the year ended December 31, 2020, $822,000 of Debentures I were converted into 10,959,998 common shares with a carrying value of $628,045 and recorded as share capital and a reduction to Debentures I balance.

During the year ended December 31, 2021, $373,000 of Debentures I were converted into 4,973,330 common shares with a carrying value of 339,809 and recorded as share capital and a reduction to Debentures I balance.

b) Debenture II

In February 2020, the Company issued $725,000 of convertible non-secured debentures ("Debentures II") which mature on February 6, 2022, and issued a total of 8,700,000 common share purchase warrants ("Warrants II") with an exercise price of $0.10, exercisable until February 6, 2022. The Warrants II are subject to a hold period that expires on June 9, 2020. Warrants II include an accelerated expiry clause such that the exercise period of the Warrants II will be reduced to 30 days if for any ten consecutive trading days during the unexpired term of the Warrant II (the "Premium Trading Days"), the closing price of the Company's shares exceeds the exercise price of the Warrants by 25% (and for more certainty, the reduced exercise period of 30 days will begin no more than 7 calendar days after the tenth Premium Trading Day).

11. Convertible debentures (continued)

b) Debenture II (continued)

Debentures II bear interest at an annual rate of of 6.5% for the first year and 10% in the second year, calculated on the principal amount, with any accrued but unpaid interest under the Debentures II due and payable quarterly in either cash or common shares (at the option of the Company). Debentures II may be converted by the holder at any time at a price of $0.075 for the first year and $0.10 in the second year, and the conversion feature of $nil was recorded in share capital. Debentures II may be redeemed in whole or in part by the Company at any time after June 10, 2020, upon payment of the principal amount plus a premium of 2.5% of such principal amount and all accrued and unpaid interest.

Two directors and officers of the Company purchased $300,000 of Debentures under the offering.

Cash transaction costs were $35,763, and an aggregate of 117,600 finder's warrants were issued. Each finder's warrant is exercisable for one common share at an exercise price of $0.10 per common share until February 6, 2022. The finder's warrants were valued at $3,323 by using the Black-Scholes model and recorded as contributed surplus (see (note 14)).

The Company used the residual value method to allocate the principal amount of the convertible debentures between the liability and equity components. The Company valued the debt component of the debentures by calculating the present value of the principal and interest payments, discounted at a rate of 19%. Based on this calculation, the liability component was $607,000 and the residual equity component was $118,000.

On September 28, 2020 the Company issued 310,726 common shares at a price of $0.0.75 per common shares in payment of $23,305 of interest owing on the Convertible Debentures II.

During the year ended December 31, 2020, $285,000 was converted into 2,466,666 common shares with a carrying value of $252,214 and recorded as share capital and a reduction to Debentures II balance.

On December 1, 2020 the Company issued 104,839 common shares at a price of $0.10 per common shares in payment of $10,484 of interest owing on the Convertible Debentures II.

During the year ended December 31, 2021, $440,000 was converted into 5,999,996 common shares with a carrying value of $385,814 and recorded as share capital and a reduction to Debentures II balance.

c) Debenture III

In September 2020, the Company issued $495,000 of convertible non-secured debentures ("Debentures III") which mature on February 6, 2022, and issued a total of 5,940,000 common share purchase warrants ("Warrants III") with an exercise price of $0.10, exercisable until September 11, 2022. The Warrants III are subject to a hold period that expires on January 12, 2021. Warrants III include an accelerated expiry clause such that the exercise period of the Warrants III will be reduced to 30 days if for any ten consecutive trading days during the unexpired term of the Warrants III (the "Premium Trading Days"), the closing price of the Company's shares exceeds the exercise price of the Warrants III by 25% (and for more certainty, the reduced exercise period of 30 days will begin no more than 7 calendar days after the tenth Premium Trading Day).

Debentures III bear interest at an annual rate of of 6.5% until February 9, 2021 and 10% thereafter calculated on the principal amount, with any accrued but unpaid interest under the Debentures III due and payable quarterly in either cash or common shares (at the option of the Company). Debentures III may be converted by the holder at any time at price of $0.075 until February 9, 2021 and $0.10 thereafter, and the conversion feature of $nil was recorded in share capital. Debentures III may be redeemed in whole or in part by the Company at any time after June 10, 2020, upon payment of the principal amount plus a premium of 2.5% of such principal amount and all accrued and unpaid interest.

(Expressed in Canadian Dollars)

11. Convertible debentures (continued)

c) Debenture III (continued)

A director and officer of the Company purchased $50,000 of Debentures III under the offering.

Transaction cash costs were $30,984 and an aggregate of 130,200 finder's warrants were issued. Each finder's warrant is exercisable for one common share at an exercise price of $0.10 per common share until February 6, 2022. The finder's warrants were valued at $3,270 by using the Black-Scholes model and recorded as contributed surplus (see (note 14)).

The Company used the residual value method to allocate the principal amount of the convertible debentures between the liability and equity components. The Company valued the debt component of the debentures by calculating the present value of the principal and interest payments, discounted at a rate of 19%. Based on this calculation, the liability component was $441,000 and the residual equity component was $54,000.

During the year ended December 31, 2021, $495,000 was converted into 6,599,998 common shares with a carrying value of $433,299 and recorded as share capital and a reduction to Debentures III balance.

The following table summarizes the debt component of the debenture.

	Debenture I	Debenture II	Debenture III	Total
Balance, December 31, 2019	**$ 792,937**	**$ -**	**$ -**	**$ 792,937**
Extinguishment of old debt	(804,800)	-	-	(804,800)
Issuance of debenture	1,095,000	725,000	495,000	2,315,000
Gain on modification	35,329	-	-	35,329
Less fair value of warrants	(179,000)	(118,000)	(54,000)	(351,000)
Less transaction cost	-	(32,724)	(34,254)	(66,978)
Less conversion of debt	(628,045)	(252,214)	-	(880,259)
Less accrued interest	(68,070)	(35,819)	(10,725)	(114,614)
Accretion expense	92,116	95,380	31,335	218,831
As at December 31, 2020	**$ 335,467**	**$ 381,623**	**$ 427,356**	**$ 1,144,446**
Less conversion of debt	(339,809)	(385,814)	(433,299)	(1,158,922)
Less accrued interest	(1,189)	(1,250)	(2,542)	(4,981)
Accretion expense	5,531	5,441	8,485	19,457
Balance, December 31, 2021	**$ -**	**$ -**	**$ -**	**$ -**

12. Share capital

a) Authorized share capital

The Company has authorized share capital of an unlimited number of common shares without nominal or par value and an unlimited number of preferred shares without nominal or par value. No preferred shares have been issued. Common shareholders are entitled to receive dividends as declared by the Company at its discretion and are entitled to one vote per share at the Company's annual general meeting.

(Expressed in Canadian Dollars)

12. Share capital (continued)

b) Common shares issued

	Number of common shares	Amount
Balance, December 31, 2019	**69,486,747**	**$ 29,480,435**
Warrants exercised	5,058,000	505,800
Stock options exercised	250,000	25,000
Fair value of stock options exercised	-	9,722
Liabilities settled with shares (ii)	1,840,971	145,909
Conversion of convertible debentures (note 11)	13,426,664	842,476
Balance, December 31, 2020	90,062,382	$ 31,009,342
Units issued as part of public offering ((i) and (note 14))	15,490,500	8,055,060
Fair value of warrants in units issued	-	(3,124,932)
Share issuance costs	-	(1,349,392)
Warrants exercised	26,750,322	4,111,116
Fair value of warrants exercised (note 8)	-	193,550
Reclassification of warrants from contributed surplus	-	760,784
Stock options exercised (note 13)	4,776,250	780,124
Reclassification of stock options from contributed surplus	-	446,712
Liabilities settled with shares (ii)	763,627	166,421
Conversion of debenture (note 11)	17,573,324	1,158,922
Deferred share units exercised	142,500	6,250
Balance, December 31, 2021	**155,558,905**	**$ 42,213,957**

i) Public offering 2021

On October 20, 2021, the Company closed a offering of 15,490,500 (“Units”), at a price of $0.52 per Unit for aggregate gross proceeds of $8,055,060. Each Unit consists of one common share of the Company (a “Common Share”) and one Common Share purchase warrant (each whole purchase warrant, a “Warrant”). Each Warrant will entitle the holder thereof to purchase one common share at an exercise price of $0.70 (the “Exercise Price”) at any time up to 60 months following Closing (as defined below). In the event that the volume weighted average trading price of the common shares for ten (10) consecutive trading days exceeds $1.00, the Company may, within 10 business days of the occurrence of such event, deliver a notice (including a press release) to the holders of Warrants accelerating the expiry date of the Warrants to the date that is 30 days following the date of such notice. The Warrants were valued using the Black-Scholes model and recorded as contributed surplus (see (note 14)).

In connection with the offering, the Company paid a cash commission of $535,774, legal and other costs of $267,540 and has issued 1,030,335 compensation options (the “Compensation Options”). Each Compensation Option is exercisable for one unit at $0.52 per option for a period of 60 months following the closing of the offering. The Compensation Option were valued using the Black-Scholes model and recorded as contributed surplus (see (note 14)).

12. Share capital (continued)

b) Common shares issued (continued)

ii) Liabilities settled with shares

- On January 24, 2020, the Company issued 239,195 common shares at a price of $0.075 per common shares in payment of $19,940 of interest owing on the Convertible Debentures I (note 11).

- On September 28, 2020, the Company issued 813,745 common shares at a price of $0.075 per common shares in payment of $61,032 of interest owing on the Convertible Debentures I and II (note 11).

- On December 1, 2020 the Company issued 233,365 common shares at a price of $0.10 per common shares in payment of $23,337 of interest owing on the Convertible Debentures I and II (note 11).

- On December 1, 2020, the Company issued 400,000 shares in payment of a $30,000 quarterly work fee due to financial consultants under a financial and strategic advisory services contract and 154,666 shares in payment of a $11,600 consulting fee due to sales consultants The price of these shares was $0.075 per common share.

- On February 2, 2021, the Company issued 666,666 common shares to a consultant in payment of $60,000 of consulting fees. The common shares issued had a price of $0.19 based on the fair value. As a result, the Company recorded a loss of $66,667.

- On February 23, 2021 the Company issued 96,961 common shares in payment of $23,270 of interest owing on the Convertible Debentures I and II (note 11). The common shares issued had a price of $0.41 based on the fair value. As a result, the Company recorded a loss on debt settlement of $16,480. Two directors of the Company received a total of 30,186 common shares.

13. Stock options

The Company has adopted an incentive stock option plan in accordance with the policies of the Exchange (the "Stock Option Plan") which provides that the Board of Directors of the Company may from time to time, at its discretion, grant to Directors, Officers, employees and consultants of the Company non-transferable options to purchase common shares, provided that the number of common shares reserved for issuance under the Stock Option Plan shall not exceed ten percent (10%) of the issued and outstanding common shares. In addition, the number of common shares reserved for issuance in any one period to any one optionee shall not exceed five percent (5%) of the issued and outstanding common shares and the number of common shares reserved for issuance to any one consultant will not exceed two percent (2%) of the issued and outstanding common shares. The Board of Directors determines the price per common share and the number of common shares which may be allotted to each Director, Officer, employee and consultant and all other terms and conditions of the option, subject to the rules of the Exchange.

(Expressed in Canadian Dollars)

13. Stock options (continued)

	Number of stock options	Weighted average exercise price
Balance, December 31, 2019	**2,649,583**	**$ 0.30**
Granted	5,725,000	0.10
Exercised	(250,000)	0.10
Expired	(1,884,583)	0.31
Balance, December 31, 2020	**6,240,000**	**$ 0.12**
Granted	6,635,000	0.27
Exercised	(4,776,250)	0.17
Expired	(765,000)	0.29
Balance, December 31, 2021	**7,333,750**	**$ 0.21**

Share-based compensation expense was determined based on the fair value of the options at the date of measurement using the Black-Scholes model with the following weighted average assumptions:

	December 31, 2021	December 31, 2020
Expected option life	1.00 - 10 years	1.50 - 10 years
Risk-free rate	0.14% - 1.651%	0.25% - 2.45
Expected forfeiture rate	0.01% to 6%	0.01% to 6%
Expected volatility	96.8% - 138.4%	78.56% - 168%
Dividend yield	nil	nil

The following table reflects the actual stock options issued and outstanding as of December 31, 2021:

Grant price range	Weighted average exercise price ($)	Weighted average remaining contractual life (years)	Number of options outstanding	Number of options outstanding vested
>$0.25	0.12	7.54	5,133,750	3,773,750
$0.26 - $0.50	0.41	5.47	2,100,000	700,000
<$0.51	0.55	0.70	100,000	50,000
	0.21	**6.85**	**7,333,750**	**4,523,750**

For the year ended December 31, 2021, stock based compensation of $898,297, was recognized in the statement of loss and comprehensive loss (year ended December 31, 2020 - $377,845)

(Expressed in Canadian Dollars)

14. Warrants

The following table reflects the continuity of warrants for the year ended December 31, 2021 and December 31, 2020:

	Number of warrants		**Weighted average exercise price**
Balance, December 31, 2019	**16,652,825**	**$**	**0.150**
Issued (i)	23,953,800		0.100
Exercised	(5,058,000)		0.100
Cancelled	(11,962,493)		0.310
Balance, December 31, 2020	23,586,132	$	0.110
Issued (ii)	15,620,835		0.690
Exercised	(23,326,132)		0.100
Balance, December 31, 2021	**15,880,835**	**$**	**0.680**

i) Convertible Debenture II Private Placement (note 11)

As part of a Private Placement of Debentures II in February 2020, the Company issued 8,700,000 common share purchase warrants and 117,600 common share purchase finder's warrants with the same terms and conditions. Each warrant and finder's warrant entitles the holder thereof to acquire one common share of the Company at an exercise price of $0.10 per common share for a period of 24 months after the issuance of the warrants on February 6, 2022. Directors and Officer of the Company purchased $300,000 of Debentures II with 3,600,000 warrants. The residual value of the warrants attached to Debentures II is included in the $118,000 residual value of equity (See note 11).

Finder's warrants issued for this instruments were valued at $3,200, using a Black-Scholes model with the assumptions outlined below:

	February 6, 2020
Share price	$0.075
Expected option life	2.0 years
Risk-free rate	1.49%
Expected volatility	81.0%
Dividend yield	nil

In February 2020, the warrants associated to Debentures I (9,066,000 warrants outstanding) issued on January 25, 2019 were amended ("Amendment") to have the same terms and expiry date as the 8,700,000 warrants issued as part of a Debentures II in February 2020. The modification was accounted for as a cancellation of the old warrants followed by the issue of new warrants.

As part of a private placement of Debentures III in September 2020, the Company issued 5,940,000 common share purchase warrants and 130,200 common share purchase finder's warrants with the same terms and conditions. Each warrant and finder's warrant entitles the holder thereof to acquire one common share of the Company at an exercise price of $0.10 per common share for a period ending February 6, 2022 A director of the Company purchased $50,000 of Debentures III with 600,000 warrants. The residual value of the warrants attached to Debentures II is included in the $54,000 residual value of equity (See note11).

(Expressed in Canadian Dollars)

14. Warrants (continued)

i) Convertible Debenture III Private Placement (note 11)

Finder's warrants issued for this instruments were valued at $2,900, using a Black-Scholes model with the assumptions outlined below.

	September 11, 2020
Share price	$0.075
Expected option life	1.4 years
Risk-free rate	.024%
Expected volatility	83.0%
Dividend yield	nil

ii) Public offering (note 12)

- On October 20, 2021, the Company closed a offering of 15,490,500 ("Units"), at a price of $0.52 per Unit for aggregate gross proceeds of $8,055,060. Each Unit consists of: (i) one common share of the Company; and (ii) one common share purchase warrant ("Warrant") with each Warrant exercisable for one common share at an exercise price of $0.70 (the "Exercise Price") at any time up to 60 months after the issuance of the Warrant. In the event that the volume weighted average trading price of the Common Shares for ten (10) consecutive trading days exceeds $1.00, the Company may, within 10 business days of the occurrence of such event, deliver a notice (including a press release) to the holders of Warrants accelerating the expiry date of the Warrants to the date that is 30 days following the date of such notice. The Warrants were valued at $3,124,932.

- In connection with the offering, the Company issued 1,030,335 compensation options (the "Compensation Options"). Each Compensation Option is exercisable for one Unit at $0.52 per Unit for a period of 60 months following the closing of the offering. The Compensation Options were valued at $546,078 using the Black-Scholes model.

- The Warrants issued were valued on the grant dates using a Black-Scholes model with the assumptions:

	October 20, 2021
Share price	$0.53
Expected option life	5 years
Risk-free rate	1.29%
Expected volatility	130.07%
Dividend yield	nil

(Expressed in Canadian Dollars)

14. Warrants (continued)

The following table reflects the warrants outstanding as of December 31, 2021:

Number of warrants outstanding	Exercise price ($)	Expiry date
260,000	0.115	October 2, 2022 (iii)
14,590,500	0.70	October 20, 2026 (ii)
1,030,335	0.52	October 20, 2026
15,880,835	**0.68**	

iii) On October 13, 2020, the Company amended the 4,687,132 warrants, initially issued on October 2, 2019, at an exercise price of $0.175 per common share to $0.115 per share. All other provisions of the warrants will remain the same and all warrants will still expire on October 2, 2022.

15. Government Grants and Contributions

Other income for the year ended December 31, 2021 consists of $73,919 (year ended December 31, 2020 - $176,102) contribution from the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP) under a Contribution Agreement for partial reimbursement of salary and contractor costs for research and development work on next generation product features.

The Company also recorded income of $5,000 (year ended December 31, 2020 - $10,000) under the Ontario-Canada Emergency Commercial Rent Assistance Program. The Government of Canada, in response to the global COVID-19 health crisis, launched CEBA (see note 9) and the loans have no repayment terms and are non-interest bearing during the initial term, until December 31, 2022. If the loan balances are repaid in full on or before December 31, 2022, 25% of the loans will be forgiven. The forgivable portion of the loan of $10,000 has been accounted for as a government grant.

16. Personnel costs

Personnel costs for the period ended December 31, 2021 and December 31, 2020 were as follows:

	Year Ended December 31, 2021	Year Ended December 31, 2020
Salaries, fees and short-term benefits	**$ 598,366**	$ 472,998
Share-based compensation	**898,297**	394,846
Total personnel cost	**$ 1,496,663**	$ 867,844

For the year ended December 31, 2021 share-based compensation of $641,356, was expensed for consultants (year ended December 31, 2020 - $60,021), and was recorded in general and administrative, research and development and sales and marketing share-based compensation expense.

(Expressed in Canadian Dollars)

17. Finance costs

Finance costs for the year ended December 31, 2021 and December 31, 2020 were as follows:

	Year Ended December 31, 2021	Year Ended December 31, 2020
Bank charges and fees	**$ 5,944**	$ 2,727
Interest free benefit	**-**	(12,294)
Interest expense	**12,960**	10,476
Accretion on debentures and transaction costs	**(50,872)**	218,831
Total finance cost	**$ (31,968)**	$ 219,740

18. Loss per share

For the year ended December 31, 2021, basic and diluted loss per share has been calculated based on the loss attributable to common shareholders of $3,881,030 (year ended December 31, 2020 - $1,850,676) and the weighted average number of common shares outstanding of 136,097,000 (year ended December 31, 2020 - 74,515,947). Diluted loss per share did not include the effect of stock options and warrants as they are anti-dilutive.

19. Income taxes

a) Current income tax expense

Income taxes are calculated at year end only. The provision for income taxes varies from the amount that would be computed by applying the expected tax rate to income (loss) before income taxes. The principle reasons for differences between such "expected" income tax expense and the amount actually recorded are as follows for the years ended December 31, 2021 and December 31, 2020.

	Year Ended December 31, 2021	Year Ended December 31, 2020
Net loss for the year	**$ (3,881,030)**	$ (1,850,676)
Statutory rate	**26.94 %**	26.18 %
Expected tax recovery	**(1,028,474)**	(486,545)
Non-deductible expenses	**275,746**	151,764
Differences due to foreign jurisdiction and foreign exchange	**-**	16,829
Change in unrecognized deferred tax assets	**752,805**	321,234
Change in tax rates	**(77)**	(3,282)
Income tax provision (recovery)	**$ -**	$ -

The statutory income tax rate represented is a blended U.S. and Canadian statutory tax rate. The operations of the Company are in both Canada and in the U.S. and therefore this rate would provide a more meaningful representation of the tax consequences.

(Expressed in Canadian Dollars)

19. Income taxes (continued)

b) Unrecognized deferred tax assets

Deferred tax assets have not been recognized in respect of the following items:

	Year Ended December 31, 2021	Year Ended December 31, 2020
Share issuance costs	**$ 280,631**	$ 66,095
Non-capital losses	**12,299,326**	10,911,613
Eligible capital expenditures	**34,242**	26,951
Payroll difference	**11,787**	156,433
Change in unrecognized temporary differences	**19,997**	21,423
Total unrecognized deferred tax assets	**$ 12,645,983**	$ 11,182,515

At December 31, 2021, the Company had Canadian tax losses of $27,733,402 (December 31, 2020 - $22,496,000) that will expire between 2026 and 2038, and U.S. tax losses of approximately $23,017,305) (December 31, 2020 - $23,018,000) which will expire between 2025 and 2038.

20. Functional expense breakdown

Components of operating expenses were as follows:

General and administration	Year Ended December 31, 2021	2020
General and administration	**$ 1,811,363**	$ 1,136,295
Share-based payments	**861,955**	350,041
Depreciation of property and equipment	**36,517**	40,228
Total general and administration	**$ 2,709,835**	$ 1,526,564

Research and development	Year Ended December 31, 2021	2020
Research and development	**$ 423,057**	$ 227,025
Share-based payments	**22,598**	31,302
Depreciation of property and equipment	**11,686**	13,714
Total research and development	**$ 457,341**	$ 272,041

Sales and marketing	Year Ended December 31, 2021	2020
Sales and marketing	**$ 527,622**	$ 102,261
Share-based payments	**13,743**	13,503
Depreciation of property and equipment	**609**	998
Total sales and marketing	**$ 541,974**	$ 116,762

(Expressed in Canadian Dollars)

21. Related party transactions

The Company defines key management personnel as Board of Directors, Chief Executive Officer, Chief Financial Officer and Chief Science Officer.

a) Remuneration of directors and key management personnel of the Company was as follows:

	Year Ended December 31, 2021	2020
Salaries, fees and short term benefits	**$ 240,000**	$ 250,000
Share-based payments	**119,115**	184,609
Total remuneration	**$ 359,115**	$ 434,609

b) Other transactions of directors and key management personnel of the Company was as follows:

i) In February 2020, two directors of the Company purchased $300,000 of Debentures II (Note 11). During the year ended December 31, 2021, the Company expensed $3,295 in interest on the convertible debentures to these directors (year ended December 31, 2020 - $169).

ii) In September 2020, a director of the Company purchased $50,000 of Debentures III (Note 11). During the year ended December 31, 2021, the Company expensed $271 in interest on the convertible debentures to the director (year ended December 31, 2020 - $169).

iii) For the year ended December 31, 2021, the Company expensed $65,076 (year ended December 31, 2020 - $28,673) to Marrelli Support Services Inc. ("Marrelli") for: the Chief Financial Officer ("CFO") of the Company; and for bookkeeping services. The CFO is an employee of Marrelli. These services were incurred in the normal course of operations for general accounting and financial reporting matters.

iv) For the year ended December 31, 2021, the Company expensed $80,000 (year ended December 31, 2020 - $nil) to Hodgkinson Equities Corp., a company controlled by a director of the Company. These services were incurred in the normal course of operations for general accounting and financial reporting matters.

v) For the year ended December 31, 2021, the Company expensed $41,250 (year ended December 31, 2020 - $nil) a director of the Company for professional fees. These services were incurred in the normal course of operations for general accounting and financial reporting matters.

vi) On January 13, 2021, directors of the Company converted $250,000 of the February 6, 2020 convertible debt into 3,333,332 shares.

vii) On February 16, 2021, a director of the Company exercised 100,000 options at an exercise price of $0.10, with an expiry date of January 12, 2031.

viii) On February 19, 2021, an officer and director of the Company exercised 466,799 warrants at an exercise price of $0.10, with an expiry date of February 6, 2022.

ix) On February 23, 2021, the Company issued to an officer and directors of the Company, 30,186 shares for debt for final interest on convertible debt.

(Expressed in Canadian Dollars)

21. Related party transactions (continued)

b) Other transactions of directors and key management personnel of the Company (continued)

x) On February 23, 2021, the Company issued to an officer and directors of the Company, 30,186 shares for debt for final interest on convertible debt.

xi) On July 1, 2021, the Company granted 150,000 common share options to a director with an exercise price of $0.30 per share, the options has a expiry with an expiry date of 1 year, 75,000 vesting immediately, and 75,000 vesting equally after 3, 6 and 9 months.

xii) On October 25, 2021, the Company granted 500,000 common share options to a director with an exercise price of $0.50 per share. The options has a expiry with an expiry date of 10 years, and vests annually over 5 years.

xiii) On December 20, 2021, the Company granted 500,000 common share options to a director with an exercise price of $0.40 per share. The options has a expiry with an expiry date of 10 years, and vests annually over 5 years.

xiv) As at December 31, 2021, $98,873 (December 31, 2020 - $571,432) was included in accounts payable and accrued liabilities due to related parties.

22. Commitments

The Company has the following contractual obligations as of December 31, 2021:

Fiscal year ended	2021	2022	2023-2029	Total
University of Washington Technology License Minimum Annual Royalty (1)	$ 6,350	$ 6,350	$ 44,450	$ 57,150

1) The annual Royalty due to the University of Washington under the Technology License Agreement is the higher of 1.5% of gross sales or the Minimum Annual Royalty of US$5,000.

23. Subsequent events

`i) Subsequent to December 31, 2021, the Company issued 1,975,000 stock options to a directors, officer, employees and consultants at an exercisable at a price between $0.33 and $0.40 per share, exercisable for a period of 1 year to 10 years.

ii) Subsequent to December 31, 2021, 100,000 options were exercised at $0.40.