

Q3 2019  
Management's  
Discussion and Analysis

# Nanalysis Scientific Corp.

(formerly Canvass Ventures Ltd.)

## READER ADVISORY

The Management's Discussion and Analysis ("MD&A") for the three and nine month periods ended September 30, 2019 of Nanalysis Scientific Corp. ("Nanalysis" or the "Company"), prepared as at November 26, 2019, focuses on the unaudited interim condensed consolidated financial statements and related notes for the respective periods and pertains to principal risks and uncertainties related to the Company's business segments. This discussion should not be considered all-inclusive as it does not include all changes regarding general economic, political, governmental and environmental events. Reference is made to the unaudited Interim Condensed Consolidated Financial Statements of Nanalysis for the three and nine month period ended September 30, 2019, upon which the following discussion is based. These Condensed Consolidated Interim Financial Statements and the notes thereto, have been prepared in accordance with International Financial Reporting Standards ("IFRS"). Reference should be made to the Interim Condensed Consolidated Financials Statements at September 30, 2019 filed under Sedar at [www.sedar.com](http://www.sedar.com).

This MD&A contains certain statements that constitute forward-looking statements under the meaning of applicable securities laws. Please see "*Forward-Looking Information, Assumptions and Risk Factors*" on page 13 for a discussion regarding Nanalysis's use of such information. For the reader's reference, the definition, calculation and reconciliation of non-GAAP terms are provided in "Non-GAAP Terms" on page 12. Readers are cautioned that these non-GAAP terms should not replace net earnings (loss), earnings (loss) per share, purchases and proceeds on sale of property, plant and equipment and debt as indicators of GAAP performance.

This MD&A and the interim condensed consolidated financial statements were reviewed by the Audit Committee of the Company's Board of Directors and approved by Nanalysis' Board of Directors on November 26, 2019.

All dollar figures are in Canadian dollars ("\$/000's"), except per share amounts or unless otherwise stated.

## OVERVIEW OF BUSINESS

Nanalysis is a patent-protected technology company with a proven track record in the development, manufacturing, and global sales of magnetic resonance spectrometers (NMR spectrometer) for the pharmaceutical, biotech, chemical, security, food, and education industries. Customers include BASF, Oxford University, Lubrizol, Johnson & Johnson, Harvard University, US Department of Agriculture, Aramco Services, SABIC, Hitachi Chemical, and many other Fortune 500 organizations.

Nanalysis Corp., a subsidiary of the Company was founded in January 2009 with the specific intent to develop the world's first portable NMR spectrometer. Nanalysis Corp. spent roughly four years developing the first product and began shipping this product commercially in Q4 2012. The technology platform upon which the product is based has been developed 100% by Nanalysis Corp. and is comprised of patented and proprietary hardware, software, algorithms, and manufacturing processes. Today, Nanalysis Corp. has multiple products based on this technology platform and continues to innovate at a rate that is more accelerated today than ever before. The Company receives millions of dollars per year via government grants and interest free loans to support research and development (R&D), and therefore investor money is used primarily to support expansion of the Company's global marketing, sales, and distribution network.

The Company is headquartered in Calgary, Canada, and performs all product development and manufacturing in its Calgary facility. The Company's global customer support, marketing, sales, and distribution are also managed from Calgary. Nanalysis Corp. in 2018 incorporated a wholly owned subsidiary in Germany, at which it conducts direct sales, marketing, technical support, and channel management activities. The Company plans to open other international subsidiaries in the coming years that will conduct similar activities in their respective regions. In June 2019 Nanalysis Corp. completed an amalgamation with Canvass Ventures in a reverse takeover ("RTO") and obtained a listing on the TSX-V as Nanalysis Scientific Corp. (NSCI).

The broader market space the Company operates in is referred to as analytical instrumentation or scientific instrumentation, which is a mature and well understood space. The size of this market is currently at over US\$63B per year. The following figure provides a breakdown of this market by type of analytical instrument:

## Demand by Analytical Instrument Segments, 2013 - 2018

	2013		2018		'13 - '18 CAGR
	Percent	\$ Mil	Percent	\$ Mil	
Chromatography	17%	8,657	16%	10,349	3.6%
Mass Spectrometry	6%	3,071	7%	4,345	7.2%
Atomic Spectroscopy	7%	3,592	7%	4,200	3.2%
Molecular Spectroscopy	7%	3,735	7%	4,587	4.2%
Life Science Instrumentation	25%	12,446	26%	16,594	5.9%
Surface Science	11%	5,472	11%	7,177	5.6%
Materials Characterization	5%	2,460	5%	3,056	4.4%
General Analytical Techniques	5%	2,384	4%	2,567	1.5%
Lab Automation & Software	9%	4,705	9%	5,526	3.3%
Lab Equipment	8%	4,239	8%	4,927	3.1%
<b>Total</b>	<b>100%</b>	<b>50,761</b>	<b>100%</b>	<b>63,328</b>	<b>4.5%</b>

Nanalysis' family of products competes for market share in several verticals associated with this broad market opportunity. There are many different types of analytical or scientific instruments in widespread use in a variety of verticals. Examples of such types of instruments include mass spectrometers, gas chromatographers, infrared spectrometers, high performance liquid chromatography (HPLC), Ultraviolet-vis-

ible spectroscopy (UV-vis), and so on. Customers tend to know when to use these different types of instruments, depending on their particular application and strengths and weaknesses of each instrument type.

Often, multiple types are used in combination, especially if safety as well as economic considerations are important. Each type of instrument provides different information regarding the atomic, molecular, and bulk properties of the substance being analyzed: For example, how much hydrogen is in the substance, how much methane is in a substance, or how much fat content exists. All industries require various amounts of testing of substances in R&D, QA/QC, commodities trades, manufacturing process automation and control, security, as well as education. Pharmaceuticals, food, chemicals, new nano materials, oil & gas, nutraceuticals, and many other substances are analyzed extensively at various stages of discovery, production, and use. Over the last three decades, all types, except one, of analytical instrument have gone from large, expensive, complex, unsafe, and often environmentally unfriendly to compact, inexpensive, simple to use, as safe to use as a laptop computer, and environmentally friendly. This last type of major analytical instrument to undergo this transformation is the NMR spectrometer, and Nanalysis is the global leader in this area, with only three other direct competitors, Magritek, Thermo Scientific, and Oxford Instruments. In other types of analytical instruments that have already undergone the miniaturization transformation, there are dozens of vendors, and sales volumes are in thousands of units per year globally.

Management of Nanalysis believes there is an opportunity for Nanalysis and its competitors to establish a global installed base of roughly 200,000 portable/compact NMR spectrometers, along with associated hardware replacements, software updates, consumables, service, and finance, which constitutes a multi-billion dollar opportunity from the current installed base of roughly 1,500 compact/portable NMR spectrometers.

Management of Nanalysis believes that, along with its eco-systems of partners, it is leading the creation of demand for portable NMR spectrometers that will be in the thousands per year in the not too distant future. In addition, because a portable NMR spectrometer cannot be made with off-the-shelf parts (such as an infrared spectrometer for example), relatively few competitors will share this market opportunity for the next 10 years, making gross margins relatively strong, and after that period of time, Nanalysis will have diversified away from an NMR-only company, as is natural for successful analytical instrumentation companies after penetrating the market with first type of product or service. During the next 10 years, it is the intention of the Company to acquire other technologies and companies, as part of this diversification.

## SELECTED FINANCIAL INFORMATION

(\$000's except share information amounts )	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	(\$ Change	2019	2018	(\$ Change
<b>Financial results</b>						
Revenue	1,641	1,797	(156)	6,241	5,595	646
Gross profit <sup>(1)</sup>	1,256	1,186	70	4,344	3,496	848
Sales and marketing expense	409	649	(240)	1,588	1,889	(301)
RTO transaction costs	61	-	61	1,421	-	1,421
Total comprehensive loss	(298)	(523)	225	(1,679)	(670)	(1,009)
<b>Share Information</b>						
Income (loss) per share (basic and diluted)	(0.00)	(0.01)	0.01	(0.03)	(0.02)	(0.01)
Common shares outstanding at period end	61,613,000	45,246,000	16,367,000	61,613,000	45,246,000	16,367,000
Weighted average shares outstanding (basic)	61,364,000	44,524,000	16,840,000	53,611,000	43,046,000	10,565,000
<b>Other Information</b>						
Capitalized property plant and equipment	238	133	105	378	790	(412)
Capitalized development expenditures	939	481	458	1,713	1,280	433

(\$ 000's)	September 30, 2019	December 31, 2018	(\$ Change
<b>Financial Position</b>			
Total assets	18,438	10,948	7,490
Total debt obligations (includes current portion)	1,353	997	356
Total liabilities	3,603	2,557	1,046
Net assets	14,835	8,391	6,444

<sup>(1)</sup> Gross profit is a non-IFRS term and is defined as revenue less cost of products sold, see reconciliation on page 12 of this document.

## OVERALL PERFORMANCE

During the nine months ended September 30, 2019, Nanalysis was successful in its objectives relating to marketing and sales of its proprietary family of NMR spectrometers and associated accessories, as well as the continued evolution of its technology platform upon which those products are based.

During the nine month period ended September 30, 2019, Nanalysis recognized revenue of \$6,241, a 12% increase over the \$5,595 recognized for the comparable period ended September 30, 2018. The increase for the nine months ended is due to growing demand for compact NMR spectrometers in a nascent market opportunity and Nanalysis' leading position in the marketplace. For the three month period ended September 30, 2019 Nanalysis recognized revenue of \$1,641, a 9% decrease from the \$1,797 recognized from the comparable period ended September 30, 2018. The third quarter is our seasonally uncertain quarter because our academic customers tend not to place orders over the summer, the third quarter of 2019 felt the effects of this uncertainty and the result was reduced sales.

The Company's total comprehensive loss for the nine month period ended September 30, 2019 was \$1,679, a \$1,009 decrease from the \$670 loss in the comparable period in 2018. The increased comprehensive loss for the nine month period ended September 30, 2019 is primarily due to RTO Transaction Costs (primarily a non-cash calculated amount) and an increase in general and administrative costs due to increased hiring of staff. These increases have been offset by a recovery of previously expensed inventory, coupled with lower sales and marketing expenses. For the three month period ended September 30, 2019 the company had a total comprehensive loss of \$298, an improvement from the \$523 comprehensive loss for the comparable period in 2018, the overall better performance is due to the aforementioned inventory adjustment, coupled with reduced expenses overall.

The Company continues to have confidence that the market for compact NMR spectrometers and related accessories and services will grow for the next two decades, because of the nascent nature of the opportunity coupled with the value proposition to customers. Nanalysis expects to continue to lead the market. Nanalysis actively manages a large pipeline of existing and new customers via its sales and international distribution organization. Management expects that sales will continue to outgrow expenses, and the Company is planning expansion plans accordingly.

In addition, the Company receives significant financial support from government organizations, primarily in order to fund ongoing product development, but also for market, sales, and IP protection. No assurances can be given that the Company will be able to achieve all or part of the objectives discussed above, or that sufficient financing from outside sources will be available. Further, if the Company's operations are unable to generate cash flow levels at or above current projections, the Company may not have sufficient funds to meet its obligations in the future. Should such events occur, management is committed to implementing all or a portion of

its contingency plan. This plan has been developed and designed to provide additional cash flow, and includes, but is not limited to, deferring certain additional product development initiatives, reducing general and administrative expenses and seeking outside financing. The failure of the Company to achieve one or all of the above items may have a material adverse impact on the Company's financial position, results of financial performance and cash flows.

In the second quarter of 2019, Nanalysis completed its going public RTO and booked \$1,421 as the RTO transaction costs for the nine month period ended September 30, 2019. Normalized for RTO expenses, total comprehensive loss for the three and nine months ended September 30, 2019 would have been \$237 and \$258 respectively.

## DISCUSSION OF OPERATIONS

(\$000's)	Three months ended September 30			Nine months ended September 30		
	2019	2018	(\$ Change)	2019	2018	(\$ Change)
Revenue	1,641	1,797	(156)	6,241	5,595	646
Cost of products sold	385	611	(226)	1,897	2,099	(202)
Gross profit	1,256	1,186	70	4,344	3,496	848
Expenses						
Sales and marketing	409	649	(240)	1,588	1,889	(301)
General and administration	775	820	(45)	2,300	1,848	452
Amortization of PPE and intangibles	273	108	165	607	282	325
Other Items						
RTO transaction costs	61	-	61	1,421	-	1,421
Interest, finance fees and other expenses	87	102	(15)	20	151	(131)
One time inventory adjustment	(75)	-	(75)	(23)	-	(23)
Foreign exchange (gain) loss	24	30	(6)	146	(4)	150
Loss before tax	(298)	(523)	225	(1,715)	(670)	(1,045)
Deferred tax recovery	-	-	-	(36)	-	(36)
Net and comprehensive loss	(298)	(523)	225	(1,679)	(670)	(1,009)

### Revenue

The business of the Company has been the development, manufacturing, and sales of NMR spectrometers from inception in 2009. As such, all revenue is related to product sales. The Company does not engage in consulting services or any other revenue generating activity unrelated to product sales. For the three month period ended September 30, 2019 Nanalysis recognized revenue of \$1,641, a 9% decrease from the \$1,797 recognized from the comparable period ended September 30, 2018. The third quarter is our seasonally uncertain quarter because our academic customers tend not to place orders over the summer, the third quarter of 2019 felt the effects of this uncertainty and the result was reduced sales. During the nine month period ended September 30, 2019, Nanalysis recognized revenue of \$6,241, a 12% increase over the \$5,595 recognized for the comparable period ended September 30, 2018. The increase for the nine months ended is due to growing demand for compact NMR spectrometers in a nascent market opportunity and Nanalysis' leading position in the marketplace.

### Cost of products sold

Cost of products sold for the three months ended September 30, 2019 was \$385 or 23 percent of revenue as compared to \$611 or 34 percent of revenue for the same period of the prior year. For the nine months ended September 30, 2019, cost of products sold was \$1,897 or 30 percent of revenue as compared to \$2,099 or 38 percent of revenue for the same period of the prior year. The change in period over period for both of three and nine months periods is due to a recovery of expense for finished goods previously recognized as an expense in 2019 that were on hand as at September 30, 2019. These finished goods have been capitalized to PPE and will be amortized over their expected useful lives as they're utilized in the day to day operations of the Company.

### Sales and marketing ("S&M")

S&M for the three months ended September 30, 2019 was \$409 as compared to \$649 for the same period of the prior year. The decrease is due to a reduction in salaries and wages as costs have been moved to G&A in line with changing duties of personnel, this decrease was partially offset by increased advertising and trade show expense as the Company continues to push sales efforts.

For the nine months ended September 30, 2019, S&M was \$1,588 as compared to \$1,889 for the same period of the prior year. The decrease for the nine months ended is due to the aforementioned change of personnel's duties, partially offset by increased advertising and trade show expenses.

### General and administrative expenses ("G&A")

G&A includes the cost of maintaining a corporate office, all publicly traded company-related expenses as well as the G&A incurred with respect to the day to day operation of the Company. For the three months ended September 30, 2019, G&A was \$775 as

compared to \$820 for the same period of the prior year. The slight decrease is due to reduced administrative and general expenses quarter over quarter, slightly offset by a bad debt in the quarter.

For the nine months ended September 30, 2019, G&A was \$2,300 as compared to \$1,848 for the same period of the prior year. The increase for the nine months ended is due to increased salaries and wages the result of increased head count.

#### **Amortization of property, plant, equipment and intangibles**

For the three and nine months ended September 30, 2019 amortization was \$273 and \$607 respectively, as compared to \$108 and \$282 for the three and nine months ended September 30, 2018. The increase for both the three and nine month periods is due to property plant and equipment and intangibles additions in the year, coupled with the office and shop asset recognized with respect to the Company's facility that now is depreciated due to the adoption of IFRS 16 as at January 1, 2019.

#### **Interest, finance fees and other expenses**

For the three months ended September 30, 2019 interest, finance fees and other expenses was \$87 as compared to \$102 for the three months ended September 30, 2018. For the nine months ended September 30, 2019 interest, finance fees and other expenses was \$20 as compared to \$151 for the comparative period. The reduction in both three and nine months is a result of offsetting interest income due to the substantial cash balance on hand coupled with the accounting treatment of interest free government grants and the resulting interest income.

#### **One-time inventory adjustment**

For the three and nine months ended September 30, 2019 the Company recognized an inventory adjustment of \$75 and \$23. The adjustment is for items previously expensed in 2018 that were on hand as at September 30, 2019.

#### **Foreign exchange**

Foreign exchange gains or losses typically occur when the exchange rate changes between the time revenue is recognized and when the resulting receivable is collected. Nanalysis conducts the vast majority of its business in US dollars, but also in Euros and GBP. Roughly 10% of the Company's revenue is in Canadian dollars.

### **SUMMARY OF QUARTERLY RESULTS**

The following table highlights revenue, cash used in operating activities, total comprehensive income (loss) before tax and earnings (loss) per share for the eight most recently completed quarters ended September 30, 2019.

(\$000's) (except per share information)	2019			2018				2017
	Q3	Q2	Q1	Q4	Q3	Q2	Q1	Q4
Revenue	1,641	2,535	2,065	2,784	1,799	2,178	1,619	2,310
Cash (used in) generated from operating activities	204	225	347	(272)	227	(741)	615	1,289
Total comprehensive income (loss) for the period	(298)	(1,177)	(204)	713	(503)	35	(172)	198
Earnings (loss) per share basic and diluted	(0.00)	(0.02)	(0.00)	0.02	(0.01)	0.00	(0.00)	0.00

- Q3 2019 saw a slight reduction in revenue compared to Q3 2018. Despite reduced demand the Company saw improved net comprehensive income due to recovery on previously expensed inventory.

## LIQUIDITY & CAPITAL RESOURCES

As at September 30, 2019 and December 31, 2018 the Company had the following debt instruments outstanding:

(\$000's)	September 30, 2019	December 31, 2018
Shareholders Loans: original amount of \$223,170 repayable in monthly blended installments of \$5,876 commencing June 15, 2016 until May 15, 2020. Interest payable at 11.99% per annum. Secured with Makino machinery (F5).	45	91
Shareholders Loans: original amount of \$500,000 repayable in monthly blended installments of \$12,993 beginning December 15, 2017 until November 15, 2021. Following conversion of \$100,000 to common shares in November 2018 monthly installments are \$9,649. Interest payable at 11% per annum. Secured with Essentec machinery (SMT). On July 12, 2019 the shareholder loans were repaid in full.	-	288
Western Economic Diversification Canada (WINN #1) interest free loan \$496,150 repayable in monthly installments of \$8,269 commencing June 30, 2017, and maturing May 31, 2022. Any amounts in default will incur interest at the Bank of Canada's interest rate plus 3% compounded monthly. The obligation is recorded at its present value using a 7.04% discount rate. This loan is unsecured.	240	300
Western Economic Diversification Canada (WINN #2) interest free loan \$376,196 drawn in 2018 and \$409,867 drawn in 2019 repayable in monthly installments of \$46,215 commencing February 1, 2022, and maturing January 31, 2027. Total value of this loan will be up to \$2,773,000. Any amounts in default will incur interest at the Bank of Canada's interest rate plus 3% compounded monthly. The obligation is recorded at its present value using a 6.0% discount rate. This loan is unsecured.	684	313
\$6,100 loan for the purchase of equipment repayable in equal monthly installments of \$109 over 56 months commencing April 28, 2018.	4	5
	973	997
Less: Current Portion	131	233
	842	764

## WORKING CAPITAL

(\$000's)	September 30, 2019	December 31, 2018	\$ Change
Cash	6,277	779	5,498
Loans and leases	1,353	997	356
Net Cash (debt)	4,924	(218)	5,142
Working capital <sup>(1)</sup>	8,670	3,802	4,868

(1) Working capital is calculated as current assets less current liabilities.

At September 30, 2019, Nanalysis had \$8,670 (December 31, 2018 - \$3,802) in working capital, including \$6,277 (December 31, 2018 - \$779) in cash and cash equivalents. Working capital has significantly increased period over period due to an influx of cash stemming from the RTO and corresponding equity raise. The increase in cash has been partially offset by the current portion of finance lease obligations, specifically \$112 stemming from IFRS 16 adjustments resulting in lease obligation being recognized for the Company's office and shop that did not exist at December 31, 2018 and an increase of \$574 in accounts payable.

The Company's exposure to liquidity risk is dependent on the sale of inventory, collection of accounts receivable and other receivables, and the raising of funds to meet commitments and sustain operations and research and development. The Company manages liquidity risk by management of working capital, cash flows, availability of borrowing facilities and share issuances.

The Company's objectives when managing capital are to ensure its ability to continue as a going concern in order to pursue the manufacturing and sale of its spectrometers. The Company attempts to maximize return to shareholders by minimizing shareholder dilution.

The Company defines its capital as share capital and contributed surplus. The Company has financed its capital requirements primarily through shareholder loans and share issuances since inception.

The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions and risk characteristics of the underlying assets. The Company may issue new securities. The Company is not subject to any externally imposed capital requirements. There were no changes to the Company's approach to capital management during the nine months ended September 30, 2019.

## FINANCIAL MANAGEMENT

Nine months ended September 30 (\$000's)	Three months ended September 30,			Nine months ended September 30,		
	2019	2018	\$ Change	2019	2018	\$ Change
Cash generated provided by (used in):						
Operating activities	204	876	(672)	776	784	(8)
Investing activities	(1,177)	(614)	(563)	(2,091)	(2,070)	(21)
Financing activities	(189)	(66)	(123)	6,813	848	5,965
Decrease in cash	(1,162)	196	(1,358)	5,498	(438)	5,936

Cash flows from operating activities decreased in the three month period ended September 30, 2019 from the same period in 2018 by \$672. This is due to increased earnings offset by a higher working capital stemming from timing differences of collection and payments. Cash flows from operating activities remained consistent for the nine month period ended September 30, 2019 and 2018.

Cash flows used in investing activities increased for the three month period ended September 30, 2019 from the same period in 2018 by \$563, this is due to increased intangible asset additions stemming from the change in the Company's status from a Canadian Controlled Private Corporation to a public entity resulting in reduced Scientific Research and Experimental Development credits that previously offset additions to intangibles. Cash flows from investing activities for the nine month period ended September 30, 2019 remained consistent for the compared nine months ended September 30, 2018.

Cash flows used in financing activities increased in the three month period ended September 30, 2019 from the same period in 2018 by \$123. This is primarily due to the repayment of a loan in July 2019. Cash flows from financing activities increased by \$5,965 for the nine month period ended September 30, 2019, as compared to the same period in 2018, the substantial increase is due to the proceeds from financing with respect to the RTO.

## SHARE CAPITAL

### [a] Authorized

Unlimited number of common shares, without nominal or par value  
 Unlimited number of Class A voting preferred shares without par value  
 Unlimited number of Class B non-voting preferred shares without par value

### [b] Issued

At September 30, 2019 Nanalysis Scientific Corp. had 61,613,000 common shares outstanding. At September 30, 2019 there were 13,489,000 shares in escrow with scheduled release over 15 months completing on December 11, 2020.

[i] During the nine month period ended September 30, 2019 the Company issued the following common shares (shares were converted at the exchange ratio of .55 for each previous share):

- 187,000 shares at \$0.60 to directors as payment of director fees
- 110,000 shares at \$0.60 for advisory services
- 71,500 shares at \$0.60 to compensate certain employees as an incentive grant
- 8,333,000 shares at \$0.60 in a financing concurrent with the RTO
- 2,500,000 shares at \$0.60 in a private placement
- 2,277,500 shares at \$0.60 to original Canvass shareholders
- 45,500 shares upon the exercise of warrants
- 643,500 shares upon the exercise of options

The Company has a stock option plan that provides for the issuance of options to eligible persons. The option price under each option granted must be no less than the discount market price defined by the TSX-V. The term of the options must be no longer than 5 years and the directors determine the vesting period. The maximum number of outstanding options must be no more than 10% of the issued and outstanding at any point in time. The maximum number of outstanding options issued for investor relation must be no more than 2% of the issued and outstanding shares and the options issued to investor relations must vest in stages over a 12 month period with no more than one quarter of the options vesting in any three month period.

### [c] Stock options

Stock option transactions and the number of stock options outstanding are summarized below:

	Number	Weighted Average Exercise Price \$
<b>Balance, December 31, 2017<sup>(1)</sup></b>	<b>3,247,750</b>	<b>0.29</b>
Granted <sup>(1)</sup>	618,750	0.45
Exercised <sup>(1)</sup>	(85,250)	(0.25)
Expired <sup>(1)</sup>	(77,000)	(0.14)
<b>Balance, December 31, 2018</b>	<b>3,704,250</b>	<b>0.29</b>
Granted Q1 2019 <sup>(1)</sup>	27,500	0.60
Granted Q3 2019	330,000	0.60
Granted Q3 2019	200,000	0.75
Granted on the RTO date	675,000	0.60
Canvass options <sup>(2)</sup>	112,500	0.47
Exercised	(643,500)	(0.20)
Expired	(404,250)	(0.40)
<b>Balance, September 30, 2019</b>	<b>4,001,500</b>	<b>0.40</b>

(1) Converted at an exchange ratio of 0.55, pursuant to the RTO

(2) Converted at an exchange ratio of 0.25, pursuant to the RTO

During the nine-month period ended September 30, 2019 and 2018, the Company recorded stock based compensation of \$149 and \$88, respectively, for stock options granted. For the three-month period ended September 30, 2019 and 2018, the Company recorded share-based recovery of \$7. The fair values of stock options granted were estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

	2019	2018
Risk-free interest rate	1.1%-1.9%	2.1%
Estimated annualized volatility based on historical performance	67%-78%	78%
Expected life	5.0 years	5.0 years
Expected dividend yield	0%	0%
Exercise price	\$0.60-\$0.75	\$0.44
Share price on date of grant	\$0.40 to \$0.60	\$0.40

As at September 30, 2019, the Company had the following stock options outstanding and exercisable:

Date of Expiry	Exercise Price	Number of Op- tions Outstanding	Number of Options Exercisable
December 31, 2019	\$0.22	16,500	16,500
December 31, 2019	\$0.27	731,500	731,500
February 19, 2020	\$0.27	258,500	258,500
April 23, 2020	\$0.36	121,000	121,000
April 23, 2020	\$0.27	239,250	239,250
June 4, 2020	\$0.40	75,000	75,000
June 4, 2020	\$0.60	37,500	37,500
June 17, 2020	\$0.36	82,500	82,500
January 15, 2021	\$0.36	33,000	33,000
March 7, 2021	\$0.18	440,000	440,000
May 5, 2021	\$0.42	16,500	16,500
June 13, 2021	\$0.18	110,000	110,000
August 8, 2021	\$0.42	8,250	8,250
December 15, 2021	\$0.42	8,250	5,500
January 31, 2022	\$0.42	110,000	110,000
October 4, 2022	\$0.45	110,000	36,667
November 19, 2022	\$0.22	68,750	68,750
January 14, 2023	\$0.45	247,500	82,500
April 25, 2023	\$0.45	55,000	18,333
February 1, 2024	\$0.60	27,500	-
June 4, 2024	\$0.60	200,000	50,000
June 4, 2024	\$0.60	150,000	75,000
June 4, 2024	\$0.60	325,000	65,000
July 24, 2024	\$0.60	180,000	-

July 24, 2024	\$0.75	200,000	40,000
Aug 21, 2024	\$0.60	150,000	-
<b>Balance, September 30, 2019</b>		<b>4,001,500</b>	<b>2,721,250</b>

As at September 30, 2019, the weighted average remaining life for outstanding options was 2.15 (December 31, 2018 – 2.57) years. Subsequent to quarter end the Company issued 525,000 options with an exercise price of \$0.60 and an expiry of October 28, 2024. As at September 30, 2019, diluted number of shares based on in the money options was 62,364,000.

#### **[d] Warrants**

As at September 30, 2019 the Company has 5,773,900 warrants outstanding. In conjunction with the financing 4,523,900 warrants were issued at an exercise price of \$0.75 and which expire on June 4, 2020. In conjunction with the private placement 1,250,000 warrants were issued with an exercise price of \$0.75 and an expiry of June 6, 2021.

In the second quarter of 2019 45,500 warrants were exercised for proceeds of \$18 with 4,500 warrants expiring.

#### **[e] Restricted Share Units (“RSU”)**

During the fiscal year ended December 31, 2018 the company granted 130,000 RSU. The RSU vested on October 31, 2018 and may be redeemed by the holder as one RSU in exchange for one Class ‘A’ common share in the capital of the company. These RSU were redeemed in January 2019 and 130,000 Class ‘A’ common shares were issued.

## **BUSINESS RISK AND UNCERTAINTIES**

### **Credit risk**

Credit risk is the risk of a financial loss to the Company if a counterparty to a financial instrument fails to meet its contractual obligations. The Company is exposed to credit risk in the event of non-performance by counterparties in connection with its cash, accounts receivable, and other receivables. The Company’s maximum exposure to credit risk at September 30, 2019 is the carrying amount of cash, accounts receivable, and other receivables on the consolidated statements of financial position. The Company mitigates this risk by holding its cash in major Canadian financial institutions and performing credit enquiries on its customers.

The Company’s sales are concentrated in universities and the technology industry. At September 30, 2019 one customer accounted for 13% of accounts receivable (2018 – 2 customers – 25%).

Trade accounts receivable are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others, the failure of the counterparty to engage in a repayment plan with the Company, and a failure to make contractual payments for a period of greater than 365 days past due. During the 9 months ended September 30, 2019, a bad debt of \$86 was recognized as an expense (2018 - \$Nil).

### **Liquidity risk**

Liquidity risk is the risk that the Company will not be able to meet its obligations as they come due. As of September 30, 2019, the Company had working capital of \$8,590 (December 31, 2018 - \$3,802). The Company’s exposure to liquidity risk is dependent on the sale of inventory, collection of accounts receivable and other receivables, and the raising of funds to meet commitments and sustain operations and research and development. The Company manages liquidity risk by management of working capital, cash flows, availability of borrowing facilities and share issuances.

### **Market risk**

#### *Currency risk*

The Company is exposed to the financial risk related to the fluctuation of foreign exchanges rates. The majority of the Company’s sales are in U.S. dollars. The Company has not entered into foreign exchange derivative contracts.

As at September 30, 2019 and September 30, 2018 the Company had the following assets and liabilities denominated in U.S. dollars:

	September 30, 2019	September 30, 2018
(\$000's)	US\$	US\$
Cash	953	643
Accounts receivable	862	548
Accounts payable and accrued liabilities	(133)	(246)
<b>Total</b>	<b>1,682</b>	<b>945</b>

The above assets and liabilities were translated at 1.3243 at September 30, 2019 (2018 – 1.2945). Based on the above net exposure as at September 30, 2019 and 2018, assuming that all other variables remain constant, a 10% appreciation or deterioration of the Canadian dollar against the U.S. dollar would result in a change of approximately \$223 (December 31, 2018 - \$122) in the Company's net income/loss.

#### *Interest rate risk*

Interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in the market interest rates. During the 9 months ended September 30, 2019 and 2018, fluctuations in the market interest rates had no significant impact on its interest expense.

#### **OPERATING SEGMENT**

The Company has a single operating segment, the manufacture of spectrometers. Substantially all of the Company's operations, assets, and employees are in Canada.

During the nine months ended September 30, 2019 and 2018 the Company was economically dependent on no customer accounting for more than 10% of revenue.

The Company's revenues are allocated to geographic segments for the three months and nine months ended September 30, 2019 and 2018 as follows:

(\$000's)	Three months ended September 30		Nine months ended September 30	
	2019	2018	2019	2018
United States of America	1,104	984	4,006	3,201
Canada	337	147	660	293
Japan	-	-	224	-
Other	200	666	1,351	2,101
Total	1,641	1,797	6,241	5,595

#### **TRANSACTIONS BETWEEN RELATED PARTIES**

Related parties include members of the Board of Directors and officers of the Company, and enterprises controlled by these individuals. The following fees and expenses were incurred in the normal course of business:

(\$000's)	Three months ended September 30		Nine months ended September 30	
	2019	2018	2019	2018
Interest and finance fees on shareholder loans:				
Makino loan (F5)	2	4	6	8
Essemtec loan (SMT)	2	13	17	26
	4	17	23	34

For the three months ended September 30, 2019 and 2018 no advisory service fees were paid to directors. For the nine months ended September 30, 2019 \$66 were paid in advisory services fees to a director (September 30, 2018 \$NIL).

#### **REVERSE TAKEOVER**

On June 4, 2019, the Company completed an amalgamation with Nanalysis Corp. and a subsidiary corporation. The amalgamation has been accounted for as a reverse takeover ("RTO") with Nanalysis Corp. being identified as the acquirer. Nanalysis Scientific Corp. is the ultimate parent entity in the group.

Upon completion of the amalgamation, the shareholders of Nanalysis Corp. ("the Accounting Acquirer") owned approximately 76.68% of the issued and outstanding common shares of the Company. For accounting purposes the Transaction is considered as a "reverse takeover". A reverse takeover transaction involving a non-public operating entity and non-operating public company is in substance a capital transaction, rather than a business combination.

This management discussion and analysis is presented as a continuation of the Accounting Acquirer but are issued in the name of the Company as a legal parent. The Transaction has been measured at the fair value of the shares and other equity instruments that are deemed to have been issued to the Company's historical shareholders. Accordingly, the transaction has been recorded in these interim condensed consolidated financial statements using a basis of accounting as summarized below:

- a) The historical equity of the Company has been eliminated and the excess of the fair value of deemed issuance of the equity instruments over the fair value of the net assets acquired has been recorded as RTO Transaction cost in net loss for the period;
- b) The accumulated deficit and other equity balances presented in the interim condensed consolidated financial statements are those of the Accounting Acquirer;
- c) The assets and liabilities of the Accounting Acquirer are included in the interim condensed consolidated financial statements on pre-transaction basis of accounting;
- d) The net assets of the Company were measured at their estimated fair value on the date of the RTO; and
- e) Comparative information presented in these financial statements is that of the Accounting Acquirer.

The following summarizes the basis of accounting for the reverse takeover described above:

Fair value of equity instruments deemed to be issued pursuant to the RTO

Issuance of 2,275,500 Canvass common shares	\$ 1,367
Fair value of existing Canvass options and warrants	\$ 37
Total amount recorded in equity in these financial statements	<u>\$ 1,404</u>
Transaction expenses	<u>\$ 488</u>
	<u>\$ 1,892</u>
Less: Net assets of Canvass immediately before the transaction	<u>\$ (471)</u>
	<u>\$ 1,421</u>

#### SUBSEQUENT EVENTS

Subsequent to quarter end the Company received \$1,070K with respect to 2018 SRED claim for the Federal portion.

#### NON - GAAP TERMS

The Company reports on certain key financial performance measures that are used by management to evaluate the performance of Nanalysis. These key financial performance measures are not recognized financial terms ("Non-GAAP Terms") under Canadian generally accepted accounting principles (Canadian "GAAP"). For publicly accountable enterprises, such as Nanalysis, Canadian GAAP is governed by principles based on International Financial Reporting Standards ("IFRS") and interpretations of the International Financial Reporting Interpretation Committee ("IFRIC"). Management believes these Non-GAAP Terms are useful supplemental measures.

#### GROSS PROFIT

Gross profit is defined as revenue less cost of products sold, cost of products sold includes direct cost of manufacturing, overhead and warranty expenses. The Corporation's method of calculating gross profit may differ from that of other companies and accordingly, may not be comparable to measures used by other companies.

Non-GAAP Term (\$000's)	Three months ended September 30		Nine months ended September 30	
	2019	2018	2019	2018
Revenue				
Deduct:				
Cost of products sold	1,641	1,797	6,241	5,595
Gross profit	<u>(385)</u>	<u>(611)</u>	<u>(1,897)</u>	<u>(2,099)</u>
	1,256	1,186	4,344	3,496

#### CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company prepares its interim condensed consolidated financial statements in accordance with IFRS. In preparing its financial statements, management is required to make various estimates and judgments in determining the reported amounts of assets and liabilities, revenues and expenses, as well as the disclosure of commitments and contingencies. Management bases its estimates and judgments on its own experience and various other assumptions believed to be reasonable at the time and under the circumstances in existence when the financial statements were prepared. Anticipating future events cannot be done with certainty; therefore, these estimates may change as new events occur, more experience is acquired or the Company's operating environment changes. More detailed information regarding the accounting estimates believed by management to require the most difficult, subjective or complex judgments and which are material to the Company's financial reporting results are discussed in the Company's

Annual MD&A for the year ended December 31, 2018, which were included in the filing statement of Canvas Ventures Ltd. Dated May 24, 2019 and filed under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

#### **ADDITIONAL CORPORATE INFORMATION**

The Company is a publicly-traded Corporation listed on the TSX Venture Exchange under the symbol "NSCI". Additional information relating to the Company, can be found on SEDAR at [www.sedar.com](http://www.sedar.com).

#### **Forward Looking Statement Advisory**

*This Management's Discussion and Analysis ("MD&A") contains certain forward looking statements and forward looking information (collectively referred to herein as "forward looking statements") within the meaning of applicable Canadian securities laws. All statements other than statements of present or historical fact are forward looking statements. Forward looking information is often, but not always, identified by the use of words such as "could", "should", "can", "anticipate", "expect", "believe", "will", "may", "projected", "sustain", "continues", "strategy", "potential", "projects", "grow", "take advantage", "estimate", "well positioned" or similar words suggesting future outcomes. In particular, this MD&A may contain forward looking statements relating to future opportunities, business strategies, development and production plans and competitive advantages.*

*The forward looking statements regarding the Company are based on certain key expectations and assumptions of the Company concerning anticipated financial performance, business prospects, strategies, regulatory developments, exchange rates, tax laws, the sufficiency of budgeted capital expenditures in carrying out planned activities, the availability and cost of labour and services and the ability to obtain financing on acceptable terms and future costs and expenses being based on historical costs and expenses, adjusted for inflation, all of which are subject to change based on market conditions and potential timing delays. Although management of the Company consider these assumptions to be reasonable based on information currently available to them, they may prove to be incorrect.*

*By their very nature, forward looking statements involve inherent risks and uncertainties (both general and specific) and risks that forward looking statements will not be achieved. Undue reliance should not be placed on forward looking statements, as a number of important factors could cause the actual results to differ materially from the beliefs, plans, objectives, expectations and anticipations, estimates and intentions expressed in the forward looking statements, including among other things: general economic and market factors, including business competition, changes in government regulations or in tax laws; component prices; technology development or operational activities; inability to scale manufacturing; changes in market demand; changes in international trade regulations, affecting the Company; timing and availability of external financing on acceptable terms; and lack of qualified, skilled labour or loss of key individuals; as well as those factors detailed from time to time in the Company's interim and annual financial statements and management's discussion and analysis of those statements. Readers are cautioned that the foregoing list is not exhaustive.*

*The forward looking statements contained herein are expressly qualified in their entirety by this cautionary statement. The forward looking statements included in this MD&A are made as of the date of this MD&A and the Company does not undertake and is not obligated to publicly update such forward looking statements to reflect new information, subsequent events or otherwise unless so required by applicable securities laws.*