# SIRONA BIOCHEM CORP.

# MANAGEMENT'S DISCUSSION AND ANALYSIS

PERIOD ENDED JANUARY 31, 2019

# SIRONA BIOCHEM CORP. MANAGEMENT'S DISCUSSION AND ANALYSIS For the Three Months Period Ended January 31, 2019

#### ITEM 1.1 INTRODUCTION

The following Management Discussion and Analysis ("MD&A") was prepared as of March 28, 2019 and should be read in conjunction with the unaudited condensed interim consolidated financial statements for the period ended January 31, 2019 and the audited consolidated financial statements and related notes for the year ended October 31, 2018.

The Company was incorporated on October 19, 2006 under the Business Corporations Act of British Columbia. The Company is a development stage public company listed for trading on the TSX Venture Exchange (the "Exchange") under the symbol SBM. On May 1, 2009 the Company completed its qualifying transaction by entering into a Licensing Agreement with TFChem S.A.R.L. ("TFC"), a biopharmaceutical company based in Rouen, France, and changed its name from High Rider Capital Inc. to Sirona Biochem Corp. On March 31, 2011, the Company completed its business acquisition of TFC. The Company is a cosmetic ingredient and drug discovery company with a proprietary technology platform developed at its laboratory facility in France with a specialization in the stabilization of carbohydrate molecules, with the goal of improving compounds' efficacy and safety.

This Management's Discussion and Analysis contains forward-looking statements which may not be based on historical fact, including without limitation statements containing the words "believes," "may," "plan," "will," "estimate," "continue," "anticipates," "intends," "expects," and similar expressions. Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, among others, the Company's stage of development, lack of product revenues, additional capital requirements, risks associated with the completion of clinical trials and obtaining regulatory approval to market the Company's products, the ability to protect its intellectual property and dependence upon collaborative partners. These factors should be considered carefully and readers are cautioned not to place undue reliance on such forward-looking statements. The forward-looking statements are made as of the date hereof, and the Company disclaims any obligation to update any such factors or to publicly announce the result of any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments.

Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this MD&A. Such statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about:

- general business and economic conditions;
- interest rates and foreign exchange rates;
- the timing of the receipt of regulatory and governmental approvals for the Company's research and development projects;
- the availability of financing for the Company's research and development projects, or the availability of financing on reasonable terms;
- the Company's ability to attract and retain skilled staff;
- market competition;
- tax benefits and tax rates;
- the Company's ongoing relations with its employees and with its business partners.

Management cautions you that the foregoing list of important factors and assumptions is not exhaustive. Events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. You should also carefully consider the matters discussed under "Risk Factors" in this MD&A. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements or the foregoing list of factors, whether as a result of new information or future events or otherwise.

Further information is available on the SEDAR website, www.sedar.com.

## ITEM 1.2 DESCRIPTION OF BUSINESS

On March 31, 2011, the Company completed the acquisition all of the issued and outstanding shares of TFCHEM S.A.R.L. ("TFC"), a biopharmaceutical company based in Rouen, France for a total consideration of 13,000,000 common shares of the Company and €500,000 (CDN \$697,550) cash, for a total purchase price of \$2,087,208. The issuance of 13,000,000 common shares are escrowed and released over a period of six years with immediate release of 10% of the shares on the closing date and the remaining 90% released over six years in 7.5% increments every six months.

The acquisition of TFC effectively settled the previously entered Research and License Agreement between Sirona and TFC. The Company has determined that no gain or loss was recognized on the settlement of the pre-existing relationship.

The TFC Agreement was accounted for as a business combination under the acquisition method of accounting.

TFC has developed a proprietary platform technology (the "Technology") based upon fluorinated sugar mimics for the treatment of diabetes and obesity.

## ITEM 1.3 SELECTED ANNUAL INFORMATION

The following table sets forth selected financial information for the Company for the last three completed financial years ended October 31. This information has been derived from the Company's audited consolidated financial statements for each of those years, and should be read in conjunction with those financial statements and the notes thereto.

	2018	2017	2016
Total revenue	1,278,695	5,468	360,500
Loss:			
In total	1,257,731	4,460,394	2,974,767
On a per share basis *	0.01	0.03	0.02
Total assets	770,511	1,251,038	3,125,047
Total liabilites	3,031,467	3,291,620	1,561,873
Total shareholders' equity	2,260,956	2,040,582	1,563,174

<sup>\*</sup> Basic and fully diluted

# ITEM 1.4 RESULTS OF ANNUAL OPERATIONS

# **Financial Analysis**

# Year 2018 compared to 2017

The loss in fiscal 2018 was \$1,273,246 compared to \$4,460,394 in fiscal 2017. The decrease in loss was driven primarily by revenue. Revenue increased by \$1,273,227 in fiscal 2018 to \$1,278,695 compared to \$5,468 in fiscal 2017 due to a milestone payment received with respect to the licensing agreement entered with Wanbang Biopharmaceuticals. Wages, salaries and benefits expenses decreased by \$124,314 in fiscal 2018 to \$189,014 compared to \$313,328 in fiscal 2017. Research expenses decreased by \$51,744 due to the decrease in general research costs in TFChem. Rental expenses decreased by \$52,024 in fiscal 2018 to \$11,729 compared to \$63,753 in fiscal 2017. Legal fees increased by \$16,942 due to more financing activities in relation to the business development. Finance expenses increased by \$81,208 due to the Company issued more convertible notes and borrowed more short-term loan, as result, more interest expenses incurred in fiscal 2018. There is no impairment loss incurred in year 2018 compared to 1,924,547 in fiscal year 2017, due to the recoverable value of long-term assets is less than the carrying value.

# Year 2017 compared to 2016

The loss in fiscal 2017 was \$4,460,394 compared to \$2,974,767 in fiscal 2016. The increase in loss was driven primarily by impairment for long term assets. Impairment loss increased by 1,943,798 in fiscal year 2017 compared to \$nil in fiscal year 2016 due to the recoverable value of long term assets is less than the carrying value. Share-based payment expenses decreased by \$164,008 in fiscal 2017 to \$112,772 compared to \$276,780 in fiscal 2016. In fiscal 2017, 2,400,000 stock options were granted to directors, officers and consultants compared to 3,250,000 in fiscal 2016. Research expenses decreased by \$305,817 due to the decrease in general research costs including rental costs, maintenance and repairs in TFChem. Consulting fees decreased by \$240,676 due to less consulting activities in relation to the business development. Finance expenses increased by \$105,437 due to the Company issued more convertible notes more interest expenses incurred in fiscal 2017.

## ITEM 1.5 SUMMARY OF CONSOLIDATED QUARTERLY RESULTS

The following table shows selected financial information for the eight most recently completed quarters:

	Jan 31	Oct 31	July 31	April 30	Jan 31	Oct 31	July 31	April 30
	2019	2018	2018	2018	2018	2017	2017	2017
	\$	\$	\$	\$	\$	\$	\$	\$
Total Revenues	64,500	126,778	586,361	3,378	562,178	2,052	2274	499
Net Loss	(581,507)	(630,549)	105,292	(614,615)	(117,859)	2,569,486	624,584	701,317
Loss per Share	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01
Cash	60,287	339,076	579,715	159,210	700,087	272,274	86,356	93,105
Total Assets	482,100	770,511	1,344,731	899,251	1,161,843	1,251,038	2,742,327	2,735,321
Long Term Debt	1,151,249	956,040	1,050,665	1,128,706	1,169,377	1,206,266	1,994,198	1,446,118

#### ITEM 1.6 LIQUIDITY

During the three months ended January 31, 2019, the Company incurred a net loss after taxes of \$581,507 as compared with \$117,859 for the same period in 2018. As of January 31, 2019, the Company had an accumulated deficit of \$27,391,637 (October 31, 2018: \$26,810,130) and working deficit of \$1,467,341 (October 31, 2018: \$1,085,782).

Management believes that its existing cash resources, together with funds obtained from share issuances, are adequate for the total amount of planned research program. The Company's ability to continue as a going concern is dependent upon its ability to obtain the necessary financing to meet its obligations and repay its liabilities arising from normal business operations.

# **Operating Activities**

Cash outflow from operating activities was \$272,483 for the three months ended January 31, 2019 compared to cash inflow of \$151,307 for the same period in 2018.

## **Financing Activities**

Financing activities in the three months ended January 31, 2019 was cash outflow of \$9,112 (2018: cash inflow of \$275,177), representing cash paid for the previous loans.

## ITEM 1.7 CAPITAL RESOURCES

## **Working Capital**

O 1		
	As At	As At
	January 31, 2018	October 31, 2018
Current assets	\$ 482,100	\$ 770,510
Current liabilities	1,949,441	1,856,292
Working deficit	\$ (1,467,341)	\$ (1,085,782))

#### Warrants

A summary of warrant activities is as follows:

				Weighted average
			Weighted	remaining
	Number of	averag	ge exercise	contractual life
	Warrants		price	(year)
Balance at October 31, 2017	15,157,784	\$	0.23	0.67
Warrants expired	(8,850,700)		0.20	-
Warrants granted exercisable on or before October 16, 2021	7,095,100		0.18	2.71
Broker warrants granted exercisable on or before October 16, 2021	95,320		0.18	2.71
Balance at October 31, 2018 and January 31, 2019	13,497,504	\$	0.23	1.72

At January 31, 2019, the warrants outstanding and exercisable were as follows:

			Number of Warrants as at
Expiry Date	Exerc	cise Price	January 31, 2019
May 11, 2019	\$	0.30	2,073,750
October 26, 2019	\$	0.25	4,233,334
October 16, 2021	\$	0.18	7,095,100
October 16, 2021	\$	0.18	95,320
			13,497,504

# **Stock Options**

At January 31, 2019, the stock options outstanding and exercisable were as follows:

					Expired/		
		Number of	Granted	Exercised	Cancelled	Number of	Number of Options
	Exercise	Options as at	During the	During the	During the	Options as at	Exercisable as at
Expiry Date	Price	October 31, 2018	Period	Period	Period	January 31, 2019	January 31, 2019
November 22, 2018	\$0.15	1,100,000	-	-	(1,100,000)	-	-
April 2, 2019	\$0.10	800,000	-	-	-	800,000	800,000
April 25, 2019	\$0.11	750,000	-	-	-	750,000	750,000
August 31, 2019	\$0.15	400,000	-	-	-	400,000	400,000
February 25, 2020	\$0.15	300,000	-	-	(300,000)	-	-
June 21, 2021	\$0.20	300,000	-	-	(100,000)	200,000	200,000
November 3, 2021	\$0.15	400,000	-	-	-	400,000	400,000
January 10, 2022	\$0.18	100,000	-	-	-	100,000	100,000
September 26, 2022	\$0.15	1,300,000	-	-	-	1,300,000	1,300,000
June 26, 2025	\$0.16	3,300,000	-	-	-	3,300,000	3,300,000
September 21, 2026	\$0.20	900,000	-	-	-	900,000	900,000
November 20, 2022	\$0.15	500,000	-	-	-	500,000	500,000
January 10, 2023	\$0.18	100,000	-	-	-	100,000	100,000
November 20, 2027	\$0.15	1,450,000	-	-	-	1,450,000	1,450,000
		11,700,000	-	-	(1,500,000)	10,200,000	10,200,000

The weighted average contractual life remaining of all stock options as at January 31, 2018 is 4.93 years (2018: 4.61 years). During the period ended January 31, 2019, no stock options were granted. The fair value of the options granted was estimated using the Black-Scholes option pricing model with the following estimated assumptions:

	2018
Risk-free interest rate	1.46% to 1.88%
Dividend yield	0%
Volatility	66% to 68%
Expected life	1.44 to 2.5 years
Share price of grant date	\$0.11 to \$0.13

For the period ended January 31, 2018, share-based compensation in the amount of \$nil (2018 - \$78,942) was recognized in the Company's consolidated statements of loss and comprehensive loss.

The Company's stock option plan is administered by the board of directors in accordance with Exchange requirements summarized below.

- (i) maximum available for grant is up to 10% of the Company's issued shares outstanding at any one time:
- (ii) grant price and exercise price may not be less than the discounted market price of the shares at the time of grant, as permitted by Exchange policy;
- (iii) non-transferable, vesting schedule subject to Board discretion when granted and exercisable up to 5 years from grant date;
- (iv) eligibility includes employees, directors, officers and consultants of the Company subject to a 5% limitation on options granted annually to any one individual director or officer and 2% to any one consultant:

(v) exercisable up to 90 days following cessation of the optionee's position with the Company. If the cessation of office, directorship or consulting arrangement was due to death, the option may be exercised within a maximum period of one year after death, subject to expiry date of such option.

## Disclosure of Outstanding Share Capital

The following is a breakdown of the share capital of the Company, on an annual basis as well as at the date of this report:

	March 28, 2019	<b>January 31, 2019</b>	October 31, 2018
Common shares	198,560,982	179,825,982	179,325,982
Stock Options	10,600,000	10,200,000	11,600,000
Warrants	31,953,864	13,497,504	13,497,504
Fully Diluted Shares	241,114,846	203,523,486	204,423,486

For additional details of outstanding share capital, refer to the unaudited condensed interim consolidated financial statements for the three months ended January 31, 2019.

#### ITEM 1.8 OFF-BALANCE SHEET ARRANGEMENTS

There are no off-balance sheet agreements.

#### ITEM 1.9 RELATED PARTY TRANSACTIONS

Related parties and related party transactions impacting the accompanying financial statements are summarized below and include transactions with the following individuals and entities:

## Key management personnel:

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. The Company has determined that key management personnel consist of executive and non-executive members of the Company's Board of Directors and corporate officers.

During three months ended January 31, 2019 and 2018, the Company incurred the following expenses to officers or directors of the Company or companies with common directors:

	2019	2018
	\$	\$
Management fees/bonus (a)	36,000	36,000
Accounting fees (b)	30,000	30,000
Share-based payments (f)	-	95,195
Total	66,000	154,575

- (a) For the period ended January 31, 2019, amount of \$36,000 (2018: \$36,000) management fee was paid/incurred to Howard Verrico, for acting as CEO, secretary and director.
- (b) For the period ended January 31, 2019, amount of \$30,000 (2018: \$30,000) accounting fee was paid/incurred to Christopher Hopton, for acting as CFO.
- (c) For the period ended January 31, 2019, nil (2018: nil) stock options were granted to management and directors and amount of \$95,195 (2018: \$nil) share-based payments was recorded.

As of January 31, 2019, \$66,000 (2018-\$nil) balance is owing to related parties.

These transactions are in the normal course of operations and have been valued in these consolidated financial statements at the exchange amount which is the amount of consideration established and agreed to by the related parties.

ITEM 1.10 QUARTERLY RESULTS

Results for the three months ended January 31, 2019 and 2018 are as follows:

	Quarters Ended January 31			nuary 31
		2019		2018
Revenue		64,500	\$	562,178
Expenses				
Research expenses		241,153		232,990
Consulting fees		144,288		45,000
Office and administration		53,731		58,739
Accounting and audit fees		33,000		58,316
Wages, salaries and benefits		29,854		46,470
Management fees		36,000		41,000
Travel and entertainment		5,897		9,497
Rental expenses		1,449		2,837
Investor relations		56,229		15,500
Legal fees		1,115		36,743
Filing fees and transfer agent fees		1,420		4,239
Management conferences and meetings		-		1,082
Exchange gain/loss		9,664		24,618
Share-based payments		-		78,942
Other expense (revenue)		-		(25,798)
Impairment for long term assets		-		-
Finance expense		36,190		46,519
Finance (income)		-		(107)
Income taxes recovery		(3,983)		3,450
Net income (loss) for the quarter	\$	(581,507)	\$	(117,859)

The loss in the quarter ended January 31, 2019 was \$581,507 compared to \$117,859 for the same period in 2018. The increase of the net loss is mainly due to the Company received the revenue from Wanbang in 2018.

A breakdown of material components of expensed research and development costs for the quarters ended January 31, 2019 and 2018 as follows:

	Three Month	ıuary 31	
	2019		2018
Wages and social charges	\$ 208,650	\$	223,772
Patent costs	-		15,323
Sub-contracting	24,413		12,473
Small equipment	12,093		15,469
Rental costs	29,933		31,212
Maintenance and repairs	19,336		16,600
Fees	7,707		(4,079)
Government grants	-		1,705
Tax credit for R&D expenses	(60,979)		(79,485)
Total	\$ 241,153	\$	232,990

# ITEM 1.11 SUBSEQUENT EVENTS

Subsequent to period ended January 31, 2019, the Company borrowed \$40,000 short term loans from a director. The loans are non-interest bearing and due on demand.

Subsequent to period ended January 31, 2019, the Company closed a non-brokered private placement for gross proceeds of \$1,783,500. The private placement consists of 17,835,000 units at \$0.10 per Unit. Each Unit consists of one common share and one transferable share purchase warrant, each whole warrant is exercisable into one additional common share of the Company for a period of 3 years from the date of issue at a price of \$0.16 per share. The Company compensated finders by cash of \$62,136 and 621,360 warrants in connection with the private placements.

Subsequent to period ended January 31, 2019, the Company granted incentive stock options under its Stock Option Plan to directors and officers of the Company for the purchase of up to 700,000 common shares at a price of \$0.12 per share. Directors will receive 400,000 options at \$0.12 with a 5-year expiry and Officers will receive 300,000 options at \$0.12 with a 10 year expiry.

In year 2018, the Company entered into an unsecured loan agreement with a third party for a total amount of \$200,000. The loan and accrued interest will mature in 90 days from the date of issuance and 400,000 shares of the Company will be issued to the lender as interest. \$36,000 interest expenses have been accrued as at October 31, 2018. The principal has been paid during the period. The 400,000 shares were issued as interest subsequent to year end.

During the period ended January 31, 2019, the Company borrowed \$200,000 short term loans from a director. The loans are non-interest bearing and due on demand. Subsequently, \$200,000 of this advance was repaid.

## ITEM 1.12 SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies and recently released IFRS accounting standards with potential effect on the Company are both detailed in Note 3 of the condensed interim consolidated financial statements for the three months ended January 31, 2019 contained herein.

#### ITEM 1.13 NEWLY ADOPTED ACCOUNTING POLICIES AND RECENTLY ISSUED

## ACCOUNTING PRONOUNCEMENTS

The newly adopted accounting policy with potential effect on the Company is detailed in Note 3 of the condensed interim consolidated financial statements for the three months ended January 31, 2019 contained herein.

The following standards and interpretations have not been in effect as they will only be applied for the first time in future periods. They may result in consequential changes to the accounting policies and other note disclosures. The Company has not yet assessed the impacts of the standards or determined whether it will adopt the standards early.

#### **IFRS 16 Leases**

On January 13, 2016, the International Accounting Standards Board published a new standard, IFRS 16, Leases, eliminating the current dual accounting model for lessees, which distinguishes between on-balance sheet finance leases and off-balance sheet operating leases. Under the new standard, a lease becomes an on-balance sheet liability that attracts interest, together with a new right-of-use asset. In addition, lessees will recognize a front-loaded pattern of expense for most leases, even when cash rentals are constant. IFRS 16 is effective for reporting periods beginning on or after January 1, 2019, with early application permitted.

Other new standards or amendments are either not applicable or not expected to have a significant impact on the Company's consolidated financial statements.

#### ITEM 1.14 OTHER

Management's Responsibility for Financial Statements

The information provided in this MD&A, including the unaudited condensed interim consolidated financial statements for the period ended January 31, 2019, is the responsibility of management. In the preparation of these statements, estimates are sometimes necessary to make a determination of future values for certain assets or liabilities. Management believes such estimates have been based on careful judgements which have been properly reflected in these audited consolidated financial statements.

#### **Disclosure Controls and Procedures**

As at January 31, 2019 disclosure controls and procedures ("DCP") have been designed by the Company to provide reasonable assurance that information required to be disclosed by the Company in its filings under Canadian securities legislation is recorded, processed, summarized and reported in a timely manner. The system of DCP includes, among other things, the Company's Corporate Disclosure and Whistleblower policies and Code of Conduct, the review and approval procedures of the Disclosure Committee and continuous review and monitoring procedures by senior management.

#### Internal controls over financial reporting

As at January 31, 2019 management has designed internal controls over financial reporting ("ICFR") within the Company in order to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Due to its inherent limitations, ICFR may not prevent or detect misstatements. In addition, the design of any system of control is based upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all future events, no matter how remote, or that the degree of compliance with the policies or procedures may not deteriorate. Accordingly, even effective ICFR can only provide reasonable, not absolute, assurance of achieving the control objectives for financial reporting.

The Company's CEO and CFO have evaluated the disclosure controls and procedures and concluded they are operating effectively notwithstanding the Company has a limited staff. As a result, internal controls which rely on segregation of duties in many cases are not possible. This inherent weakness is substantially overcome by the Company's heavy reliance on a rigorous senior management review and approval process.

## **Business and Regulatory Risks**

There is no assurance the Company's research and development program will produce commercially viable products or treatments, and additional research and development will be required before a final evaluation of the economic feasibility of the licensed technology can be determined. Even if the proposed research and development is completed and identification of commercially viable products and/or treatments is successful, significant funds must be spent on further studies before determining if the products and/or treatments are commercially viable or not.

Regulatory risks include the possible delays in getting regulatory approval to the transactions that the Board of Directors believe to be in the best interest of the Company, and also includes the ever increasing complexity of financial reporting requirements and related costs of oversight and statutory filings which must be met in order to maintain the Company's exchange listing.

# **Forward-looking Statements**

The information in this MD&A contains forward-looking statements which are subject to certain risks and uncertainties that could cause actual results to differ significantly from those included in the forward-looking statements.