

**SIRONA BIOCHEM CORP.**

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

**PERIOD ENDED JULY 31, 2018**

**SIRONA BIOCHEM CORP.**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**For the Nine Months Period Ended July 31, 2018**

**ITEM 1.1 INTRODUCTION**

The following Management Discussion and Analysis ("MD&A") was prepared as of June 19, 2018 and should be read in conjunction with the unaudited condensed interim consolidated financial statements for the period ended July 31, 2018 and the audited consolidated financial statements and related notes for the year ended October 31, 2017.

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](http://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.

	2017	2016	2015
Total revenue	5,468	360,500	7,995
Loss:			
In total	4,460,394	2,974,767	3,659,898
On a per share basis *	(0.03)	(0.02)	(0.03)
Total assets	1,251,038	3,125,047	4,147,460
Total liabilities	3,291,620	1,561,873	2,001,198
Total shareholders' equity	2,040,582	1,563,174	2,146,262

\* *Basic and fully diluted*

## ITEM 1.4 RESULTS OF ANNUAL OPERATIONS

### Financial Analysis

#### 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.

#### Year 2016 compared to 2015

The loss in fiscal 2016 was \$2,974,767 compared to \$3,659,898 in fiscal 2015. The decrease in loss was driven primarily by revenue. Revenue increased by \$352,505 in fiscal 2016 to \$360,500 compared to \$7,995 in fiscal 2015 due to a milestone payment received with respect to the licensing agreement entered with Wanbang Biopharmaceuticals. Share-based payment expenses decreased by \$274,421 in fiscal 2016 to \$276,780 compared to \$551,201 in fiscal 2015. In fiscal 2016, 3,250,000 stock options were granted to directors, officers and consultants compared to 7,505,000 in fiscal 2015. Research expenses decreased by \$86,829 due to the decrease in general research costs including rental costs, maintenance and repairs in TFChem. Consulting fees increased by \$70,468 due to more consulting activities in relation to the business development.

## ITEM 1.5 SUMMARY OF CONSOLIDATED QUARTERLY RESULTS

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

	July 31 2018 \$	April 30 2018 \$	January 31 2018 \$	October 31 2017 \$	July 31 2017 \$	April 30 2017 \$	January 31 2017 \$	October 31 2016 \$
Total Revenues	586,361	3,378	562,178	2,052	2,274	499	643	(38,488)
Net Loss	(105,292)	614,615	117,859	2,569,486	624,584	701,317	565,007	893,476
Loss per Share	0.00	0.01	0.00	0.02	0.00	0.01	0.00	0.01
Cash	579,715	159,210	700,087	272,274	86,356	93,105	329,736	613,158
Total Assets	1,344,731	899,251	1,161,843	1,251,038	2,742,327	2,735,321	2,740,647	3,125,047
Long Term Debt	1,050,665	1,128,706	1,169,377	1,260,266	1,994,198	1,446,118	975,635	725,911

## ITEM 1.6 LIQUIDITY

During the nine months ended July 31, 2018, the Company incurred a net loss after taxes of \$627,182 as compared with \$1,890,908 for the same period in 2017. As of July 31, 2018, the Company had an accumulated deficit of \$26,164,066 (October 31, 2017: \$25,536,884) and working deficit of \$1,090,654 (October 31, 2017: \$2,094).

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 in operating activities was \$252,623 for the nine months ended July 31, 2018 compared to \$1,1880,684 of funds used for the same period in 2017.

#### Financing Activities

Financing activities in the nine months ended July 31, 2018 was a source of funds of \$557,866 (2017: \$1,461,802), representing cash proceeds from options exercised and new loans.

#### Investing Activities

During the nine months ended July 31, 2018 investing activities amounted to \$nil (2017: \$106,907) in relation to the acquisition of intangible assets.

### ITEM 1.7 CAPITAL RESOURCES

#### Working Capital

	As At July 31, 2018	As At October 31, 2017
Current assets	\$ 1,344,731	\$ 1,251,038
Current liabilities	2,435,385	1,253,132
Working deficit	<u>\$ (1,090,654)</u>	<u>\$ (2,094)</u>

#### Warrants

A summary of warrant activities is as follows:

	Number of Warrants	Weighted average exercise price	Weighted average remaining contractual life (year)
Balance at October 31, 2016	10,939,720	\$ 0.22	0.57
Warrants expired	(15,200)	0.20	-
Warrants granted exercisable on or before October 26, 2019	4,233,334	0.25	1.99
Balance at October 31, 2017	15,157,854	\$ 0.23	0.67
Warrants expired	(8,850,700)	0.25	-
Balance at July 31, 2018	<u>6,307,154</u>	<u>\$ 0.27</u>	<u>1.09</u>

At July 31, 2018, the warrants outstanding and exercisable were as follows:

Expiry Date	Exercise Price	Number of Warrants as at July 31, 2018
May 11, 2019 *	\$ 0.30	2,073,820
October 26, 2019	\$ 0.25	4,233,334
		<u>6,307,154</u>

\*During the period ended July 31, 2018, the expiry date is extended from May 11, 2018 to May 11, 2019.

## Stock Options

At July 31, 2018, the stock options outstanding and exercisable were as follows:

Expiry Date	Exercise Price	Number of Options as at October 31, 2017	Granted During the Period	Exercised During the Period	Expired/Cancelled During the Period	Number of Options as at July 31, 2018	Number of Options Exercisable as at July 31, 2018
November 25, 2017	\$0.19	900,000	-	-	(900,000)	-	-
December 17, 2017	\$0.10	50,000	-	(50,000)	-	-	-
January 31, 2018	\$0.19	300,000	-	-	(300,000)	-	-
April 11, 2018	\$0.195	50,000	-	-	(50,000)	-	-
June 25, 2018	\$0.15	700,000	-	-	(700,000)	-	-
August 25, 2018	\$0.16	100,000	-	-	-	100,000	100,000 *
August 31, 2018	\$0.15	400,000	-	-	-	400,000	400,000 *
September 21, 2018	\$0.20	500,000	-	-	-	500,000	500,000 *
November 22, 2018	\$0.15	1,100,000	-	-	-	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
May 31, 2019	\$0.15	-	400,000	(200,000)	(200,000)	-	-
February 25, 2020	\$0.15	300,000	-	-	-	300,000	300,000
March 21, 2020	\$0.10	-	1,950,000	(1,950,000)	-	-	-
June 21, 2021	\$0.20	400,000	-	-	-	400,000	400,000
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
November 20, 2027	\$0.15	-	1,450,000	-	-	1,450,000	1,450,000
		12,350,000	4,300,000	(2,200,000)	(2,150,000)	12,300,000	12,300,000

\*the options expired subsequent to July 31, 2018

The weighted average contractual life remaining of all stock options as at July 31, 2018 is 4.55 years (October 31, 2017: 3.86 years). During the nine months period ended July 31, 2018, 4,300,000 stock options were granted with a weighted average exercise price of \$0.13. The granted stock options' exercise price is greater than the market price at the date of grant. 2,200,000 stock options were exercised and 2,150,000 stock options were expired during the nine months period ended July 31, 2018.

The fair value of the options granted was estimated using the Black-Scholes option pricing model with the following estimated assumptions:

	2018	2017
Risk-free interest rate	1.46%	0.56% to 1.59%
Dividend yield	0%	0%
Volatility	63%	67% to 76%
Expected life	1.5	0.375 to 2.5 years

For the period July 31, 2018, share-based compensation in the amount of \$78,942 (July 31, 2017 - \$8,413) 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.

**g) Escrow Shares**

As at July 31, 2018 and October 31, 2017, there were nil common shares held in escrow subject to Section 11(5) of Exchange Policy 2.4.

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:

	<u>September 24, 2018</u>	<u>April 30, 2018</u>	<u>October 31, 2017</u>
Common Shares	172,230,882	172,230,882	170,030,882
Stock Options	12,300,000	13,000,000	12,350,000
Warrants	6,307,154	6,307,154	15,157,854
Fully Diluted Shares	190,838,036	191,538,036	197,538,736

For additional details of outstanding share capital, refer to the unaudited condensed interim consolidated financial statements for the nine months ended July 31, 2018.

**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 the nine months ended July 31, 2018 and 2017, the Company incurred the following expenses to officers or directors of the Company or companies with common directors:

<b>Related party transactions</b>	<b>Nine months ended July 31,</b>	
	<b>2018</b>	<b>2017</b>
	<b>\$</b>	<b>\$</b>
Management fees (Howard Verrico, for acting as CEO)	108,000	108,000
Accounting fees (Christopher Hopton, for acting as CFO)	99,000	99,000
Share-based payments	85,575	-
<b>Total</b>	<b>223,575</b>	<b>207,000</b>

As of July 31, 2018, \$48,000 (October 31, 2017-\$Nil) balance is owing to related parties, which is non-interest bearing and due on demand.

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 July 31, 2018 and 2017 are as follows:

	<i>Quarters Ended July 31</i>	
	<i>2018</i>	<i>2017</i>
<b>Revenue</b>	\$ 586,361	\$ 2,274
<b>Expenses</b>		
Research expenses	214,393	269,734
Consulting fees	3,882	63,166
Office and administration	59,982	47,798
Accounting and audit fees	63,463	42,211
Wages, salaries and benefits	47,176	68,376
Management fees	49,000	36,000
Travel and entertainment	3,345	7,926
Rental expenses	2,799	15,932
Investor relations	14,327	15,240
Legal fees	1,051	10,171
Filing fees and transfer agent fees	1,487	5,520
Exchange gain/loss	14,155	1,976
Share-based payments	-	19,328
Other expense (revenue)	(4,341)	(7,408)
Finance (income)	(32,535)	(5,856)
Finance expense	39,395	36,744
Income taxes recovery	3,490	-
<b>Net income (loss) for the quarter</b>	<b>\$ 105,292</b>	<b>\$ (624,584)</b>

The income in the quarter ended July 31, 2018 was \$105,292 compared to the loss of \$624,584 for the same period in 2017. The decrease of the net loss is mainly due to the revenue generated during the quarter ended July 31, 2018.



A breakdown of material components of expensed research and development costs for the nine months ended July 31, 2018 and 2017 as follows:

	<i>Nine Months Ended July 31</i>	
	<i>2018</i>	<i>2017</i>
Wages and social charges	\$ 691,326	\$ 682,656
Patent costs	30,304	-
Sub-contracting	34,790	37,618
Small equipment	73,859	63,498
Rental costs	92,763	81,627
Maintenance and repairs	48,668	24,623
Fees	12,863	28,907
Depreciation and amortization	-	111,644
Government grants	(6,385)	-
Tax credit for R&D expenses	(249,012)	(292,996)
Testing	-	146
<b>Total</b>	<b>\$ 729,176</b>	<b>\$ 737,723</b>

#### **ITEM 1.11 SUBSEQUENT EVENTS**

None.

#### **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 nine months ended July 31, 2018 contained herein.

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

Accounting standards not yet adopted

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 July 31, 2018, 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 July 31, 2018 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 July 31, 2018 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.