

## **MedMira Inc.**

Management's Discussion & Analysis  
For the year ended July 31, 2018

## Forward looking statements

This document contains forward looking statements, such as statements regarding future sales opportunities in various global regions and financing initiatives that are based on current expectations of management. These statements involve uncertainties and risks, including MedMira Inc.'s ("MedMira" or the "Company") ability to obtain and/or access additional financing with acceptable terms, and delays in anticipated product sales. Such forward-looking statements should be given careful consideration and undue reliance should not be placed on these statements.

This MD&A contains statements that may constitute forward-looking statements about the Company's objectives, strategies, financial condition, results of operations, cash flows and businesses. These statements are "forward-looking" because they are based on current expectations, estimates, assumptions, risks and uncertainties. These forward-looking statements are typically identified by future or conditional verbs such as "outlook", "believe", "anticipate", "estimate", "project", "expect", "intend", "plan", and terms and expressions of similar import. Such forward-looking statements are subject to a number of risks and uncertainties that include, but are not limited to: cyclical downturn; competitive pressures; dealing with business and political systems in a variety of jurisdictions; repatriation of funds or property in other jurisdictions; payment of taxes in various jurisdictions; exposure to currency movements; inadequate or failed internal processes, people or systems or from external events; dependence on key customers; safety performance; expansion and acquisition strategy; regulatory and legal risk; corruption, bribery or fraud by employees or agents; extreme weather conditions and the impact of natural or other disasters; shortage of specialized skills and cost of labour increases; equipment and parts availability, reputational risk; cybersecurity risk; market price and dilution of common shares and environmental regulation risk. Actual results could be materially different from expectations if known or unknown risks affect the business, or if estimates or assumptions turn out to be inaccurate. The Company does not guarantee that any forward-looking statement will materialize and, accordingly, the reader is cautioned not to place reliance on these forward-looking statements. The Company disclaims any intention and assumes no obligation to update any forward-looking statement, even if new information becomes available, as a result of future events or for any other reasons, except in accordance with applicable securities laws.

## Introduction

The Management's Discussion and Analysis (MD&A) was issued and approved by the Board of Directors on March 28, 2019. The MD&A for the year ended July 31, 2018 has been prepared to help investors understand the financial performance of MedMira in the broader context of the Company's strategic direction, the risk and opportunities as understood by management, and the key metrics that are relevant to the Company's performance. The Audit Committee of the Board of Directors has reviewed this document and all other publicly reported financial information for integrity, usefulness, reliability and consistency.

This document should be read in conjunction with the audited consolidated financial statements for the year ended July 31, 2018. Annual references are to the Company's fiscal years, which end on July 31. All amounts are expressed in Canadian dollars (CAD) unless otherwise noted.

Additional information about MedMira, this document, and the related audited financial statements ended July 31, 2018 can be viewed on the Company's website at [www.medmira.com](http://www.medmira.com) and are available on SEDAR at [www.sedar.com](http://www.sedar.com).

The preparation of the MD&A may require management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements and the reported amount of revenue and expenses during the reporting period. Management bases estimates and judgments on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities. Actual results may differ from these estimates under different

assumptions or conditions. Management believes the accounting policies, outlined in the Significant Accounting Policies section of its July 31, 2018 consolidated financial statements, affect its more significant judgments and estimates used in the preparation of its consolidated financial statements.

## About MedMira

MedMira is a biotechnology company engaged in the development and commercialization of rapid diagnostics and technology platforms. The Company is headquartered in Halifax, Nova Scotia, Canada and is listed on the TSX Venture Exchange (TSX-V) under the symbol MIR.

The patented MedMira Rapid Vertical Flow (RVF) Technology™ platform is the basis for the Company's line of rapid tests. Diagnostic applications based on this technology are highly accurate, easy-to-use, and produce instant results – a strong advantage over most other rapid diagnostics on the market today. These features are enhanced further with ability to deliver multiplex results on one test device with just one drop of specimen. The Company has created a new generation of rapid tests that are based on the need to provide immediate answers without increasing costs.

MedMira's technology platform and growing portfolio of diagnostic tools demonstrate excellence in performance and quality in the highly competitive diagnostics industry. More than \$30 million has been invested in perfecting MedMira's core technology, which has proven itself time and time again with its excellent clinical performance and its success in rigorous evaluations and inspections, leading to regulatory approvals for rapid diagnostic solutions in the United States (U.S. Food and Drug Administration), Canada (Health Canada), the notified body in the European Union (CE Mark), and China (CFDA) and in a number of countries in Latin America, Africa, and Asia. The Company's quality system is ISO 9001 and ISO 13485 certified.

MedMira sells its rapid tests through a network of medical distributors and strategic business development partners to customers in all sectors of the healthcare industry, including laboratories, hospitals, point-of-care clinics, governments, aid organizations, and public health agencies.

In addition to clinical diagnostics, the Company offers the Miriad™ product line to create new opportunities in the high value technology licensing sector. This business line allows the Company to monetize its award-winning technology and core capabilities, including R&D, product development, and regulatory proficiency. Miriad provides access to MedMira's RVF Technology for researchers, developers, and biotech companies on a license basis to facilitate the creation of new rapid tests or the transition of existing tests to this unique platform. Infiltrating new and different sectors of the diagnostic industry, such as veterinary and environmental, with the Company's technology, enables MedMira to build a higher degree of global awareness, generate new revenue streams, and provide a superior diagnostic platform to the market.

## Intellectual property

The Company strives to protect its intellectual property in established and emerging markets around the world as warranted. MedMira's intellectual property portfolio for its Rapid Vertical Flow Technology and the methodology behind its rapid diagnostics includes the following:

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<i>Patent #</i>	<i>Title</i>	<i>Jurisdiction</i>
9,164,087	Rapid Diagnostic Device, assay and multifunctional Buffer	United States
9,086,410	Downward or vertical flow diagnostic device and assay	United States
8,025,850	Rapid Diagnostic Device, Assay and Multifunctional Buffer	United States

8,287,817	Rapid Diagnostic Device, Assay and Multifunctional Buffer	United States
8,586,375	Rapid Diagnostic Device, Assay and Multifunctional Buffer	United States
7,531,362	Rapid Diagnostic Device, Assay and Multifunctional Buffer	United States
D706945	Diagnostic Device	United States
D706466	Diagnostic Device	United States
EP1417489	Rapid Diagnostic Device and Assay	Europe
EP1328811	HCV Mosaic Antigen Composition	Europe
ZL02819646.5	Rapid Diagnostic Device and Assay	China
2,493,616	Rapid Diagnostic Device, Assay and Multifunctional Buffer	Canada

The Company has other patents pending patents in the U.S. as well as two design patents in force or pending in eight markets.

The Company's corporate and product brand names are protected by trademarks in the U.S. and Canada.

The Company has recorded an impairment charge in previous fiscal years to write-down its intangible assets to a nominal value. There is no indication at the end of July 31, 2018 that this impairment has been reversed and thus the value of intangible assets on the balance sheet on July 31, 2018 is \$1 (July 31, 2017 - \$1).

## Corporate update

Throughout FY2018, MedMira continued to focus on sustaining and expanding its presence in the U.S. rapid HIV test market as well as the tissue and eye bank vertical with current product lines. The Company is exploring other niches for these products as the U.S. healthcare landscape and the need for rapid testing solutions continues to evolve. In parallel with these ongoing market activities, the Company looked for future expansion opportunities through ongoing development and commercialization initiatives and collaborative projects.

MedMira maintained partnerships within its distribution network, including Cardinal Health, VWR International, and Medline Industries. Through these partnerships the Company engaged with new and existing customers to promote the products and build awareness within the U.S. healthcare and tissue and eye bank market segments. Activities included exploration of new market segments in public health and identification of new opportunities for Reveal G4 and promotion of Miriad screening products in the tissue and eye bank sectors.

In FY2018, MedMira's R&D team sustained and advanced a solid product pipeline with development projects supporting the expansion of the Company's existing product lines. Additionally, the Company continuously sought avenues for ongoing Rapid Vertical Flow Technology platform exploration and innovation.

The Company's, Finance and Operations teams maintained fiscal constraints across all quarters of FY2018, to ensure the Company could support a balanced mix of cash management and investment in short and long term growth through sales and product commercialization.

In the second quarter of FY2018, the Company held its Annual General Meeting of Shareholders where incumbent directors Mr. Hermes Chan and Dr. Shou-Ching Tang were re-elected and Ms. Lili Zhao was elected to the Board. Mr. Marvyn Robar chose not to stand for re-election.

## Financial results

### Basis of preparation and significant accounting policies

The basis of financial statement preparation and the significant accounting policies of MedMira are described in Notes 2 and 3 of the Company's audited consolidated financial statements for the year ended July 31, 2018.

### Selected quarterly information (in thousands of dollars except per share amounts)

<b>Income statement</b>	<b>Q4 2018</b>	<b>Q3 2018</b>	<b>Q2 2018</b>	<b>Q1 2018</b>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q2 2017</b>	<b>Q1 2017</b>
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	172	76	184	143	149	192	194	212
Product royalties	14	-	-	-	-	-	-	-
Cost of sales	(40)	(16)	(42)	(30)	(40)	(76)	(60)	(92)
Gross profit	146	60	142	113	109	116	134	120
Operating expenses	(468)	(572)	(681)	(580)	(480)	(742)	(563)	(827)
Other expenses (gains)	(181)	(145)	(175)	(169)	(186)	(126)	(121)	(94)
Net earnings (loss) before tax	(503)	(657)	(714)	(636)	(557)	(752)	(550)	(801)
<b>Balance sheet</b>	<b>Q4 2018</b>	<b>Q3 2018</b>	<b>Q2 2018</b>	<b>Q1 2018</b>	<b>Q4 2017</b>	<b>Q3 2017</b>	<b>Q2 2017</b>	<b>Q1 2017</b>
	\$	\$	\$	\$	\$	\$	\$	\$
Current assets	272	245	302	551	581	582	674	695
Non-current assets	29	33	46	68	93	117	142	168
Total assets	301	277	348	619	674	699	816	863
Current liabilities	11,699	11,173	10,601	10,158	9,421	8,401	8,218	8,538
Non-current liabilities	-	-	-	-	237	737	286	-
Total liabilities	11,699	11,173	10,601	10,158	9,658	9,138	8,504	8,538
Total shareholders deficiency	(11,398)	(10,896)	(10,253)	(9,539)	(8,984)	(8,439)	(7,688)	(7,675)
Total liabilities and equity	(301)	277	348	619	674	699	816	863
Net earnings (loss) per share	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

This quarterly information is unaudited but has been prepared on the same basis as the annual consolidated financial statements. We discuss the factors that caused our results to vary over the past eight quarters throughout this MD&A. The main highlights are:

- The decrease in revenue of 21% for fiscal 2018 compared to fiscal 2017 is the direct result of the Company's decision to focus on higher profit margin markets. The decrease in operating expenses is a direct result of the decrease in sales coupled with the Company's continued efforts to reduce general and administrative costs.
- The increase in other expenses over the last several quarters is in direct relation to the increased amount of accounts payable and loans payable that the Company is carrying.

## Fourth quarter analysis

	For the three months ended		Better(worse)
	31-Jul-18	31-Jul-17	
	\$	\$	\$
<b>Product</b>			
Product sales	171,582	148,933	22,649
Product royalties	14,011	-	
Product cost of sales	(38,663)	(40,271)	1,608
<b>Gross margin on product</b>	<u>146,930</u>	<u>108,662</u>	<u>24,257</u>
<b>Operating expenses</b>			
Research and development	(74,453)	(29,479)	(44,974)
Sales and marketing	(42,280)	(102,573)	60,293
Other direct costs	(73,679)	(141,009)	67,330
General and administrative	(278,028)	(207,190)	(70,838)
<b>Total operating expenses</b>	<u>(468,440)</u>	<u>(480,251)</u>	<u>11,811</u>
<b>Operating loss</b>	<u>(321,510)</u>	<u>(371,589)</u>	<u>50,079</u>
<b>Non-operating income (expenses)</b>			
Financing	(181,150)	(186,297)	5,147
<b>Net (loss) income</b>	<u>(502,660)</u>	<u>(557,886)</u>	<u>55,226</u>

### Product revenue and gross margin

The Company recorded revenue from product sales in the three months ended July 31, 2018 of \$171,582 as compared to \$148,933 for the same period last year. The 15% increase in revenue compared to Q4 FY2017 was due to Company's anticipated higher sales generated between May and July 2018.

Gross profit on product sales for the three months ended July 31, 2018 was \$146,930 compared to \$108,662 for the same period in 2017. The Company's gross profit increased by 35% in comparison to Q4 FY2018. The Company's gross profit margin in Q4 FY2018 was 79% compared to a gross margin of 73% in the same quarter last financial year. This increase was due to the focus on the high margin U.S. market, which enabled the Company to generate a higher operating contribution amount to the operating results.

### Operating expenses

Total operating expenses decreased by \$11,811 from \$480,251 for the three months ended July 31, 2017 to \$468,440 for the three months ended July 31, 2018.

- Research and development expenses for the three months ended July 31, 2018 were \$74,453 compared to a \$29,479 for the same period in 2017. The increase in research and development expenses are due to a decrease in SR&ED refunds for the year 2018.
- Sales and marketing expenses for the three months ended July 31, 2018 were \$42,280 compared to \$102,573 for the same period in 2017. The decrease of approximately 59% was due to the anticipated low sales cycle in Q3 FY2018.
- Other direct costs for the three months ended July 31, 2018 were \$73,679, compared to \$141,009 for the same period in 2017. This decrease of approximately 48% was due to the lower sales generated and the management's strategy to streamline cost efficiency.
- General and administrative expenses were \$278,028 for the three months ended July 31, 2018, compared to \$207,190

for the same period in 2017. The increase of approximately 34% was in line with management's expectations for this period of the financial year.

*Non-operating expenses*

- Total non-operating expenses were \$181,150 in the three months ended July 31, 2018, compared to \$186,297 during the same period in fiscal year 2017. The decrease of approximately 3% in financing expenses was in line with management's expectation.

**Year to date Analysis**

	For the twelve months ended		Better(worse) \$
	31-Jul-18 \$	31-Jul-17 \$	
<b>Product</b>			
Product sales	574,860	747,344	(172,484)
Product royalties	14,011	-	14,011
Product cost of sales	<u>(127,760)</u>	<u>(269,047)</u>	<u>141,287</u>
<b>Gross margin on product</b>	<u>461,111</u>	<u>478,297</u>	<u>(17,186)</u>
<b>Operating expenses</b>			
Research and development	(522,940)	(292,299)	(230,641)
Sales and marketing	(206,683)	(500,841)	294,158
Other direct costs	(367,463)	(615,400)	247,937
General and administrative	<u>(1,204,322)</u>	<u>(1,202,927)</u>	<u>(1,395)</u>
<b>Total operating expenses</b>	<u>(2,301,408)</u>	<u>(2,611,467)</u>	<u>310,059</u>
<b>Operating loss</b>	<u>(1,840,297)</u>	<u>(2,133,170)</u>	<u>292,873</u>
<b>Non-operating income (expenses)</b>			
Financing	<u>(669,167)</u>	<u>(527,897)</u>	<u>(141,270)</u>
<b>Net (loss) income</b>	<u>(2,509,464)</u>	<u>(2,661,067)</u>	<u>151,603</u>

*Product revenue and gross margin*

The Company recorded revenue from product sales for the year ended July 31, 2018 of \$574,860 as compared to \$747,344 for the same period last year. Gross profit on product sales for the year ended July 31, 2018 was \$461,111 compared to \$478,297 for the same period in 2017. The Company's decreased revenue is directly related to its strategy to focus on high profit margin markets implemented in FY2017. The effect of the Company's strategy is evident with decreased revenue of approximately 21%, the Company's gross margin was 78% for the twelve months ended July 31, 2018 in comparison to a gross profit margin of only 64% for the period ended July 31, 2017.

*Operating expenses*

Total operating expenses decreased by \$310,059 from \$2,611,467 for the year ended July 31, 2017 to \$2,301,408 for the year ended July 31, 2018.

- Research and development expenses for the year ended July 31, 2018 were \$522,940 compared to \$292,299 for the same period in 2017. The increase of approximately 79% in research and development expenses was due to the Company's significant work on new products destined for the U.S. market. In addition, the lower SR&ED refund contributed to the increase of these expenses.

- Sales and marketing expenses for the year end July 31, 2018 were \$206,683 compared to \$500,841 for the same period in 2017. The decrease of approximately 59% in sales and marketing expenses was in line with the management's strategic plan to increase efficiency with focused sales and marketing efforts.
- Other direct costs for the year ended July 31, 2018 were \$367,463, compared to \$615,400 for the same period in 2017. This decrease of approximately 40% was due to the reduction in the Company's overall sales and the management's strategy to streamline costs.
- General and administrative expenses were \$1,204,322 for the year ended July 31, 2018, compared to \$1,202,927 for the same period in 2017. The Company has achieved its goal to keep the general and administrative costs in line with the previous financial year's efforts in this area.

*Non-operating expenses*

- Total non-operating expenses were \$669,167 in the year ended July 31, 2018, compared to \$527,897 during the same period in 2017. The increase of approximately 27% was due to additional short terms loans and accounts payable.

**Geographic information**

The Company organizes and records the sales and distribution of its products based on major geographical territories around the world. The table below provides the three month geographic breakdown of revenue.

	Product and service revenue		Product and service revenue	
	For the three months ended		For the year ended	
	31-Jul-18	31-Jul-17	31-Jul-18	31-Jul-17
	\$	\$	\$	\$
North America	139,383	124,135	477,185	495,248
Latin America and the Caribbean	8,592	9,402	17,734	138,741
Europe	22,295	15,396	48,505	56,603
Asia Pacific	15,323		45,252	56,742
Other	-	-	195	-
<b>Total revenue</b>	<b>185,593</b>	<b>148,933</b>	<b>588,871</b>	<b>747,334</b>

**Liquidity and capital resources**

*Cash and working capital*

The Company had a bank indebtedness of \$13,940 on July 31, 2018 as compared to a cash reserve of \$155,915 on July 31, 2017. The Company's net working capital position as at July 31, 2018 was a deficit of \$11.4 million compared to the July 31, 2017 working capital deficit of \$8.8 million. The Company has incurred operational losses and negative cash flows on a cumulative basis since inception. For the year ended July 31, 2018, the Company incurred a net loss from operating activities of approximately \$1.8 million and negative cash flows from operations of \$0.8 million, compared to a net loss from operations of \$2.1 million and negative cash flows from operations of \$1.9 million for the same period in 2017. The following table is a list of commitments the Company has:

	Total \$	Less than 1 year \$	1 to 3 years \$	4 to 5 years \$	After 5 years \$
Debt	7,569,607	7,569,607	-	-	-
Bank indebtedness	13,940	13,940			
Accounts payable and accrued liabilities	4,007,217	4,007,217	-	-	-
Royalty provision	82,000	82,000		-	-
Operating leases	1,287,274	242,851	510,463	511,472	22,488
<b>Total debt</b>	<b>12,960,038</b>	<b>11,915,615</b>	<b>510,463</b>	<b>511,472</b>	<b>22,488</b>

#### *Operating activities*

MedMira incurred negative cash flows from operations of approximately \$0.8 million for the year ended July 31, 2018, compared to negative cash flows of \$1.9 million for the same period in 2017. The reason for this variance was mainly due to the increase in trade accounts payables and the receipt of current tax assets compared to FY2017.

#### *Financing activities*

Cash inflows from financing activities were \$0.6 million for the year ended July 31, 2018, compared to cash inflow of \$2.0 million for the same period in 2017.

#### *Investing activities*

Cash outflows from investments were \$0.003 for the year ended July 31, 2018, compared to cash outflows of \$0 for the same period in 2017.

#### **Debt**

As at July 31, 2018, the Company had loans payable with a carrying value of \$7.6 million compared to \$6.9 million at July 31, 2017. The increase in the carrying value of loans payable from July 31, 2017 to July 31, 2018 is due to additional short term loans. During the past 18 months, the Company was in negotiations with all of its debt holders to ensure realistic debt repayment plans, which shall enable the Company to use its working capital for its growth and ensure its future stability. As these negotiations are ongoing, the Company must record these as in default until final agreements have been signed. The amount of all loans in default due to non-payment of principal and interest was \$7.4 million and therefore shows as a current liability on the balance sheet.

Further discussion on liquidity and capital resources can be found in this document in the Liquidity Risk section, Risk and Uncertainties section of this document and in Notes 2 and 11 of the Company's consolidated financial statements for the year ended July 31, 2018 and the audited consolidated financial statements for the year ended July 31, 2017.

#### **Equity/Shares**

The Company is authorized to issue an unlimited number of common shares without par value. During the year end July 31, 2018, the Company issued no common shares. The number of issued and outstanding common shares on July 31, 2018 was 658,364,320. The Company is also authorized to issue an unlimited number of Series A preferred shares redeemable at \$0.01 per share after March 31, 2010, convertible into an equal number of common shares upon the Company meeting

certain milestones. There were 5,000,000 Series A preferred shares issued and outstanding on July 31, 2018.

The Company had 2,287,500 outstanding stock options on July 31, 2018. The outstanding stock options have a weighted average exercise price of ranging between \$0.05 - \$0.10 per share and a weighted average remaining term of 1.32 years. The number of outstanding warrants on July 31, 2018 was 144,000,000. The outstanding warrants have a weighted average exercise price of \$0.10 per share.

### **Off balance sheet arrangements**

The Company was not party to any off balance sheet arrangements as of July 31, 2018.

### **Financial instruments – fair value**

The Company recognizes financial instruments based on classification. Depending on the financial instruments' classification, changes in subsequent measurements are recognized in net loss or other comprehensive loss. The Company has implemented the following classifications:

#### *Financial assets*

- Cash: Classified as loans and receivables and recorded at amortized cost using the effective interest method.
- Trade and other receivables: Classified as loans and receivables and recorded at amortized cost using the effective interest method.

#### *Financial liabilities*

- Total long term debt, accounts payable and accrued liabilities: After initial fair value measurement, these financial liabilities are measured at amortized cost using the effective interest method.
- Royalty agreements: The Company records its provision for royalty at fair value. Fair value is determined using the discounted cash flow method using the Company's best estimate for future cash flows discounted at a rate that considers the credit risk of the Company.
- Management believes the carrying value of cash, trade and other receivables, long term debt, and accounts payable and accrued liabilities approximate fair value at year-end due to their short term nature.

Fair value estimates are made at a specific point in time based on relevant market information. These estimates involve uncertainties and matters of significant judgement and cannot be determined with precision. Change in assumptions and estimates could significantly affect fair values

### **Financial instruments – risk factors**

MedMira has exposure to the following risks from its financial instruments: liquidity risk, credit risk, currency risk, and interest rate risk. Management monitors risk levels and reviews risk management activities as necessary.

#### *Liquidity risk*

The Company manages liquidity by forecasting and monitoring operating cash flows and the use of revolving credit facilities and share issuances.

The Company has incurred losses and negative cash flows from operations on a cumulative basis since inception. For the year ended July 31, 2018, the Company realized a net loss of \$2.5 million (July 31, 2017 - \$2.7 million), consisting of a net loss from operations of \$1.8 million (July 31, 2017 - \$2.1 million), and other non-operating losses of \$0.7 million (July 31,

2017 - \$0.5 million). Negative cash flows from operations were \$0.8 million (July 31, 2017 - \$1.9 million). As at July 31, 2018, the Company had an accumulated deficit of \$88.6 million (July 31, 2017 - \$86.1 million) and a negative working capital position of \$11.4 million (July 31, 2017 - \$8.8 million). In addition, as at July 31, 2018, \$7.4 million of debt was in default, and \$0.2 million of long-term debt became in default subsequent to July 31, 2018 but prior to the issuance of these consolidated financial statements. The Company currently has insufficient cash to fund its operations for the next 12 months. In addition to its ongoing working capital requirements, the Company must secure sufficient funding for its research and development programs for existing commitments, including its current portion of debt of approximately \$7.6 million. These material uncertainties may cast significant doubt about the Company's ability to continue as a going concern.

The Company's objectives in managing capital are to ensure it can meet its ongoing working capital requirements. The Company must secure sufficient capital to support its capital requirements for research and development programs, existing commitments, including its current portion of debt of approximately \$7.6 million, as well as growth opportunities.

The Company's objectives in managing capital are to ensure it can meet its ongoing working capital requirements. The Company must secure sufficient capital to support its capital requirements for research and development programs, existing commitments, including its current portion of debt of approximately \$7.6 million, as well as growth opportunities. Management dedicates significant time to pursuing investment alternatives that will fund the Company's operations and growth opportunities so it can continue as a going concern. As of July 31, 2018, potential investors were identified and negotiations were initiated to secure the necessary financing through the issuance of new equity. Debt arrangements were also ongoing with the Company's major shareholder and other debt holders. Subsequent to the close of fiscal year 2018, management continues investor negotiations with the identified parties, nevertheless, there is no assurance that this initiative will be successful.

#### *Credit risk*

The Company is exposed to credit risk in relation to its trade accounts receivable. To mitigate such risk, the Company continuously monitors the financial condition of its customers and reviews the credit history or worthiness of each new customer. The Company mitigates this risk by requiring a 50% down payment on most orders at the time of purchase, and the remaining 50% prior to shipment. The Company establishes an allowance for doubtful accounts based on specific credit risk of its customers by examining such factors as the number of overdue days of the customers' balance outstanding as well as the customers' collection history. Since 79% of the Company's sales are with three large international companies there is no significant concentration of credit risk.

#### *Currency risk*

MedMira receives most of its revenues in foreign currencies and incurs expenses in U.S. and Canadian currencies. As a result, the Company is subject to uncertainty as foreign exchange rates fluctuate. The exchange fluctuations from year to year have accounted for a significant portion of the Company's exchange gain and loss. Most sales are in USD, however, they are recorded at the exchange rate prevailing on or near the transaction date and collected in a timely manner.

The Company also experiences currency exposure resulting from balance sheet fluctuations of U.S.-denominated cash, accounts receivable, accounts payable and U.S.-denominated promissory notes.

MedMira mitigates this currency risk by maintaining a balance of USD currency which is used to pay down U.S.-denominated liabilities and replenishes the balance through U.S.-denominated revenues.

#### *Interest rate risk*

The Company is not exposed to interest rate risk as it borrows funds at fixed rates.

### Related party transactions

The following transactions occurred with related parties during the year ended July 31, 2018:

- Short term loans totalling \$124,059 was received from an officer (2017 - \$78,946).
- Short term loan totalling \$387,630 was received from Ritec AG (2017 - \$645,300).
- Short term loans totalling \$108,603 were received from employees (2017 - \$42,500).
- Short term loans totalling \$21,983 were repaid to employees (2017 - \$0).
- Short term loan totalling \$2,022 were repaid to an officer (2017 - \$31,978).
- Long term loan totalling \$5,490 was repaid to an employee (2017 - \$0).
- Royalty payments of \$22,886 were incurred and owed to MedMira Holding AG (2017 - \$21,475).

The following balances with related parties were outstanding at July 31, 2018:

- Accounts payable totalling \$422,164 was due to officers (2017 - \$129,037).
- A long term loan totalling \$198,801 was due to the Chief Financial Officer (2017 - \$237,496).
- A royalty provision was owed to MedMira Holding AG of \$75,824 (2017 - \$50,775).
- A long term loan totalling \$8,010 was owed to an employee (2017 - \$13,500).
- Short term loans totalling \$174,337 were owed to employees (2017 - \$42,500).
- Three short term loans totalling \$1,052,480 are owed to Ritec AG (2016 - \$645,300).
- Short term loans totalling \$174,579 were owed to officers (2017 - \$46,968).

### Compensation summary

A) Officers for the year ended July 31, 2018

Name and Principal Position	Paid Compensation (\$)	Accrued Compensation Current year (\$)	Share- and Option-based Awards* (\$)	All other compensation (\$)	Total Compensation current year (\$)	Paid Compensation related to previous fiscal years (\$)	Accrued Compensation related to previous fiscal years (\$)
Hermes Chan CEO	86,769	101,231	-	-	188,000	-	-
Robyn Cook CCO	86,592	18,408	-	-	105,000	-	-
Markus Meile CFO	-	152,610	-	-	152,610	28,104	90,318

<sup>1</sup> All other compensation includes pension fund contributions and/or bonuses paid out.

\*The Company makes certain estimates and assumptions when calculating the fair value of option-based awards. The Company uses an option-pricing model, which includes significant assumptions including estimates of the expected volatility, expected life, expected dividend rate and expected risk-free rate of return. Changes in these assumptions may result in a material change to the amounts recorded for the issuance of stock options.

B) Directors for year ended July 31, 2018

Name and Principal Position	Paid Compensation (\$)	Accrued Compensation Current year (\$)	Share- and Option-based Awards* (\$)	Total Compensation current year (\$)	Paid Compensation related to previous fiscal years (\$)	Accrued Compensation related to previous fiscal years (\$)
Hermes Chan, Director Member of the Audit Committee	-	-	5,126	5,126	-	-
Lili Zhao, Director Member of the Audit Committee	-	-	-	-	-	-
Dr. Shou-Ching Tang Director, Member of the Audit and Nomination and Compensation Committee	-	-	5,126	5,126	-	-

\*The Company makes certain estimates and assumptions when calculating the fair value of option-based awards. The Company uses an option pricing model which includes significant assumptions including estimates of the expected volatility, expected life, expected dividend rate and expected risk-free rate of return. Changes in these assumptions may result in a material change to the amount recorded for the issuance of stock options.

**Subsequent events**

Subsequent to the end of the year, the Company received a loan of \$393,480 from a related party. The loan is unsecured, bears an interest rate of 5% per annum and is payable on demand.

Subsequent to the end of the year, the Company received a loan of \$190,000 from a non-related party. The loan is unsecured, bears an interest rate of 5% per annum and is payable on demand.

Subsequent to the end of the year, the Company entered into and signed a loan agreement for \$250,000 from a related party. The loan is unsecured, bears an interest rate of 5% per annum and is payable on demand.

**Internal control systems and disclosure controls**

To ensure the integrity and objectivity of the data, management maintains a system of internal controls comprising of written policies, procedures and a program of internal reviews which provides reasonable assurance that transactions are recorded and executed in accordance with its authorization that assets are properly safeguarded and that reliable financial records are maintained.

Management is currently updating existing standardized processes to improve internal controls and reduce compliance costs. The updated controls will help improve timeliness and accuracy of financial records as well as continue to ensure that the Company's assets are properly safeguarded.

Disclosure controls and procedures within MedMira have been designed to provide reasonable assurance that all relevant information is identified to the Disclosure Committee to ensure appropriate and timely decisions are made regarding public disclosure.

Management, under the supervision of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's internal control over financial reporting and based on this evaluation, has concluded that internal control over financial reporting was effective as of July 31, 2018.

Due to inherent limitations, internal control over financial reporting and disclosure controls can provide only reasonable assurances and may not prevent or detect misstatements. Furthermore, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The Audit Committee of the Board of Directors of MedMira reviewed this MD&A, and the consolidated financial statements and MedMira's Board of Directors approved these documents prior to release.

### **Risk and uncertainties**

The Company's base of activity has expanded to manufacturing products for distribution in international markets, making it difficult to accurately predict future operating results. Actual future results may differ significantly in any forward-looking statements. Currently, the Company is not making sufficient sales to be self-sustaining. As a result, the Company's financial condition, business and operations, and intellectual property are exposed to a variety of risk factors. These risks include, but are not limited to, the following:

#### **Risks and uncertainties related to the Company's financial condition**

##### *Need for additional capital*

Cash generated from operations is insufficient to satisfy working capital and capital expenditure requirements, and the Company is operating with a substantial working capital deficit. The Company will need to secure additional financing in the near term in order to continue as a going concern which may include the sale of additional equity or debt securities or obtaining additional credit facilities. In recent quarters, the Company has relied on temporary funding advanced from key investors. There can be no assurance that this source of funding will continue to be available on acceptable terms, and additional capital may not be available on satisfactory terms, or at all. Management is pursuing other financing alternatives to fund the Company's operations so it can continue as a going-concern.

The Company intends to continue to explore opportunities to enter into supply agreements, joint venture relationships, and other special purpose vehicles with third parties from time to time in order to continue to commercialize its patent pending technology and other intellectual property. Such arrangements may include the issuance of equity or debt securities of the Company, subject to compliance with the applicable requirements of the Canadian securities regulatory authorities and the TSX-V.

Any additional equity financing may result in the dilution of shareholders, and debt financing, if available, may include restrictive covenants. MedMira's future liquidity and capital funding requirements will depend on numerous factors including:

- the extent to which new products and products under development are successfully developed, gain market acceptance and become and remain competitive;
- the costs and timing of further expansion of sales, marketing and manufacturing activities and facility's needs;

- the timing and results of clinical studies and regulatory actions regarding potential products; and
- the costs and timing associated with business development activities, including potential licensing of technologies patented by others.

Continued operations will be contingent on generating sufficient revenues or raising additional capital or debt financing. There is no assurance that these initiatives will be successful.

#### *Fluctuations in revenue*

The Company's quarterly and annual revenues may fluctuate due to several factors, including seasonal variations in demand, competitive pressure on average selling prices, customer order patterns, the rate of acceptance of the Company's products, product delays or production inefficiencies, regulatory uncertainties or delays, costs and timing associated with business development activities, including potential licensing of technologies, international market conditions and variations in the timing and volume of distributor purchases. The healthcare industry traditionally is not impacted by seasonal demand. The impact of one or a combination of several of these factors could have a significant adverse effect on the operations of the Company. In addition, changes in existing collaborative relationships, as well as the establishment of new relationships, product licensing and other financing relationships, could materially impact the Company's financial position and results from operations.

#### *Effects of inflation and foreign currency fluctuations*

A significant portion of the Company's revenue and expenses are in U.S. dollars, and therefore subject to fluctuations in exchange rates. There is a risk that significant fluctuations in exchange rates may impact the Company's ability to sell its products and, thereby, have a material adverse impact on the Company's results of operations.

#### *Possible volatility of share price*

The stock market has from time to time experienced significant price and volume fluctuations that may be unrelated to the operating performance of the Company. In addition, the market price of the Company's common shares, like the share prices of many publicly traded biotechnology companies, has been highly volatile. Announcement of technology innovations or new commercial products by the Company or its competitors, developments or disputes concerning patent or proprietary rights, publicity regarding actual or potential medical results relating to products under development by the Company or its competitors, regulatory developments in both the U.S. and foreign countries, public concern as to the safety of biotechnology products and economic and other external factors, as well as period to period fluctuations in financial results may have a significant impact on the market price of the Company's common shares. It is likely that in some future quarter the Company's operating results will be below the expectations of the public market analysts and investors. In such event, the price of the Company's common shares would likely be materially adversely affected.

### **Risks and uncertainties related to the Company's business and operations**

#### *Lack of market acceptance*

MedMira's ability to market its diagnostic products will, in part, depend on its or its partners' ability to convince users that these products represent viable and efficacious diagnostic tests. There can be no assurance that MedMira will be successful in this regard.

#### *Competition*

The *in vitro* diagnostics market in which the Company participates is highly complex and competitive. It is comprised of both large healthcare companies that have substantially greater financial, scientific, and other resources than MedMira and a variety of international companies producing diagnostic products of varying quality. In the developed regions of the world with strong healthcare infrastructures, the *in vitro* diagnostics market for serious and emerging infectious diseases such as

HIV and Hepatitis C has been focused on diagnostic tests using instrument based platforms designed for clinical laboratories. Diagnostic products designed for use in non-laboratory settings at the point-of-care or for use in laboratories or public health clinics using non-instrument based platforms for the screening and diagnosis of infectious diseases are becoming more mainstream in both the developed and developing regions of the world. Competition in this sector of the market is intense and is expected to increase. Many of the companies have substantially greater resources available for development, marketing and distribution of these products than does MedMira.

*Significant development effort required*

Products currently under development by MedMira require additional development, testing and investment prior to any final commercialization. There can be no assurance that these products or any future products will be successfully developed, prove to be safe and effective in clinical trials, receive applicable regulatory approvals, be capable of being produced in commercial quantities at reasonable costs or be successfully marketed. The long term success of MedMira must be considered in light of the expenses, difficulties and delays frequently encountered in connection with the development of new technology and the competitive and highly regulated environment in which MedMira operates.

*Uncertainties in sales cycles in target markets*

MedMira markets and distributes its products to both developed and developing regions of the world. Sales cycles in developed regions of the world are somewhat conventional, however, timing of registrations and other activities surrounding the sale of product into a specific market are unpredictable and highly dependent on third party and government organizations to complete certain processes before a sales transaction can take place. In developing regions of the world where MedMira and its strategic partners are working to close deals, the sales cycle timing is highly uncertain given a number of factors including political and economic turmoil, as well as bureaucratic processes necessary to do business in these regions.

*High degree of regulation*

MedMira operates in a highly regulated industry and is subject to the authority and approvals of certain regulatory agencies, including Health Canada, the FDA, the CFDA, CE Mark and applicable health authorities in other countries, with regard to the development, testing, manufacture, marketing and sale of its products. The process of obtaining such approvals can be costly and time consuming, and there can be no assurance that regulatory approvals will be obtained or maintained. Any failure to obtain (or significant delay in obtaining) or maintain Health Canada, FDA, Notified Body or CFDA approvals (or, to a lesser extent, approval of applicable health authorities in other countries) for MedMira's new or existing products could materially adversely affect MedMira's ability to market its products successfully and could therefore have a material adverse effect on the business of MedMira.

*Ability to retain and attract key management and other experienced personnel*

Since its inception, the Company has been, and continues to be, dependent in its ability to attract and maintain key scientific and commercial personnel upon whom the Company relies for its product innovations and commercialization programs. Loss of key personnel individually or as a group could have significant adverse impact on the Company's immediate and future achievement of operating results.

*Limited sales and marketing resources and reliance on key distributors to market and sell the Company's product*

Any revenues received by the Company will be dependent on the efforts of third parties and there can be no assurance that such efforts will be successful. Failure to establish sustainable and successful sales and marketing programs with effective distributor support programs may have a material adverse effect on the Company.

Commercialization of the Company's products is expensive and time consuming. In the United States, a relationship has been established with a number of distributors to support the logistics and distribution of the Company's products. The

Company will rely on the joint efforts of Medline Industries and distributors Cardinal Health, a Fortune 100 company, and VWR International to distribute MedMira's product line.

Outside the United States, the Company pursues collaborative arrangements with established pharmaceutical and distribution companies for marketing, distribution, and sale of its products.

In China, MedMira has formed a strategic partnership with Triplex to market and distribute the Company's rapid HIV test within the assigned territory. This strategic partnership also encompasses the assembly and packaging of final product components.

If any of the Company's distribution agreements are terminated and the Company is unable to enter into alternative agreements, or if the Company elects to distribute new products directly, additional investment in sales and marketing resources would be required which would increase future selling, general and administrative expenses. The Company has limited experience in direct sales, marketing and distribution of its products. A failure of the Company to successfully market its products would have a material and adverse effect on the Company.

#### *Manufacturing capabilities and scale-up*

The Company must manufacture its products in compliance with regulatory requirements, in sufficient quantities and on a timely basis, while maintaining product quality and acceptable manufacturing costs. If it is unable to manufacture or contract for such capabilities on acceptable terms for its products under development, MedMira's plans for commercialization could be materially adversely affected.

MedMira's manufacturing facilities are, or will be, subject to periodic regulatory inspections by the FDA, CE, CFDA and other regulatory agencies and these facilities are subject to Quality System Regulations requirements of the FDA and other standards organizations. MedMira may not satisfy such regulatory or standards requirements, and any failure to do so would have a material adverse effect on the Company.

In addition, production and scale-up of manufacturing for new products may require the development and implementation of new manufacturing technologies and expertise. Manufacturing and quality control problems may arise as the Company attempts to scale-up manufacturing and such scale-up may not be achieved in a timely manner or at commercially reasonable cost, or at all.

#### *Rapidly changing technology*

The *in vitro* diagnostic testing field as a whole is characterized by rapidly advancing technology that could render MedMira's products obsolete at any time and thereby adversely affect the financial condition and future prospects of the Company.

#### *Uncertainties regarding healthcare reimbursement and reform*

The future revenues and profitability of diagnostic companies as well as the availability of capital may be affected by the continuing efforts of government and third party payers to contain or reduce costs of healthcare through various means. For example, in certain foreign markets, pricing or profitability is subject to government control. In the US, there has been, and the Company expects that there will continue to be, a number of federal and state proposals to implement similar government controls. While the Company cannot predict whether any such legislative or regulatory proposals will be adopted, the announcement or adoption of such proposals could have a material adverse effect on the Company's results of operations.

#### *Product liability*

MedMira may be subject to claims of personal injury and could become liable to clinical laboratories, hospitals and patients for injuries resulting from the use of its products. MedMira could suffer financial loss due to defects in its products and such financial loss together with litigation expenses could have a material adverse effect on its operations. MedMira has obtained

product liability insurance to protect against possible losses of this nature. However, no assurance can be given that such insurance will be adequate to cover all claims or that MedMira will be able to maintain such insurance at a reasonable cost.

### **Risks and uncertainties related to the Company's intellectual property**

#### *No assurance of patent protection*

MedMira has filed patent applications in the United States, Canada, China, and other foreign countries relating to various aspects of its rapid diagnostic platform, processes, reagents, and equipment. Although it is management's belief that the patents for which the Company applied may be issued, there can be no such assurance, nor can MedMira assure that competitors will not develop functionally similar or superior diagnostic testing devices. Moreover, there is a question as to the extent to which biotechnology discoveries and related products and processes can effectively be protected by patents. The law regarding the breadth or scope of biotechnology patents is new and evolving. No assurance can be given that, if a patent issued to MedMira is challenged, it will be held valid and enforceable or will be found to have a scope sufficiently broad to cover competitors' products or processes. The cost of enforcing MedMira's patent right, if any, in lawsuits that it may bring against infringers may be significant and could limit MedMira's operations.

#### *Possible patent infringement*

The extent to which biotechnology discoveries and related products and processes can be effectively protected by patents and be enforceable is uncertain and subject to interpretation by the courts. The technologies, products, and processes of MedMira may be subject to claims of infringement on the patents of others and, if such claims are successful, could result in the requirement to access such technology by license agreement. There can be no assurance that such licenses would be available on commercially acceptable terms. If MedMira is required to acquire rights to valid and enforceable patents but cannot do so at reasonable cost, MedMira's ability to manufacture or market its products would be materially adversely affected. The cost of MedMira's defence against infringement charges by other patent holders may be significant and could limit MedMira's operations.