

## **MedMira Inc.**

Management's Discussion & Analysis

For the year ended July 31, 2016

## 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.

The preparation of Management's Discussion and Analysis (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 consolidated interim financial statements, affect its more significant judgments and estimates used in the preparation of its consolidated financial statements.

## Introduction

The following MD&A for the three months and year ended July 31, 2016 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.

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 quarterly financial statements 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).

## 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 (FDA)), Canada (Health Canada), the notified body in the European Union (CE Mark),

and China (CFDA – formerly known as SFDA) 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 facilities, governments, 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 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 core 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:

<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.

### **Corporate update**

In FY2016, MedMira maintained its robust rapid diagnostics development and commercialization pipeline with ongoing evaluation of emerging trends and market conditions, new product concepts, and prototyping. Additionally, the Company continued its collaborations with world class partners for the creation of new applications on the RVF Technology platform.

The Company received FDA approval on Reveal G4 Rapid HIV-1 Antibody Test (Reveal G4) in Q1 2016. Building on the solid performance of predecessor tests in the Reveal product line, Reveal G4 is MedMira's first whole blood approval in the U.S.

MedMira's sales and marketing focus for FY2016 was the U.S. market, particularly growth in the Reveal and Miriad product lines.

With Reveal G4 FDA approval received during Q1, the concentration of activities in subsequent quarters was product launch and sales channel activation. Officially introduced during the National HIV Prevention Conference in Atlanta, GA, in December 2015, Reveal G4 added whole blood applications for fingerstick and venipuncture whole blood samples. These new capabilities effectively extended the product line from serum and plasma testing in the laboratory to point-of-care settings where more and more HIV testing is taking place to meet U.S. guidelines which now advise routine HIV testing as part of normal healthcare for persons aged 15-65 and all pregnant women.

As part of the Reveal G4 market launch, MedMira fully activated its two U.S. sales and distribution channels, VWR International LLC and Cardinal Health, with Reveal G4 internal launches, sales and product training sessions, and key account visits. Additionally, MedMira continued to support these sales channels with targeted Reveal G4 marketing efforts in key industry sectors where Reveal G4 whole blood tests could meet demand. These efforts included MedMira's debut at the 2016 Association of Public Health Laboratories Annual Meeting.

In parallel with the promotion and brand building efforts for Reveal G4 in the U.S. market, the Company also increased its presence in the tissue and eye bank sector, where customers across the U.S. are using the Miriad HBc/HIV/HCV and Miriad HCV/HIV rapid tests as part of tissue procurement procedures. During FY2016, MedMira focused on building the Company's profile as an industry partner in this sector. The Company became an affiliated member of the American Association of Tissue Banks, participated in the AATB Annual Meeting, and sponsored the AATB Quality Donor and Suitability Workshop. MedMira also made its debut at the Eye Bank Association of America's Annual Meeting and participated in internal customer training. Collectively these targeted marketing efforts within the tissue and eye bank community were successful in raising MedMira's profile as an industry partner, increasing the use of Miriad, and providing the opportunity for MedMira customers to speak to their colleagues about their experience with the product.

In addition to these two main areas of focus, FY2016 saw the increase of sales support initiatives. A website refresh to focus on core areas of business including the RVF Technology platform, Reveal G4, and Miriad for the tissue and eye bank sector, and the creation of product specific infographics and sales collateral further supported MedMira's sales and distribution channels in the U.S.

During Q1 2016, the Company received CAD \$5 million in equity investments from MedMira Holding AG (formerly OnSite Lab Holding AG). This investment, from MedMira's controlling shareholder, supported an increased sales and marketing drive in the U.S. market as well as ongoing research and development and product commercialization activities.

For the remainder of FY2016, the focus of the Finance team was continued fiscal streamlining, finding a balance in managing operating expenses with ongoing investment in sales, marketing, and product commercialization initiatives.

The primary focus of MedMira is the U.S. market, however there were continued sales and business development efforts within our global sales and distribution partner network which garnered sales in Latin America and Asia Pacific.

## **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 July 31, 2016 consolidated financial statements.

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

<b>Income statement</b>	<b>Q4 2016</b>	<b>Q3 2016</b>	<b>Q2 2016</b>	<b>Q1 2016</b>	<b>Q4 2015</b>	<b>Q3 2015</b>	<b>Q2 2015</b>	<b>Q1 2015</b>
	<b>\$</b>							
Revenue	(957)	230	1370	1614	1,463	1,345	723	521
Cost of sales	(991)	66	1134	1028	1,028	1,114	403	327
Gross profit	34	164	236	586	435	231	320	194
Operating expenses	1946	1205	1,051	1296	548	904	1,261	939
Other expenses (gains)	150	173	167	190	186	179	96	297
Net earnings (loss) before tax	(2,062)	(1,214)	(982)	(900)	(299)	(852)	(1,037)	(1,042)
<b>Balance sheet</b>	<b>Q4 2016</b>	<b>Q3 2016</b>	<b>Q2 2016</b>	<b>Q1 2016</b>	<b>Q4 2015</b>	<b>Q3 2015</b>	<b>Q2 2015</b>	<b>Q1 2015</b>
	<b>\$</b>							
Current assets	678	1930	3648	4,465	1,520	991	925	1,352
Non-current assets	192	217	242	256	264	291	313	335
Total assets	870	2,147	3,890	4,721	1,784	1,282	1,238	1,687
Current liabilities	8,277	5,746	4,723	3,939	6,993	5,765	5,754	5,061
Non-current liabilities	255	2,201	3,753	4,412	2,495	2,923	3,159	3,265
Total liabilities	8,532	7,947	8,476	8,351	9,488	8,688	8,913	8,326
Total shareholders deficiency	(7,662)	(5,800)	(4,586)	(3,630)	(7,704)	(7,406)	(7,676)	(6,640)
Total liabilities and equity	870	2,147	3,890	4,721	1,784	1,282	1,238	1,687
Net earnings (loss) per share	(0.004)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)

#### Fourth quarter analysis

The following table compares the results of operations for the three months ended July 31, 2016 to the three months ended July 31, 2015.

	For the three months ended		Better (worse) \$
	31-Jul-16 \$	31-Jul-15 \$	
<b>Product</b>			
Product sales	222,751	159,428	63,323
Royalties	-	-	0
Product cost of sales	(72,685)	(52,431)	(20,254)
<b>Gross margin on product</b>	<u>150,066</u>	<u>106,997</u>	<u>43,069</u>
<b>Services</b>			
Service sales	(1,180,037)	1,303,805	(1,303,805)
Service cost of sales	1,063,632	(975,160)	88,472
<b>Gross margin on services</b>	<u>(116,405)</u>	<u>328,645</u>	<u>(445,050)</u>
<b>Operating expenses</b>			
Research and development	(1,284,564)	330,932	(1,615,496)
Sales and marketing	(249,100)	(160,514)	(88,586)
Other direct costs	(157,001)	(159,869)	2,868
General and administrative	(255,538)	(558,624)	303,086
<b>Total operating expenses</b>	<u>(1,946,203)</u>	<u>(548,073)</u>	<u>(1,398,130)</u>
<b>Operating (expense) income</b>	<u>(1,912,542)</u>	<u>(112,433)</u>	<u>(1,800,109)</u>
<b>Non-operating expenses</b>			
Financing (expense) income	(149,457)	(185,879)	36,422
<b>Net Loss</b>	<u>(2,061,999)</u>	<u>(298,312)</u>	<u>(1,763,687)</u>

#### Product revenue and gross margin

The Company recorded revenue from product sales and royalties in the quarter ended July 31, 2016 of \$222,751 as compared to \$159,428 for the same period last year. The increase in revenue was due to additional sales in Latin America and the US. Gross profit for the quarter was \$150,066 (67.3%) compared to \$106,997 (67.1%) in the same period in 2015. The cost of product sales was \$72,685 during the three months ended July 31, 2016 (July 31, 2015– \$52,431).

*Service revenue and gross margin*

The Company recorded revenue from service sales of \$-1,180,037 in the three months ended July 31, 2016 (July 31, 2015 - \$1,303,805). The Company earned revenue and gross margin on two research contracts with the United States military. The decrease in service sales revenue during the fourth quarter was related to the Company derecognizing service revenue recorded in the second quarter FY2016 for service sales revenue from the contract with the U.S. military. This derecognition was necessary due to continuing reimbursement activities associated with the U.S. military contract.

*Operating expenses*

Total operating expenses increased to \$1,912,542 in the quarter ended July 31, 2016, compared to \$548,073 during the same period in 2015.

- Research and development expenses for the quarter ended July 31, 2016 were \$1,284,564, compared to a recovery of \$330,932 for the same period last year. The increase in research and development expenses is related to ongoing commercialization activities and product approval submissions with FDA in the United States.
- Sales and marketing expenses for the quarter ended July 31, 2016 was \$249,100 compared to \$160,514 for the same period last year. This increase was due to additional sales and marketing strategies implemented to promote its G4 and Miriad product line.
- Other direct costs for the three months ended July 31, 2016 were \$157,001 compared to \$159,869 for the same period last year.
- Administrative expenses were \$255,538 for the quarter ended July 31, 2016, compared with \$558,624 for the same period in 2015. The decrease of 54.30% was due to the cost restructuring measures implemented during FY2015.

*Non-operating income and expenses*

- The Company had financing expenses of \$149,457 in comparison to \$185,879 in FY2015. The decrease was due to repayment of short-term loans.

**Year to date analysis**

The following table compares the results of operations for the year ended July 31, 2016 to the year ended July 31, 2015.

	For the year ended		Better(worse)
	31-Jul-16	31-Jul-15	
	\$	\$	\$
<b>Product</b>			
Product sales	962,140	1,130,419	(168,279)
Royalties	0	753	(753)
Product cost of sales	(284,904)	(443,002)	158,098
<b>Gross margin on product</b>	<b>677,236</b>	<b>688,170</b>	<b>(10,934)</b>
<b>Services</b>			
Service sales	1,294,692	2,921,169	(1,626,477)
Service cost of sales	(952,633)	(2,428,973)	1,476,340
<b>Gross margin on services</b>	<b>342,059</b>	<b>492,196</b>	<b>(150,137)</b>
<b>Operating expenses</b>			
Research and development	(2,518,546)	(874,143)	(1,644,403)
Sales and marketing	(792,456)	(503,535)	(288,921)
Other direct costs	(714,515)	(623,742)	(90,773)
General and administrative	(1,472,640)	(1,920,421)	447,781
<b>Total operating expenses</b>	<b>(5,498,157)</b>	<b>(3,921,841)</b>	<b>(1,576,316)</b>
<b>Operating (expense) income</b>	<b>(4,478,861)</b>	<b>(2,741,475)</b>	<b>(1,737,386)</b>
<b>Non-operating expenses</b>			
Financing (expense) income	(679,539)	(758,090)	78,551
<b>Net Loss</b>	<b>(5,158,401)</b>	<b>(3,499,565)</b>	<b>(1,658,836)</b>

*Product revenue and gross margin*

The Company recorded revenue from product sales in the year ended July 31, 2016 of \$962,140 as compared to \$1,131,172 for the same period last year. Gross profit on product sales for the year was \$677,236 compared to \$688,170 in the same period last year. The profit margin increased to 70.4% from 60.8% due to the Company's strategic focus on the US market.

*Service revenue and gross margin*

The Company recorded revenue from service sales in the year ended July 31, 2016 of \$1,294,692 as compared to

\$2,921,169 for the same period last year. The Company earned revenue and gross margin on two research contracts with the United States military. The decrease in service revenue is due to the completion of the US military contracts as expected by the management.

*Operating expenses*

Total operating expenses increased by \$1,576,316 from \$3,921,841 for the year ended July 31, 2015 to \$5,498,157 for the year ended July 31, 2016.

- Research and development expenses for the year ended July 31, 2016 were \$2,518,546 compared to \$874,143 for the year ended July 31, 2015. Actual research expenses in July 31, 2016 for the year were \$3,471,179 (July 31, 2015 – \$3,033,116 which was offset by reimbursements of research costs (July 31, 2015 – \$294,425) and allocation of \$952,633 to cost of sales (July 31, 2015 – \$2,428,973). The comparative increase in research costs was directly attributable to greater activity related to the United States military contracts and new product developments.
- Sales and marketing expenses for the year ended July 31, 2016 were \$792,456 compared to \$503,535 for the same period last year. The increase in sales and marketing cost was due to the launch of the Company's FDA approved G4 rapid test in the USA in addition to the increased brand awareness of MedMira's Miriad product line in the tissue bank sector.
- Other direct costs for the year ended July 31, 2016 were \$714,515, compared to \$623,742, for the same period last year.
- General and administrative expenses were \$1,472,640 for the year ended July 31, 2016, compared to \$1,920,421 for the same period in 2015. The decrease of 23.30% in administrative expense was due to the cost restructuring implemented in FY2015.

*Non-operating income and expenses*

Total other expenses were \$679,539 in the year ended July 31, 2016, compared to an expense of \$758,090 during the same period in FY2015.

- Financing expenses, including interest expense, were \$679,539 for the year ended July 31, 2016 in comparison to \$758,090 in the same period last year.

## Geographic information

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

	Product and service revenue		Product and service revenue	
	For the three months ended		For the year ended	
	31-Jul-16	31-Jul-15	31-Jul-16	31-Jul-15
	\$	\$	\$	\$
North America	131,684	1,452,193	1,974,349	3,591,649
Latin America and the Caribbean	59,398	-	187,523	111,721
Europe	2,161	6,273	33,765	27,130
Asia Pacific	29,509	4,518	61,195	82,138
West Asia	-	-	-	238,663
Middle East	-	-	-	791
Other	-	294	-	294
<b>Total revenue</b>	<b>222,752</b>	<b>1,463,278</b>	<b>2,256,832</b>	<b>4,052,386</b>

## Liquidity and capital resources

### *Cash and working capital*

The Company had a cash reserve of \$46,120 on July 31, 2016, as compared to \$262,392 on July 31, 2015. The Company's net working capital position as of July 31, 2016 was a deficit of \$7.6 million compared to the July 31, 2015 working capital deficit of \$5.5 million. The Company has incurred losses and negative cash flows on a cumulative basis since inception. For the year ended July 31, 2016, the Company incurred a net loss from operating activities of approximately \$5.2 million and negative cash flow of \$4.7 million, compared to a net loss from operations of \$2.9 million and negative cash flow from operations of \$2.6 million for the same period in 2015.

### *Operating activities*

MedMira generated negative cash flows from operations of \$4.7 million for the year ended July 31, 2016, compared to negative cash flows of \$2.9 million for the year ended July 31, 2015.

### *Financing activities*

Net cash inflows from financing activities was \$3.9 million for the year ended July 31, 2016, compared to \$2.7 million for the same period in 2015.

### *Investing activities*

Cash outflow from investments was \$27,249 during the year ended July 31, 2016, compared to \$-nil for the same period in 2015.

## Debt

As at July 31, 2016, the Company had loans payable with a carrying value of \$6.2 million compared to \$7.0 million at July 31, 2015. The decrease in the carrying value of loans payable from July 31, 2015 to July 31, 2016 is due to a decrease in short term loans. The Company's loans have an average payment term of 2.5 years.

Further discussions on liquidity and capital resources can be found in the Liquidity Risk section of this document, under Need for Additional Capital in the Risk and Uncertainties section in this document and in Notes 2 and 11 of the Company's July 31, 2016 condensed interim consolidated financial statements.

### **Equity/Shares**

The Company is authorized to issue an unlimited number of common shares without nominal par value. During fiscal year 2016 the company issued 100,000,000 common shares. The number of issued and outstanding common shares on July 31, 2016 was 658,364,320. The Company is also authorized to issue an unlimited number of Series A preferred shares redeemable at \$0.001 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, 2016.

The Company had 2,094,792 outstanding stock options on July 31, 2016. The outstanding stock options have a weighted average exercise price of \$0.10 per share and a weighted average remaining term of 1.6 year. The number of outstanding warrants on July 31, 2015 was 266,100,000. 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, 2016.

### **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 and bank balances: Classified as loans and receivables and recorded at amortized cost using the effective interest method.
- Trade and other receivables: After initial fair value measurement, trade and other receivables are measured at amortized cost using the effective interest method.

#### *Financial liabilities*

- Total bank indebtedness 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.

Management believes the carrying value of accounts receivable, bank indebtedness, and accounts payable and accrued liabilities approximate fair value at the 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. Senior 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 through 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, 2016, the Company realized a net loss of \$5.2 million (July 31, 2015 - \$3.5 million), consisting of a net loss from operations of \$4.5 million (July 31, 2015 - \$2.7 million), and other non-operating losses of \$0.7 million (July 31, 2015 - \$0.8 million). Negative cash flows from operations were \$4.7 million (July 31, 2015 - \$2.9 million). As at July 31, 2016, the Company had an accumulated deficit of \$83.5 million (July 31, 2015 - \$78.3 million) and a negative working capital position of \$7.6 million (July 31, 2015 - \$5.5 million). In addition to its on-going working capital requirements, the Company must secure sufficient funding for its research and development programs for existing commitments, including its current portion of loans of approximately \$6.0 million. These circumstances cast significant doubt as to the ability of the Company to meet its obligations as they come due and, accordingly, the appropriateness of the use of accounting principles applicable to a going-concern.

Management is pursuing other financing alternatives to fund the Company's operations so it can continue as a going-concern. Management plans to secure the necessary financing through new equity and debt arrangements. Nevertheless, there is no assurance that this initiative will be successful.

#### *Credit risk*

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. 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 derives approximately 84% (July 31, 2015—83%) of its revenue from four (July 31, 2015— three) main customers and, for these customers, assesses the recoverability of each account on a regular basis. As of July 31, 2015, 91% of the accounts receivable balance is due from two customers (July 31, 2015—99% due from three customers) and no other customers account for more than 10% of the accounts receivable balances as at July 31, 2016.

#### *Currency risk*

MedMira receives most of its revenues in foreign currencies and incurs expenses in US 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 US-denominated cash, accounts receivable, accounts payable and US-denominated promissory notes.

MedMira mitigates this currency risk by maintaining a balance of USD currency which is used to pay down US-denominated liabilities and replenishes the balance through US-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, 2016:

- A short term loan totalling \$180,000 was to repaid MedMira Holding AG (2015 - \$0).
- A short term loan totalling \$350,000 was repaid to Andurja AG (2015 - \$0).
- Director fees totalling \$14,166 were incurred (2015 - \$13,750).
- A short term loan totalling \$276,100 was received and repaid to Ritec AG (2015 - \$0).
- A long term loan totalling \$74,796 was repaid to an employee (2015 – \$5,872).

The following balances with related parties were outstanding at July 31, 2016:

- Accounts payable totalling \$10,000 was due to directors (2015 - \$10,543).
- Accounts payable totalling \$26,901 was due to officers (2015 - \$193,629).
- A long term loan totalling \$241,565 was due to the Chief Financial Officer (2015 - \$229,585).
- A royalty payment was estimated/owing to MedMira Holding AG of \$31,991 (2015 - \$260,000).
- A long term loan totalling \$3,495 was owed to an employee (2015 - \$78,291).

### Summary Compensation Table – Officers

Name and Principal Position	Period	Paid Compensation (\$)	Accrued Compensation (\$)	Paid Compensation related to previous fiscal years (\$)	Share- and Option-based Awards* (\$)	All other compensation (\$) <sup>(1)</sup>	Total Compensation (\$)
Hermes Chan CEO	Fiscal 2016	188,000	-	66,796	-	-	188,000
Sing Chan COO	Fiscal 2016	101,538	-	-	-	57,702	159,240
Robyn Cook CCO	Fiscal 2016	108,000	2,000	-	-	18,000	128,000
Markus Meile CFO	Fiscal 2016	136,161	17,829	130,123	-	-	153,990

**Note:**

<sup>(1)</sup> All other compensation include, 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.

**Summary Compensation Table – Directors**

Name Designation Position(s)	Period	Paid Compensation (\$)	Accrued Compensation (\$)	Share- and Option-based Awards (\$)*	Paid Compensation related to previous fiscal year (\$)	Total Compensation (\$)
Hermes Chan Director	Fiscal 2016	-	-	8,217	-	8,217
Romano Robusto Director/Audit Committee Chair Member of Nomination and Compensation Committee	Fiscal 2016	2,500	5,000	6,163	-	13,663
Marvyn Robar Director/Chairman of the Board/Member of Audit and Nomination & Compensation Committee	Fiscal 2016	2,500	5,000	7,806	3,750	15,306
Martial Lacroix Director	Fiscal 2016	-	-	-	-	-
Philippe Dro Director	Fiscal 2016	-	-	3,424	-	3,424

\*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.

## **Subsequent events**

During the first quarter of FY2017, the Company received a loan of \$262,206 from its largest shareholder in order to support the Company's strategic goals. The loan is repayable in 2018 and carries an annual interest rate of 5% that is due upon repayment of the loan.

During the first quarter of FY2017, the Company received loans of \$520,000 from its CFO, in order to support the Company's strategic goals. The loans are repayable in 2018 and carry an annual interest rate of 5% that is due upon repayment of the loan.

## **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, 2016.

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 My Care Solution to support the logistics and distribution of the Company's products. The Company will rely on the joint efforts of My Care Solution 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.