

# MedMira Inc.

Management's Discussion & Analysis For the three months ended October 31, 2015

# **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 ended October 31, 2015 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, 2015. 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 and are available on SEDAR at 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<sup>™</sup> platform is the basis for the Company's line of rapid tests. Diagnostic applications based on this distinct 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 the unique competitive advantage of enabling 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 its customers' need to provide swift answers without increasing costs.

MedMira's technology 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 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 is also ISO 9001:2008 and ISO 13485:2003 certified.

MedMira sells its rapid tests through a worldwide network of medical distributors and strategic business development partners with customers in all sectors of the healthcare industry, including laboratories, hospitals, point-of-care facilities, governments, and public health agencies. The Company launched its Miriad<sup>™</sup> product line in 2014 to create new opportunities in the high value technology licensing sector. This business 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:

Patent #	Title	Jurisdiction
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 Q1 2016, MedMira received a total of CAD \$5 million in equity investments from OnSite Lab Holding AG (OnSite Lab). This investment fueled the Company's increasing sales and marketing drive in the U.S. market, a key strategic market its products and technology. Research and development and commercialization activities to expand product lines with new and advanced rapid testing solutions to meet increasing customer demand for high quality, multiplex rapid diagnostics were also supported by this investment.

During the quarter MedMira maintained its robust development and commercialization pipeline with ongoing review of emerging trends and marketing conditions, new product concepts, prototyping, and collaborative efforts on the RVF Technology platform. The Company's primary development and commercialization projects with the U.S. military for Reveal HBsAg and Multiplo HBc/HIV/HCV continued to progress during the quarter with all significant milestones being met and the multi-center clinical trials entering the final phase.

The Company received FDA approval on Reveal G4 Rapid HIV-Antibody Test and began final preparations for launch at the National HIV Prevention Conference taking place in Atlanta, GA, December 6-9, 2015. The new Reveal G4 adds whole blood applications for fingerstick and venipuncture specimens to the existing serum and plasma testing that was offered in predecessor products. These new whole blood applications effectively extend the Reveal product line in to point-of-care settings, where more and more HIV testing is being conducted. As per U.S. guidelines HIV testing is now part of routine healthcare for people aged 15-65 and all pregnant women and increasingly taking place in community based settings where rapid testing using whole blood specimens is the most convenient and preferred method for both patients and providers.

In additional to the Reveal G4 launch activities, the Company's sales and marketing team generally focused on expanding marketing knowledge and understanding of the Company's RVF Technology platform and promoting its rapid diagnostic solutions during the quarter. Building on the introduction of the research-focused Miriad product line in the previous year, the Company concentrated efforts during Q1 on the tissue bank sector where there are a number of customers evaluating or considering the implementation of Miriad HBc/HIV/HCV in their tissue collection procedures. MedMira made its debut at the American Association of Tissue Banks Annual Meeting, where the Company's exhibit featured branding and messaging centered on the core positioning statement helping people know... and Miriad - the Know in Go/No Go messaging. An independent presentation on field results and user experiences with Miriad HBc/HIV/HCV test was also given by two customers during the event.

In Q1 the Company's controlling shareholder OnSite Lab appointed Dr. Philippe Dro to replace Dr. Michael Sidler as its MedMira Board of Directors representative. Dr. Dro brings biotech expertise as well as strategic and operational insights to the Board based on his past experience and executive roles at biotechnology and medtech companies.

# **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 condensed interim consolidated financial statements for the three months ended October 31, 2015 and its audited consolidated financial statements as at July 31, 2015.



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

Income statement	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015	Q4 2014	Q3 2014	Q2 2014
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	1,614	1,463	1,345	723	521	898	639	519
Cost of sales	1,028	1,028	1,114	403	327	678	428	316
Gross profit	586	435	231	320	194	220	211	203
Operating expenses	1,296	548	904	1,261	939	1,044	1,213	1,358
Other expenses (gains)	190	186	179	96	297	(462)	216	261
Net earnings (loss) before tax	(900)	(298)	(852)	(1,037)	(1,042)	(362)	(1,218)	(1,417)
Balance sheet								
	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015	Q4 2014	Q3 2014	Q2 2014
	\$	\$	\$	\$	\$	\$	\$	\$
Current assets	4,465	1,520	991	925	1,352	1,484	1,411	3,216
Non-current assets	256	264	291	313	335	358	373	378
Total assets	4,721	1,784	1,282	1,238	1,687	1,842	1,784	3,594
Current liabilities	3,939	6,993	5,765	5,754	5,061	4,286	3,456	3,792
Non-current liabilities	4,412	2,495	2,923	3,159	3,265	4,246	4,842	5,097
Total liabilities	8,351	9,888	8,688	8,214	8,327	8,532	8,298	8,890
Total shareholders deficiency	(3,630)	(7,704)	(7,406)	(7,676)	(6,640)	(6,690)	(6,514)	(5,296)
Total liabilities and equity	4,721	1,784	1,282	1,238	1,687	1,842	1,784	3,594
Net earnings (loss) per share	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)

# First quarter analysis

The following table compares the results of operations for the three months ended October 31, 2015 to the three months ended October 31, 2014.



	For the three months ended		
	31-Oct-15	31-Oct-14	Better(worse)
	\$	\$	\$
Product			
Product sales	318,852	235,759	83,093
Royalties	-	(3,387)	3,387
Product cost of sales	(75,125)	(123,094)	47,969
Gross margin on product	243,727	109,278	134,449
Services			
Service sales	1,294,692	288,806	1,005,886
Service cost of sales	(952,633)	(204,234)	(748,399)
Gross margin on services	342,059	84,572	257,487
Operating expenses			
Research and development	(580,131)	(260,444)	(319,687)
Sales and marketing	(171,226)	(132,496)	(38,730)
Other direct costs	(167,752)	(119,902)	(47,850)
General and administrative	(376,612)	(426,086)	49,474
Total operating expenses	(1,295,721)	(938,928)	(356,793)
Operating loss	(709,935)	(745,078)	35,143
Non-operating income (expenses)			
Financing	(190,481)	(297,421)	106,940
Net (loss) income	(900,416)	(1,042,499)	142,083

## Product revenue and gross margin

The Company recorded revenue from product sales in the three months ended October 31, 2015 of \$318,852 as compared to \$235,759 for the same period last year. Gross profit on product sales for the three months ended October 31, 2015 was \$243,727 compared to \$109,278 for the same period in 2014. The Company has increased its gross profit on product sales from 47% (October 31, 2014) to 77% (October 31, 2015). This was due to the Company's focus on the North American market and the increasing demand for the Company's products such as the Miriad product line.

#### Services revenue and gross margin

The Company recorded revenue from service sales of \$1,294,692 in the three months ended October 31, 2015 (October 31, 2014 – \$288,806) with a related gross margin of \$342,059 (October 31, 2014 – \$84,572). The Company earned revenue and gross margin on a research contract with the U.S. military. The service sales revenue and the gross margin on services was in line with management's expectations.

## Operating expenses

Total operating expenses increased by \$221,745 from \$938,928 for the three months ended October 31, 2014 to \$1,160,673 for the three months ended October 31, 2015.

 Research and development expenses for the three months ended October 31, 2015 were \$580,131 compared to \$260,444 for the same period in 2014. The Company continued its work on new product development in order to strengthen its product portfolio. The increase was in line with the management's expectations.

- Sales and marketing expenses for the three months ended October 31, 2015 were \$171,226 compared to \$131,934 for the same period in 2014. The sales and marketing expenses have been in line with the management's strategic plan for the preparation of the up-coming Reveal G4 product launch and further investments into the business development plan set forward for fiscal year 2016.
- Other direct costs for the three months ended October 31, 2015 were \$167,752, compared to \$119,902 for the same period in 2014.
- General and administrative expenses were \$376,612 for the three months ended October 31, 2015, compared to \$426,086 for the same period in 2014. The decrease was due to the management's strategic efficiency plan implemented in fiscal year 2015.

Non-operating expenses

 Total non-operating expenses were \$190,481 in the three months ended October 31, 2015, compared to \$297,421 during the same period in fiscal year 2014.

## **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 R	evenue	Service Revenue		
	31-Oct-15	31-Oct-14	31-Oct-15	31-Oct-14	
	\$	\$			
North America	233,124	150,861	1,294,692	288,806	
Latin America and the Caribbean	65,279	48,797	-	-	
Asia Pacific	16,788	32,714	-	-	
Europe	3,661	-	-	-	
Total revenue	318,852	232,372	1,294,692	288,692	

## Liquidity and capital resources

#### Cash and working capital

The Company had a cash reserve of \$3,147,307 on October 31, 2015 as compared to \$262,392 on July 31, 2015. The Company's net working capital position as at October 31, 2015 was \$0.5 million compared to the July 31, 2015 working capital deficit of \$5.5 million. The net working capital position was positive due to the \$5 million investment from OnSite Lab and the renegotiation on the debt. The Company has incurred operational losses and negative cash flows on a cumulative basis since inception. For the three months ended October 31, 2015, the Company incurred a net loss from operating activities of approximately \$0.7 million and negative cash flows from operations of \$1.5 million, compared to a net loss from operations of \$0.7 million and negative cash flows from operations of \$0.7 million for the same period in 2014.

#### **Operating** activities

MedMira incurred negative cash flows from operations of approximately \$1.5 million for the three months ended October 31, 2015, compared to negative cash flows of \$0.7 million for the three months ended October 31, 2014.

# Financing activities

Cash inflows from financing activities were \$4.4 million for the three months ended October 31, 2015, compared to cash inflow of \$1.1 million for the same period in 2014.

## Investing activities

Cash outflows from investments were \$0.02 million for the three months ended October 31, 2015, compared to cash outflows of nil for the same period in 2014.

## Debt

As at October 31, 2015, the Company had loans payable with a carrying value of \$6.5 million compared to \$7.0 million at July 31, 2015. The decrease in the carrying value of loans payable from July 31, 2015 to October 31, 2015 was due to the completion of the debt re-negations, which resulted the reclassification of one loan as non-current liability. One loan is still in negotiation and stays classified as a current liability. The Company's loans have an average remaining payment term of 3 years and interest rates varying between 3% and 5%. As at October 31, 2015, one of the loans was in default due to ongoing debt-restructuring negotiations.

Further discussion on liquidity and capital resources can be found in this document in the Liquidity Risk section, Risk and Uncertainties section, as well as in the notes for the condensed interim financial statements for the three months ended October 31, 2015 and the audited consolidated financial statements for the year ended July 31, 2015.

# Equity/Shares

The Company is authorized to issue an unlimited number of common shares without par value. During the first quarter of fiscal year 2016, the Company issued 100,000,000 common shares. The number of issued and outstanding common shares on October 31, 2015 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 October 31, 2015.

The Company had 2,921,875 outstanding stock options on October 31, 2015. The outstanding stock options have a weighted average exercise price of \$0.10 per share and a weighted average remaining term of 1.42 year. The number of outstanding warrants on October 31, 2015 was 406,100,000. The outstanding warrants have a weighted average exercise price of \$0.10 per share.

## 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 three months ended October 31, 2015, the Company realized a net loss of approximately \$0.9 million (October 31, 2014 – net loss \$1.0 million), consisting of a net loss from operations of \$0.7 million (October 31, 2014 – net loss \$0.7 million), and other non-operating expenses of \$0.2 million (October 31, 2014 – loss of \$0.3 million). Negative cash flows from operations were approximately \$1.5 million (October 31, 2014 – \$0.7 million). As at October 31, 2015, the Company had an accumulated deficit of \$78.9 million (July 31, 2015 – \$78.0 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 \$2.3 million. These circumstances lend 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 goingconcern. Management plans to secure the necessary financing through new equity and debt arrangements. Nevertheless, there is no assurance that this initiative will be successful.

# Foreign 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. USD sales 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 liabilities.

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. A one cent change in the USD/CAD exchange rate would have an estimated impact on revenue of \$12,917.

## **Related party transactions**

The following transactions were recorded with related parties during the three months ended October 31, 2015:

- A direct investment of \$5,000,000 from OnSite Lab (July 31, 2015 \$1,100,000)
- Director fees totalling \$2,500 were incurred (July 31, 2015 \$13,750)
- Short term loan totalling \$350,000 bearing interest at 5% was repaid to Andurja (July 31, 2015 \$0)
- Short term loan totalling \$180,000 bearing interest at 5% was repaid to OnSite Lab (July 31, 2015 \$0)

The following balances with related parties were outstanding at October 31, 2015:

- A short term loan totalling \$234,584 was due to the Chief Financial Officer (July 31, 2015 \$229,585).
- Accounts payable totalling \$73,865 was due to an officer (July 31, 2015 \$193,629).
- A royalty provision was owed to OnSite Lab of \$260,000 (July 31, 2015 \$260,000).
- A long term loan totalling \$64,750 was due to an employee (July 31, 2015 \$78,291).
- A short term loan totalling \$13,000 was due to the Chief Operating Officer (July 31, 2015 \$26,000)



#### **Compensation summary**

## A) Officers for Q1 FY2016

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	43,538	-	-	-	43,538	73,873	-
Sing Chan <i>COO</i>	35,538	-	-	-	35,538		-
Robyn Cook <i>CCO</i>	28,269	-	-	9,000	37,269		-
Markus Meile <i>CFO</i>	39,339		-	-	39,339	44,208	64,991

\*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.



## B) Directors for Q1 FY2016

Name Designation Position(s)	Paid Compensation (\$)	Accrued Compensation (\$)	Paid Compensation related to previous fiscal years (\$)	Share- and Option-based Awards (\$)*	All other compensation (\$)	Total Compensation (\$)
Hermes Chan Member of the Audit Committee	-	-	-	-	-	-
Romano Robusto Director/Audit Committee Chair Member of Nomination & Compensation Committee	1,250	-	2,500	-	-	3,750
Philippe Dro Director	-	-	-	-	-	-
Marvyn Robar Director/Chairman of the Board/Member of Audit and Nomination & Compensation Committee	1,250	-	3,750	-	-	5,000
Colin MacGillivray Director/ Member of Audit and Nomination & Compensation Committee	2,500	-	-	-	-	2,500

\*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.

#### 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 at October 31, 2015.

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 condensed interim consolidated financial statements of MedMira for October 31, 2015 and MedMira's Board of Directors approved these documents prior to release.

## **Risk and uncertainties**

For the three month period ended October 31, 2015 the Company has not identified any significant changes to the risks and uncertainties it is exposed to which were previously described in the annual MD&A for the year-ended July 31, 2015.