Managements' Discussion and Analysis
(Expressed in Canadian Dollars)

# MIRACULINS INC.

Years ended November 30, 2012 and 2011

The following management's discussion and analysis ("MD&A") is current to January 29, 2013 and should be read in conjunction with Miraculins Inc.'s (Miraculins or the Company) audited financial statements for the year ended November 30, 2012, which have been prepared under International Financial Reporting Standards ("IFRS"). The Company previously prepared its financial statements in accordance with Canadian generally accepted accounting principles (Canadian "GAAP"). For more information regarding the conversion to IFRS, see note 20 of the audited financial statements, which contains further information and a reconciliation of Miraculins' previously reported financial information prepared under Canadian GAAP to IFRS. Except as otherwise noted, the financial information contained in this MD&A and in the audited financial statements has been prepared in accordance with IFRS. All amounts are expressed in Canadian Dollars unless otherwise noted. Additional information regarding the Company is available on SEDAR at www.sedar.com and on the Company's website at www.miraculins.com.

## OVERVIEW

Miraculins is a medical device company committed to extending life, reducing suffering and lowering healthcare costs. Through acquisition, development and commercialization of diagnostic tests and risk assessment tools for unmet clinical needs, the Company seeks to improve the overall diagnosis quality and treatment of patients by enhancing the information available to patients and physicians. The Company is listed on the TSX Venture Exchange under the symbol "MOM".

The Company's business model is to acquire and/or develop diagnostic and risk assessment opportunities in areas where there are unmet clinical needs. Once Miraculins has advanced a technology through the necessary development stages, it partners with large diagnostic companies, reference laboratories and distribution partners to commercialize and market its technology. These types of relationships typically involve collaborative research agreements, upfront payments, milestone payments and ongoing royalties on sales. Successful execution of this model requires the convergence of product development, marketing, regulatory and corporate finance strategies.

The Company's two primary technology programs are in the areas of cardiovascular disease and maternal health. Miraculins cardiovascular disease program is focused on the PreVu Non-Invasive Skin Cholesterol Test ("PreVu"), a non-invasive tool for risk assessment of coronary artery disease ("CAD"). Miraculins has appointed distribution partners for the Canadian medical professional and Canadian retail pharmacy segments, respectively, and has been working with these partners to develop markets for PreVu. Revenue from PreVu is expected to be earned in the first quarter of fiscal 2013 upon the commencement of the commercial rollout of PreVu. The Company's maternal health program is centred on a suite of promising markers for preeclampsia. In 2010, Miraculins partnered its preeclampsia program with Alere, Inc., one of the world's largest diagnostic companies. Alere has diligently advanced the markers subject to that partnership and in January exercised its exclusive option and licensed the novel biomarker Endoglin, concluding the three-year Collaborative Research and Option Agreement program.

Miraculins continues to be open to the evaluation of new licensing and acquisition opportunities that fit strategically with the Company's business model, however management remains primarily focused on preparing for the successful commercial roll-out of the Company's PreVu technology, which will transition Miraculins into a sales and marketing organization. Potential new programs of greatest interest to the Company are those that have completed discovery stage research and biomarker identification, but require additional expertise and resources to be developed into commercial products.

Historically, the Company has continued to access capital during difficult market conditions, having completed private placement and debt financings, and obtained non-dilutive grant funding to advance its programs to fund general operating, ongoing product development, inventory and sales and marketing related costs. Miraculins continues to work to selectively advance the critical aspects of its development programs while obtaining the appropriate financing, collaboration and/or license agreements necessary to apply greater resources to its programs. Based on management's current estimates and expected operating activities, sufficient financial resources exist to fund operations into the second quarter of fiscal 2013.

Management has forecast that its expected expenditure levels and contracted commitments will exceed the Company's net cash flows and working capital in the second quarter of fiscal 2013 unless further financing is obtained. The Company's future operations including the completion of the launch of its products are dependent upon its ability to secure additional funds, generate product sales, negotiate collaboration or license agreements with upfront payments, and/or obtain research grant funding. While the Company is striving to achieve these plans, there is no assurance that these and other strategies will be achieved or such sources of funds will be available or obtained on favourable terms or obtained at all. Historically, the Company has obtained funding via the issuance of shares and warrants and expects to require additional capital by the end of the second quarter of fiscal 2013. Management believes that it will be able to obtain additional funding in sufficient time to continue to execute its plans without interruption. If the Company cannot secure additional financing on terms that would be acceptable to it, generate product sales, negotiate collaboration or license agreements with upfront payments, and/or obtain research grant funding, the Company will have to consider additional strategic alternatives which may include, among other strategies, cost curtailments, delays of product launch expenditures, exploring the monetization of certain intangible assets, as well as seeking to outlicense and/or divest assets.

On March 8, 2012, Miraculins announced an agreement that sees The Stevens Company Limited, the largest, privately-owned Canadian distributor of hospital, physician and nursing home supplies, distribute the PreVu Point of Care ("POC") Test to medical professionals in clinical settings across Canada. Additionally, on April 18, 2012, Miraculins announced an agreement that sees Pear Healthcare Solutions, a leading provider of in-pharmacy health screening and education services, distribute the PreVu POC Test to Canadian retail pharmacies and work with pharmacy partners to establish CAD screening programs using skin cholesterol and other known risk factors for implementation in pharmacy settings across the country. To facilitate the direct marketing and selling of the product to its medical customer base, the agreement calls for The Stevens Company to purchase a start-up inventory sufficient for national servicing.

On June 6, 2012, the Company announced the launch of a new Canadian web site and on November 5, 2012 the Company announced the launch of a French language web-site for the PreVu POC Test at www.prevu.com. The new web site has been designed to provide comprehensive information on the science of skin cholesterol, and the PreVu technology designed to measure this new biomarker for risk of CAD. The site has been divided into two separate information areas; a comprehensive scientific and medical section for healthcare professionals and a general overview section for public/consumers who may be candidates for the PreVu POC Test.

On June 11, 2012, the Company announced that it has received a Notice of Allowance from the United States Patent and Trademark Office for a patent that covers use of spectrophotometric measurements for the non-invasive analysis of skin cholesterol. The allowed patent will cover elements that are key to the PreVu POC Test, specifically relating to the PreVu Handheld Spectrophotometer, which is used to read the level of skin cholesterol during the test. Additionally on June 14, 2012, the Company announced that it has been issued a patent by the State Intellectual Property Office of the People's Republic of China that covers use of a tape stripping device for skin sampling. The issued patent covers elements of the PreVu Non-Invasive Skin Cholesterol Lab Processed ("LP") Test, specifically relating to the LP collection device, which is used to collect skin samples which are then sent to a central lab for processing and measuring the skin cholesterol values of the samples.

On August 10, 2012, the Company announced that it will receive $130,000 in grant funding from the Manitoba Commercialization Support for Business (CSB) Program to support commercialization of its PreVu Non-Invasive Skin Cholesterol Test.

On December 20, 2012, the Company announced that London Drugs, one of Canada's leading pharmacy chains will be expanding its offering of the PreVu POC Test to all 76 physical pharmacy locations in more than 35 major markets throughout Western Canada beginning in March 2013. The agreement includes a period of market exclusivity for London Drugs in delivering the technology through its retail pharmacy platform into the Western Canadian marketplace and follows a successful pilot program in eleven London Drugs location that occurred in October and November of 2012. During the pilot launch, the PreVu POC Test was made available for a special introductory price of $19.99 and was performed in-store by London Drugs pharmacists.

On January 7, 2013, the Company announced that PharmaChoice, one of Canada's largest pharmacy networks comprised of over 350 independently-owned stores, will be the first pharmacy network to introduce the PreVu POC Test in Ontario and Atlantic Canada, through a Phase One launch in up to 50 of its stores in February 2013, Canada's National Heart Health Month. This introductory campaign will see the PreVu POC test conducted in-store by PharmaChoice pharmacists as part of a series of special PreVu Cardiovascular Risk Assessment Clinics. Phase Two of the expansion will see additional PharmaChoice locations being added in the months to follow, with all participating stores anticipated to transition to offering PreVu testing as an ongoing risk assessment service available either through walk-up request or by appointment.

On January 10, 2013, the Company announced that Alere has exercised its exclusive option and licensed the novel biomarker Endoglin from the Company, concluding a three-year Collaborative Research and Option Agreement program. As the license agreement will now cover only Endoglin, the Company has agreed to certain amendments to the original terms of the license agreement, including a reduced option exercise and a modification of milestones and payments. Upon commercialization of Endoglin products by Alere, the Company will receive ongoing royalties on sales pursuant to terms set out in the license agreement. Additionally, the Company maintained its rights to pursue complementary commercial strategies for the Endoglin biomarker, utilizing certain Alere controlled intellectual property and reagents. Alere had previously exercised its third and final option to maintain its exclusive option on Miraculins' preeclampsia technology through payment of a non-refundable fee on July 10, 2012 focusing its research and development efforts on seven biomarkers from the original suite of 35 biomarkers that were part of the Collaborative Research and Option Agreement.

On January 28, 2013, the Company provided the market with an overview of its plans for its PreVu technology for the 2013 year. The Company announced that the coming year is expected to be one of potential growth, and one of market development. Revenue from PreVu is expected to be earned in the first quarter of fiscal 2013 upon the commencement of the commercial rollout of PreVu. The Company walked through its plans for the four principal market segments for PreVu, namely: Retail Pharmacy, Primary Care Physicians, Life Insurance, and Health and Wellness Service Providers.

**Development Program Highlights**

- The Company's PreVu Non-Invasive Skin Cholesterol Point of Care (POC) Test is designed to address the worldwide market of coronary artery disease risk assessment. This innovative test measures cholesterol in the skin tissues as a new clinical tool to assist with CAD risk assessment. In the second quarter of 2012, Miraculins appointed distribution partners for the Canadian medical professional and Canadian retail pharmacy segments, respectively, and has been working diligently with these partners towards commercial roll-out.

- The Company’s preeclampsia technology is comprised of a suite of placental development protein biomarkers for the detection and diagnosis of preeclampsia, a disease of growing incidence and a leading cause of maternal and prenatal deaths worldwide. The program is based on world leading research from Mount Sinai Hospital and has been developed through a collaborative research and development partnership with Alere, Inc., one of the world’s largest diagnostic companies. Alere has recently exercised its exclusive option and licensed the novel biomarker Endoglin, concluding the three-year Collaborative Research and Option Agreement program.

**Corporate History**

Miraculins began active operations in 2002 as a research and development company focused on the screening and identification of target proteins and peptides related to diseases. The Company’s original vision was to contribute to the saving of lives through the early detection and diagnosis of cancer by developing products to increase the information available to physicians and consequently enhance the quality of treatment for cancer patients.

In the spring of 2008, Miraculins announced a shift in its business model, moving the Company’s focus away from basic discovery research and further down the diagnostic assay development and commercialization pathway. The Company’s business plan is now focused on in-licensing/acquiring and developing diagnostic and risk assessment technologies that address unmet clinical needs and have completed the early stage research phase.

In the fall of 2008, Miraculins announced its first technology acquisition under its new business model. The Company acquired a panel of biomarkers from Mount Sinai Hospital that have demonstrated the potential to detect or diagnose preeclampsia, a devastating condition of growing incidence affecting pregnant women that is the leading cause of maternal and prenatal deaths worldwide. The Company partnered the program with Alere, Inc. in January 2010 for development and potential commercialization and Alere has recently exercised its exclusive option and licensed the novel biomarker Endoglin, concluding the three-year Collaborative Research and Option Agreement program. Miraculins has retained certain commercial rights to pursue complimentary commercial strategies for the markers and receives a secure supply of reagents and certain rights to intellectual property related to the biomarker Endoglin from Alere. In addition, the Company has the right to seek other developmental and commercial partners for the placental development biomarkers not licensed with Alere. The Company is evaluating opportunities for these other biomarkers.

In late summer 2010, Miraculins completed the acquisition of all assets relating to the PreVu Non-Invasive Skin Cholesterol Test. PreVu is a revolutionary new CAD risk assessment technology that measures cholesterol levels in a patient's skin non-invasively, painlessly and without the need for fasting. Since closing the acquisition of the PreVu technology, Miraculins' has been focused on preparing all aspects of the product for market launch and has recently begun commercial roll-out of the product through Canadian retail pharmacies.

## RESEARCH PROGRAMS

The Company is focused on developing non-invasive diagnostic tests and risk assessment technologies that address unmet clinical needs in various disease areas. As a result of market conditions and the limited availability of investment funding Miraculins has focused its attention primarily on advancing its preeclampsia program and capitalizing on the acquisition of its PreVu program. The Company had previously developed an immunoassay for PSP94 in urine and had intellectual property on PSP94's use in combination with other markers for detecting prostate cancer. The immunoassay for PSP94 is no longer being supported by Miraculins. The Company has been continually reviewing cancer biomarker programs that have been on hold since 2008 with an eye towards out-license, advancing or canceling these programs.

### Coronary Artery Disease Program (PreVu Non-Invasive Skin Cholesterol Test)

Coronary Artery Disease ("CAD") is a leading cause of death worldwide. CAD occurs when fat and cholesterol gradually accumulate in the coronary arteries, forming a plaque that narrows the artery and reduces blood flow to the heart. Undetected or untreated, this build-up of plaque can block the artery and cause a heart attack. A heart attack, also known as a myocardial infarction (MI), causes a part of the heart muscle to die, which weakens or prevents the heart’s ability to pump blood. Worldwide, about 7.2 million people die from heart attacks every year.

A major risk factor for CAD is high blood cholesterol. It is estimated that more than 250 million cholesterol tests are performed per year in the United States. While blood cholesterol remains one of several important risk factors for heart disease, it is widely accepted that multiple risk factors for CAD must be considered to provide a more accurate picture of the absolute risk of disease, which is an individual's risk of experiencing an event over a specific time horizon, generally ten years.

Absolute cardiovascular disease risk is determined by a combination of all cardiovascular risk factors present. Other traditional and emerging risk factors include: gender, increasing age and heredity, tobacco smoking, high blood pressure, physical inactivity, diet and obesity, diabetes mellitus, C-reactive protein ("CRP"), homocysteine, carotid intima-media thickness (CIMT), and coronary calcium, among others. Many of these factors are costly to measure or assess, are resource intensive, are inappropriate for a primary care setting, are not easily accessible by the broader population or require invasive procedures. In addition, many individuals are still getting through this assessment net, as evidenced by growing incidences of heart attacks worldwide. Therefore, a clear unmet medical need exists for new CAD risk factors to identify hidden risk individuals early and help avoid that critical first coronary event.

In September 2010, Miraculins announced the acquisition of the PreVu Non-Invasive Skin Cholesterol Test technology, a new and non-invasive clinical tool to assist with risk assessment of CAD. As a new risk marker for heart disease, skin cholesterol measurement provides first-stage screening and valuable information to complement traditional CAD risk assessment. Skin contains over 11% of the body’s cholesterol by weight and ages in parallel with vascular connective tissue. As blood vessel walls accumulate cholesterol, peer reviewed clinical data has shown that so too does skin tissues. An elevated skin cholesterol level is a reliable predictor of the risk of higher cholesterol accumulation in the arteries and, accordingly, the increased risk of heart disease. Elevated levels of skin cholesterol have been shown to be strongly associated with CAD as measured by treadmill stress testing and coronary angiography, as well as by testing for coronary calcium, carotid artery thickening and carotid artery plaque.

The PreVu POC Test is conducted by placing a drop of detector reagent on the palm of the hand, which binds selectively to the cholesterol in the skin. After a one minute incubation period, the area is blotted dry to remove any unbound detector solution and an indicator reagent is then added. When combined, a blue colour change occurs in direct proportion to the amount of skin cholesterol present. After two minutes, a hand held spectrophotometer (colour reader) is placed over the drop to precisely measure its hue, generating a measure of a patient's skin cholesterol value, which places the patient on a scale showing their risk of CAD based on clinical data for the biomarker.

In addition to the POC format of the test, the PreVu technology is also being developed by Miraculins and partner Gamma-Dynacare Medical Laboratories in a lab-processed format called the PreVu Non-Invasive Skin Cholesterol Lab Processed ("LP") Test or the PreVu LP Test. This format of the test has been designed as a simple collection device that allows a patient or administrator to painlessly capture skin cells and cholesterol from the palm of the hand with a medical grade adhesive in about ten seconds. The sample is then sent into a contract processing lab for measurement and results reporting.

The PreVu POC Test has received Health Canada clearance and has been CE-Marked for sale within the European Union. In Canada and the European Union, the PreVu LP Test has been previously cleared for use as part of risk assessment for CAD. In the United States, the PreVu POC Test has previously been cleared by the FDA for use as part of risk assessment for CAD in persons with a history of heart attack and/or in persons suspected of having significant multi-vessel coronary artery disease (>50% stenosis, or blockage, in more than one vessel, as diagnosed by angiography). Skin cholesterol test results, when considered in conjunction with clinical evaluation, blood cholesterol and other risk factors identified for coronary artery disease, will aid a physician or healthcare practitioner in focusing diagnostic and patient management options.

Miraculins has focused on making the PreVu technology available for commercial sale with the following highlights:

**Prepared for Commercialization and Met Regulatory Requirements**

- Received formal ISO Certificate of Registration by The BSI Group Inc. designating Miraculins as a medical device manufacturer with a certified quality management system
- PreVu® Non-Invasive Skin Cholesterol Point of Care (POC) Test CE Marked and officially registered within the European Union
- PreVu® Non-Invasive Skin Cholesterol POC Test cleared for sale by Health Canada
- Outlined and reiterated details of the FDA's clearance for its PreVu® Non-Invasive Skin Cholesterol POC Test, which was issued prior to Miraculins' acquisition of the PreVu technology and remains in effect in the U.S. marketplace
- Developed and launched an English language Canadian web site for its PreVu® Non-Invasive Skin Cholesterol POC Test at www.prevu.com
- Developed and launched a French language Canadian web site for its PreVu® Non-Invasive Skin Cholesterol Test at www.prevu.com
- Received Notice of Allowance from the United States Patent and Trademark Office for a patent that covers the use of spectrophotometric measurements for the non-invasive analysis of skin cholesterol (POC technology) and issued a patent by the State Intellectual Property Office of the People's Republic of China that covers use of a tape stripping device for skin sampling (LP technology)
- Announced $130,000 in grant funding from the Manitoba Commercialization Support for Business (CSB) Program to support commercialization of its PreVu® Non-Invasive Skin Cholesterol Test

**Established Distribution Partnerships and Developed Sales Channels**

- Entered into an agreement with The Stevens Company Limited – the largest, privately-owned Canadian distributor of hospital, physician and nursing home supplies – that will see the PreVu® Non-Invasive Skin Cholesterol POC Test distributed to the Canadian medical market
- Entered into an agreement with Pear Healthcare Solutions Inc., a leading provider of in-pharmacy health screening and education services, that will see the PreVu® Non-Invasive Skin Cholesterol POC Test distributed to the Canadian retail pharmacy market segment
- Successfully completed the retail pharmacy launch of the PreVu® Non-Invasive Skin Cholesterol POC Test in 11 London Drugs locations in Western Canada, which generated a dynamic response from the public and media. The launch included the provision of store level promotion and advertising and the validation of a number of logistical processes, resulting in a number of patients tested with PreVu at an introductory price of $19.99
- Conducted an expansive education and awareness campaign to over 3,600 medical doctors in Vancouver/Lower Mainland as well as Winnipeg (pilot regions) in advance of the London Drugs launch
- Announced that London Drug will be expanding its offering of the PreVu POC Test to all 76 physical pharmacy locations in more than 35 major markets throughout Western Canada beginning in March 2013.
- Announced that PharmaChoice, one of Canada's largest pharmacy networks comprised of over 350 independently-owned stores, will be the first pharmacy network to introduce the PreVu POC Test in Ontario and Atlantic Canada, through a Phase One launch in up to 50 of its stores in February 2013, Canada's National Heart Health Month.

**Retained Experienced Leaders/Advisors**

- Renowned cardiologist Dr. G.B. John Mancini, MD, FRCPC, FACC appointed to the PreVu Medical Advisory Board and named Chair
- Preeminent Canadian Cardiologist, Scientist and University Professor, Dr. Milan Gupta, MD, FRCPC, FACC appointed to the PreVu Medical Advisory Board
- Distinguished U.S. Cardiologist Dr. Henry A. Solomon, MD, FACP, FACC appointed to the PreVu Medical Advisory Board as first U.S. based member

To support the launch plan, Miraculins has appointed key consultants in the areas of scientific, manufacturing, technical development and clinical and regulatory affairs. In addition to bringing their skills to Miraculins, certain consultant resources having experience with the PreVu technology prior to Miraculins' acquisition also provides a continuity of technical knowledge as the product advances to commercialization.

The PreVu business model is to sell products in key market segments through established distribution companies that will purchase PreVu products from the Company and then resell them through their networks of retailers, or market them directly to the end consumer.

The Company's PreVu revenues will be generated from the sale of test kit consumables and the custom designed hand-held readers that are utilized to read the PreVu POC Test result and guide the test operator through the test process. PreVu POC Test reagent kits contain all of the components required to deliver 40 complete tests. The testing format requires basic operator training and therefore the test is not currently sold as an over-the-counter product.

Additional revenues may be derived from territorial licensing or marketing partnerships with corporate or brand partners who have an interest in promoting skin cholesterol as a new biomarker for risk of coronary artery disease ("CAD"), as a way of differentiating their health and wellness, pharmaceutical, or consumer/grocery products.

The Company has identified four principal market segments for PreVu, and has been actively working to explore and/or develop these markets, namely:

1. Retail Pharmacy
2. Primary Care Physicians
3. Life Insurance
4. Health and Wellness Service Providers

**1. Retail Pharmacy Sector:**

The retail pharmacy market is believed to represent a significant opportunity for PreVu based on access to millions of patients/consumers globally. Additionally, there is a growing role for neighbourhood pharmacists in delivering health and wellness products and health awareness programs to the public, providing a clear opportunity for the PreVu POC Test.

The Company plans to continue to focus on the introduction of the PreVu POC Test through Canadian retail pharmacy locations in conjunction with its distribution partner Pear Healthcare Solutions Inc. While there are similar retail pharmacy models worldwide, the Canadian marketplace is a very important market for the Company, given the Company is headquartered in Canada and considering the presence of over 6,000 retail chain pharmacy locations, along with a significant number of well-organized and professionally operated independent pharmacies. Canada also presents a cost-effective opportunity to refine the PreVu pharmacy model before exporting the concept to other international markets.

Successful market development in the retail pharmacy segment requires the participation of pharmacy partners, coordinated management of distribution logistics, sophisticated point of sale material and store level advertising, test operator training, physician education and public relations management. These major areas are being advanced as the PreVu roll-out continues in this market segment.

Efforts continue towards evolving a plan for a United States market introduction that would allow the test to be offered through pharmacies in accordance with the cleared indication for use. Miraculins plans to engage in exploratory meetings with select pharmacies in the U.S. to discuss the potential opportunity further.

Efforts have also begun to identify a pharmacy partner in the European Union, with a focus on English or French speaking markets due to the Company's current marketing materials and labeling being available in those languages.

Summary of Goals/Plans for 2013 – Retail Pharmacy:

- Manage a successful PreVu expansion in Western Canada, as recently announced, through London Drugs pharmacy locations (76 Stores)
- Manage a successful PreVu rollout in Eastern Canada, as recently announced, through select PharmaChoice locations
- Launch PreVu into the Quebec marketplace through retail chain/independent pharmacies
- Continue to work with distribution partner Pear Healthcare to develop, sustain and expand PreVu's distribution network throughout the retail pharmacy market in Canada
- Hold exploratory discussions with U.S. based pharmacies towards a PreVu U.S. launch strategy
- Seek to establish a PreVu pilot program with a European Union based pharmacy chain

**2. Primary Care Physicians**

Miraculins is continuing to analyze the potential of the PreVu POC Test in the Primary Care Physician ("PCP") market segment. It is generally viewed by medical device distributors in the Canadian market that the wide spread sale of a point-of-care test into the physician market will need to be preceded by reimbursement by the Canadian healthcare system. In the U.S. market, there is a greater precedence for a user pay model for a point-of-care test within the PCP market segment. However, significant adoption of the PreVu POC Test may require recognition and/or reimbursement from private health insurers or other organizations.

A strategic review of the reimbursement landscape was commissioned by the Company for Canada and the U.S. and was provided by industry experts including OptumInsight, a leading health services business specializing in improving the performance of the health system by providing analytics, technology and consulting services that enable better decisions and results. The initial phase of this review process has been completed and the Company is considering opportunities to implement the results into its ongoing strategy.

Summary of Goals/Plans for 2013 – Primary Care Physicians:

- Continued exploration of the Canadian PCP market segment and determination of potential market size for PreVu POC Test and estimated market development costs
- Engage in discussions with U.S. based medical device distributors with access to broad PCP networks across the U.S.

**3. Life Insurance**

The second format of the PreVu test technology, the PreVu Lab Processed (LP) Test, has been in further development through the Company's partnership with Gamma-Dynacare Medical Laboratories, one of Canada's largest and most respected providers of laboratory services and solutions (discussed further under "Other Activities" below).

The PreVu LP Test was originally designed to service the life insurance market in the U.S. for certain insurance policies where the provider does not typically require the applicant to submit to a physical or to provide a blood sample for traditional CAD risk factors such as serum cholesterol, due to the time and expense associated with such tests. The strategy was that with the provision of at least one risk marker for CAD, namely skin cholesterol using the convenient PreVu LP Test, the insurance company could better understand the risk profile for each applicant on a much more timely and cost effective basis and proceed accordingly.

Miraculins has been steadily working on reactivating the life insurance market for PreVu and has engaged in discussions with leading U.S. based life insurance companies and potential distribution partners who are active in the life insurance market. The Company has found that there is continuing interest in the PreVu technology from key companies, and expects to continue discussions with a goal of developing a clear strategy for this market.

At present, the PreVu LP Test has not been cleared in the United States for use in the life insurance industry (or for any other use). An earlier version of the PreVu LP Test has previously been cleared for use in Canada and CE Marked in the European Union.

Summary of Goals/Plans for 2013 – Life Insurance:

- Continue to engage in discussions with key industry companies and establish an action plan for this market segment
- Provide further market updates regarding the PreVu LP Test and life insurance market segment

**4. Health and Wellness Services Providers:**

The health and wellness service provider market segment is comprised of highly trained, generally registered or accredited, providers of health and wellness services including naturopaths, dieticians and chiropractors. Additionally, this market segment could also include mobile or public setting health risk screening service providers. It is thought that the non-invasive aspect of the PreVu POC Test could allow this segment to become more involved in CAD screening, or supplement current CAD screening activities.

The primary focus of the Company in this market segment to date has been on introducing the PreVu POC Test to registered Naturopathic Doctors ("NDs") in Canada through industry trade shows, industry specific advertising and direct communication, in conjunction with distribution partner, The Stevens Company. The ND market holds potential as a robust market for PreVu based on the focus of the ND community on preventative health and optimum wellness. According to the Canadian Association for Naturopathic Doctors, there are over 1800 registered NDs in Canada and efforts continue to promote PreVu to registered NDs.

Miraculins also plans to begin to explore the potential of the PreVu POC Test with other health and wellness service providers working with patient and customer groups who would benefit from access to new, non-invasive tools for CAD risk assessment.

Summary of Goals/Plans for 2013 – Health and Wellness Service Providers:

- Work with distribution partner, The Stevens Company, to continue to develop the naturopathic doctor market in Canada
- Evaluate potential opportunities with additional accredited medical professionals including dieticians and chiropractors
- Explore alternatives for additional Canadian retail clinic opportunities including executive health clinics, public settings, and large employer health screening services
- Look for potential distribution partners and key stakeholders for this market segment internationally

**Other Activities**

**Laboratory Processed Test (LP) Format**

Considerable product development activity is being directed towards the PreVu LP Test, Miraculins' second testing format for skin cholesterol. Gamma-Dynacare Medical Laboratories, the Company's exclusive Canadian partner for the PreVu LP Test, has been making steady and continued progress towards the development and implementation of an in-house system for processing the PreVu LP Test.

The PreVu LP Test non-invasively measures the amount of cholesterol that has been deposited in skin tissues by painlessly and rapidly collecting skin cells from the palm of the hand using a proprietary medical adhesive collection device, which is then sent to a central reference laboratory for processing. Results are then reported to test providers and/or patients a short while later. This format could ultimately be distributed, to varying degrees, in all of the identified market segments.

**Scientific Awareness and Development**

The Company is continually evaluating opportunities to highlight existing, or develop additional scientific support that will build upon the awareness of skin cholesterol as an emerging biomarker for the assessment of CAD risk.

**Expansion of PreVu Medical Advisory Board**

The addition of members to the PreVu Medical Advisory Board is continually being considered, in part to support the Company's plan to expand PreVu into new markets.

**PR Activities/Healthcare Community Education**

The Company continues to engage in an expansive and integrated public relations and educational campaign to enhance the awareness of the science of skin cholesterol as an emerging new biomarker for risk of CAD, and the PreVu technology designed to measure it. This campaign is two-pronged, with one focus being the general public, and the other being medical/healthcare community members, including specialists working in areas of cardiovascular and heart health. Public relations and promotional activities are ongoing, however, they tend to be intensified around specific market development milestones.

### Preeclampsia Program

Preeclampsia is a devastating condition affecting pregnant women that manifests abruptly and results in 15% of all premature births. In the most severe cases, it can result in seizure, stroke, coma, or death. The incidence rate is 7 – 10% of all pregnant women and has an estimated $7 billion impact on the US healthcare system annually. Currently, the sole diagnosis for preeclampsia is by its symptoms; high blood pressure and significant amounts of protein in the urine, which are non-specific to the disease. Currently, preeclampsia affects three million mothers worldwide every year and is associated with premature births and infant illness including cerebral palsy, blindness, epilepsy, deafness and lung conditions. There is no effective detection method for the risk of preeclampsia and the cause is unknown. The potential target market for a preeclampsia test is every expectant mother, estimated to be 6 million women annually in the US alone, and greater than 12 million worldwide.

Miraculins' preeclampsia technology is based on a suite of novel protein biomarkers, in-licensed from Mount Sinai Hospital, involved in the development of the placenta and the biology implicated in the development of preeclampsia. The technology was discovered through pioneering research conducted by Dr. Isabella Caniggia and her collaborators at the Samuel Lunenfeld Research Institute of Mount Sinai Hospital, and the Hospital for Sick Children.

One of the promising biomarkers in the portfolio acquired by Miraculins is a cell surface glycoprotein known as Endoglin, which has been widely studied in the independent literature, including a major study published in the New England Journal of Medicine entitled "Soluble Endoglin and Other Circulating Anti Angiogenic Factors in Preeclampsia". Under the direction of independent experts from institutions across the United States, the paper reports that Endoglin levels change during gestation and that it can play a role in identifying the patients at highest risk of preeclampsia. Subsequent studies have continued to report on the strong utility of Endoglin and its role in detecting preeclampsia.

On January 8, 2010, Miraculins announced a partnership with Alere, Inc., a global leader in the convergence of medical diagnostic testing and health management, to advance and potentially commercialize Miraculins' preeclampsia technology. The partnership agreement included a fee paid to Miraculins by Alere to acquire the exclusive option to license the worldwide rights to biomarkers of interest from the program. The goal of the partnership was to commercialize Miraculins' biomarkers for worldwide distribution. The development program was established in a Collaborative Research and Option Agreement, whereby Alere developed tests for Miraculins' biomarkers and evaluated their performance in large cohorts of patient blood samples.

On January 10, 2013, the Company announced that Alere has exercised its exclusive option and licensed the novel biomarker Endoglin from the Company, concluding a three-year Collaborative Research and Option Agreement program. As the license agreement will now cover only Endoglin, the Company has agreed to certain amendments to the original terms of the license agreement, including a reduced option exercise and a modification of milestones and payments. Upon commercialization of Endoglin products by Alere, the Company will receive ongoing royalties on sales pursuant to terms set out in the license agreement. Alere had previously exercised its third and final option to maintain its exclusive option on Miraculins' preeclampsia technology through payment of a non-refundable fee on July 10, 2012 focusing its research and development efforts on seven biomarkers from the original suite of 35 biomarkers that were part of the Collaborative Research and Option Agreement.

Miraculins has retained certain commercial rights to pursue complementary commercial strategies for the markers and receives a secure supply of reagents and certain rights to intellectual property related to the biomarker Endoglin from Alere. In addition, the Company has the right to seek other developmental and commercial partners for the placental development biomarkers not licensed with Alere. The Company is evaluating opportunities for these other biomarkers.

### Cancer Programs

Prior to the business model change in 2008, Miraculins' primary focus was research and development with the goal of discovering novel biomarkers for cancer. During this period a series of early stage biomarker discovery programs were established. In order to effectively manage its financial and other resources, the Company is currently focused on its cardiovascular and preeclampsia programs and research and development for these cancer programs has been on hold since 2008 and the Company cancelled its research programs surrounding pancreatic and gastric cancer during 2012. The Company has been continually reviewing anticipated costs required to advance the remaining early stage programs. In considering alternatives, the Company evaluates the potential for these programs, the intellectual property, the stage of the research, the likelihood of success and the potential for an acceptable return on investment. Alternatives for the remaining cancer programs, which include colorectal and prostate cancer biomarkers, include seeking an out-licensing partner, advancing the research independently, or canceling the program.

### New Program Opportunities

Miraculins is continually evaluating in license/acquisition opportunities in areas where there are unmet clinical diagnostic and risk assessment needs. Diagnostic technologies of greatest interest to the Company have completed discovery stage research and biomarker identification but require additional expertise and resources to be developed into validated commercially viable assays.

## OUTLOOK

The strategic direction of the Company is centred on the acquisition, development and commercialization of diagnostic and risk assessment tests for unmet clinical needs. In order to advance these research and development programs, Miraculins expects to continue incurring operating losses. Based on current projections and strategic plans, management expects expenses will increase in fiscal 2013, as compared to fiscal 2012. Any increase in expenditures would result from the continued development of current technology programs and the potential addition of complementary technologies.

The Company's financial statements have been prepared on a going concern basis in accordance with IFRS. The going concern basis of presentation assumes that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities and commitments in the normal course of business. There is substantial doubt about the Company's ability to continue as a going concern as the Company has experienced operating losses and cash outflows from operations since incorporation and has accumulated a deficit of $13,825,533 as at November 30, 2012.

Management has forecast that its expected expenditure levels and contracted commitments will exceed the Company's net cash flows and working capital during fiscal 2013 without further financing being obtained. Historically, the Company has obtained funding via the issuance of shares and warrants and expects to require additional capital by the end of the second quarter of fiscal 2013. Management believes that it will be able to obtain additional funding in sufficient time to continue to execute its plans without interruption. The Company's future operations including the completion of the launch of its products are dependent upon its ability to secure additional funds, generate product sales, negotiate collaboration or license agreements with upfront payments, and/or obtain research grant funding. While the Company is striving to achieve these plans, there is no assurance that these and other strategies will be achieved or such sources of funds will be available or obtained on favourable terms or obtained at all. If the Company cannot secure additional financing on terms that would be acceptable to it, generate product sales, negotiate collaboration or license agreements with upfront payments, and/or obtain research grant funding, the Company will have to consider additional strategic alternatives which may include, among other strategies, cost curtailments, delays of product launch expenditures, exploring the monetization of certain intangible assets, as well as seeking to outlicense and/or divest assets.

The ability of the Company to continue as a going concern and to realize the carrying value of its assets and discharge its liabilities and commitments when due is dependent on many factors, including, but not limited to the successful completion of the actions taken or planned, some of which are described above, which are intended to mitigate the adverse conditions and events which raise doubt about the validity of the going concern assumption used in preparing these financial statements. There is no certainty that the Company's working capital will be sufficient through fiscal 2013 or that the above described and other strategies will be sufficient to permit the Company to continue as a going concern.

The Company's financial statements do not reflect adjustments that would be necessary if the going concern assumption were not appropriate. If the going concern basis was not appropriate for these financial statements , then adjustments would be necessary to the carrying value of assets and liabilities, the reported expenses, and the statement of financial position classifications used.

Based on current estimates and expected operating activities, management believes the Company has sufficient financial resources to fund operations into the second quarter of fiscal 2013.

The Company may decide to accelerate, terminate or reduce its focus in certain research areas, or commence research in new areas as a result of the Company's research progress and the availability of financial resources. These decisions are made with the goals of managing the Company's cash resources and optimizing the Company's opportunities. The availability of funding may change management's strategy over the coming year.

## RISKS AND UNCERTAINTY

The Company operates in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of the Company's control, which could have a material adverse effect upon the Company, its business and future prospects. Investors should carefully consider the risks and uncertainties described below, as well as other information contained in this MD&A. The risks and uncertainties described below are not exhaustive. There may be risks and uncertainties not presently known to the Company or that the Company believes to be immaterial which could adversely affect the Company and its business in the future.

### Risks Related to the Company's Financial Condition

- The Company has mainly relied on equity and debt financing and grant funding to support operations and will continue to need significant amounts of additional capital. The Company intends to raise additional financing, as required, through research, partnering and licensing arrangements, the exercise of warrants and options, and through equity and/or debt financing. However, there can be no assurance that these financing efforts will be successful or that the Company will continue to be able to meet ongoing cash requirements. It is possible that financing will not be available or, if available, may not be on favourable terms. The Company may fail to obtain additional financing and be unable to fund operations and commercialize its product candidates. The availability of financing will be affected by the results of scientific and clinical research, the Company's ability to attain regulatory approvals, the market acceptance of the Company's products, the state of the capital markets generally (with particular reference to pharmaceutical, biotechnology and medical companies), the status of strategic alliance agreements, and other relevant commercial considerations. Any future equity financing could result in significant dilution to existing shareholders.
- The Company has not derived any revenue to date from the commercial sale of its diagnostic products. In light of the length of time and expense associated with bringing new products through commercialization, obtaining regulatory approval and bringing products to market, operating losses are expected to continue unless and until the Company is able to generate sufficient revenues from the commercial sale of its diagnostic products.
- The Company must meet its debt repayment obligations and failure to do so could cause the lender to demand on its security on the Company's long-term debt. There can be no assurance that the Company will continue to meet its debt repayment obligations.

### Risks Related to the Company's Business and Operations

- The Company is in various stages of development of diagnostic and risk assessment products and, as a result, is unable to predict whether it will be able to profitably commercialize its products. There can be no assurance that the Company will be able to commercialize its products.

- Failure to protect intellectual property, or infringement on the intellectual property rights of others, may impede the Company's ability to operate freely. There can be no assurance that the Company's intellectual property rights will not be challenged by third parties, that the Company will receive patents it seeks, or that the Company will receive any necessary licenses. The Company could incur substantial costs in enforcing its intellectual property rights or defending its intellectual property rights against claims brought by others. Miraculins views patents and other means of intellectual property protection as essential to the Company's core business by protecting the Company's proprietary technology from infringement by competitors. To that end, patents will be reviewed and continued to be sought in relation to those components or concepts of each of its pre-clinical and clinical diagnostic products by management of the Company to ensure the highest level of protection possible given the Company's financial position is obtained. The Company requires all employees, consultants, and parties to collaborative research agreements to execute confidentiality agreements upon the commencement of employment, consulting relationships or a collaboration with the Company. These agreements require that all confidential information developed or made known during the course of the engagement with Miraculins is to be kept confidential. The Company also maintains agreements with scientific staff and all parties contracted in a scientific capacity, providing that all inventions resulting from work performed for Miraculins, using Miraculins' property, or relating to Miraculins' business and conceived or completed during the period covered by the agreement are the exclusive property of the Company. Despite these practices, there can be no assurance that the Company will be able to successfully protect its intellectual property rights.
- The Company's business is subject to significant government regulation and failure to achieve and maintain regulatory approval of diagnostic products would negatively affect its business. The process for obtaining such approval, including clinical trials, varies by country and type of product, and the process can be time consuming and costly.
- The Company is dependent on strategic partners, including clinical investigators and contract research organizations, as part of its diagnostic product development strategy, and it would be negatively affected if it is not able to initiate or maintain these relationships. Furthermore, a failure of any of these strategic partners to perform their obligations or to continue in the partnership could delay or halt the development strategy. There can be no assurance that these strategic partners will not pursue other technologies or develop alternative products competing with those of the Company.
- The Company may be dependent on others for the manufacture, development and sale of its products. If the Company is unable to establish or manage collaborations in the future, or if the Company encounters difficulties with these collaborations, there could be a delay in the manufacture, development and sale of products.
- Even if product candidates receive all of the required regulatory approvals, there is no guarantee of market acceptance or commercialization of the resulting product candidates, which will be determined by the Company's sales, marketing and distribution capabilities and the positioning and competitiveness of its diagnostic products compared with any alternatives.
- The Company's ability to successfully market certain diagnostic products may depend in part on the extent to which reimbursement for the cost of such products will be available from government health administration authorities, private health insurers and other organizations. Significant uncertainty exists as to whether newly approved healthcare products will qualify for reimbursement, or the timing by which such reimbursement can be secured. Furthermore, challenges to the price of medical products and services are becoming more frequent. There can be no assurance that adequate third-party coverage will be available to establish price levels, which would allow the Company to realize an acceptable return on its investment in product development. Although non-reimbursed, user-pay models may be available to the Company, uncertainty exists to the degree to which lack of available reimbursement by government health administration authorities, private health insurers and other organizations could limit market adoption of the Company's products. Reimbursement issues and decisions vary country by country as to procedure and time for review and/or reimbursement approval.

- The Company's industry is characterized by intense competition and rapid change and a failure by the Company to react to such competition and change could have a material adverse effect on its business. Competitors may develop products that are more effective and less costly than those developed by the Company. There can be no assurance that developments by others will not cause the Company's products to become non-competitive.
- The Company may conduct development internationally and may be subject to laws and regulations of several countries which may affect the Company's ability to access regulatory agencies and may affect the enforceability and value of the Company's licenses and intellectual property.
- The testing and commercial use of diagnostic products involves exposure to product liability claims. Although the Company maintains liability insurance for certain claims, there is no assurance that such coverage will provide protection against all risks, or that such insurance will continue to be available on terms which would be acceptable to the Company. If a product liability claim was brought against the Company, it could have a material adverse affect on the Company and its financial condition.
- The Company is dependent on certain members of its management and scientific staff. If the Company fails to retain this staff, or to hire qualified key personnel, the implementation of the Company's business plan could slow and the Company may be unable to successfully develop and commercialize products.

**Risks Relating to the Company's Common Shares**

- The Company has not paid any cash dividends on its common shares and, for the foreseeable future, the Company does not intend to pay any cash dividends on its common shares and therefore its shareholders may not be able to receive a return on their shares unless they sell them. The policy of the Board of Directors of the Company is to retain all available funds in operations. The Board of Directors may reassess this policy from time to time. Any decision to pay dividends on the common shares of Miraculins will be made by the Board of Directors based on the assessment of, among other factors, earnings, capital requirements and the operating and financial condition of the Company.
- The market price and trading volume of the Company's common shares have been volatile, and may continue to be volatile in the future. Variations in earnings estimates by securities analysts and the market prices of the securities of competitors may also lead to fluctuations in the trading price of the common shares. In addition, the financial markets may experience significant price and volume fluctuations that affect the market price of the Company's common shares that are not related to the Company's operating performance. Broad market fluctuation and economic conditions generally, and in the medical device sector specifically, may adversely affect the market price of the Company's common shares.
- The significant costs that the Company will incur as a result of being a public company in Canada could adversely affect its business.

## SELECTED ANNUAL FINANCIAL INFORMATION

The following is selected financial information about the Company for its 2012 and 2011 fiscal years:

| Years ended November 30 | 2012 | 2011 |
|---|---|---|
| Collaborative research and option fee income | 126,840 | 91,599 |
| General and administration expenses | $ (1,826,664) | $ (983,247) |
| Research and development expenses | (695,406) | (514,283) |
| Finance expense | (315,320) | (225,839) |
| Loss and comprehensive loss for the year | (2,697,728) | (1,617,182) |
| Loss per share | (0.03) | (0.02) |
| Total assets | 2,318,712 | 1,953,604 |
| Total liabilities | 2,158,311 | 1,890,500 |
| Deficit | (13,825,533) | (11,127,805) |
| Total share capital, warrants and contributed surplus | 13,985,934 | 11,190,909 |

## SELECTED QUARTERLY FINANCIAL INFORMATION

The selected financial information, presented under IFRS, provided in the table below is derived from the unaudited quarterly financial statements for each of the last eight quarters (in $'s):

| | Q4 - 2012 | Q3 - 2012 | Q2 - 2012 | Q1 - 2012 | Q4 - 2011 | Q3 - 2011 | Q2 - 2011 | Q1 - 2011 |
|---|---|---|---|---|---|---|---|---|
| Collaborative research and option fee income | 25,253 | 31,372 | 38,640 | 31,575 | 23,822 | 21,350 | 23,214 | 23,213 |
| Loss for the period | (797,329) | (639,141) | (713,000) | (548,258) | (558,725) | (349,896) | (376,024) | (332,537) |
| Loss per share | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) | (0.01) |

It is important to note that historical patterns of expenditures cannot be taken as an indication of future expenditures. The amount and timing of expenditures, and therefore liquidity and capital resources, may vary substantially from period to period depending on the business and research activities being undertaken at any one time and the availability of funding from investors and prospective commercial partners.

The Company's cumulative quarterly loss over the past two years relates to the expansion of the Company's research and development programs, primarily the acquisition and the move towards commercialization of the PreVu Non-Invasive Skin Cholesterol Test ("PreVu"). The increased losses in Q4 2011 and in fiscal 2012 as compared to previous quarters relate to costs associated with the move towards commercialization of PreVu. The Q4 2011 loss has also increased due to an increase in the revaluation of the royalty obligation and interest on the long-term debt obtained in Q4 2011. The 2012 quarterly losses have also increased as a result of interest on the long-term debt and increased stock-based compensation expense, as a result of significant stock options issued in fiscal 2012.

## RESULTS OF OPERATIONS

### Collaborative Research and Option Fee Income

The change in collaborative research and option fee income for the years ended November 30, 2012 and 2011 is reflected in the following table:

| Years ended November 30 | 2012 | 2011 | Increase (Decrease) |
|---|---|---|---|
| Collaborative research and option fee income | $ 126,840 | $ 91,599 | $ 35,241 |

The increase in collaborative research and option fee income for the year ended November 30, 2012 is the result of higher collaborative research and option revenues earned from the agreement with Alere Inc. when compared to the year ended November 30, 2011.

### General and Administration

General and administration expenses include those costs not directly related to research and development activities. This includes expenses associated with management services, and professional fees such as legal, audit and investor and public relations activities.

The changes in general and administration expenditures, including stock-based compensation, for the years ended November 30, 2012 and 2011 are reflected in the following table:

| Years ended November 30 | 2012 | 2011 | Increase (Decrease) |
|---|---|---|---|
| Compensation related costs | | | |
| Wages, consulting fees, and benefits | $ 804,960 | $ 428,899 | $ 376,061 |
| Stock compensation related costs | 323,646 | 54,619 | 269,027 |
| Other administration costs | 698,058 | 499,729 | 198,329 |
| Total general and administration | $ 1,826,664 | $ 983,247 | $ 843,417 |

The increase in costs for the year ended November 30, 2012 as compared to the year ended November 30, 2011 can be attributed to the following factors:

- The increase in wages, consulting fees, and benefits is primarily related to salary increases, the appointment of new executive team members and the Company hiring additional employees.
- The increase in stock compensation related costs is related to the granting of stock options to certain of the Company's management, directors, employees and consultants during fiscal 2012. In fiscal 2011, the compensation related to stock option grants was significantly less.
- The increase in other administration costs is primarily related to higher professional fees relating to consulting, as well as communication costs.

The Company expects higher levels of general and administration expenditures for the coming fiscal year.

### Research and development

Research and development expenditures include costs associated with the Company's research and development programs, the significant portion of which are development activities related to the commercialization of the PreVu technology. The Company is in the development stage and devotes a significant portion of its financial resources to research and development activities.

The increase in costs for the year ended November 30, 2012 as compared to the year ended November 30, 2011 can be attributed to the following factors:

| Years ended November 30 | 2012 | 2011 | Increase (decrease) |
|---|---|---|---|
| PreVu Non-Invasive Cholesterol test | $ 677,196 | $ 327,198 | $ 349,998 |
| less: Government assistance | (87,509) | (80,057) | 7,452 |
| | 589,687 | 247,141 | 342,546 |
| **Other Research and Development Activities** | | | |
| Compensation related costs | - | 43,308 | (43,308) |
| Laboratory rent and occupancy costs | 20,829 | 38,011 | (17,182) |
| Contract research and scientific consulting | 500 | 49,025 | (48,525) |
| Consumables | 1,418 | 6,416 | (4,998) |
| Other research costs | 31,174 | 57,765 | (26,591) |
| Amortization | 30,327 | 39,318 | (8,991) |
| Write-offs of intangible assets | 21,471 | 58,551 | (37,080) |
| less: Government assistance | - | (25,252) | 25,252 |
| | 105,719 | 267,142 | (161,423) |
| Total research and development | $ 695,406 | $ 514,283 | $ 181,123 |

The increase in costs for the year ended November 30, 2012 as compared to the year ended November 30, 2011 can be attributed to the following factors:

- In 2010, the Company acquired assets related to the PreVu Non-Invasive Cholesterol Test. Costs incurred on this program during the year ended November 30, 2012 were directly related to development activities of this technology as the Company moves towards commercialization of the product. Costs have increased as compared to the year ended November 30, 2011 as additional costs have been incurred as the Company rolls out the product to various markets. Miraculins has appointed distribution partners for the Canadian medical professional and Canadian retail pharmacy segments, respectively, and has been working with these partners towards commercial launch.

- Government assistance relating to the PreVu program is a result of the Company receiving grants from the Province of Manitoba through the Manitoba Technology Commercialization Program (TCP) to a maximum of $100,000 and the Manitoba Commercialization Support for Business (CSB) Program to a maximum of $130,000 to support the PreVu Non-Invasive Cholesterol Test. During the year ended November 30, 2012, $67,567 was recognized under the CSB program. No amounts were recorded in fiscal 2011 under this program as the grant funding was received in fiscal 2012. During the year ended November 30, 2012, $19,942 was recognized under the TCP program compared to $80,057 during the year ended November 30, 2011. The programs provided funding to cover up to 50% of eligible costs including legal fees, patenting, marketing studies, literature development, product certification, prototyping, process validation and technical consulting costs to a maximum of $100,000. During the year ended November 30, 2012, $87,509 was recorded under this program compared to $97,323 during the year ended November 30, 2011.

- Expenses associated with the Company's other research and development activities, including the maternal health and cancer programs and other research and development costs have decreased during the year ended November 30, 2012, when compared to the year ended November 30, 2011 as the Company's focus is on the advancement of the PreVu technology. The Company terminated its laboratory lease in January of 2012 and incurred a one-time payment of $17,500 as a result of this lease termination.

- Government assistance in fiscal 2011 relates to the cooperation and project funding agreement with Canada-Israel Industrial Research and Development Foundation ("CIIRDF"). The Company received funding to offset $1 for every $2 spent on research on the project. During the year ended November 30, 2011 $25,252 was recognized under the agreement. This project was completed during the 2011 fiscal year and as a result, no further assistance was recorded during the year ended November 30, 2012 relating to this funding agreement.

The Company expects higher levels of research and development expenditures for the coming fiscal year as the Company rolls out the PreVu technology commercially.

### Finance Income

The change in finance income for the years ended November 30, 2012 and 2011 are reflected in the following table:

| Years ended November 30 | 2012 | 2011 | Increase (Decrease) |
|---|---|---|---|
| Finance income | $ 14,998 | $ 12,891 | $ 2,107 |

Finance income was consistent between the year ended November 30, 2012 and November 30, 2011 due to similar levels of cash on hand as a result of financings in the respective periods. The Company anticipates similar levels of investment income for the coming year.

### Finance Expense

The change in finance expense for the years ended November 30, 2012 and 2011 is reflected in the following table:

| Years ended November 30 | 2012 | 2011 | Increase (Decrease) |
|---|---|---|---|
| Finance expense | $ 315,320 | $ 225,839 | $ 89,481 |

Finance expense for the year ended November 30, 2012 is primarily the result of the accretion on the royalty obligation associated with the acquisition of PreVu of $124,000 and interest on the long-term debt that was obtained in October of 2011 of $162,954. During the year ended November 30, 2011, the finance expense primarily related to the accretion on the royalty obligation associated with the acquisition of PreVu of $181,000, interest on the long-term debt that was obtained in October of 2011 of $21,701 and interest on the amount payable to GVI of $21,077. The increase is due to higher interest on the long-term debt as it was obtained in Q4 of 2011, partially offset by lower accretion on the royalty obligation and no interest on the amount payable to GVI which was settled in early fiscal 2012 with interest being waived in the period subsequent to September 30, 2011. The Company anticipates similar levels of finance expense as a result of the outstanding debt for the coming year.

### Loss and comprehensive loss for the period

The loss and comprehensive loss for the years ended November 30, 2012 and 2011 is reflected in the following table:

| Years ended November 30 | 2012 | 2011 | Increase (Decrease) |
|---|---|---|---|
| Loss and comprehensive loss for the period | $ 2,697,728 | $ 1,617,182 | $ 1,080,546 |
| Loss per share | $ 0.03 | $ 0.02 | $ 0.01 |

As discussed above, the increase in loss for the year ended November 30, 2012 as compared to the year ended November 30, 2011 primarily resulted from increases in PreVu development activities, stock-based compensation and interest expense.

## LIQUIDITY AND CAPITAL RESOURCES

Since inception, the Company has financed its operations from public and private sales of equity, issuance of debt, the exercise of warrants and stock options, interest income on funds available for investment and, government grants. As at November 30, 2012, the Company had unrestricted cash totaling $911,808 as compared with $683,169 at November 30, 2011.

### Cash used in operating activities

Cash used in operating activities totaled $1,928,926 for the year ended November 30, 2012 from ongoing research and development programs as well as general and administration activities, compared to cash used by operating activities of $1,589,087 for the year ended November 30, 2011. The increase in cash used in operating activities of $339,839 is mainly due to a higher net loss during the year after adjusting for non cash items, offset by an increase in accounts payable.

### Cash from financing activities

For the year ended November 30, 2012, cash provided from financing activities totaled $2,259,082. Of this amount $2,369,159 resulted from the issuance of common shares and warrants as a result of the financing that was closed during the period. An additional $30,000 was obtained upon the exercise of stock options and a payment of $16,711 related to the repayment, in its entirety, of the obligation under finance lease and interest of $123,366 was paid. For the year ended November 30, 2011, cash provided from financing activities totaled $2,260,201. Of this amount, $1,321,493 was from the issuance of common shares and warrants and the exercise of warrants, $950,000 resulted from the Company obtaining long-term debt financing in October of 2011 and $9,233 was for repayment of the obligation under finance lease and interest of $2,059 was paid.

### Cash used in investing activities

Cash used in investing activities totaled $101,517 for the year ended November 30, 2012. Of this amount, $113,236 was for patent and trademark costs and $14,056 was for the acquisition of property and equipment. Additionally, the Company received proceeds of $25,775 on the sale of scientific equipment, which was being held for resale. During the year ended November 30, 2011, cash used in investing activities totaled $114,770. Of this amount, $112,149 was for patent and trademark costs and $2,621 was for the acquisition of property and equipment.

### Shares, options and warrants

On January 20, 2012, the Company issued 952,533 Common Shares to Genesys Venture Inc. ("GVI") with a fair value of $64,296 in accordance with the terms of an agreement between the two parties to settle the amount payable by the Company to GVI.

On March 29, 2012, the Company closed a private placement offering (the "2012 Offering") with aggregate gross proceeds to the Company of $2,452,292 from the sale of 22,293,559 units ("Units") at a price of $0.11 per Unit. Each Unit is comprised of one common share of the Company (a "Share") and one half of one Share purchase warrant (a "Warrant"). Each Warrant will expire 24 months from the date the Warrant is issued (the "Expiry Date") and will entitle the holder to purchase one Share at a price of $0.16 up to the Expiry Date. There were 11,146,780 warrants issued within the 2012 Offering. The net proceeds of the Offering are being used for general corporate purposes.

Certain persons assisted the Company by introducing potential subscribers for the 2012 Offering and were paid a finder's fee of up to 10% of the total subscription proceeds received from subscribers introduced to the Company by each particular person. Additionally, these persons were issued compensation warrants ("Compensation Warrants") up to 10% of the total number of Units subscribed for by subscribers introduced to the Company by each particular person. Each Compensation Warrant entitles the holder thereof to purchase one Share at a price of $0.14 for a period of 12 months from the date of issue. There were 503,047 Compensation Warrants issued.

On May 7, 2012, 300,000 options to purchase common shares were exercised at an exercise price of $0.10 per common share resulting in the issuance of 300,000 common shares for gross proceeds of $30,000 to the Company.

Subsequent to November 30, 2012, Alere exercised its option on January 10, 2013 to license under the Collaborative Research and Option Agreement, and the Company is required to issue 250,000 common shares to MSH.

During the year ended November 30, 2012, the Company granted 4,820,000 options to purchase Common Shares to certain directors, an officer, employees and advisors of the Company with a weighted average exercise price of $0.11. Additionally, 640,000 options expired during the year ended November 30, 2012 and 300,000 options were exercised as described above.

6,248,332 warrants expired on December 15, 2011. On March 29, 2012, 11,649,827 warrants were issued as described above.

| | January 29, 2013 | November 30, 2012 | November 30, 2011 |
|---|---|---|---|
| Common shares issued and outstanding | 92,968,820 | 92,968,820 | 69,422,728 |
| Options outstanding | 8,085,000 | 8,085,000 | 4,205,000 |
| Warrants outstanding | 11,649,827 | 11,649,827 | 6,248,332 |

The Company believes it has sufficient financial resources to fund operations into the second quarter of fiscal 2013. The Company's management is reviewing all financing alternatives including raising additional funds for operations from current stockholders and other potential investors. This disclosure is not an offer to sell, nor a solicitation of an offer to buy the Company's securities. Where the Company opts to pursue such financing, there is no assurance that funding will be available or obtained on favourable terms.

## CONTRACTUAL OBLIGATIONS

The Company periodically enters into long-term contractual agreements for the leases of office facilities and equipment, management services, and certain purchased services. The following table presents commitments arising from agreements currently in force over the next five years.

| | Payments due by Period | | | |
|---|---|---|---|---|
| | Within 1 year | 2 - 3 years | 4 - 5 years | Total |
| Management services agreement | $ 7,083 | $ - | $ - | $ 7,083 |
| Contractual commitments | 86,000 | 166,500 | 40,000 | 292,500 |
| Accounts payable and accrued liabilities | 373,430 | - | - | 373,430 |
| Long-term debt including interest | 120,000 | 1,060,000 | - | 1,180,000 |
| | $ 586,513 | $ 1,226,500 | $ 40,000 | $ 1,853,013 |

Effective January 1, 2012, the Company amended the terms of the business and administration services agreement with GVI, including the provision of Chief Financial Officer services. The Company is committed to pay $7,083 per month or $85,000 per annum for a period of one year. Subsequent to November 30, 2012 and effective January 1, 2013, the Company amended the terms of the business and administration services agreement and is committed to pay $8,333 per month or $100,000 per annum for a period of one year.

The Company is obligated to pay an annual licence maintenance fee beginning on October 15, 2011, which is the third anniversary date of a license agreement with the Mount Sinai Hospital in Toronto, Canada. For further information refer to Note 6 contained in the audited financial statements for the year ended November 30, 2012.

On April 9, 2012 a payment of $15,919 in regards to the finance lease was made and there is no further obligation under this lease.

The Company previously leased its laboratory space under an operating lease. In addition to the annual lease payments, the Company also paid maintenance, property taxes, insurance and other operating costs. The premises and equipment were leased from GVI, a company controlled by a former director. On January 16, 2012, the Company and GVI mutually agreed to terminate the remainder of the laboratory lease for a one-time payment of $17,500 and there is no further obligation under this lease.

The Company is obligated to pay royalties to PreMD based on any future commercial sale of PreVu Skin Cholesterol Test equal to 10 percent of gross revenue associated with PreVu. The Company retains the right to buy-out the royalty at anytime for a one-time payment of $1,000,000. To date, no revenue had been recorded related to PreVu.

The Company is obligated to pay royalties to CIIRDF based on any future product revenues, if any, from the exploitation of the preeclampsia technology contemplated in the project funding agreement, described in note 9 to the audited financial statements for the year ended November 30, 2012, equal to 2.5 percent up to a maximum of the amounts funded under the agreement. To November 30, 2012, no royalties are due and/or payable.

The Company is obligated to pay a royalty to MSH, subject to minimum annual royalties, of a stipulated percentage of the net sales of licensed products related to the worldwide rights to commercialize a portfolio of biomarkers for use in developing diagnostic assays for the early detection of preeclampsia, if any, along with other milestone payments. If the Company sub-licenses any rights under the MSH agreement to a third party, the Company shall pay MSH a stipulated percentage of the sub-license fee and sub-license royalty fee as described in note 6 to the audited financial statements for the year ended November 30, 2012. Subsequent to November 30, 2012 and in conjunction with Alere's decision to license under the Collaborative Research and Option Agreement on January 10, 2013, a royalty of $6,250 becomes payable within 30 days to Mount Sinai Hospital.

A summary of the Company's contractual obligations may be found in Note 14 of the audited financial statements for the year ended November 30, 2012.

## RELATED PARTY TRANSACTIONS

As of November 30, 2011 $68,712 was owed to GVI, a party which was related to the Company until November 1, 2011, when a director who controlled GVI resigned from the Board of Directors, which bore interest at 12% per annum, calculated and compounded on a monthly basis until September 30, 2011. The payable was included in accounts payable and accrued liabilities as at November 30, 2011. Interest of $21,077 was expensed in fiscal 2011 to September 30, 2011 and interest was waived in the period subsequent to September 30, 2011. On January 20, 2012, the payable to GVI was settled in exchange for $4,416 of cash and 952,533 Common Shares with a fair value of $64,296 being issued to GVI for payment for services rendered in accordance with the terms of an agreement between the two parties.

The Company has an on-going consulting agreement with a shareholder to provide services as needed from time to time. For the year ended November 30, 2012, $156,000 (2011 - $9,000) has been recorded in general and administration expenses relating to this consulting agreement.

## OFF-BALANCE SHEET ARRANGEMENTS

Other than as described above, the Company does not have any off-balance sheet arrangements.

## CONTROLS

### Effectiveness of disclosure controls and procedures

Management has established and maintained disclosure controls and procedures for the Company in order to provide reasonable assurance that material information relating to the Company is made known to management in a timely manner and that information required to be disclosed by the Company is reported within the time periods prescribed by applicable securities legislation.

A control system can only provide reasonable, not absolute, assurance that the objectives of the control system are met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs.

As a result of the Company's limited administrative staffing levels, internal controls which rely on segregation of duties in many cases are not appropriate or possible. Due to resources constraints and the present stage of the Company's development, the Company does not have sufficient size and scale to warrant the hiring of additional staff to correct this potential weakness at this time. To help mitigate the impact of this potential weakness and to ensure quality financial reporting, the Company is highly reliant on the performance of compensating procedures and senior management's review and approval to ensure that the controls are as effective as possible.

During the year ended November 30, 2012, the Company made no material changes to its systems of internal controls over financial reporting.

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of financial statements in conformity with International Financial Reporting Standards (IFRS) requires the Company to select from possible alternative accounting principles and to make estimates and assumptions that determine the reported amounts of assets and liabilities at the balance sheet date, and reported costs and expenditures during the reporting period. Management believes that the estimates and assumptions upon which the Company relies are reasonable based upon information available at the time these estimates and assumptions are made. Estimates and assumptions may be revised as new information is acquired, and are subject to change.

In addition to the going concern assumption previously described, management believes that its most critical accounting policies and estimates relate to the following areas, with reference to notes contained in the audited financial statements for the year ended November 30, 2012:

### Research and development costs

The Company's accounting policy over research and development costs may be found in Note 3(f)(i) to the Company's audited financial statements for the year ended November 30, 2012. Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit and loss as incurred. Development activities involve a plan or design for the production of new or substantially improved products and processes. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete the development and to use of sell the asset. No development costs have been capitalized to date.

### Acquired intellectual property

The Company's accounting policy over acquired intellectual property may be found in Note 3(f)(ii) to the Company's audited financial statements for the year ended November 30, 2012. Costs incurred for acquired intellectual property will be amortized over the estimated period that it is available for use in the manner intended by management, which is estimated to be three to five years.

### Patents and trademarks

The Company's accounting policy over patents and trademarks may be found in Note 3(f)(iii) to the Company's audited financial statements for the year ended November 30, 2012. Costs incurred for patents and trademarks are capitalized and amortized from the date of issuance on a straight-line basis over their respective legal lives or economic life, if shorter. Trademarks have an indefinite life. Costs incurred in successfully obtaining a patent or trademark are measured at cost less accumulated amortization and accumulated impairment losses. The cost of servicing the Company's patents and trademarks is expensed as incurred.

### Inventory

The Company's accounting policy over inventory may be found in Note 3(d) to the Company's audited financial statements for the year ended November 30, 2012. Inventory consists of parts to be used in the manufacture of finished medical devices that are held for resale, as well as finished and fully assembled and tested medical devices and purchased testing kit inventories that are held for resale. Inventory is recorded based on the first in first out principle and is valued at the lower of cost and net realizable value.

### Stock-based compensation

The Company's accounting policy over stock-based compensation may be found in Notes 3(i)(ii) and 12(c) to the Company's audited financial statements for the year ended November 30, 2012. The grant date fair value of share-based payment awards granted to employees is recognized as a personnel expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Share-based payment arrangements in which the Company receives goods or services as consideration for its own equity instruments are accounted for as equity-settled share-based payment transactions. In situations where equity instruments are issued and some or all of the goods or services received by the entity as consideration cannot be specifically identified, they are measured at fair value of the share-based payment.

### Impairment of non-financial assets

The Company's accounting policy over impairment of non-financial assets may be found in Note 3(h)(ii) to the Company's audited financial statements for the year ended November 30, 2012. The carrying amounts of the long-lived non-financial assets, including intangible assets and property and equipment, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Intangible assets that have indefinite lives and intangible assets not yet put into use are evaluated for impairment at least annually.

An impairment exists when the carrying value of an asset exceeds its recoverable amount, which is the higher of its fair value less costs to sell or its value in use. The fair value less costs to sell calculation is based on available data from observable market prices, less incremental costs. The value in use calculation is based on a discounted cash flow model. These calculations require the use of estimates and forecasts of future cash flows. Qualitative factors, including market size and market growth trends, strength of customer demand and degree of variability in cash flows, as well as other factors, are considered when making assumptions with regard to future cash flows and the appropriate discount rate. A change in any of the significant assumptions or estimates used to evaluate the underlying assets could result in a material change to the results of operations.

Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed, to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of amortization, if no impairment had been recognized. Write-downs as a result of impairment are recognized in research expense in the statement of comprehensive loss.

A summary of all of the Company's significant accounting policies and estimates may be found in Note 3 to the audited financial statements for the year ended November 30, 2012.

## CHANGES IN ACCOUNTING POLICIES

**Adoption of International Financial Reporting Standards (IFRS):**

The financial statements for the year ended November 30, 2012 of the Company were prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). These are the first annual financial statements prepared in accordance with IFRS and IFRS 1 First-time Adoption of International Financial Reporting Standards has been applied.

The audited financial statements for the year ended November 30, 2012 provide the following reconciliation's from Canadian generally accepted accounting principles (GAAP) to IFRS for the consolidated:

- statement of financial position, including equity as at December 1, 2010;
- statement of financial position, including equity as at November 30, 2011; and the
- statement of net loss and comprehensive loss for the year ended November 30, 2011.

In preparing the accompanying financial statements in accordance with IFRS 1, First time Adoption of International Financial Reporting Standards, the Company has applied the mandatory exceptions of IFRS.

An explanation of how the transition from Canadian GAAP to IFRS has affected the Company's financial position and financial performance is set in note 20 of the financial statements as at and for the year ending November 30, 2012. The transition from Canadian GAAP to IFRS has not had a material impact on the statement of cash flows. The reconciling items between Canadian GAAP and IFRS presentation have no net effect on the cash flows generated.

## NEW STANDARDS AND INTERPRETATIONS NOT YET ADOPTED

**IFRS 9 *Financial Instruments: Classification and Measurement***

IFRS 9 (2009) replaces the guidance in IAS 39 *Financial Instruments: Recognition and Measurement,* on the classification and measurement of financial assets. The Standard eliminates the existing IAS 39 categories of held to maturity, available-for-sale and loans and receivables.

Financial assets will be classified into one of two categories on initial recognition:

- financial assets measured at amortized cost; or
- financial assets measured at fair value.

Under IFRS 9 (2010), for financial liabilities measured at fair value under the fair value option, changes in fair value attributable to changes in credit risk will be recognized in other comprehensive income ("OCI"), with the remainder of the change recognized in profit and loss.

IFRS 9 (2010) supersedes IFRS 9 (2009) and is effective for annual periods beginning on or after January 1, 2015, with early adoption permitted. For annual periods beginning before January 1, 2015, either IFRS 9 (2009) or IFRS 9 (2010) may be applied.

The Company intends to adopt IFRS 9 (2010) in its financial statements for the annual period beginning on December 1, 2015. The extent of the impact of adoption of IFRS 9 (2010) has not yet been determined.

### IFRS 13 - *Fair Value Measurement*

In May 2011, the IASB published IFRS 13 *Fair Value Measurement,* which is effective prospectively for annual periods beginning on or after January 1, 2013, with earlier application permitted. The disclosure requirements of IFRS 13 need not be applied in comparative information for periods before initial application. IFRS 13 replaces the fair value measurement guidance contained in individual IFRSs with a single source of fair value measurement guidance. It defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, i.e. an exit price. The standard also establishes a framework for measuring fair value and sets out disclosure requirements for fair value measurements to provide information that enables financial statement users to assess the methods and inputs used to develop fair value measurements and, for recurring fair value measurements that use significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income. IFRS 13 explains how to measure fair value when it is required or permitted by other IFRSs. IFRS 13 does not introduce new requirements to measure assets or liabilities at fair value, nor does it eliminate the practicability exceptions to fair value measurements that currently exist in certain standards.

The Company intends to adopt IFRS 13 prospectively in its financial statements for the annual period beginning on December 1, 2013. The extent of the impact of adoption of IFRS 13 has not yet been determined.

### Annual Improvement to IFRSs 2009-2011 Cycle - Various Standards

In May 2012, the IASB published Annual Improvements to IFRSs - 2009-2011 Cycle as part of its annual improvements process to make non-urgent but necessary amendments to IFRS effective for annual periods beginning on or after January 1, 2013 with retrospective application.

The impending changes that potential have an effect on the Company include:

- IAS 1 *Presentation of Financial Statements* - the changes involve amendments to the presentation and disclosure of comparative information beyond the minimum and the presentation of the opening statement of financial position.

The Company intends to adopt the amendments to the standards in its financial statements for the annual period beginning on December 1, 2013. The extent of the impact of the adoption of the amendments has not yet been determined.

## FORWARD-LOOKING STATEMENTS

This Management's Discussion and Analysis ("MD&A") contains forward-looking information as defined in applicable securities laws (referred to herein as "forward-looking statements") that reflect the Company's current expectations and projections about its future results. All statements other than statements of historical fact are forward-looking statements. Forward-looking statements are based on the current assumptions, estimates, analysis and opinions of management of the Company made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors which the Company believes to be relevant and reasonable in the circumstances.

The Company uses words such as "believes," "may," "plan," "will," "estimate," "continue," "anticipates," "intends," "expects," and similar expressions to identify forward-looking statements, which, by their very nature, are not guarantees of the Company's future operational or financial performance, and are subject to risks and uncertainties, both known and unknown, as well as other factors that could cause the Company's actual results, performance, prospects or opportunities to differ materially from those expressed in, or implied by, these forward-looking statements.

Specifically, this MD&A contains forward-looking statements regarding, but not limited to, the Company's:

- intention to acquire, develop and commercialize diagnostic tests for unmet clinical needs;
- intention to partner with large diagnostic companies and reference laboratories to commercialize and market technology;
- expectation regarding collaborative research agreements, upfront payments, milestone payments, ongoing royalties on sales and other sources of revenue;
- expectation regarding new diagnostic program opportunities;
- intentions regarding the protection of intellectual property;
- business strategy; and
- intention with respect to dividends.

Inherent in forward-looking statements are known and unknown risks, uncertainties and other factors beyond the Company's ability to predict or control that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such risk factors include, among others, the Company's stage of development, lack of product revenues, additional capital requirements, the ability to protect its intellectual property, dependence upon collaborative partners, changes in government regulation or regulatory approval processes, and rapid technological change in the industry. These factors should be considered carefully and readers are cautioned not to place undue reliance on such forward-looking statements.

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

- the availability of financing for the Company's research and development projects, or the availability of financing on reasonable terms;
- general business and economic conditions;
- the timing of the receipt of regulatory and governmental approvals for the Company's research and development projects;
- interest rates and foreign exchange rates;
- the Company's costs of research projects;
- positive results of current and future clinical trials;
- the uncertainties associated with the acceptance and demand for new products;
- research projects not being unreasonably delayed and expenses not increasing substantially;
- government regulation not imposing requirements that significantly increase expenses or that delay or impede the Company's ability to bring new products to market;
- the Company's ability to attract and retain skilled staff;
- the impact of changes in Canadian-US dollar and other foreign exchange rates on the Company's costs and results;
- market competition;
- tax benefits and tax rates; and
- the Company's ongoing relations with its employees and with its business partners.

Although management of the Company believes that these forward-looking statements are based on reasonable assumptions, a number of factors could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such forward-looking statements. The forward-looking statements contained in this MD&A and any documents incorporated by reference herein are expressly qualified by this cautionary statement. The Company cautions you that the foregoing list of important factors and assumptions is not exhaustive. Events or circumstances could cause actual results to differ materially from those estimated or projected and expressed in, or implied by, these forward-looking statements. You should also carefully consider the matters discussed under "Risk Factors" in this MD&A which provides for additional risks and uncertainties relating to the Company and its business. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements or the foregoing list of factors, whether as a result of new information or future events or otherwise, other than as may be required by applicable legislation.