



VENTRIPOINT DIAGNOSTICS LTD.

MANAGEMENT'S DISCUSSION AND ANALYSIS FORM 51-102F1

For the year ended December 31, 2015

April 29, 2016

MANAGEMENT’S DISCUSSION AND ANALYSIS, APRIL 29, 2016

This management’s discussion and analysis of operations and financial position (MD&A) should be read in conjunction with Ventripoint Diagnostics Ltd.’s (‘Ventripoint’ or the ‘Company’) audited consolidated financial statements and the corresponding notes thereto for the years ended December 31, 2015 and 2014. Ventripoint’s financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS).

Unless otherwise specified, all financial data is presented in United States dollars. This MD&A is as of April 29, 2016.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

In the interest of providing current and potential investors in Diagnostics with information regarding the Company’s future plans and operations, certain statements and information, which is included or referenced herein, contain “Forward-looking Statements.”

Forward-looking Statements include, but are not limited to, statements (collectively, “Statements”) with respect to status of technology, development, commercialization, market size, financing, general and administrative, and beyond. You are cautioned not to place undue reliance on forward-looking statements as there can be no assurance that the plans, intentions or expectations they are based on will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown, and risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur.

Although the Company believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will prove to be correct. Some of the risks and other factors which could cause results to differ materially from those expressed in the forward-looking statements included or referenced herein include, but are not limited to, access to future funding (debt and/or equity) as described under the section titled “Liquidity”; general economics, business and market conditions as discussed in “Risks and Uncertainties – Financial”; the regulatory approval process as noted in “Risks and Uncertainties – Regulatory”; and the Company’s ability to secure additional capital as discussed in “Risks and Uncertainties – Continued Operations”. You are cautioned that the foregoing list of important factors is not exhaustive.

With respect to forward-looking statements contained in this MD&A, we have made several key assumptions including, but not limited to:

- The market for the Company’s planned product and service offerings is in excess of \$1 billion worldwide and is not subject to decline in the foreseeable future;
- The Company will be able to obtain financing in a timely manner on acceptable terms;
- The current tax and regulatory regimes will remain substantially unchanged;
- The Company will be able to obtain equipment and qualified personnel in a timely manner;
- The Company will successfully market its efficient, accurate and cost-effective heart diagnostic tool that uses standard echo images to deliver functional information about the heart;

- Product and service related approvals will be obtained from all necessary agencies in a timely manner and without unplanned additional costs; and
- The Company will have sufficient resources to timely and effectively implement its strategies.

The forward-looking statements contained or referenced herein are expressly qualified by this cautionary statement made as of this date. The Company disclaims any intention and has no obligation or responsibility, except as required by law, to update or revise any forward-looking statements.

OVERVIEW

Ventripoint is a medical device Company engaged in the development and commercialization of its diagnostic tools to monitor patients with heart disease – the number one cause of death in developed countries and a rapidly rising incidence in emerging countries. By using images produced from existing medical imaging systems, the Ventripoint Medical System (VMS™) generates accurate heart volumetric measurements and a three-dimensional model in a rapid and inexpensive manner. Ventripoint's solution produces critical heart information by processing standard information received from existing medical imaging equipment with its patented and proprietary methods incorporating Knowledge Based Reconstruction (KBR) algorithms and proprietary cardiac databases (sometimes called catalogues). The VMS enables medical professionals to economically obtain accurate three-dimensional models with critical volume and functional measurements of a patient's heart chambers in only a few minutes more than the time needed for a routine echocardiogram. Measuring volume and function, and most significantly in the difficult to measure right ventricle, is fundamental in evaluating patients to determine the severity and progression of their disease, assess the effectiveness of treatment, gauge prognosis and decide on the timing of surgical and pharmacological interventions. These key measurements and the 3D model for visual assessment provide medical professionals with some of the critical information necessary for clinical diagnosis and monitoring of their patients.

The Company's KBR method allows for the creation of a three-dimensional model of the all the chambers of the heart, right and left ventricles and right and left atria using images generated from existing 2D and 4D imaging equipment (real time 3D imaging is now considered to be 4D). The Company's technology platform is applicable to all heart diseases. The VMS system is based upon patented technology that Ventripoint has licensed on an exclusive basis from the University of Washington. The VMS has U.S. FDA marketing clearance for all patients where right heart information is warranted or desired. The Company is in the early stage of commercialization. As further described below, current efforts are focused on:

- expanding the offering to include all 4 chambers of the heart; left ventricle (LV), left atrium (LA), right ventricle (RV) and right atrium (RA),
- establishing partnerships to develop an integrated 2D ultrasound machine and expand the software analysis tools,
- establishing a partnership to market and distribute existing and future VMS products in China. The Company will retain the rights to market existing and any new devices outside of China,

- completing its VMS-4DE application to be used with 4D scanning equipment for the developed world where 4D systems are available but underused for volumetric measurements due to technical issues which can be overcome by the VMS approach.

Since the commencement of operations, Ventripoint has been committed to commercializing its breakthrough technology to be used as a tool in the diagnosis and management of various heart related diseases, a market that today it estimates to be in excess of \$1 billion worldwide. It is the Company's goal to have the first system on the mass market that addresses the need for an efficient, accurate and cost-effective heart diagnostic tool that uses standard 2D echo or 4D echo or MRI images to deliver 3D functional information. The ability to sustain the implementation of its commercialization strategies for its VMS is dependent upon the timely receipt of additional and sufficient operating capital.

HIGHLIGHTS AND CURRENT DEVELOPMENTS

The Company has made significant progress in implementing its development and commercialization plans. Approvals to market its initial applications for Pulmonary Artery Hypertension (PAH), Tetralogy of Fallot (TOF), dextro-Transposition of the Great Arteries (d-TGA) and non-specific heart disease (RV database) have been secured in both Canada and Europe, and the Company has now received Marketing Clearance from the US-FDA for its use for PAH and all other types of heart disease where the RV information is warranted or desired. The VMS product remains the only approved way to generate substantially equivalent results to the gold-standard MRI for right ventricular volumes using echocardiography. Since 2007, the Company has completed a number of equity and debt financings to fund its technology development and commercialization activities, and will likely continue to seek additional investments from both public and strategic investors.

Corporate Structure and Strategy

Late in 2015, the Company refocused its efforts on developing the VMS to analyze all 4 chambers of the heart in response to market research on the needs of the cardiology community. In the developed countries, cardiologists were asking to use 4D ultrasound scanning, which was not routinely used due to the difficulty in analyzing the images. The 4D images continue to get better as the technology improves but it is estimated that 20-25% of patients will always need to be scanned using 2D ultrasound due to poor windows (body size and shape) for ultrasound. In the emerging world, 2D ultrasound is still dominant, but cardiologists would prefer one device with both VMS and routine echocardiographic functions. Hence, the Company developed a strategy to develop an integrated 2D ultrasound device in partnership with a Chinese group and to expand both the 2D and 4D applications to all 4 chambers of the heart. The integrated VMS will take approximately a year to be developed and 6 months to be approved, so the Company has continued to evolve the existing 2D-VMS-PLUS prototype to be ready for manufacture in Q2 2016.

The overall strategy is to have available a suite of products to allow customers with existing 2D ultrasound machines to purchase the VMS-PLUS this year and upgrade to the integrated 2D-VMS machine when they are ready to buy new 2D ultrasound machines. The normal average life cycle of a cardiac ultrasound is 5 years and many are now past the end of their useful life. Thus, there is a large opportunity to sell integrated 2D-VMS machines. In the developed world, the strategy will be to develop the VMS analytical software package for 4D ultrasound and not to integrate it as the special data is already embedded in the 4D scans. There would still be a need for the integrated 2D-

VMS in about a quarter of the patients and so those services wanting to use 4D would need to buy both products to effectively examine all their patients.

The Company continues to support the cardiac readmission clinical study at the Montefiore Einstein Center for Heart and Vascular Care in New York City, to show that the volume and function of the right heart will identify which heart failure patients are likely to return to hospital within 30 days and should therefore be treated more aggressively to prevent the readmission and the associated potentially significant penalties to the hospital. The verification of right-ventricle volume as a predictor of readmission would be a game changer for the product and greatly accelerate the adoption of the products worldwide.

The Company has appointed experts in ultrasound and biomedical commercialization. In November, 2015, the Company appointed Dave Willis to the Board of Directors (see NR November 4, 2015). Mr. Willis is an expert in the development and international sales of ultrasound equipment. Until recently, he was Vice President Competitive Strategy and Product Innovation at SonoSite-Fujifilm Ultrasound, where he was responsible for design input, launch and global training of 4 major product releases. He also served as Vice President of Sales and Marketing the Americas for Ultrasonix Medical Corp, where he managed sales forces in Canada, U.S.A, and South America. Mr. Willis had been with SonoSite Ultrasound previously as Vice President of General Imaging Business Unit, where he helped grow sales to \$65 million, and as Director of Product Marketing. In the 1990's, he had positions with ATL Ultrasound as Director of Clinical Marketing, Manager of Clinical Investigations, Senior Clinical Specialist, International Sales Specialist and Applications Specialist, where he managed a distribution network in Asia.

In Q1 2016, Dr. Don Segal was appointed as a Director (see NR February 15, 2016) of the Company. Dr. Segal is an entrepreneur with a successful history of starting companies both in the private and public sector. With approximately 40 years of experience in the healthcare industry, he has managed several start-up companies through to commercialization. He is currently the Chairman and CEO of United Biopharmaceuticals Inc. Previously he founded Joldon Diagnostics and spearheaded its amalgamation with Intercon Pharma and Helix Biotech to form Helix BioPharma Corp (TSX:HBP), where he was Chairman and CEO. During his tenure, the company was listed on the TSX and NYSE and raised significant funding from capital markets to support product commercialization. Dr. Segal's first company was Radioimmunoassay Inc. (RIA Inc), which was sold as a private company. Dr. Segal has a Ph.D. in Medical Sciences from the University of Guelph.

The Board elected to move the Company's development operations to Canada to begin the creation of the 4-chamber system as well as to upgrade the hardware and software for the VMS to be ready for the 4-chamber application. Accordingly, the Company established a new facility in Toronto, Canada in early 2016 (see NR February 15, 2016). There is an excellent pool of software and hardware engineers in Toronto to draw upon for the 4-chamber project at more reasonable cost than the Seattle location. In addition, there are government grants available for such development.

The Company also elected to hire outside vendors for the 4-chamber development. Consequently, it hired Precision Image Analysis to build the new right atrium (RA) and left atrium (LA) catalogues using its internal image library. Over many years, the Company has amassed an excellent cardiac image library with both MRI and ultrasound image files from patients with a wide variety of cardiac conditions. This is a very valuable resource that anyone wishing to build

catalogues would need to replicate. Consequently, the Company is able to produce the new catalogues more quickly.

The Company was able to extend its license for the KBR technologies with the University of Washington to include the atria (See NR January 21, 2016) and secure initial data files which greatly helped to begin the catalogue creation process. The building of new catalogues requires an iterative process of tracing the heart chambers and then verifying the accuracy of the tracings using the KBR algorithm and then retracing any images that have motion artefacts and other inaccuracies. The Company is pleased to report all the necessary hearts to build the RA and LA catalogues have been traced, verified and retraced. The final catalogues can now be created and tested for accuracy. The Company has established relationships with three clinical centres (two in Canada and one in Europe) to advise it on the development and testing of the 4-Chamber interface and catalogues. This creation and testing of the RA and LA catalogues had been expected to take 6 months (see NR October 23, 2015) and be completed by the end of April. It is now estimated it will take an additional 3 months to complete the project.

The Company has also hired Walled Networks to assist it in the software and hardware upgrades. To date, they have redesigned the VMS-PLUS to be manufactured more easily while reducing the foot print and weight of the machine. They have also made the VMS-PLUS more mobile and upgraded the computer hardware to current standards. This was necessary as many of the components for the VMS were no longer available. The result is a much improved machine, which can be mass manufactured in Canada or China.

In Q4 2015, the Company entered into an agreement with Lishman Global Inc. to set up a self-financing joint venture in China to develop an integrated VMS-ultrasound machine, as well as to manufacture and market existing and new VMS machines in China. The Company retains all rights to market the Chinese-manufactured machines outside of China. An initial investment in Ventripoint Diagnostics Ltd. of CDN\$500,000 was received by the Company (see NR November 10, 2015) and it is expected an additional CDN\$2.25M will be invested by Chinese entities who will be part of the joint venture. Due to market conditions, the additional investment has been postponed. The Company is exploring a share swap with a Chinese Company to facilitate the formation of the joint venture and subsequent dividend transfers. This transaction would require approval from the TSX Venture Exchange and the central government in China and therefore there can be no assurance such a share swap will be completed.

Product Development

The Company continues to look for ways to make the VMS system easier to use, expand its capabilities and increase its value. In discussions with leading cardiologists, they have expressed the need for a volumetric analysis package for all 4 heart chambers. A prototype application for left ventricle analysis (LV) has been developed, which included the creation of a LV database from the existing inventory of heart images, which the Company has amassed over several years. This application has been used for clinical research by a major European heart centre, which reports that it is more accurate than existing analysis techniques, especially when the LV has been deformed in the setting of RV dysfunction. With the recent clearance in the United States of the RV database for all patients where RV analysis is desired or warranted (see NR, May 26, 2015), the Company has been encouraged to make commercially available databases for the other 3 chambers of the heart. While RV volume measurements are valuable in congenital heart diseases and pulmonary hypertension, there is an emerging demand for accurate volumetric measurements of the LA and RA to inform the selection of

the appropriate monitoring and treatment of patients who require pacemakers, as well as those with acute heart attacks (myocardial infarctions). All the VMS analytical products; 2DE, 4DE or CMR (for use with MRI images) can use the same catalogues for the different heart chambers to generate volumetric measurements. Initially thought to be years away, Ventripoint estimates that all development will be completed for the 4-chamber feature, along with regulatory clearances and commercial release to be used with 2D ultrasound equipment, within the next year.

An additional opportunity is emerging with the proliferation of 4D ultrasound equipment in the developed countries. The VMS technology can provide analysis of 4D ultrasound images of the heart with the same accuracy as MRI. The development team has developed a prototype analytical software package to be used with 4D echocardiograms (VMS-4DE™) and one to be used with MRI images (VMS-CMR™). These have undergone initial clinical evaluation for accuracy and have been shown to be accurate when compared to the method of disks analysis of MRI images, which is the gold-standard technique. A group led by Dr. Kai Laser at the Center for Congenital Heart Defects, Bad Oeynhausen, Germany, has published the results of a clinical study that demonstrated the robust application of the VMS heart analysis technology using cardiac MRI (CMR) and 4D ultrasound imaging in a wide range of cardiac conditions ([“Knowledge-based reconstruction of right ventricular volumes using real-time three-dimensional echocardiographic as well as cardiac magnetic resonance images: comparison with a cardiac magnetic resonance standard.”](#) Laser KT, Horst JP, Barth P, Kelter-Klöpping A, Haas NA, Burchert W, Kecicioglu D, Körperich H. J Am Soc Echocardiogr. 27(10):1087-97, 2014). An accurate 4D analysis approach is needed as the current 4D ultrasound analysis approaches are widely accepted as inaccurate in calculating volumes except for normal LV volumes, which can easily be calculated from 2DE scans.

The current use of 4DE in cardiology is for research purposes and for isolated structures of the heart, such as valves. The Company believes that the VMS approach can overcome the limitations of 4DE concerning coverage, image quality and lack of feasibility when looking at volumetric functional assessments and allow its use for routine clinical assessments of the heart. Indeed the German study confirms the accuracy and precision using 4D images. The VMS-4DE product needs additional work on the user interface to increase the feasibility prior to commercialization. The Company has selected a vendor to perform this development and has established a relationship with three clinical centres to assist in the development and testing of the product. The Company is also exploring the merits of using KBR-assisted automated border detection with research groups that specialize in creating algorithms for border detection. Should one of these groups determine they can produce a better algorithm, the Company would enter into an agreement to seek additional research funding for the project. The Company is also seeking partners to assist in commercializing the VMS-4DE product. Ventripoint will announce any agreements if and when they are completed.

The Company has suspended the development of the new workstations, VMS-Plus™, and the VMS-Nano™ and direct sales efforts until the 4-chamber databases are available, in order to focus on the LA and RA catalogue development, the VMS-4DE product and support the Chinese initiatives.

Clinical Trials in Support of US FDA Approvals and Demonstration of Functionality

The Company has completed clinical enrolment for two clinical trials in the United States which were designed to show substantial equivalency between the gold-standard MRI method and the 2D-ultrasound, VMS-2DE™ technique in Tetralogy of Fallot (TOF) and Pulmonary Arterial Hypertension (PAH) and has an ongoing study to examine the ability of RV analysis with the VMS tools to identify heart failure patients who will be re-admitted to hospital within 30 to 90 days.

Pulmonary Arterial Hypertension: On May 2, 2012 the Company announced that it had initiated a clinical trial in pulmonary hypertension and on October 10, 2013, the Company announced that the clinical trial achieved all its primary endpoints of accurately measuring the volume and ejection fraction of the right heart as compared to the traditional MRI analysis using the method of summation of disks. The results of the clinical trial demonstrated that the calculated parameters between right ventricular volumes computed from echocardiograms by VMS and MRI images computed with Simpson's rule were within the pre-specified 10% range for each of the mean difference and 95% confidence interval (4.8+/-1.4% for EDV, 1.8+/-1.5% for ESV, and 2.0+/-0.7% for EF).

On November 15, 2013, the Company announced that the FDA had closed its review of the Company's 510(k) application for approval of the VMS for use in PAH. The Company consulted with the Agency and determined a modified submission would be favourably received. On January 23, 2014, the Company submitted a revised 510(k) application and on March 10, 2014, the Company received clearance from the FDA to market the VMS device for use in adults with PAH in the United States. The VMS was the first ultrasound system to be cleared as substantially equivalent to MRI for right ventricle analysis.

All Heart Disease: Right heart function remains a significant prognostic parameter for all heart disease. On May 26th, 2015, the Company announced that the US FDA had given Market Clearance for the VMS for use in all heart disease patients where RV analysis was warranted or desired.

Heart disease is the number one killer of adults, taking more lives each year than all forms of cancer combined. With more than 27 million individuals in the U.S. alone that are living with cardiac disease, there is not a single person that will not be affected by this statistic at some point in their life. This Market Clearance will greatly increase the marketability of the VMS product as it is recommended by the ASE guidelines that a RV volumetric analysis be done on heart patients.

Tetralogy of Fallot (TOF): On June 24, 2013 the Company announced that the TOF clinical trial had stopped recruiting as it had achieved the goal of 75 evaluable cases. The Company has elected not to analyze the TOF study data as the RV application to the FDA was approved and allows for analysis of all patients where the RV analysis is warranted or desired.

Re-Admission Study: The Company is discussing with major cardiac centres in Canada and the US the initiation of clinical studies in left heart failure to determine if analysis of the RV using VMS during initial and subsequent patient admissions to a hospital would reduce the re-admission rate within 30 days, which is currently 21% in the US. It is estimated that over 1 million re-admissions happen annually in the US. In 2004 alone, the cost to Medicare for heart failure re-admissions totalled \$17.4 billion (http://www.heart.org/idc/groups/heart-public/@wcm/@private/@hcm/@gwtg/documents/downloadable/ucm_432944.pdf). In the US, Medicare and Medicaid

withhold a percentage of billings from hospitals with higher than acceptable re-admission rates. The withholding was 1% in fiscal year (FY) 2013, 2% in FY2014 and 3% in FY2015. Two thirds of hospitals, or 2,213 hospitals, were penalized in FY2013, which ended September 30, 2013, for a total of \$280 - \$320 million at the 1% level (<http://www.advisory.com/Daily-Briefing/2013/08/05/CMS-2225-hospitals-will-pay-readmissions-penalties-next-year>). It has been reported that 2,600 hospitals were penalized in FY2014 and 2,592 hospitals will receive lower payments for every Medicare patient that stays in the hospital for FY2015. The total penalty for FY2015 at the 3% level in the fourth year of the program was estimated to be \$420 million (<http://www.khn.org/news/half-of-nations-hospitals-fail-again-to-escape-medicares-readmission-penalties/>).

While the penalties for high re-admission rates are significant to hospitals, a larger issue is bed utilization. The average cardiac admission lasts for 6.5 days and generates about 50% of the revenue per bed-day than for average admissions. Thus, the cardiac re-admissions significantly affect the hospitals' average revenues per bed-day. Some procedures, where patients are hospitalized for a few days, generate 5 times greater revenue per bed-day than a routine cardiac admission. Accordingly, hospitals would benefit in two ways by acquiring a VMS; lower penalties and higher revenues from bed utilization.

Patients in left heart failure do not routinely undergo functional RV analysis and yet research studies using MRI have shown that functional RV analysis is prognostic. The recent imaging guideline has recommended functional right heart assessments for all patients. On November 11, 2014, the Company announced that the Montefiore-Einstein Center for Heart and Vascular Care in the Bronx, New York City, had begun a clinical study.

Dr. Mario Garcia and Dr. Ileana Piña are leading the study. Dr. Piña is a nationally renowned cardiologist known for her work in heart failure and development of multidisciplinary clinical interventions to improve patient rehabilitation outcomes. Dr. Piña serves as advisor/consultant to the FDA's Center for Devices and Radiological Health and their section of Epidemiology. She is also a consultant to Novartis Pharmaceuticals and GE HealthCare. She is the author/co-author of over 100 publications in print, and a world-renowned speaker on heart failure management. Dr. Piña was on the writing committee of the new American Heart Association Guidelines for the Prevention of Heart Disease. Mario J. Garcia, MD, is Chief of the Division of Cardiology and Co-Director of the Montefiore-Einstein Center for Heart and Vascular Care. Dr. Garcia is an internationally known leader in the development and clinical advancement of cardiac diagnostic technology, including cardiac CT, echocardiography and cardiac magnetic resonance imaging. Dr. Garcia is board-certified in cardiovascular medicine, internal medicine and echocardiography.

Montefiore Medical Center is a 1,418-bed general medical and surgical facility in the Bronx, New York. It ranked among the top hospitals nationally in Cardiology and Heart Surgery, in *U.S. News & World Report's* "America's Best Hospitals" 2014-2015 survey. Through its enduring partnership with Albert Einstein College of Medicine, it combines clinical care with research to deliver the most current treatments available.

The clinical trial will evaluate the ability of VMS analysis to identify the patients who will return within 30 days and determine the degree RV function is impaired in this group. If a positive correlation can be established between RV function and re-admission to hospital, a second study looking at treatment modifications to prevent or delay re-admissions will be initiated. This study has the potential to revolutionize how cardiac patients are assessed and save the healthcare system

billions of dollars by reducing re-admission rates as more appropriate therapy is applied to those patients in left-heart failure with right-heart involvement.

The Company has done an analysis of the effect of a 5% reduction in re-admission rate and determined the average hospital would benefit with \$1.3 million in new or recovered revenue from better bed and MRI usage, as well as recovery of penalties and re-imbursements for the VMS procedures themselves. The study will also look at 90 day re-admission rates to determine additional benefits from functional RV analysis.

To date 140 patients have been enrolled in the Montefiore study. An interim analysis is ongoing with approximately half the studies having been completed. The re-admission study in patients with left heart failure is attempting to determine if the quantitative assessment of right-heart function using the Ventripoint VMS Heart Analysis System would enable cardiologists to identify those patients most likely to return and be re-admitted within 30 days or 90 days.

Commercialization – Strategies and Implementation

The successful launch and adoption of a new medical device requires acceptance by multiple groups. Among the most fundamental is a credible independent validation of meritorious use of the VMS in clinical-care settings. It is essential that the ultimate payers for healthcare (e.g. government, third party insurers) receive the appropriate professional recommendations with supporting justifications and verify the device represents a medically effective and financially efficient tool that fits within the healthcare industry's complex set of business and patient-care needs.

The Company believes the support of thought leaders is the first building block to gaining the endorsement of the payers. Accordingly, the Company has collaborated with leading echocardiologists and institutions in the field of Congenital Heart Disease (CHD), PAH and other heart conditions. Establishing luminary sites across multiple geographies has enabled the Company to best select those studies that address clinically relevant challenges and solidify the medical benefits of its VMS system in clinical settings, as well as to disseminate the study results more broadly. Ventripoint is now installed at leading cardiac sites in the US, Europe, Canada and China. To build VMS awareness in the Company's targeted medical professional market segments, these VMS deployments were designed to produce publications in leading medical journals and presentations at conferences. When possible, the Company attends the conferences where the results of these clinical studies are being first presented to the medical community.

In May 2013, the Company exhibited at the annual Congress of the Association of Pediatric Cardiologists (AEPC) in London, UK. In July 2013, the Company exhibited at the Annual Congress of the American Society for Echocardiography (ASE) in Minneapolis, USA. In October 2013, the Company exhibited at the 8th European Echocardiography Course in Congenital Heart Disease in Bologna, Italy.

In June, 2013 the Company exhibited in collaboration with Toshiba Medical Systems Europe, at the 11th International Symposium entitled "Echocardiography Today and Tomorrow" in St. Wolfgang, Austria. The conference was focused on the right heart and included a workshop, where case studies using the Ventripoint VMS were presented by the group from Elisabethinen Hospital, Linz, Austria, which also organized the conference. Dr. Lang from the University of Chicago also presented his PAH data.

In July, 2013, when the Company exhibited at the 24th Scientific Sessions of the American Society of Echocardiology in Minneapolis, Minnesota three scientific papers were presented by three groups of researchers discussing the clinical use of the VMS.

1. A multicentre group from the University of Chicago and Elisabethinen Hospital in Linz, Austria presented a study entitled “Three-dimensional Modeling of the Right Ventricle from Two-Dimensional Transthoracic Echocardiographic Images: Utility of Knowledge-Based Reconstruction in Pulmonary Arterial Hypertension”. Dr. Lang from the University of Chicago and past President of the ASE stated; “*The Ventripoint 3D system provides reproducible measurements of RV volumes in pulmonary arterial hypertension patients. The clinical accuracy of VMS helps obtain valuable information that can impact patient care*”.
2. A group led by Dr. Laser from the Heart and Diabetes Center NRW (HDZ NRW), Bad Oeynhausen, Germany reported on the first use of the prototype VMS-4DE™ software, which analyses 4D ultrasound cardiac images, in a paper entitled; “*Right ventricular volumetry in healthy children and young adults by RT3DE - New axis, new quantification tool with promising results*”.
3. A group led by Dr. Soriano from the Seattle Children’s Hospital reported on their early experiences with the VMS in a number of children with a broad range of heart problems in a paper entitled; “*Echocardiographic 3D Reconstruction Accurately and Precisely Measures Right Ventricular End Diastolic Volumes: Preliminary Pediatric Experience in a Single Institution*”. Dr. Soriano commented “Our ongoing research experience with the Ventripoint equipment has been very positive and we look forward to applying it routinely once it is available for clinical usage in the USA”.

In July 2013, the cardiology group from the University of Chicago, led by Dr. Roberto Lang, published a paper entitled “*Three-Dimensional Modeling of the Right Ventricle from Two-Dimensional Transthoracic Echocardiographic Images: Utility of Knowledge-Based Reconstruction* in Pulmonary Arterial Hypertension*” in the Journal of the American Society of Echocardiography, [Volume 26, Issue 8](#) , Pages 860-867, August 2013. The paper concludes: “Three-dimensional reconstruction of the RV endocardium from 2D transthoracic echocardiographic images obtained in patients with Pulmonary Arterial Hypertension (PAH), as accomplished by Knowledge-Based Reconstruction (KBR), is feasible, accurate, and reproducible”.

On April 2, 2014, the Company reported on the completion of two clinical studies, one in PAH and one in congenital heart disease. Both studies verify the utility of the VMS in monitoring patients after treatment to determine if the therapy has been effective.

Dr. Johannes Schwaiger of the Department of Cardiology at Royal Free Hospital in London will be lecturing at the 13th International Pulmonary Hypertension Forum in Lisbon on his experiences using the VMS to verify a significant change in RV ejection fraction after novel targeted treatments, which resulted in significant improvements in patients with PAH in a session entitled “*Progress and future challenges in the management of PAH*”.

Dr. Henrik Brunand and his [group](#) at the Rikshospitalet University Hospital in Oslo, Norway, published a paper in the Congenital Heart Disease Journal entitled “*Right Ventricular Volumes Assessed by Echocardiographic Three-dimensional Knowledge-based Reconstruction Compared with Magnetic Resonance Imaging in a Clinical Setting*”. The paper reports on patients with

Congenital Heart Disease who had undergone pulmonary valve replacement and found excellent feasibility (97% of patients could be assessed) with VMS and clinically useful correlations with MRI for RV volumes. The paper concludes with the comment “*Knowledge-based reconstruction [VMS] may replace MRI measurements for serial follow-up...*”

On November 5, 2014, the Company reported that the group from L’hôpital Universitaire Necker-Enfants Malades in Paris, France had published a paper entitled: “*Knowledge-based 3D reconstruction compared to MRI for evaluation of right ventricular volumes and function in congenital heart diseases affecting the right ventricle*” in [Archives of Cardiovascular Diseases](#), Volume 107(9), 491-500. For the first time, along with a wide range of patients with congenital heart disease (CHD), patients with all stages of repaired Hypoplastic Left-Heart Syndrome (HLHS) were studied. The VMS allowed for repeated evaluation of these very ill children, while MRI continues to be very difficult and dangerous to perform. This is of particular concern in these HLHS patients. The paper concludes: “*3D-KR ... provides accurate and reproducible measurements of RV volumes. This new technique can be used as an accurate routine tool to assess RV function in CHD*”.

In April, 2015, a paper titled “Accuracy and Test-Retest Reproducibility of Two-Dimensional Knowledge-Based Volumetric Reconstruction of the Right Ventricle in Pulmonary Hypertension” was accepted for publication in the *Journal of the American Society of Echocardiography*. The full article is available at <http://www.onlinejase.com/article/S0894-7317%2815%2900142-X/references>.

The study design compared the accuracy of the measurements performed by the cardiologists who independently performed an echocardiogram on the same patient and then analyzed the scans. This “test-retest” design is unique in that a majority of studies comparing measurements performed by different individuals are typically completed with the observers using the same echocardiographical images. This type of study method reflects the real world clinical use of echocardiography, where patients receive echocardiograms on different days performed by different cardiologists and they are used to assess if changes in heart function have occurred. An accurate, reproducible procedure is absolutely necessary to make therapeutic decisions.

This clinical study demonstrated that the VMS analysis of the right heart is reproducible between operators. This means that the cardiologist can trust previous test results regardless of the examiner, so long as the echocardiogram was analyzed using the VMS. Further, the study determined that results produced by VMS were more accurate and reproducible than Fractional-Area Change, which is one of the methods of estimating right-heart function recommended by the ASE imaging guidelines. The imaging guidelines, published by the American Society of Echocardiography (ASE) in the Journal of the ASE, are written by experts in the field of echocardiography and cardiology, and provide a recommended standard of care.

This VMS validation and awareness campaign was intended to engage the support and endorsement of opinion leaders and to position VMS for broad acceptance by clinicians in Canada, Europe and in the US.

From November 2013 until March 2014, the Company was focused solely on obtaining FDA clearance and minimal efforts were put towards sales and marketing. With the FDA clearance received on March 10, 2014, the Company re-initiated contact with the cardiology community in the United States, Europe and Canada to promote clinical use and sales. The Company became focused on initial marketing strategies, which included:

- Exhibiting at the annual meeting of the American Society for Echocardiography in June, 2014 in Portland, Oregon and attending other conferences to meet with cardiologists.
- Contacting American cardiologists who have previously indicated an interest in functional heart analysis,
- Signing up distributors in the rest of the world,
- Furthering discussions with select leading ultrasound manufacturers for collaborations on technology integration,
- Advancing hospital-sponsored clinical studies into new applications for the VMS, and
- Re-evaluating marketplace acceptance of a pay-per-use structure in patients with left heart failure, while maintaining the current capital purchase approach in Pulmonary Hypertension and Congenital Heart Disease applications.

The Company exhibited at the EuroEcho Conference in Vienna from December 3-6, 2014. More than 3,500 participants who focus on echocardiology attended EuroEcho-Imaging 2014, which is the official annual meeting of the European Association of Cardiovascular Imaging, a registered branch of the European Society of Cardiology.

The Company attended the American College of Cardiology Scientific Sessions, March 14-16th, 2015, in San Diego, CA. We met with key potential customers who have asked for our time to engage in further discussions with regard to our product. The event was an excellent opportunity to communicate directly with those customers currently interested in purchasing a VMS system.

The Company exhibited at American Society of Echocardiography Scientific Session (ASE 2015) held in Boston in June 2015. Cardiologists at this major conference indicated that they wanted an ability to analyze the volumes for all 4 chambers of the heart.

On March 30, 2015, the Company announced the appointment of PYP Enterprises LLC (PYP) to be the exclusive distributor to the US military hospitals including the VA hospitals. PYP Enterprises LLC is a preferred provider of services to the Department of Defense and is designated as a service-disabled, veteran-owned, small business (SDVOSB) by the US Department of Defense. The US Department of Defense is required to purchase products worth 6% of its budget from SDVOSBs and the VA is required to spend 3% of its annual budget on products from SDVOSBs.

The Veterans Health Administration (VHA) is the largest integrated health care system in the United States and consists of 150 medical centers, nearly 1,400 community-based outpatient clinics, community living centers, Vet Centers and Domiciliaries. With a medical care budget of more than \$55 billion, VHA employs more than 288,000 staff with 53,000 independent licensed health care practitioners who provide comprehensive care to more than 8.3 million veterans each year. In addition, VHA is the nation's largest provider of graduate medical education and a major contributor to medical research.

On September 2, 2014, the Company announced that it has signed a distribution agreement with Shandong Realcan Pharmaceuticals Co. Ltd ("Realcan", Shenzhen Exchange:002589). The Company was informed in March, 2015 by Realcan that they were not ready to move forward with the distribution agreement and investment. The agreement has been terminated and all rights returned to the Company.

On November 10, 2015, the Company announced a strategic investment from Shanghai YuTian Medical Investment Management Co. Ltd. (YuTian), a Chinese Company. The investment was part

of a larger transaction under the umbrella of an investment, distribution and manufacturing agreement entered into between Ventripoint and Lishman Global Inc. Pursuant to the terms of the agreement and subject to certain milestones being achieved, YuTian will make a future investment in Ventripoint in consideration of an exclusive license to develop, manufacture and distribute a series of Ventripoint's Knowledge-Based Reconstruction products in the People's Republic of China. YuTian will establish a joint venture in China to develop, manufacture and distribute the KBR products and capitalize the JV appropriately. The future investment into Ventripoint of CDN\$2,250,000 will be made upon the completion of certain steps within the 90 days after the VMS machine is installed in a major Chinese hospital. The 90 days ended February 29, 2016 and the parties have agreed to extend the timeline due to market conditions. After this future investment, YuTian would hold more than 10% of the issued and outstanding shares of the Company, and would be granted the right to nominate one director to the board of directors of Ventripoint. Provided certain conditions are met, the Company will invest CDN\$750,000 in YuTian, and will have the right to appoint one director to the board of directors of YuTian. Discussions to establish the JV are advancing and there is no assurance a joint venture will be established.

The market for medical instruments in China is approximately \$7 billion per year and growing rapidly as the healthcare system is improved and extended. There are over 14,000 hospitals in China and 25% of cases are for cardiovascular disease. In the last 3 years, over 2,000 new hospitals have been built and the government health insurance now covers 90% of the population.

In addition the Company is evaluating the integration of its technology with existing ultrasound devices and analysis packages. The Company continues to discuss with manufacturers of ultrasound equipment and analytic software the merits of combining the VMS with their systems to allow for a complete heart analysis using 2D ultrasound. The Company will disclose any agreements, to the limit possible for such commercial agreements, should they arise.

Regulatory

Canada and Europe As previously reported, the Company has received Health Canada approval and has also received the European CE Mark approval to market its VMS product and service offering.

On March 27, 2012 the Company was notified that it had received Notified Body approval to market its pulmonary hypertension application in Europe. On May 4, 2012 the Company was notified that it had received Health Canada approval to market its pulmonary hypertension application in Canada.

On April 17, 2013 the Company was notified that it had received Notified Body approval to market its NRV™ application in Europe. On April 25, 2012 Health Canada approved the Company's application for approval of the NRV database in Canada.

On November 11, 2014, the Company received a renewal of its European CE Mark.

In December, 2014, the Company successfully completed an ISO 13485 re-certification audit, which is carried out every three years.

United States On March 10, 2014, the Company received clearance from the FDA to market the VMS device for use in adults with PAH in the United States. The VMS is the first ultrasound system to be cleared as equivalent to MRI for right ventricle analysis.

The Company completed an initial Establishment Inspection by the U.S. Food and Drug Administration (FDA) on January 8, 2015. This initial Establishment Inspection following 510(k) clearance of the Ventripoint Medical System in March, 2014, was started on December 29, 2014 at the Company's Bellevue, Washington location. It was a pre-announced Good Manufacturing Practices (GMP) facility inspection. It was a very detailed inspection of our Quality System as it relates to Federal Regulations. The inspection reported only two minor observations, as noted on FDA Form 483, that were easily addressed.

On May 26, 2015, the Company announced that the US FDA had granted Marketing Clearance for Ventripoint's newest NRV catalog, which was developed to provide right ventricular volumes of individuals being evaluated, regardless of their cardiac diagnosis. Previous submissions to the FDA required us to prove the methodology, safety, and accuracy of the entire VMS product to the reviewers, which was challenging with such novel technology. By referring to our cleared product throughout any future submissions as a Predicate Device, our path forward becomes much more predictable. This approval will also allow us to formulate additional submissions for expansion of the databases to other heart chambers.

FINANCIAL HIGHLIGHTS

Unless otherwise specified, all financial data is presented in US dollars.

At the Shareholders Meeting on October 13, 2015, the shareholders approved a resolution providing the Board with the discretion to enact a share consolidation of up to 10:1. The consolidation took effect on December 7, 2015 at a ratio of 10:1.

All numbers of common shares, warrants, options and other derivatives, and all share prices in this MD&A have been adjusted to reflect post consolidation values.

Capital Transactions

The fully diluted share capital of the Company, adjusted for the 10:1 consolidation, as of April 29, 2016 is as follows:

	Issued and Outstanding				
	Common Shares	Convertible Debentures	Warrants	Options	Fully Diluted
Reverse takeover - 2007 Ventripoint and Diagnostics	2,432,845		7,881	115,285	2,556,011
Stock for services & payment of debt	2,088,982		405,149	-	2,494,131
Option grants net of expirations and forfeitures	-		-	678,080	678,080
Common stock offering - 2007	1,150,000		-	-	1,150,000
Debenture offerings - 2009	-		513,174	-	513,174
Common stock offering - 2010	2,429,012		142,505	-	2,571,517
Common stock offering - 2011	3,122,862		1,693,396	-	4,816,258
Promissory Unit offering - 2011	-		63,000	-	63,000
Common stock offering - 2012	1,895,000		947,500	52,635	2,895,135
Common stock offering - 2013	933,700		493,626		1,427,326
Unit Debentures -2013	110,000				110,000
Convertible Debentures - 2013	234,000	766,000	689,900		1,689,900
Warrants cancelled/expired	-		(4,015,123)	-	(4,015,123)
Warrants exercised	651,056		(651,056)	-	0
Options exercised	72,500			(72,500)	0
DSUs exercised	150,000				150,000
Convertible debentures - 2014	1,000,000				1,000,000
Common stock offering - 2014	2,557,643		1,388,870		3,946,513
Short-term debentures - 2014			348,340		348,340
Convertible debentures - Mar. 2015	150,000				150,000
Common stock offering - June, 2015	1,454,545		816,363		2,270,908
Common stock offering - Sept & Nov, 2015	6,363,636		1,663,636		8,027,273
Issued and outstanding, April 29, 2016	26,795,787	766,000	4,507,161	773,500	32,842,442

As of April 29, 2016, officers and directors held 2.32% of the outstanding common shares of the Company (5.02% on a fully diluted basis).

Common Share Issuances 2015 and 2016

a. *Deferred Stock Unit grants and exercise*

On February 5, 2016 two Directors were granted a total of 37,500 Deferred Share Units (DSU's) in recognition of their past and future services to the Company. On February 26, 2016 the Company issued 82,500 Common Shares upon the exercise of DSUs by a Director who stepped down from the Board of Directors after many years of service, including 15,000 of the DSU's issued in February. DSU's are expensed at each grant date and measured at the five-day volume weighted average trading price of the Company's common shares on the day prior to the day the Units were granted. Under the terms of the Company's Deferred Share Unit Plan holders of DSUs may redeem each DSU for one common share upon the termination of their services to the Company, at no cost to the holder.

b. *Unit Private Placement – November 9, 2015*

On November 9, 2015, the Company closed a non-brokered private placement (the "Private Placement"), pursuant to which Shanghai YuTian Medical Investment Management Co. Ltd. ("Ventrisound") made a strategic investment in Ventripoint. At closing, Ventripoint issued to Ventrisound a total of 909,091 units ("Units") at CDN\$0.55 per Unit for total proceeds of CDN\$500,000. Each Unit consists of one common share of Ventripoint and one quarter of one common share warrant ("Warrant"). Each Warrant will entitle the holder thereof to acquire one additional common share at an exercise price of CDN\$1.10 per common share for a period of 2 years after the issuance of the Warrant, subject to accelerations in certain events. A finder's fee comprised of CDN\$40,000 and 72,727 of the Warrants were paid.

The common shares and the Warrants are subject to a hold period of four months plus one day from the date of closing of the Private Placement.

c. *Unit Private Placement - September 29, 2015*

On September 29, 2015 the Company completed a non-brokered Private Placement of 5,454,545 units ("Units") at CDN\$0.55 per Unit for total gross proceeds of CDN\$3,000,000 consisting of CDN\$2,400,000 cash proceeds and CDN\$600,000 debt repayment. Each Unit consists of one common share of the Company and one quarter of one common share Warrant. Each Warrant entitles the holder to acquire one common share at an exercise price of CDN\$1.10 per common share for a period of 2 years after the issuance of the Warrant, subject to accelerations in certain events.

Two of the subscribers in the Private Placement accepted Units as payment in full of the CDN\$300,000 Two Year Convertible Debenture and of the CDN\$300,000 Promissory Note as a shares-for-debt transaction.

d. *Shares for Interest – August 28, 2015*

On August 28, 2015 the Company issued an aggregate of 56,000 common shares at a deemed price of CDN\$0.57 per common share as payment of an aggregate of CDN\$31,920 in interest owing pursuant to the outstanding Three Year Unsecured Convertible Debenture issued on August 21, 2013.

e. *Conversion of Short Term Convertible Debentures*

On July 27, 2015 CDN\$70,000 of the Short-Term Convertible Debentures issued March 25, 2015, were converted into 116,667 common shares at a deemed price of CDN\$0.60 per share. On September 22, 2015 a further CDN\$20,000 of these Short-Term Convertible Debentures were converted into 33,333 common shares at CDN\$0.60 per share.

f. *Unit Private Placement – June 4, 2015*

On June 4, 2015 the Company completed a non-brokered Private Placement of 1,454,545 units (“Unit”) at CDN\$0.55 per Unit for gross proceeds of CDN\$800,000. Each Unit consists of one common share of the Company and one half Warrant. Each full Warrant entitles the owner to acquire one common share at a price of CDN\$1.20 per common share for a period of 2 years from the date of issue. Of the total, 1,390,909 Units were issued for cash of CDN\$765,000 and 63,636 Units were issued in exchange for consulting services valued at CDN\$35,000.

An aggregate of CDN\$49,000 in finder’s fees were paid to finders along with 89,091 finder’s warrants,. Each finder’s warrant entitles the holder to purchase one common share at CDN\$0.55 per share for a period of 18 months after the issuance of the finder’s warrants.

g. *Exercise of Options*

On May 11, 2015 a Director and Officer of the Company exercised 10,000 common share options at CDN\$0.80 per share with gross proceeds to the Company of CDN\$8,000. On May 27, 2015, the same Officer exercised an additional 25,000 common share options at CDN\$0.80 for proceeds to the Company of CDN\$20,000.

h. *Deferred Stock Unit exercise*

On March 27, 2015 the Company issued 67,500 common shares upon the exercise of Deferred Share Units by a Director who stepped down from the Board of Directors on March 25, 2015. These DSU’s were expensed at each grant date from 2012 through 2014, measured at the five-day volume weighted average trading price of the Company’s common shares on the day prior to the day the Units were granted. Under the terms of the Company’s Deferred Share Unit Plan holders of DSUs may redeem each DSU for one common share upon the termination of their services to the Company, at no cost to the holder.

Outstanding Warrants and Options

For details of Warrant Issuances see *Common Share Issuances* above. The following table reflects warrants outstanding at April 29, 2016 (\$CDN):

Warrants - Outstanding and Exercisable

<u>Grant Price</u>		<u>Quantity</u>	<u>Weighted Avg Remaining Contract Life</u>	<u>Weighted Average Exercise Price</u>
<u>Low</u>	<u>High</u>			
\$0.55	\$0.90	437,431	0.72	\$0.59
\$1.00	\$1.10	1,663,636	1.50	\$1.10
\$1.20	\$1.30	2,006,094	0.55	\$1.20
\$1.40	\$1.50	400,000	0.48	\$1.50
		4,507,161	0.92	\$1.13

2015 Option Grants -

On June 6, 2015 a consultant was granted 12,000 stock options in payment for consulting services related to product distribution. These options are exercisable at CDN\$0.60 per common share until June 6, 2018.

On May 26, 2015 the Company granted a Vice-President of the Company 100,000 stock options with an exercise price of CDN\$0.60 until May 20, 2020. The options vested immediately but expired in January, 2016, after the Officer left the Company.

Also on May 25, 2015 a consultant was granted 12,000 stock options at CDN\$0.60 cents for a term of three years in payment for consulting services. Options vested on execution of the consulting agreement on May 26, 2015.

The following table reflects stock options outstanding at April 29, 2016 (\$CDN):

		<u>Options Outstanding</u>			<u>Options Exercisable</u>		
		<u>Weighted Avg</u>			<u>Weighted Avg</u>		
<u>Grant Price</u>							
Low	High	Quantity	Remaining Contract Life	Weighted Avg Exercise Price	Quantity	Remaining Contract Life	Weighted Avg Exercise Price
\$0.60	\$0.80	239,000	3.32	\$0.78	189,000	3.29	\$0.77
\$0.90	\$1.10	307,500	2.07	\$1.00	286,667	2.04	\$1.00
\$1.20	\$1.70	227,000	2.76	\$1.46	227,000	2.76	\$1.46
		773,500	2.66	\$1.07	702,667	2.61	\$1.09

Notes and Debentures

The Company's debt is entirely unsecured. The financial statement presentation under IFRS presents the debt at its fair market value, which may differ substantially from the amounts actually payable on maturity as shown below. The following is a summary of the Notes and Debentures outstanding at December 31, 2015 and 2014 in US\$ as presented in the audited annual financial statements prepared using International Financial Accounting Standards (IFRS), with their respective cash amounts due on maturity at the 2015 year end foreign exchange rate (US\$/C - \$0.7212):

	<u>Per financial statements - US\$</u>		<u>Cash Due on Maturity - US\$</u>		<u>Maturity Date</u>
	<u>Dec. 31, 2015</u>	<u>Dec. 31, 2014</u>	<u>Dec. 31, 2015</u>	<u>Dec. 31, 2014</u>	
<i>Current portion of Debentures</i>					
Short-Term Convertible Debentures	101,095	-	115,392	-	3/25/2016 8/21 & 10/22 2016
3 Year Convertible Debentures	330,090	-	552,439	-	12/31/2015
Short-term Debentures	-	36,436	-	116,834	9/15/2015
Promissory Note	-	257,979	-	216,360	6/30/2015
Retention Promissory Note	-	39,878	-	45,283	8/30/2015
2 Year Convertible Debentures	-	149,972	-	216,360	
<i>Total current portion of Debentures</i>	431,185	484,265	667,831	594,838	
<i>Long term portion of Debentures:</i>					
3 Year Convertible Debentures	-	232,141	-	552,439	8/21 & 10/22 2016
<i>Total Debt</i>	\$431,185	\$716,406	\$667,831	\$1,147,277	

All Notes and Debentures at December 31, 2015 were denominated in CDN \$, totaling CDN\$926,000. At December 31, 2014 the debt consisted of US\$45,283 and CDN\$1,580,700 in debentures.

Debenture Transactions in 2015 and 2016

a. *Issuance and Partial Conversion of Short-Term Convertible Debentures – March 25, 2015*

On March 25, 2015, the Company completed a non-brokered private placement of unsecured short-term convertible debentures for gross proceeds of CDN\$250,000. Of the total, CDN\$162,000 was issued for cash and CDN\$90,000 was exchanged for consulting services. The debentures mature on March 25, 2016 and may be converted by the holder at any time into common shares of the Company at a price of CDN\$0.60 per common share. Interest is payable on the debentures at an annual rate of 12% paid in cash on a quarterly basis in arrears. These debentures may be repaid partially, or in full, by the Company at any time without penalty. A Director and Officer of the Company subscribed for CDN\$50,000 of the debentures.

On July 27, 2015 CDN\$50,000 and CDN\$20,000 of the Short-Term Convertible Debentures were converted into 83,333 and 33,333 common shares, respectively, and on September 22, 2015 an additional CDN\$20,000 was converted into 33,333 common shares.

On March 25, 2016, the Short-Term Convertible Debentures issued on March 25, 2015 were fully repaid in cash.

b. *Issuance of Short-Term Debentures – December 31, 2014 and January, 2015*

On December 31, 2014 the Company issued non-secured debentures for gross proceeds of CDN\$209,000, which mature on December 31, 2015. The debentures were issued with 270,005 common share purchase warrants with an exercise price of CDN\$0.60 for a period of two years. The Short-Term Debentures bear a 12% annual simple interest paid monthly in arrears with cash. In January, 2015 the Company received an additional CDN\$47,000 of proceeds from the December 31, 2014 Debenture issuance, which, as a result of the late receipt of funds, was recorded in the financial statements in 2015. This tranche was issued with 78,335 common share purchase warrants.

These debentures were fully repaid on December 31, 2015.

c. *Extension and Repayment of Two Year Unsecured Convertible Debenture*

Effective August 30, 2015, the Company reached an agreement with the holder of the CDN\$300,000 Two Year Convertible Debenture to amend the maturity date of the debenture from August 30, 2015 to October 30, 2015.

On September 29, 2015 the Company completed a CDN\$3,000,000 private placement of 5,454,545 units (“Units”) at CDN\$0.55 per Unit (see *Common Share Issuances in 2015*, b. above). The CDN\$300,000 Two Year Convertible Debenture was fully repaid with 545,455 Units as part of the offering.

d. *Extension and Repayment of Unsecured Promissory Note*

The CDN\$300,000 Promissory Note, issued in December 2011, with a maturity date of December 22, 2014, was extended by agreement with the holder, to September 15, 2015.

This Promissory Note was fully repaid with 545,455 Units as part of the September 29, 2015 Unit Private Placement offering (see *Common Share Issuances in 2015*, b. above).

e. *Repayment of Retention Bonus Promissory Note*

In June, 2015 the Company made the final monthly blended principal and interest payment to fully repay the Retention Bonus Promissory Note, which was denominated in US\$ and payable to a previous Company officer. The Promissory Note was originally for US\$112,500 and the outstanding balance at December 31, 2015 was US\$45,283.

Selected Quarterly Information

The selected quarterly information below is from the Company's audited financial statements for the three month and twelve month periods ended December 31, 2015 and 2014.

	Quarter ended December 31		Year ended December 31	
	2015	2014	2015	2014
Revenue	41	34,139	40,199	110,533
Cost of revenue	12,500	35,001	50,000	88,106
Gross margin	(12,459)	(862)	(9,801)	22,427
Operating expenses	412,763	561,694	1,436,227	1,707,490
Loss from operations	(425,222)	(562,556)	(1,446,028)	(1,685,063)
Non-operating income (loss)	379,565	406,281	354,733	(199,166)
Loss and comprehensive loss	(45,657)	(156,275)	(1,091,295)	(1,884,229)
Basic and diluted loss per share adjusted for 10:1 consolidation	\$0.00	(\$0.01)	(\$0.05)	(\$0.11)
Total assets			1,570,710	423,597
Total liabilities			1,765,030	2,487,250

Revenue in 2015 was comprised of \$22,000 in VMS Unit sales with the remainder from annual service and maintenance contract income and interest income on installment sales. Activity in the latter part of 2015 has focused on the development of the next generation of VMS with volume quantification for all 4 chambers of the heart.

Foreign Exchange Impact

The change in the foreign exchange rate between the US\$ and CDN\$ during 2015 has had a major impact on the Company's financial results both in terms of financial reporting and because capital is raised in Canadian dollars and has been transferred to the US to fund operations, until the operations were moved to Canada in 2016. In 2015 the Company transferred CDN\$1.4 million to the US for proceeds of US\$1.08 million resulting in a realized exchange loss of \$346,000. This is part of the reason that the operations were moved to Canada in February 2016.

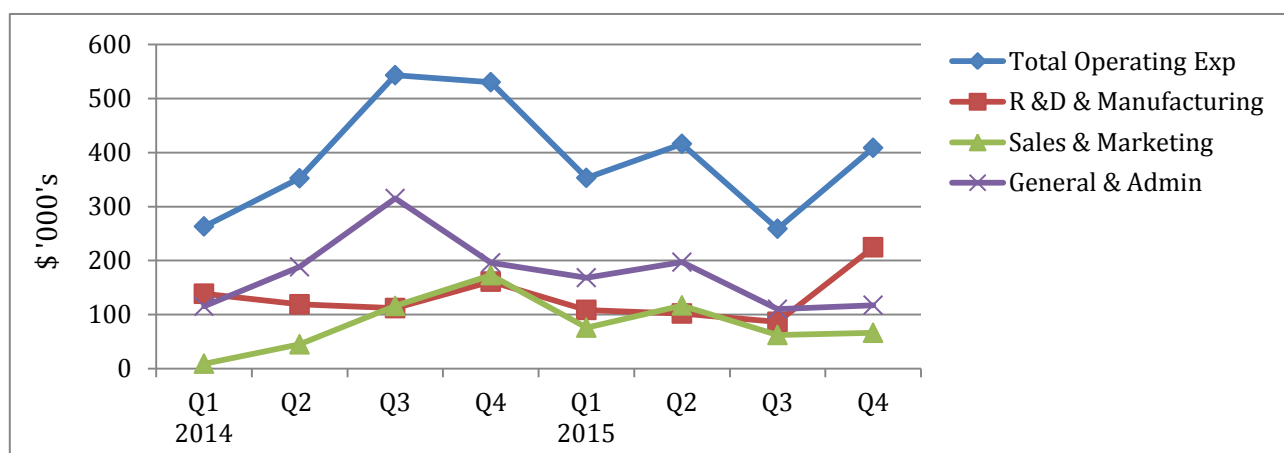
For reporting purposes CDN\$ revenues and expenses are translated into US\$ using each year's average foreign exchange rate. In 2015 the US\$/CDN\$ rate was \$0.78, significantly down from \$0.91 for 2014. Of the \$271,000 reduction in total reported operating expenses from 2014 to 2015, approximately \$100,000 can be attributed to the change in foreign exchange rates applied to CDN\$ expenses.

For the translation of Canadian assets and liabilities for the financial statements, the year end foreign exchange rates are used. The US\$/CDN\$ rate at December 31, 2015 was \$0.72, having fallen from \$0.86 at December 31, 2014. Had the Canadian assets at December 31, 2015 been translated at the 2014 year end exchange rate, total Canadian assets of CDN\$1,350,000 (2014 – CDN\$220,000) would have been reported as US\$187,000 higher in the financial statements.

Operating Expenses

As shown in the graph below, operating expenses increased in Q4 2015, primarily due to the increase in R&D costs, which include a write down of \$50,000 of obsolescent inventory. In addition, an external IT development company began work on an extensive updating of the VMS software to bring it up to current standards for hardware and software libraries, and on upgrading the software to facilitate the deployment of the 4 chamber software suite, when it is ready.

The lower General and Administrative expenses in 2015 are primarily to do with the non-cash Stock Based Compensation expense which is valued using the Black-Scholes model to calculate option values. This model was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions, which significantly differs from the Company's stock option awards. This model also requires four highly subjective assumptions, including future stock price volatility and average option life, which greatly affect the calculated values.



Non-Operating Income and Expense

The components of non-operating income and expense for the three month periods and years ended December 31, 2015 and 2014 are as follows:

	Three months ended December 31		Year ended December 31	
	2015	2014	2015	2014
<i>Finance costs:</i>				
Interest expense on notes and debentures	24,962	37,502	146,449	303,717
Accretion of derivatives issued with debentures	107,338	71,599	417,223	237,893
Other income/gain				(16,047)
Transaction costs	3,290	18,203	29,586	54,146
Bank service charges and other	571	573	3,118	2,660
<i>Total finance costs</i>	136,162	127,877	596,376	582,369
Loss (gain) on issuance of shares for debt	-	-	-	115,155
Derivative liabilities revaluation adjustment	(535,057)	(311,605)	(759,621)	(393,151)
Foreign currency differences	23,566	(157,681)	(191,488)	(105,206)
Total non-operating loss (gain)	(375,329)	(341,409)	(354,733)	199,167

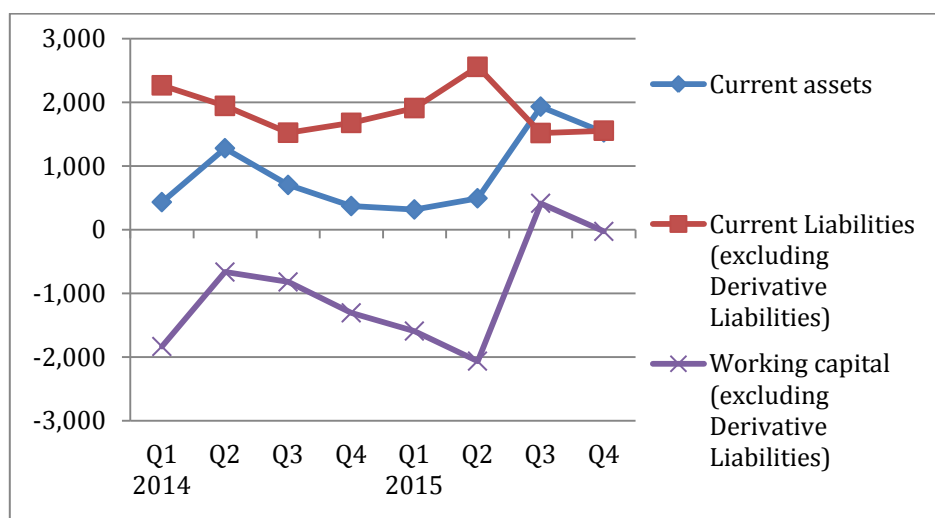
Interest - Interest expense in 2015 was down significantly year over year due to the reduction of outstanding debt from CDN\$1,580,700 debentures and a US\$45,000 note at December 31, 2014 to CDN\$926,000 in debentures at December 31, 2015 (see *Notes and Debentures* above).

Accretion - Accretion relates to the recognition of the value of derivative liabilities (i.e. warrants and conversion features) issued with debentures and netted against the debenture value on the balance sheet at the issue date. The value of the derivative liabilities is recognized as a non-cash expense over the life of the debenture and added to the balance sheet debenture value. As each debenture nears its maturity date, its accretion expense gets larger, which is why the accretion expense for both 2015 and Q4 2015 is higher than the comparable periods in 2014, while the interest expense is lower on less debt outstanding.

Derivative Liabilities Revaluation Adjustment - The non-cash derivative liabilities revaluation adjustment is the result of the revaluation at each balance sheet date of the fair value of the common share warrants and debenture conversion features. This revaluation adjustment can vary significantly with changes in the principal factors including; the number of outstanding warrants, the remaining terms of the warrant, the warrant exercise price, the market price and the volatility of the Company's common stock. The weighted average assumptions underlying the period end valuations can be found in the financial statement notes.

Foreign Currency Differences – see discussion above under *Selected Quarterly Information*.

Liquidity



Changes in total current liabilities on the balance sheet can be significantly impacted by the non-cash valuation of the warrants and other derivative instruments from quarter to quarter, therefore the working capital in the graph above is shown excluding the Derivative Liabilities in order to present a clearer picture of liquid current assets and current operating liabilities.

At December 31, 2015 the Company had negative working capital of \$26,400 (December 31, 2014 – \$1,305,483), excluding the non-cash Derivative Liabilities, of \$210,144 (December 31, 2014 – \$578,243).

At the year end the Company had cash and equivalents of \$1,424,374 (December 31, 2014 - \$148,283) from the proceeds of the September 29, 2015 and the November 9, 2015 Unit Private Placements, which together, had cash proceeds of \$2,091,480 (CDN\$2,900,000) (see *Common Share Issuances in 2015* b. and c. above), reduced by operating costs and the repayment of CDN\$250,000 of Short Term Debentures at December 31, 2015.

Contractual Cash Obligations

The Company has the following contractual cash obligations as of April 29, 2016:

	2016	2017	2018 - 2025	Total
Premises Lease	\$6,026	\$0	\$0	\$6,026
University of Washington Technology License Minimum Annual Royalty	-	50,000	350,000	400,000
Total contractual commitments for the period	\$6,026	\$50,000	\$350,000	\$406,026

The Minimum Annual Royalty under the Technology License Agreement with the University of Washington is due in February each year, for the term of the Technology License. The Annual Royalty is the lower of 3% of sales, net of direct distribution costs, or \$50,000.

The Company leases office and manufacturing space in Bellevue, Washington, however, operations were moved to Toronto, Canada in February 2016. The Company has been unable to sub-let the premises, however, the lease is finished as of June 30, 2016. For reporting purposes the remainder of the lease expense was recognized at the end of 2015 in the 2015 annual statements, as the premises are no longer in use. The premises in Toronto are on a month to month lease.

RISKS AND UNCERTAINTIES

Financial The Company's success in raising new operating capital since 2010 has enabled it to finalize its VMS development and implement its initial commercialization strategies with a resulting decrease in its operating expenses. The Company may require additional operating capital to sustain and grow the level of its operations and to further implement its commercialization strategies. The Company is in discussions with multiple parties related to its financing, development and commercialization efforts to secure sufficient additional capital and resources for commercialization of its VMS and the expansion and enhancements of product applications and to achieve cash flow break-even. The need, success and timing of additional financings and/or strategic relationships cannot be projected with any certainty and their ultimate success is necessary for the Company to continue operations and to achieve its near term commercial and development milestones.

The Company anticipates that it will be able to restructure or refinance its debt.

Regulatory In May, 2015 the Company received clearance from the FDA to market its application in the United States for the expanded Indications for Use of its VMS product which states; "The VMS system is indicated for use where RV (right ventricle) volumes and ejection fractions are warranted or desired." This means physicians in the U.S. can now use the VMS on patients that they believe will benefit from assessment of RV function, without being limited to a specific condition.

Continued Operations Without sufficient additional capital being secured in a timely manner, Company operations may have to be curtailed; the result of which could render the Company unable to pursue commercialization of its products and services, or to continue its operations.

CRITICAL ACCOUNTING ESTIMATES

The Company's financial statements have been prepared in accordance with the International Financial Reporting Standards. Certain accounting policies require that management make appropriate decisions with respect to the formulation of estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. The Company's primary critical accounting estimates relate to the valuation of its issued stock warrants and stock options. The Company applies the fair value method for valuing stock option grants and the issuances of stock warrants. The fair value is estimated on the date of grant or issue, and in the case of its warrants revalued at each balance sheet date, using the Black-Scholes option pricing model, other than specialized models to value those warrants associated with the two year Convertible Debenture issue to reflect the impact of the Trigger Events, and the warrants issued in the September and November 2015 Private Placements to reflect the impact of the acceleration of the expiry date under certain circumstances. In order to calculate the fair value of options granted and warrants at issuance and for warrant revaluation, the following information is required: stock price at date of grant or issue, exercise price of option or warrant, risk-free interest rate, volatility of the Company's stock price, expected life of the option or warrant, the expected annual dividend rate for future periods and vesting periods. Management is required to make assumptions regarding the risk-free interest rate, expected volatility of the Company's stock price, expected life, dividend rate and estimated number of options or warrants that will actually be exercised in future periods. See Notes 8 and 9 of the consolidated annual audited financial statements for weighted average assumptions used to determine the fair value of the Company's options and warrants granted, revalued and issued as at December 31, 2015. Other accounting estimates include the allocation of revenues between amounts recognized upon installation and amounts deferred and recognized over the initial warranty period, and the designation of the United States dollar as the Company's functional currency.

ADDITIONAL INFORMATION

Additional information relating to the Company can also be found on SEDAR at www.sedar.com.