



## **Management's Report on Financial Position and Operating Results**

**For the six months ended June 30, 2011**

## LETTER TO SHAREHOLDERS

August 23, 2011

Dear Shareholder,

Immunovaccine continues to make progress in the development of cancer vaccines. As you know from earlier communications, during the second quarter we completed the vaccinations of DPX-0907, our first human trial treating patients with breast, ovarian and prostate cancer. The patients participating in this study tolerated the vaccine well, and many of them showed a measurable immune response to the vaccine.

This study advances us several steps along the road to market for a cancer vaccine, proving most importantly that our technology can be used safely in patients. There is still a long way to go, and there are many studies to be done in the meantime, but success in this trial has raised our visibility, credibility and hope.

The way our science team conducted the DPX-0907 trial led the U.S. Food and Drug Administration to give the go ahead for testing of our next cancer vaccine, DPX-Survivac, in clinical trials. As reported earlier, our Survivac product was licensed from Merck KGaA to pair with our DepoVax™ technology to create a vaccine with very broad applicability. Research over the past several years suggests that Survivac may be helpful in treating nine different types of cancer, including ovarian, multiple myeloma and bowel cancers.

Because our resources are limited, we have chosen to concentrate on DPX-Survivac's potential for treating women with ovarian cancer. Ovarian cancer is often called the hidden cancer, because symptoms do not usually appear until the cancer has reached an advanced stage. As a result, life expectancy even after surgery and chemotherapy is limited significantly.

The upcoming DPX-Survivac clinical trials will assess the safety (Phase I) and evaluate the efficacy (Phase II) in extending the lives of those who suffer from this disease. We expect to enroll our first patients before the end of this year with a target date for completion of the Phase II trial in the middle of 2015.

As noted above, DPX-Survivac also holds the promise of being effective in the treatment of eight other cancers. Our DPX-0907 vaccine also shows promise for treatment of some of these cancers. We are exploring a variety of ways to advance the use of both vaccines. Our patent portfolio covers patents specific to both DPX-0907 and DPX-Survivac and we have 33 additional patents pending in eleven jurisdictions.

We have also continued to explore options for developing our technology for treatment and prevention of infectious diseases in both people and animals. Pfizer Animal Health licensed the rights to use our technology in treating infectious diseases in livestock, and they have a growing pipeline of animal vaccines. Our plan is to continue to build on our past research success in animals and pursue additional licensing opportunities in animal health.

Likewise, we are working with a number of human health research partners who are participating in the DepoVax Challenge, applying our DepoVax platform to their vaccine candidates. As you can appreciate, for each DepoVax Challenge, fine-tuning the vaccine-DepoVax formulation takes time. Our research partners must also evaluate the new vaccine formulation through their own bench tests before the vaccine moves into preclinical testing. Our goal is to advance these research partnerships into new agreements with full commercial development opportunities. By attending and presenting at major biotechnology industry conferences and by continuing to expand awareness of our technology in the science community through research collaborations, we are raising our profile to create new opportunities for investment and development.

Your board presently is conducting a broad international search for a new Chief Executive Officer. We expect to announce a choice very soon from a short list of qualified professionals.

With cash and potential cash resources of \$11.2 million at June 30, 2011, the Company has sufficient reserves to advance our Phase I trial on DPX-Survivac. By gaining the confidence of regulatory agencies, we have been able to slash expected outlays by several million dollars over the next few years by shortening clinical development times. In recognition of current market conditions expenses have been reduced. Furthermore, in such an environment, your board believes that the market price is not a true reflection of the value of the company.

With all of this underway, I want to thank you on behalf of the board and the staff for your patient and consistent support of the company.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Albert Scardino", with a horizontal line extending to the right.

Albert Scardino  
Chairman

## MANAGEMENT DISCUSSION AND ANALYSIS (“MD&A”)

The following analysis provides a review of the unaudited interim condensed consolidated results of operations, financial condition and cash flows for the six month period ended June 30, 2011 (“Q2 Fiscal 2011”), with information compared to the six month period ended June 30, 2010 for Immunovaccine Inc. (“Immunovaccine” or the “Company”). This analysis should also be read in conjunction with the information contained in the audited consolidated financial statements and related notes for the year ended December 31, 2010 and the nine month period ended December 31, 2009.

The Company prepares its financial statements in accordance with Canadian generally accepted accounting principles as set out in the Handbook of the Canadian Institute of Chartered Accountants (“CICA Handbook”). In 2010, the CICA Handbook was revised to incorporate IFRS, and required publicly accountable enterprises to apply such standards effective for years beginning on or after January 1, 2011. Accordingly, the Company is reporting on this basis in these unaudited interim condensed consolidated financial statements. In the financial statements, the term (“Canadian GAAP”) refers to Canadian GAAP before the adoption of IFRS, and the term “GAAP” or “IFRS” refers to generally accepted accounting principles in Canada after the adoption of IFRS.

These unaudited interim condensed consolidated financial statements have been prepared in accordance with IFRS applicable to the preparation of interim financial statements, including IAS 34, International Accounting Standard 34 “*Interim Financial Reporting*” and IFRS 1, “*First-time Adoption of International Financial Reporting Standards*”. Subject to certain transition elections disclosed in the unaudited interim condensed consolidated financial statements, the Company has consistently applied the same accounting policies in its opening IFRS statement of financial position at January 1, 2010 and throughout all periods presented, as if these policies had always been in effect.

The policies applied in these unaudited interim condensed consolidated financial statements are based on IFRS issued and outstanding as of August 23, 2011, the date the Board of Directors approved the statements. Any subsequent changes to IFRS that are given effect in the Company’s annual consolidated financial statements for the year ending December 31, 2011 could result in restatement of these unaudited interim condensed consolidated financial statements, including the transition adjustments recognized on change-over to IFRS.

Additional information regarding the business of the Company, including the Annual Information Form, is available on SEDAR at [www.sedar.com](http://www.sedar.com).

Amounts presented in this MD&A are approximate and have been rounded to the nearest thousand except for per share data. All amounts are presented in Canadian dollars.

## FORWARD-LOOKING STATEMENTS

This MD&A contains certain forward-looking statements, which reflect Management’s expectations regarding the Company’s growth, results of operations, performance and business prospects and opportunities. Statements about the Company’s future plans, intentions, results, levels of activity, performance, goals, achievements or other future events constitute forward-looking statements. Wherever possible, words such as “may,” “will,” “should,” “could,” “expect,” “plan,” “intend,” “anticipate,” “believe,” “estimate,” “predict,” “potential” or the negative or other variations of these words, or other similar words or phrases, have been used to identify these forward-looking statements.

Forward-looking statements involve significant risk, uncertainties and assumptions. Many factors could cause actual results, performance or achievements to differ materially from the results discussed or implied in the forward-looking statements. These factors should be considered carefully and readers should not place undue reliance on the forward-looking statements. Although the forward-looking statements contained in this MD&A are based upon what Management believes to be reasonable assumptions, the Company cannot assure readers that actual results will be consistent with these 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: (i) general business and economic conditions; (ii) the Company’s ability to successfully develop new products; (iii) positive results of pre-clinical and

clinical tests; (iv) the availability of financing on reasonable terms; (v) the Company's ability to attract and retain skilled staff; (vi) market competition; (vii) the products and technology offered by the Company's competitors; (viii) the Company's ability to protect patents and proprietary rights; (ix) the Company's ability to manufacture its products and to meet demand; and (x) regulatory approvals.

These statements reflect Management's current beliefs and are based on information currently available to Management. The information contained herein is dated as of August 23, 2011, the date of the Board's approval of the MD&A and the Q2 Fiscal 2011 unaudited interim condensed consolidated financial statements. A more detailed assessment of the risks that could cause actual results to materially differ from current expectations is contained in the section entitled "Risk Assessment" of this MD&A.

## **COMPANY OVERVIEW**

Immunovaccine is a clinical stage vaccine development company focused on the commercialization of its patented DepoVax™ vaccine delivery technology and related vaccine product candidates. The Company is currently developing vaccine product candidates for both therapeutic cancer indications and infectious diseases. Immunovaccine has completed vaccinations for its multi-site Phase I human clinical trial for its first vaccine candidate, DPX-0907, a therapeutic cancer vaccine targeting breast, ovarian and prostate cancers. The results, which were released on June 1, 2011, demonstrated that DPX-0907 is generally well tolerated by all patients and is considered safe, with no serious adverse events related to the volume of vaccine administered. Results also showed that DPX-0907 could generate an immune response specific to the cancer antigens contained in the vaccine.

The Company's latest therapeutic cancer vaccine, EMD 640744 ("DPX-Survivac"), in-licensed from Merck KGaA ("Merck KGaA") on July 12, 2010, is being developed for clinical testing in patients diagnosed with ovarian cancer. On June 20, 2011, the Company announced that the U.S. Food and Drug Administration (FDA) reviewed and cleared its Investigational New Drug (IND) application for a Phase I/II clinical trial of DPX-Survivac. After a successful Phase I clinical trial, which the Company expects to start in the three month period ended December 31, 2011 ("Q4 Fiscal 2011"), Immunovaccine will be permitted to initiate a Phase II clinical trial without any further application to the FDA.

The Company has also completed proof of concept pre-clinical studies in infectious disease applications such as single-dose DepoVax™ platform-based pandemic influenza and hepatitis B vaccine candidates. The Company continues to strengthen its vaccine pipeline through licensing and strategic partnerships to develop therapeutic cancer and infectious disease vaccines.

Based in Halifax, Nova Scotia, the Company has 22 full-time and part-time employees and four part-time consultants. Being involved in a scientific and technical business, the Company requires staff with significant education, training and scientific knowledge that cannot be easily recruited or replaced. As a result, the Company recruits talented expertise locally, nationally and internationally. In addition to the core team, the Company has also assembled a Scientific Advisory Board ("SAB") of experienced and internationally recognized scientific advisors to assist Management in dealing with industry-related issues and how these issues may affect the Company's scientific research and product development. The common shares of the Company are listed on the TSX-Venture Exchange ("TSX-V") under the symbol "IMV" (see [www.sedar.com](http://www.sedar.com)).

## **DEVELOPMENT AND STRATEGY**

### *Development*

The Company commenced operations in 2000, based on animal health research pioneered at Dalhousie University in Halifax, Nova Scotia, when it was contracted by the Department of Fisheries and Oceans (Canada) to develop a contraceptive vaccine to control the seal population. The Company succeeded in developing an effective vaccine delivery system so that 90% of seals were still contracepted 10 years after receiving the novel single-dose vaccine.

From 2000 to 2004, the Company concentrated its research efforts on animal contraception for both wildlife and companion animals, while entering into discussions with CSL Animal Health, a division of CSL Limited, which was subsequently acquired by Pfizer Animal Health ("Pfizer"). In 2004 and continuing through 2008, the Company

began establishing its VacciMax<sup>®</sup> platform for various human applications, while simultaneously developing a scalable manufacturing process for the VacciMax<sup>®</sup> platform.

The Company continued its research and, in 2008, developed a lipid depot-based vaccine delivery and enhancement technology called the DepoVax<sup>™</sup> platform, an improvement on the Company's original VacciMax<sup>®</sup> platform. The patented DepoVax<sup>™</sup> platform is a combination of antigens and immune enhancers formulated in liposomes, and then in oil. The DepoVax<sup>™</sup> platform creates a "depot effect" that prolongs the immune system's exposure to the vaccine, resulting in rapid, potent and long-lasting cellular and/or humoral immune responses, which allows for the creation of effective, single-dose vaccines.

The DepoVax<sup>™</sup> platform is easy to use, chemically stable, scalable and has broad applications for cancer and infectious diseases. The Company has also tested the platform with several commercial vaccines and other vaccines currently under development such as H5N1 pandemic influenza, hepatitis B, acellular pertussis (whooping cough), anthrax, meningitis, and melioidosis. In all cases, the pre-clinical studies in animals, demonstrated significantly higher immune responses after a single dose with the DepoVax<sup>™</sup> platform when compared to two or three doses of a control vaccine or other commercially available vaccines.

### *Strategy*

Central to the Company's strategy is the ability to leverage the patented DepoVax<sup>™</sup> platform across multiple business models and markets at the same time. Therefore, unlike many early stage biotechnology companies, the Company is not reliant on one product for its success in the medium- to long-term. Immunovaccine has identified, and is pursuing opportunities across a number of markets, which the Company believes will give it the ability to concurrently pursue multiple product opportunities in the future.

Building upon the research success in animal health and acknowledging the larger potential of the human health market, the Company is now focused on developing new vaccines using the DepoVax<sup>™</sup> platform to protect and promote human health. While the Company's technology has just recently begun clinical testing in humans, it has characteristics of being at a later stage, as the DepoVax<sup>™</sup> delivery platform for human health applications has already been evaluated in a wide variety of pre-clinical therapeutic cancer and infectious disease indications.

As the Company has made a strategic decision to focus on the broader human health market, Immunovaccine has adopted a three pronged business strategy: i) develop Company controlled vaccine products ii) partner out the DepoVax<sup>™</sup> vaccine platform to other companies to improve their vaccines; and iii) in the medium- to long-term, use revenues from animal health to fund human health research and development.

*Development of in-house vaccines* - The Company is focusing its in-house research and development on developing a vaccine pipeline of therapeutic cancer and infectious disease products. Recently, the Company released final results of its Phase I clinical trial of DPX-0907, a therapeutic vaccine to treat ovarian, breast and prostate cancers. The positive results of the Phase I trial of DPX-0907 have accelerated the Company's advancement towards a Phase I clinical trial of DPX-Survivac, an investigational therapeutic survivin-based cancer vaccine, recently in-licensed from Merck KGaA. While this vaccine has the potential to target nine different solid tumors and blood cancers, the Company has chosen to focus the first Phase I clinical trial of DPX-Survivac on ovarian cancer. The Company had been evaluating a *Pseudomonas aeruginosa* ("Pseudomonas") vaccine, however, after completing a series of experiments, the results have shown that the antibodies generated by the antigen did not protect animals when the challenge *Pseudomonas* strain was introduced. The Company will therefore not pursue renewal of the exclusive license option signed with Yokohama University.

The Company is currently focusing on its clinical candidates DPX-0907 and DPX-Survivac. DPX-0907 is completing a Phase I trial and results have shown the vaccine candidate to be safe and immunogenic. The Company now plans to develop DPX-Survivac through Phase I and Phase II clinical trials and has secured FDA clearance to proceed with a Phase I/II clinical protocol. Under this protocol, ovarian cancer patients will receive DPX-Survivac after completing surgery and chemotherapy to remove the bulk of the cancer. The DPX-Survivac vaccine treatment is expected to stimulate a specific immune response against cancer cells remaining in the patient's body, with the goal of preventing the cancer from re-establishing in the average expected timeframe it normally would reappear. The vaccine treatment is therefore designed to delay or prevent the cancer's return.

*Vaccine improvement* - The Company intends to license the DepoVax™ technology to human health companies for certain indications. Immunovaccine has already negotiated and signed a number of research collaboration agreements which allow other companies to apply the DepoVax™ platform to their vaccine products in development. The existing research partnership agreements include advancing a variety of vaccines such as seasonal and pandemic influenza, anti-anthrax vaccines, therapeutic cancer vaccines and vaccines for HIV and malaria.

*Animal health* - Immunovaccine's initial research was focused on animal health and its positive results enabled the Company to initiate discussions with Pfizer. In 2008, Pfizer licensed the Company's patented delivery system to develop vaccines for two indications to prevent infectious diseases in livestock. Pfizer's evaluation and acceptance of Immunovaccine's technology was an important step in validating the technology, its patents and provided its first revenues in January 2008. In November 2009, Pfizer signed a license agreement for the use of the Company's delivery technology for all cattle vaccines. In March 2010, Pfizer exercised a licensing option on the Company's delivery platform to develop a third livestock vaccine. In the medium- to long-term, Immunovaccine intends to pursue additional licensing and revenue opportunities within the animal health market to help fund the research and development of human health vaccine candidates.

#### *Business model and nature of expenses*

As a clinical stage vaccine development company, Immunovaccine will primarily focus its limited resources on research and development activities up to and including Phase II clinical trials of potential vaccine candidates. The Company intends to partner with other companies to manufacture, commercialize, market and sell the Company's vaccine candidates.

The Company's ongoing research and development expenses ("R&D") are comprised primarily of salaries and benefits, consulting fees for various research services and expertise, third party animal care costs, peptides and other lab chemicals and supplies, lab rent, utilities and office costs, as well as travel, conferences and training. R&D expenses also include costs associated with the DPX-0907 Phase I clinical trial, the pre-clinical Phase I/II development plan for DPX-Survivac, and the continued development of other potential vaccine candidates.

Business development costs ("BD") are comprised primarily of salaries and benefits, marketing and communications expenses, ongoing travel, road show and conference fees, advertising and promotions expenses, as well as the cost of services provided by outside investor relations and public relations firms. BD costs also include direct costs incurred, including legal and consulting fees, to help build and advance the Company's pipeline of pre-clinical vaccine candidates across all three components of the Company's business strategy.

General and administration ("G&A") expenses are comprised primarily of salaries and benefits, including consulting fees, professional fees related to legal expenses, patents, audit and taxation, rent and office expenses, fees paid to the Board of Directors, regulatory fees and share transfer agent fees, insurance, training, travel and conference fees, amortization of office equipment, as well as other operating expenses.

#### *Manufacturing*

The Company has completed the scale-up and manufacturing method development for the DepoVax™ platform which it expects to be applicable to all of the Company's subsequent human health vaccine candidates. To reduce costs, the Company has purchased dedicated equipment that is housed at an approved Good Manufacturing Practices ("GMP") contract manufacturing facility.

In 2009, the proprietary manufacturing and lyophilisation processes were established at the GMP contract manufacturing facility. That same year, the Company also manufactured commercial scale pilot vaccine batches, including 50 litres (200,000 doses) of a hepatitis B vaccine, some of which the Company retained for research purposes. This accomplishment is important because historically, large-scale production of liposomes has been an industry challenge.

During the first quarter of Fiscal 2010, a clinical batch of the DPX-0907 vaccine was successfully produced and was used in a multicentre Phase I clinical trial in the U.S. In November 2010, the Company successfully manufactured test batches of DPX-Survivac and established the analytical methods to support the release of future clinical trial batches. In ongoing stability studies, the Company established that the DPX-0907 vaccine can be stored for greater than two years.

## **PRODUCTS IN DEVELOPMENT**

The Company's first human health vaccine candidate is a therapeutic cancer vaccine called DPX-0907 which targets ovarian, breast and prostate cancers. The Company received clearance in December 2009 from the U.S Food and Drug Administration ("FDA") to proceed with a Phase I clinical trial for its therapeutic cancer vaccine DPX-0907. Recruitment for its Phase I clinical trial commenced on March 29, 2010 and the first patient was dosed on April 9, 2010. The Company released preliminary safety results for its Phase I clinical trial in December 2010, in which 21 patients had been vaccinated with DPX-0907. By February 2011, patient enrolment in the Phase I clinical trial was completed. The interim safety analysis, presented at the American Association of Cancer Research ("AACR") annual meeting in April 2011, reported that the most common adverse events were grade 1 and 2 injection site reactions. A grade 3 local site reaction was reported after repeat injections of 1 ml of vaccine. Such local site reactions are expected and the severity of the injection site reactions were related to the volume of vaccine administered. The vaccine, therefore, is considered safe at both dose levels (0.25 ml and 1 ml) tested. Positive interim immunogenicity results were released in April 2011, which showed that the DPX-0907 therapeutic cancer vaccine candidate elicited an antigen specific immune response, at both dose levels, in patients with breast, ovarian and prostate cancers, with the highest responder rate in patients with ovarian cancer. Final results of the Phase I clinical trial for DPX-0907 were released June 1, 2011, confirming the interim safety and immunogenicity results.

DPX-0907 is a therapeutic cancer vaccine that combines the Company's DepoVax™ platform with seven peptide antigens indicated for breast, ovarian and prostate cancers. These seven antigens are highly specific, visible to the immune system and are believed to be involved in critical tumor cell processes. The vaccine has been designed to kill tumor cells without injury to normal, healthy cells.

In addition, the Company is conducting pre-clinical research studies on DPX-Survivac, expected to lead to the initiation of a Phase I clinical trial by the last quarter of 2011. DPX-Survivac uses Survivin-based antigens, in-licensed from Merck KGaA on a world-wide exclusive basis, and formulated in the DepoVax™ vaccine delivery platform. Survivin is a major tumor-associated antigen over-expressed in several cancers including ovarian cancer cells, making it a viable target for immunotherapy. The DepoVax™ platform will deliver the Survivin-based antigens in a lipid depot-based format designed to generate a strong and prolonged immune response. The Phase I clinical trial results of DPX-0907, as well as the safety results from Merck KGaA's Phase I clinical trial on Survivin, have enabled the Company to accelerate the pre-clinical research and development of DPX-Survivac, and allowed the Company to file an Investigational New Drug ("IND") application with the U.S. Food Drug and Administration ("FDA") for DPX-Survivac months ahead of schedule. The Company received FDA clearance on June 17, 2011 to proceed with Phase I and Phase II clinical trials for DPX-Survivac. The ability to progress the clinical trial of DPX-Survivac immediately from Phase I to Phase II clinical trials eliminates the regulatory risk of having to do a Phase II FDA filing and reduces the additional clinical development time that is normally required to prepare for a Phase II clinical trial following the completion of the Phase I clinical trial.

Successful initiation and completion of Phase I, II and III clinical trials for DPX-0907 and DPX-Survivac, as well as approval from global regulatory bodies, represent future, and therefore uncertain, events that could have a significant impact on the Company's business. The Company is currently exploring opportunities to progress the clinical development of DPX-0907.

The Company is also conducting studies for single-dose infectious disease vaccines, such as pandemic influenza, anthrax, and hepatitis B which do not exist today but would be beneficial. The Company had been evaluating the possibility of a *Pseudomonas aeruginosa* vaccine, however recent research results have indicated that the *Pseudomonas aeruginosa* antigen did not prove satisfactory for generating protective antibodies. Therefore, Immunovaccine will not seek continuation of the exclusive rights the Company currently has to this antigen. The Company will continue to investigate opportunities to partner with other companies to develop potential DepoVax™ vaccines for markets such as biodefense, hepatitis B and pandemic influenza.

The Company also intends to continue to pursue additional opportunities to generate revenues by licensing its technology for additional animal health applications.

## **MARKET OVERVIEW**

Vaccines are one of the fastest growing segments of the pharmaceutical industry, and the Company's market for its products is world-wide. According to industry sources, the global market has been growing, with revenues expected to rise to US\$46.5 billion by 2014. The development of new infectious disease vaccines along with therapeutic cancer vaccines, is expected to drive the growth of the vaccine industry in the early 21st century. In particular, cancer vaccines are expected to account for nearly 27% of the total vaccine revenues by 2012. Currently, there are five manufacturers that dominate revenue generation in the human vaccine market: Merck, GlaxoSmithKline ("GSK"), Novartis, Sanofi Pasteur ("Sanofi") and Pfizer. The increased revenue potential for vaccines is in part due to the improved pricing for vaccine products. For example, the Gardasil vaccine is currently selling for approximately US\$160 per dose for three doses. This represents an improvement of what used to be a fundamental economics problem within the vaccine industry.

Furthermore, advances in biotechnology mean that vaccines are not easily replaced by generic substitutes and are therefore more likely to assure a long-term income stream. Vaccines are also positively viewed by governments and healthcare providers because of their potential to reduce hospital stays and drug costs. New technologies, such as the enhanced vaccine delivery platform being developed by the Company, are enabling the development of targeted vaccines not previously possible. These new vaccine products are being priced at a premium to reflect the value of the technology.

### *Therapeutic cancer vaccines*

Cancer affects more than 10 million people world-wide each year. This number is expected to increase to 15 million people by 2020. Cancer treatment per person is very expensive with anti-cancer biological therapies like Avastin and Erbitux costing as much as US\$15,000 to \$60,000 per year. Therefore, cancer is a key therapeutic focus for the pharmaceutical industry and is particularly attractive for small biotech companies as cancer vaccines offer shorter time to market with lower approval hurdles and fast-track development opportunities.

Conventional cancer treatment involves debulking surgery, followed by chemotherapy. Chemotherapy interferes with the ability of cancer cells to grow and spread, but these drugs can only delay the cancer's recurrence as most tumors eventually develop resistance to the treatment. Chemotherapy also kills normal cells which is why it has negative side effects.

The next generation of therapeutic cancer vaccines is a more attractive approach because the vaccine is administered after surgery and chemotherapy, when tumor burden is low. Patients also need treatments with a better safety profile than chemotherapy. The goal is to have the cancer vaccine train the body's immune system to target and kill remaining cancer cells.

As a multi-billion dollar market opportunity, interest in cancer immunotherapy is rising as more products are approved. Two recent examples include the approval of Provenge for prostate cancer and Yervoy (ipilimumab) for melanoma.

IMS Health Inc. estimates that sales for oncology treatments will grow to US\$75 billion by 2012 due, in part, to the introduction of cancer vaccines. The Company is of the belief that, over the next five years, cancer vaccines will become part of a multi-targeted approach to the treatment of cancer.

### *Animal Health Market*

According to industry sources, the world animal health market, defined as a sector spanning veterinary pharmaceuticals, biologicals and medicated feed additives, was approximately US\$20 billion in 2008. The animal vaccine market, subdivided into livestock, companion animal and other smaller segments including equine, poultry and aquatic, makes up approximately 20% of the total animal health market and is projected to reach US\$5.6 billion

by 2015. Europe is the leading market for veterinary vaccines which are projected to maintain 30% market share through 2015, followed closely by North America. Asia-Pacific is the fastest growing market for veterinary vaccines.

The world-wide livestock vaccine market is comprised primarily of cattle and swine vaccines, along with, to a lesser extent, vaccines for sheep, poultry and other food animals. Of this market, industry sources suggest the world-wide livestock vaccine market is estimated to be approximately US\$3.6 billion by 2015, with the cattle vaccine market representing approximately US\$1 billion of the livestock vaccines. The companion animal vaccine market represents US\$2 billion of the market. There are only a few players in the animal vaccine market including Pfizer, Boehringer Ingelheim, Merial, Intervet/Schering-Plough Animal Health, Novartis and AgriLabs. While the livestock vaccine market is based on high volumes and lower pricing, the companion animal market is less sensitive to price and is focused on safety of the products. The majority of today's vaccines for both market segments require booster administrations, which increases the handling costs for the livestock market and have the potential to decrease safety in the companion animal market. Therefore, a vaccine which requires fewer doses (one dose, in some cases) for efficacy could be a significant innovation and have the potential to replace existing products in both segments.

## **RECENT DEVELOPMENTS AND OUTLOOK**

Unlike many early stage biotech companies, the Company is not reliant on one product for its success. This strategy effectively provides the Company with the ability to concurrently pursue many product opportunities, both through the development of Company-controlled products and through licensing agreements.

However, as the DepoVax™ platform is central to all three components of the Company's business strategy, a strategic priority for the Company has been to advance the DepoVax™ platform into human clinical trials as quickly as possible to obtain safety data in humans. The Company therefore reached a major milestone when it announced positive safety and immunogenicity results of its first Phase I clinical trial for DPX-0907. On June 1, 2011, the Company announced that DPX-0907 is safe and is capable of activating an antigen specific immune response. Obtaining positive safety and immunogenicity data in humans has allowed the Company to accelerate business development efforts and also increase its visibility. Immunovaccine is using this safety data in humans to negotiate additional research partnerships with larger biopharmaceutical companies, with the intent to advance these partnerships towards commercial licensing agreements.

During Q2 Fiscal 2011, the Company continued to further its efforts to raise awareness of the Company and its technology, identifying additional potential partnerships and funding opportunities.

### *Key developments and achievements*

- On June 27, 2011, the Company announced that Dr. Marc Mansour, Chief Operating Officer and Chief Science Officer, presented at the 2011 Biotechnology Industry Organization (BIO) Business Forum, the largest global event for the biotechnology industry.
- On June 23, 2011, the Company announced the results of the 2011 Annual General Meeting. The shareholders elected Dr. William A. Cochrane, Wade K. Dawe, James W. Hall, Albert Scardino, Kimberly Stephens and Brad Thompson to serve on the Board of Directors. The shareholders approved all motions put forth at the meeting, including the appointment of PricewaterhouseCoopers LLP, Chartered Accountants, as the Company's independent auditors.
- On June 20, 2011, the Company announced that the U.S. Food and Drug Administration (FDA) reviewed and cleared its Investigational New Drug (IND) application for a Phase I/II clinical trial with DPX-Survivac, a therapeutic cancer vaccine. After a successful Phase I clinical trial, which the Company expects to start in Q4 Fiscal 2011, Immunovaccine will be permitted to initiate a Phase II clinical trial without any further application to the FDA.

- On June 1, 2011, the Company announced a detailed analysis of immune responses from patients enrolled in the Phase I clinical trial assessing the safety and tolerability of DPX-0907, a therapeutic cancer vaccine. The trial was designed to evaluate the safety and immunogenicity of DPX-0907 in patients with advanced stage breast, ovarian or prostate cancer. Immunovaccine performed a detailed analysis of patients' blood samples that showed cell mediated immunity (CMI) to vaccine targets in all 3 breast cancer patients, 5 of 6 ovarian cancer patients and 3 of 9 prostate cancer patients. Both dose levels produced a targeted immune response in vaccinated patients.
- On May 31, 2011, Immunovaccine provided a corporate update indicating that the Company had completed a pre-Investigational New Drug Application meeting with the U.S. Food and Drug Administration for DPX-Survivac. In pre-clinical studies, DPX-Survivac was found to significantly enhance immune response over the control formulation used in previous clinical trials. Immunovaccine is completing the remaining safety studies required for the IND filing for clearance to begin human clinical trials. Also, the Company signed a research agreement with Cuban-based CIMAB S.A. ("CIMAB") to deliver CIMAB's CIMAvax-EGF peptide antigen formulated in the Company's DepoVax™ delivery system to potentially enhance the immunogenicity of their novel therapeutic vaccine. Also on that date, the Company retained The Equicom Group ("Equicom") to provide strategic investor relations services. Equicom provides strategic communications services to approximately 100 public companies across a diverse range of industries. Under the terms of the agreement, Immunovaccine will pay Equicom a monthly fee of \$5,800 for select strategic communication services. The initial contract term is for six months and commenced immediately.
- On April 14, 2011, the Company announced the resignation of Dr. Randal Chase from the Board of Directors effective immediately and also his three month notice to terminate his contract as President and Chief Executive Officer. Dr. Chase remained President and Chief Executive Officer until July 13, 2011, while the Board continues an executive search for his replacement.
- On April 11, 2011, the Company announced positive interim immunogenicity results for the Phase I clinical trial of its therapeutic vaccine candidate, DPX-0907, in patients with breast, ovarian and prostate cancer. The analysis showed that the DPX-0907 vaccine elicited an antigen specific immune response in the majority of ovarian cancer patients analyzed. This preliminary evaluation examined vaccine responses in the first fifteen patients enrolled in the clinical trial; three with breast cancer, five with ovarian cancer, and seven with prostate cancer.
- On April 5, 2011, Immunovaccine announced that it would be presenting at the American Association for Cancer Research (AACR) 102<sup>nd</sup> annual meeting in Orlando, FL and at the World Vaccine Congress 2011 in Washington, D.C. The presentations disclosed findings from the Phase I clinical trial with the therapeutic cancer vaccine, DPX-0907, and the ability of DepoVax™ to enhance the immunogenicity of peptide antigens.
- On March 21, 2011, Immunovaccine announced it will receive \$2.9 million from the Atlantic Canada Opportunities Agency (ACOA), under the Atlantic Innovation Fund (AIF). This non-dilutive funding will enable Immunovaccine to develop new diagnostics to identify specific subsets of cancer patient populations that would benefit most from receiving DepoVax™-based vaccine therapies. This funding will also help the Company develop additional methods for measuring vaccine activity, which will help design future Phase II clinical trials.
- On February 23, 2011, the Company and Immunotope Inc. announced that the U.S. Patent and Trademark Office had issued an official Notice of Allowance for a new U.S. patent specific to the DPX-0907 therapeutic cancer vaccine. The new U.S. patent application titled "Cytotoxic T-lymphocyte-inducing immunogens for prevention, treatment, and diagnosis of cancer" provides additional intellectual property protection in the U.S. for the seven antigens used in Immunovaccine's DPX-0907.
- On February 10, 2011, the Company provided a corporate update, including the following announcements: the completion of enrolment for the Phase I clinical trial of DPX-0907; the achievement of positive pre-clinical results for DPX-Survivac; the recipient of the Halifax Chamber of Commerce Business of the Year

Bronze Award; presenting at the BIO CEO & Investor Conference in New York; and announcing the date of the Annual General Meeting of June 22, 2011.

- On January 11, 2011, Dr. Randal Chase, President and CEO presented at the Biotech Showcase, during the JP Morgan Healthcare conference, the industry's largest annual healthcare investor conference in San Francisco, CA.

## **Outlook**

To date, much interest has already been shown in the broad range of potential applications for the Company's DepoVax™ delivery platform. Positive clinical safety and immunogenicity results have been achieved, as well as positive results in pre-clinical models for cancer, hepatitis and anthrax indications.

Immunovaccine will continue to refine and focus its research activities on those candidates that show the most compelling technical results and commercial opportunities. The Company has performed pre-clinical proof of concept for vaccines in a number of infectious disease indications such as hepatitis B, pandemic influenza and anthrax. Immunovaccine does not currently have the resources to progress these candidates into clinical trials. The Company continues to look for partners with access to the specific antigens who are interested in advancing these products in the relevant jurisdictions. With positive clinical safety and immunogenicity results from the Phase I clinical trial of DPX-0907, Immunovaccine intends to leverage this achievement to accelerate its business development efforts. The in-licensing of Survivac and the creation of DPX-Survivac is also a significant addition to the Company's pipeline. Over the upcoming quarters, the Company intends to continue to pursue opportunities to expand its pipeline of in-house vaccines, as well as enter into deals to use the DepoVax™ platform to deliver and improve other companies' vaccine candidates.

The Company continues pre-clinical research studies on DPX-Survivac and successfully filed an IND application with the FDA for DPX-Survivac. The clinical success of DPX-0907, and the established track record for DepoVax™ in humans, has helped accelerate the clinical development plan for DPX-Survivac. Given the Company's current limited resources, Immunovaccine cannot currently progress the development of both therapeutic cancer vaccines. Accordingly, the Company will dedicate its resources to the clinical development of DPX-Survivac, while simultaneously exploring business development opportunities to advance the clinical development of DPX-0907.

The Company is also currently pursuing additional licensing and revenue opportunities within the animal health market.

## SUMMARY OF QUARTERLY RESULTS

The following consolidated quarterly data was drawn from the unaudited interim condensed consolidated financial statements. All values discussed below are rounded to the nearest thousand. The information in the last two quarters of 2009 is reported in Canadian GAAP (prior to the adoption of IFRS), while the information in the four quarters of 2010 and the first two quarters of 2011 is reported on an IFRS basis. Accordingly, the financial information for the two quarters of 2009 may not be comparable to subsequent periods.

Quarter Ended In	Total Revenue \$	Total Expenses \$	Loss \$	Basic and Diluted Loss Per Share \$
Q2 - June 30, 2011	-	2,044,000	(2,044,000)	(0.04)
Q1 - March 31, 2011	-	1,878,000	(1,878,000)	(0.03)
Q4 - December 31, 2010	6,000	1,468,000	(1,462,000)	(0.03)
Q3 - September 30, 2010	6,000	1,451,000	(1,445,000)	(0.03)
Q2 - June 30, 2010	6,000	1,644,000	(1,638,000)	(0.04)
Q1 - March 31, 2010	58,000	1,167,000	(1,109,000)	(0.02)
Q3 - December 31, 2009*	971,000	1,317,000	(346,000)	(0.01)
Q2 - September 30, 2009*	449,000	853,000	(404,000)	(0.01)

(\*) – Reported revenue, loss and loss per share reflect the impact of the Company’s early adoption during the nine month period ended December 31, 2009, of EIC-175 “Multiple Deliverable Revenue Arrangements”.

### Results for the three month period ended June 30, 2011 (“Q2 Fiscal 2011”), compared to the three month period ended June 30, 2010.

#### Net loss and comprehensive loss

As a result of a decrease in revenue and increased operating expenses, as discussed below, the net loss and comprehensive loss increased from a loss of \$1,638,000 during the three month period ended June 30, 2010 to a loss of \$2,044,000 in Q2 Fiscal 2011, an increase of \$406,000. Operating expenses increased by \$400,000 due mainly to the \$720,000 expenses related to pre-clinical research on DPX-Survivac and the manufacturing of the clinical batch of DPX-Survivac vaccines and a \$334,000 reduction of government assistance. These increases were offset by a \$319,000 decrease in expenses associated with the Phase I clinical trial of DPX-0907, \$170,000 related to decreased business development costs and a decrease in general and administration expenses of \$189,000.

#### Revenues

During Q2 Fiscal 2011, revenue was \$nil compared to \$6,000 during the three month period ended June 30, 2010. The \$6,000 was deferred revenue being recognized in the period in relation to a past license agreement signed with Pfizer. Although Immunovaccine is actively pursuing new additional licensing and revenue opportunities, within both the animal and human health markets, the Company has not signed any new license agreements in 2011.

All revenue recognized to date has been earned through the Company’s animal health activities and relates to potential animal vaccines that are being developed by another company that has licensed the Company’s technology. The animal licenses are structured with upfront payments, milestones payments and royalties paid as a percentage of sales. As the animal vaccine candidates, to which these licenses relate, have not yet achieved final commercialization, the revenue at this stage of development is inconsistent. The amount and timing of future revenues from these animal health licenses are dependent on continued future development.

#### Operating expenses

Overall operating expenses increased by \$400,000 (24%) during Q2 Fiscal 2011 compared to the three month period ended June 30, 2010. Explanations of the nature of costs incurred, along with explanations of changes in those costs are discussed below.

### *Research and development expenses (“R&D”)*

R&D expenses include salaries and benefits, expenses associated with the Phase I clinical trial of DPX-0907, pre-clinical research expenses of DPX-Survivac, consulting fees paid to various independent contractors who possess specific expertise required by the Company, the cost of animal care facilities, lab supplies, peptides and other chemicals, rental of lab facilities, insurance, as well as other R&D related expenses. These R&D costs are offset by investment tax credits and government assistance received in relation to the R&D expenses incurred.

The majority of the Company’s R&D efforts and related expenses for Q2 Fiscal 2011 continued to be focused on the Company’s Phase I clinical trial of DPX-0907 and the pre-clinical research and development of DPX-Survivac, including the manufacturing costs of the clinical batch of DPX-Survivac vaccines. The remaining R&D costs related to the Company’s ongoing R&D activities associated with the investigation, analysis and evaluation of other potential vaccine candidates and technologies. R&D expenses are expected to remain high as the Company continues the formulation, analytical development, pre-clinical efficacy and other activities in preparation for a Phase I clinical trial of DPX-Survivac.

Total R&D expenses for Q2 Fiscal 2011 were \$1,488,000, less the investment tax credits of \$36,000 and the government assistance of \$34,000. This represented a \$423,000 (40%) increase over the three month period ended June 30, 2010. Total R&D expenses for the three month period ended June 30, 2010 were \$1,065,000, less the investment tax credits of \$33,000 and government assistance of \$365,000.

The largest component of R&D expense was direct expenses associated with the pre-clinical research and development of DPX-Survivac of \$720,000 (three month period ended June 30, 2010 - \$nil). Also in Q2 Fiscal 2011, the Company incurred \$235,000 of expenses associated with the Phase I clinical trial for DPX-0907 (three month period ended June 30, 2010 - \$554,000). Other R&D expenses increased by \$19,000 (4%) to \$529,000 during Q2 Fiscal 2011 compared to \$510,000 during the three month period ended June 30, 2010.

The government assistance recorded consists mainly of amounts realized due to the revaluation of the interest-free government loans. Under IFRS, as described in further detail below, the government interest-free repayable loans must be valued at fair value and the difference between the fair value of the loans and the contribution received must be treated as government assistance. In the three month period ended June 30, 2010, the Company received loan contributions of \$315,000, which was recorded directly against research and development costs, compared to \$nil in Q2 Fiscal 2011, as the AIF Round V loan had been fully drawn down at the end of the three month period ended March 31, 2011.

### *Investment tax credits*

Refundable investment tax credits, which were recorded against R&D expenses, were \$36,000 during Q2 Fiscal 2011, compared to \$33,000 during the three month period ended June 30, 2010.

### *General and administrative expenses (“G&A”)*

G&A expenses of \$404,000 represented 20% of total expenses for Q2 Fiscal 2011 compared to \$593,000 (36% of total expenses) for the three month period ended June 30, 2010, an overall decrease of \$189,000 (32%).

The most significant components of G&A expenses are salaries and benefits and professional fees. Professional fees for Q2 Fiscal 2011 of \$82,000 (three month period ended June 30, 2010 - \$198,000) included: \$27,000 in costs to maintain and expand the Company’s patent portfolio; \$39,000 in respect of audit, accounting, taxation and other consulting services provided by the Company’s auditors; and \$16,000 in general legal and other professional fees. During the three month period ended June 30, 2010, patent related costs, accounting and related costs, and general legal and other professional costs were approximately \$102,000, \$85,000 and \$11,000, respectively.

G&A expenses related to salaries and benefits for Q2 Fiscal 2011 were approximately \$61,000 compared to \$162,000 for the three month period ended June 30, 2010. The decrease of \$101,000 is attributable to the departure

of the former Chief Financial Officer in June 2010 and the Vice President in August 2010, offset by the appointment of the new Chief Financial Officer in January 2011.

Also included in G&A expenses for Q2 Fiscal 2011 are consulting fees of \$111,000 (three month period ended June 30, 2010 - \$55,000). The increase in consulting fees primarily relates to the allocation of the President and Chief Executive Officer's time and costs to G&A expenses in Q2 Fiscal 2011 compared to an amount allocated to R&D expenses, which was done in previous periods. The Company's directors' fees and costs in Q2 Fiscal 2011 were \$50,000 compared to \$42,000 during the three month period ended June 30, 2010.

Other Q2 Fiscal 2011 G&A expenses included a foreign exchange gain of \$6,000 related to U.S. funds held by the Company, and \$30,000 in interest income compared to a foreign exchange gain of \$25,000 and interest income of \$7,000, respectively, during the three month period ended June 30, 2010. Other minor differences were noted in office expenses and travel.

#### *Business development expenses ("BD")*

Total business development expenses of \$194,000 in Q2 Fiscal 2011 represented a decrease of \$170,000 compared to the three month period ended June 30, 2010. The decrease relates mainly to the \$119,000 decrease in legal fees compared to the three month period ended June 30, 2010. Legal fees were significantly higher in the three month period ended June 30, 2010 due to the completion of both the Merck KGaA and Oncothyreon agreements in Fiscal 2010. This also led to a decrease in travel expenses from \$58,000 in the three month period ended June 30, 2010 compared to \$36,000 in Q2 Fiscal 2011, as the Company had attended more research partnership meetings and conferences in the three month period ended June 30, 2010 compared to Q2 Fiscal 2011.

#### *Stock-based compensation*

Under IFRS, stock-based compensation has been reallocated to research and development expenses, general and administrative expenses and business development expenses based on the appropriate breakdown of the expense. A total amount of \$57,000, \$126,000 and \$7,000 (three month period ended June 30, 2010 - \$92,000, \$160,000 and \$25,000) was allocated to R&D, G&A and BD expenses, respectively. The overall decrease was due primarily to the change in accounting for stock-based compensation under IFRS compared to the former Canadian GAAP. Refer to the section below, "Transition to International Financial Reporting Standards (IFRS)", for more detail describing this change.

### **Results for the six month period ended June 30, 2011, compared to the six month period ended June 30, 2010.**

#### **Net loss and comprehensive loss**

As a result of a decrease in revenue and increased operating expenses, as discussed below, the net loss and comprehensive loss increased from a loss of \$2,747,000 during the six month period ended June 30, 2010 to a loss of \$3,922,000 during the six month period ended June 30, 2011, an increase of \$1,175,000. Operating expenses increased by \$1,112,000, including \$1,130,000 related to pre-clinical research expenses for DPX-Survivac and a \$769,000 reduction of government assistance. These increases are offset by a decrease in general and administration expenses of \$330,000, a decrease in other research and development costs not related to the clinical or pre-clinical trials discussed above of \$152,000, an increase in refundable investment tax credits of \$93,000, and a \$207,000 decrease in stock-based compensation.

#### **Revenues**

During the six month period ended June 30, 2011, revenue was \$nil compared to \$64,000 during the six month period ended June 30, 2010. The entire amount of \$64,000 was for a non-refundable, upfront license fee pursuant to the signing of a new license agreement for a third livestock vaccine with Pfizer during the six month period ended June 30, 2010. Although Immunovaccine is actively pursuing new additional licensing and revenue opportunities, within both the animal and human health markets, the Company has not signed any new license agreements in 2011.

All revenue recognized to date has been earned through the Company's animal health activities and relates to potential animal vaccines that are being developed by another company that has licensed the Company's technology. The animal licenses are structured with upfront payments, milestones payments and royalties paid as a percentage of sales. As the animal vaccine candidates, to which these licenses relate, have not yet achieved final commercialization, the revenue at this stage of development is inconsistent. The amount and timing of future revenues from these animal health licenses are dependent on continued future development.

## **Operating expenses**

Overall operating expenses increased by \$1,112,000 (40%) during the six month period ended June 30, 2011 compared to the six month period ended June 30, 2010. Explanations of the nature of costs incurred, along with explanations of changes in those costs are discussed below.

### *Research and development expenses ("R&D")*

R&D expenses include salaries and benefits, expenses associated with the Phase I clinical trial of DPX-0907, pre-clinical research expenses of DPX-Survivac, including manufacturing costs of the clinical batch of DPX-Survivac vaccines, consulting fees paid to various independent contractors who possess specific expertise required by the Company, the cost of animal care facilities, lab supplies, peptides and other chemicals, rental of lab facilities, insurance, as well as other R&D related expenses. These R&D costs are offset by investment tax credits and government assistance received in relation to the R&D expenses incurred.

The majority of the Company's R&D efforts and related expenses for six month period ended June 30, 2011 continued to be focused on the Company's Phase I clinical trial of DPX-0907 and the pre-clinical research and development of DPX-Survivac. The remaining R&D costs related to the Company's ongoing R&D activities associated with the investigation, analysis and evaluation of other potential vaccine candidates and technologies. R&D expenses are expected to remain high as the Company continues the formulation, analytical development, pre-clinical efficacy and other activities in preparation for a Phase I clinical trial of DPX-Survivac.

Total R&D expenses for the six month period ended June 30, 2011 were \$2,989,000, less the investment tax credits of \$148,000 and the government assistance of \$178,000. This represented a \$871,000 (41%) increase over the six month period ended June 30, 2010. Total R&D expenses for the six month period ended June 30, 2010 were \$2,118,000, less the investment tax credits of \$56,000 and government assistance of \$947,000.

The largest component of R&D expense was direct expenses associated with the pre-clinical research and development of DPX-Survivac and the manufacturing costs of the clinical batch of DPX-Survivac vaccines of \$1,130,000 (six month period ended June 30, 2010 - \$nil). Also in the six month period ended June 30, 2011, the Company incurred \$812,000 of expenses associated with the Phase I clinical trial for DPX-0907 (six month period ended June 30, 2010 - \$918,000). Other R&D expenses decreased by \$153,000 (13%) to \$1,047,000 during the six month period ended June 30, 2011 compared to \$1,200,000 during the six month period ended June 30, 2010. The decrease in other R&D expenses is due to the focus on the clinical trial of DPX-0907 and the pre-clinical research and development of DPX-Survivac.

The government assistance recorded consists mainly of amounts realized due to the revaluation of the interest-free government loans. Under IFRS, as described in further detail below, the government interest-free repayable loans must be valued at fair value and the difference between the fair value of the loans and the contribution received must be treated as government assistance. In the six month period ended June 30, 2010, the Company received loan contributions of \$830,000, which was recorded directly against research and development costs, compared to \$87,000 in the six month period ended June 30, 2011, as the AIF Round V loan had been fully drawn down at the end of the three month period ended March 31, 2011.

### *Investment tax credits*

Refundable investment tax credits, which were recorded against R&D expenses, increased to \$149,000 during the six month period ended June 30, 2011, compared to \$56,000 during the six month period ended June 30, 2010. This

relates to the increase of research and development costs to \$2,989,000 during the six month period ended June 30, 2011 compared to \$2,117,000 during the six month period ended June 30, 2010.

#### *General and administrative expenses (“G&A”)*

G&A expenses of \$746,000 represented 19% of total expenses for the six month period ended June 30, 2011 compared to \$1,075,000 (38% of total expenses) for the six month period ended June 30, 2010, an overall decrease of \$329,000 (31%).

The most significant components of G&A expenses are salaries and benefits and professional fees. Professional fees for the six month period ended June 30, 2011 of \$193,000 (six month period ended June 30, 2010 - \$313,000) included: \$95,000 in costs to maintain and expand the Company’s patent portfolio; \$77,000 in respect of audit, accounting, taxation and other consulting services provided by the Company’s auditors; and \$21,000 in general legal and other professional fees. During the six month period ended June 30, 2010, patent related costs, accounting and related costs, and general legal and other professional costs were approximately \$144,000, \$133,000 and \$36,000, respectively.

G&A expenses related to salaries and benefits for the six month period ended June 30, 2011 were approximately \$122,000 compared to \$271,000 for the six month period ended June 30, 2010. The decrease of \$149,000 is attributable to the departure of the former Chief Financial Officer in June 2010 and the Vice President in August 2010, offset by the appointment of the new Chief Financial Officer in January 2011.

Also included in G&A expenses for the six month period ended June 30, 2011 are consulting fees of \$140,000 (six month period ended June 30, 2010 - \$94,000). The increase in consulting fees primarily relates to the allocation of the President and Chief Executive Officer’s time and costs to G&A expenses in Q2 Fiscal 2011 compared to an amount allocated to R&D expenses, which was done in previous periods. The Company’s directors’ fees and costs in the six month period ended June 30, 2011 were \$87,000 compared to \$76,000 during the six month period ended June 30, 2010.

Other G&A expenses during the six month period ended June 30, 2011 included a foreign exchange gain of \$4,000 related to U.S. funds held by the Company, and \$70,000 in interest income compared to a foreign exchange gain of \$2,000 and interest income of \$14,000, respectively, during the six month period ended June 30, 2010. Other minor differences were noted in office expenses and travel.

#### *Business development expenses (“BD”)*

Total business development expenses of \$455,000 during the six month period ended June 30, 2010 represented a decrease of \$126,000 compared to the six month period ended June 30, 2010. The Company incurred increased expenses in consulting fees of \$97,000 offset by decreased legal fees of \$99,000. There was a decrease in salary and benefits of \$43,000, as the role of Director of Business Development is currently being performed by a consultant rather than an employee. Travel expenses decreased by \$19,000, from \$116,000 in the six month period ended June 30, 2010 compared to \$97,000 in the six month period ended June 30, 2011. The remaining significant decrease relates to the decrease in the stock-based compensation expense as described below.

#### *Stock-based compensation*

Under IFRS, stock-based compensation has been reallocated to research and development expenses, general and administrative expenses and business development expenses based on the appropriate breakdown of the expense. A total amount of \$134,000, \$267,000 and \$16,000 (six month period ended June 30, 2010 - \$187,000, \$379,000 and \$58,000) was allocated to R&D, G&A and BD expenses, respectively. The overall decrease was due primarily to the change in accounting for stock-based compensation under IFRS compared to the former Canadian GAAP. Refer to the section below, “Transition to International Financial Reporting Standards (IFRS)”, for more detail describing this change.

## **CASH FLOWS, LIQUIDITY AND CAPITAL RESOURCES**

At June 30, 2011, the Company had cash and cash equivalents of \$7,504,000, as compared to cash and cash equivalents of \$9,299,000 at March 31, 2011 and \$10,413,000 at December 31, 2010. At June 30, 2011, the Company had working capital of \$7,638,000, as compared to \$9,462,000 at March 31, 2011 and \$11,116,000 at December 31, 2010.

Since the Company's inception, Immunovaccine has been financed through the sale of shares, debt, revenue from the animal healthcare licenses, interest income on funds available for investment, and government assistance and tax credits.

### **Three months ended June 30, 2011**

During Q2 Fiscal 2011, cash of \$1,774,000 was used in operating activities. This included the reported net loss of \$2,044,000 prior to being decreased for; non-cash amortization, non-cash depreciation, non-cash accretion of long-term debt, non-cash stock-based compensation and non-cash loss on the disposal of assets of \$10,000, \$22,000, \$29,000, \$190,000 and \$3,000, respectively.

During Q2 Fiscal 2011, the Company had a source of cash of \$17,000 as a result of non-cash changes in working capital balances. The primary uses of cash were a \$456,000 decrease in accounts payable and accrued liabilities and a \$36,000 increase in investment tax credits receivable. These decreases in cash were offset by a collection of \$430,000 of amounts receivable, a decrease in prepaid expenses of \$73,000 and an increase of \$6,000 in amounts due to directors.

Sources of cash raised through financing activities during Q2 Fiscal 2011 were \$3,000 in proceeds from long-term debt, offset by the repayment of \$10,000 of its long-term debt.

During Q2 Fiscal 2011, the Company purchased \$15,000 of equipment for ongoing research and operating activities.

### **Six months ended June 30, 2011**

During the six months ended June 30, 2011, cash of \$2,796,000 was used in operating activities. This included the reported net loss of \$3,922,000 prior to being decreased for; non-cash amortization, non-cash depreciation, non-cash accretion of long-term debt, non-cash stock-based compensation, shares issued for professional services and loss on the disposal of assets of \$20,000, \$43,000, \$59,000, \$417,000, \$27,000 and \$3,000, respectively.

During the six months ended June 30, 2011, the Company had a source of cash of \$557,000 as a result of non-cash changes in working capital balances. The primary sources of cash were \$304,000 collection of amounts receivable, \$183,000 decrease in investment tax credits receivable, \$90,000 decrease in prepaid expenses and \$13,000 increase in accounts payable and accrued liabilities. These sources in cash were offset by a decrease of \$34,000 in amounts due to directors.

Sources of cash raised through financing activities during the six months ended June 30, 2011 were \$47,000 in proceeds from long-term debt, offset by the repayment of \$19,000 of its long-term debt.

During the six months ended June 30, 2011, the Company purchased \$141,000 of equipment for ongoing research and operating activities.

At June 30, 2011, the Company had approximately \$11.2 million of existing and identified potential sources of cash including:

- cash and equivalents of \$7.5 million;
- amounts receivable and investment tax credits receivable of \$0.8 million; and
- additional funding of \$2.9 million available from government assistance and loans that the Company has been awarded.

For Q2 Fiscal 2011, the Company's "cash burn rate" (defined as net loss for the period adjusted for non-cash transactions including amortization, accreted interest, stock-based compensation and shares issued for professional services) was approximately \$1.8 million for the quarter. This cash burn rate is higher than the average cash burn rate the Company experienced in fiscal 2010 of \$1.4 million, as the DPX-0907 Phase I clinical trial costs wind down and the Company increases its Phase I/II clinical development work for DPX-Survivac. During Q2 Fiscal 2011, the Company incurred manufacturing expenses to develop the clinical batch of DPX-Survivac vaccines. The Company forecasts the burn rate to be between \$1.8 million to \$2.4 million over the next six months.

At June 30, 2011, the Company had cash resources of \$7.5 million and identified additional potential cash resources of \$3.7 million, including the \$2.9 million from the new AIF loan. Management is of the belief that this provides the Company with sufficient funds to execute the strategy of completing the Phase I trial of DPX-0907 and to advance towards a Phase I clinical trial of DPX-Survivac, while maintaining adequate working capital until the third quarter of 2012. Management further believes there are discretionary expenditures within the current cash forecast which could be reduced in the event that the identified potential sources of cash are not realized or receipt is delayed. The Company continually reassesses the adequacy of its cash resources since should either positive research results be obtained from existing research projects and/or potential collaboration opportunities identified, then additional funding may be required.

### **TRANSITION TO INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)**

In February 2008, the Canadian Accounting Standards Board announced that accounting standards in Canada are to converge with International Financial Reporting Standards ("IFRS") and companies will begin reporting, with comparative data, under IFRS for fiscal years beginning on or after January 1, 2011. The Company adopted IFRS effective January 1, 2011 and has prepared its opening balance sheet at that date. Prior to the adoption of IFRS, the Company prepared its financial statements in accordance with previous Canadian GAAP. The Company's consolidated financial statements for the year ended December 31, 2011 will be the first annual financial statements that comply with IFRS. The Company's second quarter 2011 unaudited interim condensed consolidated financial statements have been prepared in accordance with IFRS, as well as all comparative financial information presented in this MD&A, consistent with retrospective application.

While IFRS is based on a conceptual framework similar to Canadian GAAP, there are significant differences with respect to recognition, measurement and disclosure. The adoption of IFRS did not have an impact on the Company's reported net cash flows, however it had a material impact on the Company's consolidated balance sheets, which is now referred to as the statements of financial position under IFRS, and statements of loss and comprehensive loss.

The Company prepared an opening statement of financial position, along with the accounting policies under IFRS, and presented them to the Audit Committee for review. The Company's external auditors reviewed the accounting policies under IFRS, the opening statement of financial position and the disclosures under IFRS, however all amounts will be considered unaudited, as the Company has not yet prepared a complete set of financial statements and note disclosures under IFRS.

Below is a summary of key differences between Canadian GAAP and IFRS that have affected the Company.

*Statement of Financial Position Impact*

The following table provides the old Canadian GAAP consolidated statements of financial position as at January 1, 2010 and December 31, 2010 and changes required to adjust to new GAAP (IFRS).

<b>TRANSITION TO INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)</b>						
<b>Unaudited Consolidated Statements of Financial Position</b>						
<b>As at December 31, 2010 and January 1, 2010</b>						
	<b>December 31, 2010</b>			<b>January 1, 2010</b>		
	<b>Cdn GAAP</b>	<b>Adj</b>	<b>IFRS</b>	<b>Cdn GAAP</b>	<b>Adj</b>	<b>IFRS</b>
<b>Assets</b>						
<b>Current assets</b>						
Cash and cash equivalents	10,413,047		10,413,047	7,777,303		7,777,303
Amounts receivable	469,990		469,990	595,436		595,436
Share subscription receivable	-		-	28,877		28,877
Prepaid expenses	288,068		288,068	183,441		183,441
Investment tax credits receivable	818,106	(34,000)	784,106	553,448	(43,000)	510,448
	11,989,211	(34,000)	11,955,211	9,138,505	(43,000)	9,095,505
Intangible asset	391,327		391,327	430,460		430,460
Property and equipment	332,697		332,697	322,356		322,356
	12,713,235	(34,000)	12,679,235	9,891,321	(43,000)	9,848,321
<b>Liabilities</b>						
<b>Current liabilities</b>						
Accounts payable and accrued liabilities	700,136		700,136	720,861		720,861
Amounts due to directors	81,705		81,705	-		-
Current portion of long-term debt	57,683		57,683	67,821		67,821
Deferred revenues	-		-	24,000		24,000
	839,524	-	839,524	812,682	-	812,682
Long-term debt	6,987,803	(6,413,927)	573,876	5,782,959	(5,320,198)	462,761
	7,827,327	(6,413,927)	1,413,400	6,595,641	(5,320,198)	1,275,443
<b>Shareholders' equity</b>						
Capital Stock	24,728,328		24,728,328	18,730,299		18,730,299
Contributed Surplus	1,275,508	338,318	1,613,826	633,970	84,878	718,848
Warrants	1,590,402		1,590,402	136,672		136,672
Deficit	(22,708,330)	6,041,609	(16,666,721)	(16,205,261)	5,192,320	(11,012,941)
	4,885,908	6,379,927	11,265,835	3,295,680	5,277,198	8,572,878
	12,713,235	(34,000)	12,679,235	9,891,321	(43,000)	9,848,321

The most significant statement of financial position impact relates to the valuation of the Company's government interest-free loans. Under IFRS, a government loan that has a "below market rate of interest" should be measured at initial recognition at fair value, with any difference between the contribution received for the loan and the fair value amount accounted for as government assistance. This varies from old Canadian GAAP, where the loans were recorded at cost and reduced at the time of repayment. The impact of this accounting change resulted in a \$5.32 million decrease in the value of the long-term debt recorded in the opening statement of financial position of January 1, 2010, an 92% decrease below the carrying value of the loans under the old Canadian GAAP at December 31, 2009. The fair value of the loans were calculated based on discounted future cash flows using discount rates that reflect current market conditions for instruments with similar terms and risks.

The two significant Atlantic Innovation Fund ("AIF") loans the Company received from the Atlantic Canada Opportunities Agency ("ACOA") have repayment terms based on future revenue. As the Company is a clinical stage vaccine development company and has not earned significant revenues to date, there is a significant level of uncertainty in the projections of the repayment of the loans. This resulted in the decreased valuation of these loans, from their respective book values of \$3,779,000 and \$1,785,000 on January 1, 2010, to their fair values of \$243,000

and \$1,000, respectively. Subsequent to the transition date of January 1, 2010, the difference between the book value and the fair value is recorded as government assistance, reducing research and development expenses. The imputed interest rate used to discount the loans will be accreted in the statement of loss each quarter, until the loan is paid in full. While the Company has made this accounting change to the financial statements to comply with IFRS, the Company is still responsible for the repayment of these government loans, based on future revenue.

The Company's accounting for stock options was also impacted by the change to IFRS. The Company grants stock options to certain employees and non-employees which vest over 18 months and expire after five years. Under IFRS, each tranche in an award is considered a separate award with its own vesting period and grant date fair value. This accelerated vesting leads to higher stock-based compensation expense in the beginning of the vesting period, resulting in an \$85,000 increase in contributed surplus recorded in the opening statement of financial position of January 1, 2010.

Under IFRS, the investment tax credit receivable must be measured at fair value. Under old Canadian GAAP, these were measured at cost, however due to the length of time between recording the receivable and collection, the receivable must be adjusted to reflect the time value of money. The IFRS adjustment required decreased the receivable by \$43,000 at January 1, 2010 and \$34,000 at December 31, 2010.

The net difference of these adjustments flowed through shareholders' equity, which increased by \$5.3 million in the opening statement of financial position of January 1, 2010.

#### *Statement of Loss and Comprehensive Loss Impact*

The table below provides the old Canadian GAAP consolidated statements of loss and comprehensive loss for the year ended December 31, 2010 and the three and six month period ended June 30, 2010 and changes required to adjust to new GAAP (IFRS).

TRANSITION TO INTERNATIONAL FINANCIAL REPORTING STANDARDS (IFRS)									
Unaudited Consolidated Statements of Loss and Comprehensive Loss									
For the year ended December 31, 2010 and the three and six months ended June 30, 2010									
	12 months			3 months			6 months		
	December 31, 2010			June 30, 2010			June 30, 2010		
	Cdn GAAP	Adj	IFRS	Cdn GAAP	Adj	IFRS	Cdn GAAP	Adj	IFRS
<b>Revenue</b>	76,105	-	76,105	6,000	-	6,000	64,105	-	64,105
<b>Expenses</b>									
General and administrative	1,878,697	88,745	1,967,442	548,354	44,409	592,763	1,001,325	74,043	1,075,368
Research and development	3,672,249	(1,040,742)	2,631,507	908,097	(241,196)	666,901	1,805,053	(690,533)	1,114,520
Business development	1,028,228	21,108	1,049,336	352,003	11,877	363,880	557,941	22,221	580,162
Interest	-	81,600	81,600	-	20,400	20,400	-	40,800	40,800
	6,579,174	(849,289)	5,729,885	1,808,454	(164,510)	1,643,944	3,364,319	(553,469)	2,810,850
<b>Net loss and comprehensive loss</b>	<b>(6,503,069)</b>	<b>849,289</b>	<b>(5,653,780)</b>	<b>(1,802,454)</b>	<b>164,510</b>	<b>(1,637,944)</b>	<b>(3,300,214)</b>	<b>553,469</b>	<b>(2,746,745)</b>

Adopting IFRS has resulted in a net loss for the three and six months ended June 30, 2010 of \$1,638,000 and \$2,747,000, respectively, compared to a net loss of \$1,802,000 and \$3,300,000, respectively, under old Canadian GAAP. The most significant statement of loss item is the difference between the fair value of the government interest-free loans and the amount of contribution received, which was recorded as government assistance and accounted for as a reduction in research and development expenditures. The Company recorded an increase of \$315,000 and \$830,000 in government assistance in the three and six months ended June 30, 2010, respectively. This positive adjustment was offset by the accreted interest relating to these loans of \$20,000 and \$41,000 in the three and six months ended June 30, 2010, as well as an increase in the stock-based compensation expense of \$133,000 and \$242,000 in the three and six months ended June 30, 2010, respectively. A small increase in the investment tax credit expense of \$3,500 and \$6,000 in the three and six months ended June 30, 2010 reduced the impact to a \$165,000 and \$553,000 decrease of net loss in the three and six months ended June 30, 2010, respectively, due to the adoption of IFRS.

## *Statements of Cash Flows*

The transition from old Canadian GAAP to IFRS had no significant impact on the cash flows generated by the Company; however the effect of recording the long-term debt at fair value resulted in a change of presentation of the cash flows received. The difference between the contribution received for the loan and the fair value amount was accounted for as a government grant, and therefore reduced the net loss by \$165,000, \$553,000 and \$849,000 for the three and six months ended June 30, 2010 and year ended December 31, 2010, respectively. The Company also recorded accreted interest relating to the interest-free loans of \$20,000, \$41,000 and \$82,000, for the three and six months ended June 30, 2010 and year ended December 31, 2010, respectively, which were added back as non-cash items in the statements of cash flows.

## **RELATED PARTY TRANSACTIONS**

During the six month period ended June 3, 2011, the Company incurred business development consulting fees of \$36,000 by a non-executive Director. The Company had no other transactions with related parties as defined in the CICA Handbook (IFRS), except those pertaining to transactions with key management personnel in the ordinary course of their employment or directorship arrangements.

## **DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING**

Disclosure controls and procedures (“DC&P”) are intended to provide reasonable assurance that material information is gathered and reported to senior management to permit timely decisions regarding public disclosure. Internal controls over financial reporting (“ICFR”) are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with Canadian generally accepted accounting principles.

TSX-V listed companies are not required to provide representations in their annual and interim filings relating to the establishment and maintenance of DC&P and ICFR, as defined in Multinational Instrument MI 52-109. In particular, the CEO and CFO certifying officers do not make any representations relating to the establishment and maintenance of (a) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and (b) processes to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with the issuer’s GAAP.

## **SIGNIFICANT ESTIMATES**

The unaudited interim condensed consolidated financial statements as at June 30, 2011 have been prepared in accordance with new Canadian GAAP (IFRS). Significant accounting estimates used in preparing the unaudited interim condensed consolidated financial statements include the valuation of long-term debt, the Scientific Research and Experimental Development (“SRED”) tax credit receivable, the fair value allocation of consideration for multiple element revenue arrangements, non-cash stock based compensation expense, amortization and depreciation of intangibles and property and equipment, allocation of proceeds between common shares and warrants, and accrued liabilities. Management has calculated the fair value of the interest-free government loans based on the forecast of the Company’s future revenue, discounted at an appropriate discount rate. The estimates and assumptions used in the valuation model were based on current information available to Management and a degree of Management’s judgment. A change in Management’s assumptions used to forecast future revenue or a change in the discount rate could have a significant impact on the fair value of these interest-free government loans. Management has estimated the SRED receivable based on its assessment of tax credits receivable on eligible expenditures incurred during the period and its experience with claims filed with and collected from the Canada Revenue Agency. Management has analyzed the accounts receivable listing for potentially uncollectible amounts and has allowed for all balances which collection is doubtful. Management has made estimates regarding when stock options might be exercised and stock price volatility in calculating non-cash stock based compensation. The timing for exercise of options is out of the Company’s control and will depend on a variety of factors including the market value of the Company’s shares and the financial objectives of the stock-based instrument holders. Management has

made estimates about the expected useful lives of long-lived assets, and the expected residual values of the assets. Management has determined the allocation of proceeds between common shares and warrants based on the relative values of the shares and warrants issued. Through knowledge of the Company's activities in the six month period ended June 30, 2011, Management has estimated the amount of accrued liabilities to be recorded.

## **OUTSTANDING SECURITIES**

The number of issued and outstanding common shares on August 23, 2011 is 53,987,084. The number of outstanding stock options on June 30, 2011 is 3,440,650. The outstanding stock options have a weighted average exercise price of \$0.95 per share and a weighted average remaining term of 3.13 years. The number of outstanding warrants on June 30, 2011 is 4,137,556. The outstanding warrants have a weighted average exercise price of \$1.27 per share and a weighted average remaining term of 2.12 years.

## **INTELLECTUAL PROPERTY RIGHTS**

The Corporation strives to protect its intellectual property in established, as well as emerging markets around the world as warranted. The Corporation's intellectual property portfolio for its vaccine platform technology includes five patent families, the first of which contains five patents issued in four jurisdictions (U.S., Europe, Japan and Australia) and two pending patent applications in the U.S. and Canada. The other four families collectively contain thirty-three pending patent applications in eleven jurisdictions. U.S. Patent 6,793,923, issued in 2004, contains claims to the Corporation's platform, covering "any antigen, any adjuvant in any liposome and any oil". The platform name is protected by trademarks in the U.S., Canada and Europe.

## **FINANCIAL INSTRUMENTS**

Financial assets and liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership.

Financial assets and liabilities are offset and the net amount is reported in the statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

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

The Company has implemented the following classifications:

- Cash and cash equivalents and amounts receivable are classified as loans and receivables. After their initial fair value measurement, they are measured at amortized cost using the effective interest method; and
- Accounts payable and accrued liabilities, amounts due to directors and long-term debt are classified as other financial liabilities. After their initial fair value measurement, they are measured at amortized cost using the effective interest method.

## **OFF BALANCE SHEET ARRANGEMENTS**

The Company was not party to any off balance sheet arrangements as of June 30, 2011.

## **RISK ASSESSMENT**

The Company's activities are subject to certain risk factors and uncertainties that generally affect development-stage biotechnology companies. Management defines risk as the evaluation of the probability that an event might happen in the future that could negatively affect the financial condition, results of operation or perspectives of the Company. The success of the Company will depend, without limitation, on its ability to: i) develop its products and technologies; ii) preserve its intellectual property rights; iii) retain its key employees; iv) conclude strategic alliances

and research and development partnerships with third parties; v) complete strategic in-licensing agreements; vi) demonstrate the safety and efficacy of its products and obtain satisfactory results in regard to the clinical trials; vii) manufacture product candidates in sufficient yields, at commercial scale and at economical market prices; and viii) obtain regulatory approvals required to commercialize its products or those of its partners. The Company's activities have required and will require significant financial investment. Therefore, the Company's ability to obtain the necessary funding to finance its activities is essential to ensure its success and is, as such, a risk factor. The risks identified above do not include all possible risks as there may be other risks of which Management is currently unaware. The above risks and other general risks and uncertainties relating to the Company and its activities are more fully described in the Annual Information Form of the Company for the year ended December 31, 2010, under the heading "Risk Factors".