



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

**For the year ended December 31, 2010**



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

The following analysis provides a review of the audited consolidated annual results of operations, financial condition and cash flows for the year ended December 31, 2010, with information compared to the nine months ended December 31, 2009, respectively 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 periods ended December 31, 2010 and 2009.

On September 30, 2009, Rhino Resources Inc. (“Rhino”) and ImmunoVaccine Technologies Inc. (“IVT”) completed a reverse take-over (“RTO”). Following the reverse take-over, Rhino changed its name to Immunovaccine Inc. Immunovaccine’s financial year-end was August 31<sup>st</sup>. IVT, the reverse take-over acquirer, had a financial year-end of March 31<sup>st</sup>. Companion Policy 51-102CP provides that the accounting for the new reporting issuer, Immunovaccine, should be that of the reverse take-over acquirer, with financial statements prepared and filed as if IVT has always been the reporting issuer. Subsequent to the RTO, the Company changed its financial year-end to December 31<sup>st</sup> to efficiently manage the time and cost of current and ongoing reporting requirements. The nature of the business of the Company renders December 31<sup>st</sup> as the most appropriate financial year-end. See additional information under “Reverse Take-over and Private Placements”.

These results have been prepared in accordance with generally accepted accounting principles (“GAAP”) in Canada. 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 April 20, 2011, the date of the Board's approval for the MD&A and the audited consolidated December 31, 2010 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. The first vaccine candidate, DPX-0907, a therapeutic cancer vaccine targeting breast, ovarian and prostate cancers, is the furthest developed. Currently, the Company is in a multi-site Phase I human clinical trial for DPX-0907 in the United States ("U.S."). EMD 640744 ("DPX-Survivac"), in-licensed from Merck KGaA ("Merck KGaA") on July 12, 2010, is the Company's latest therapeutic cancer vaccine and is being developed for clinical testing in patients diagnosed with ovarian cancer. 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. A DPX-Pseudomonas vaccine candidate which is currently at the discovery stage is being evaluated. Pseudomonas aeruginosa is an opportunistic lung infection that affects individuals with compromised immune systems, including the elderly, cystic fibrosis patients, and burn victims. 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 20 full-time and part-time employees and five 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 was able to develop an effective vaccine delivery system so that 90% of seals, 10 years after vaccination, were still contracepted after a single dose.

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. In 2004 and continuing through 2008, the Company began establishing its Vaccimax® platform for various human applications, while simultaneously developing a scalable manufacturing process for the Vaccimax® platform.

The Company continued its research and, in 2008, developed a lipid depot-based vaccine delivery and enhancement technology called the DepoVax™ platform, an improvement on the Company's original Vaccimax® platform. The patented DepoVax™ platform is a combination of antigens and immune enhancers formulated in liposomes, and then in oil. The DepoVax™ 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™ 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™ 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™ platform across multiple business models and markets at the same time. Therefore, unlike many early stage biotechnology companies, in the medium- to long-term, the Company is not reliant on one product for its success. The Company has identified and is pursuing a far more robust and diverse strategy across a number of markets, which the Company believes will effectively give it the ability to concurrently pursue many product opportunities in the future.

Acknowledging the larger potential of the human pharmaceutical market, the Company is now focused on developing new vaccines using the DepoVax™ 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™ delivery platform for human health applications has already been evaluated in not just one, but 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, the Company has adopted a three pronged business strategy: i) develop Company controlled vaccine products ii) partner out the DepoVax™ 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. Specifically, the Company is currently working toward three goals: to complete the current Phase I clinical trial of DPX-0907, a therapeutic vaccine to treat ovarian, breast and prostate cancers; to advance towards and complete a Phase I clinical trial of DPX-Survivac, an investigational therapeutic survivin-based vaccine, recently in-licensed from Merck KGaA; and to advance the Company's pre-clinical research in developing a Pseudomonas aeruginosa ("Pseudomonas") vaccine. Pseudomonas is a hospital-acquired infection and there are no vaccines for Pseudomonas on the market today.

*Vaccine improvement* - The Company intends to license the DepoVax™ technology to human health companies for certain indications and 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 vaccines already covered by the existing partnership agreements include advancing seasonal and pandemic influenza, anti-anthrax vaccines, therapeutic cancer vaccines and vaccines for HIV and malaria.

*Animal health* - The Company's initial research was focused on animal health and its results caught the attention of Pfizer Animal Health ("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 the Company's technology was an important step in validating the technology 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. Most recently, in 2010, Pfizer exercised a licensing option on the Company's delivery platform to develop a third livestock vaccine. In the medium- to long-term, the Company is currently pursuing additional licensing and revenue opportunities within the animal health market to help fund the Company's research and development of human health vaccine candidates.

### *Business model and nature of expenses*

As an early stage biotechnology company, the Company 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 completing 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. The Company has purchased dedicated equipment which, along with the Company's scale-up and manufacturing methods, has been contracted out to an approved Good Manufacturing Practices ("GMP") fill and finish facility. In 2009, the Company manufactured commercial scale vaccine batches, including 50 litres (200,000 doses) of a hepatitis B vaccine. This accomplishment is important because historically, large-scale production of liposomes has been an industry challenge.

In 2009, the manufacturing and lyophilisation processes were established and delivered to a GMP fill and finish facility. 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 US and 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.

## **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 cancer. 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. The Company commenced recruitment for its Phase I clinical trial starting March 29, 2010, and injected the first patient 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. The Company completed enrolment of the Phase I clinical trial in February 2011. Interim safety analysis presented at the American Association of Cancer Research ("AACR") annual meeting in Orlando, FL 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. The Company announced positive immunogenicity results of DPX-0907 in April 2011, which showed that the DPX-0907 therapeutic cancer vaccine candidate elicited an antigen specific immune response, regardless of the dose delivered, in patients with breast, ovarian and prostate cancer, with the highest responder rate in patients with ovarian cancer. The Phase I clinical trial is progressing as planned.

DPX-0907 combines seven essential peptide antigens with the Company's DepoVax™ platform. The combination of the potent delivery technology and validated antigens will reduce risk and greatly enhance the Company's

probability of developing a successful therapeutic cancer vaccine. The vaccine is designed with specificity to antigens believed to be involved in critical tumor cell processes, and is expected to kill tumor cells without injury to normal, healthy cells. Successful initiation and completion of Phase I, II and III clinical trials for DPX-0907, as well as approval from global regulatory bodies, all represent future, and therefore uncertain, events that could have a significant impact on the Company's business.

In addition, the Company is conducting pre-clinical research studies on DPX-Survivac, expected to lead to a Phase I clinical trial. 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 Company intends to file an Investigational New Drug ("IND") application with the Food and Drug Administration ("FDA") for DPX-Survivac by the end of the third quarter of 2011.

The Company is also conducting studies for single-dose infectious disease vaccines, such as pandemic influenza, and *Pseudomonas aeruginosa*. Single-dose products for these indications do not exist today but would be beneficial. 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 intends to continue to pursue additional opportunities to generate revenues by licensing its technology for additional animal health care applications.

## **MARKET OVERVIEW**

Vaccines are one of the fastest growing segments of the pharmaceutical industry, and the Company's market for its products is worldwide. According to industry sources, the global market has been growing, with revenues reaching approximately US\$27 billion in 2009 and is expected to continue this rise to US\$46.5 billion by 2014. Therapeutic cancer vaccines, along with development of new infectious disease vaccines, are expected to drive the growth of the vaccine industry in the early 21st century. Overall, 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, through its acquisition of Wyeth. 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.

Vaccines are not easily replaced by generic substitutes and are therefore more likely to assure a long-term income stream. Vaccines also have the potential to reduce hospital stays and drug costs, and are positively viewed by governments and health care providers. New technologies, such as those being developed by the Company, are enabling the development of vaccines not previously possible. These new vaccine products are being priced at a premium to reflect the value of the technology.

### *Therapeutic cancer vaccines*

Although many treatments for cancer are currently available, cancer vaccines have become promising and plausible treatment options when used in combination with surgery, chemotherapy and radiation treatments. Therapeutic cancer vaccines hold the greatest promise when tumor burden is low (i.e. for smaller tumors) and the vaccine is used to stimulate the body's immune system to eradicate residual cancer cells following first-line treatments.

On April 30, 2010, the FDA approved Provenge, a prostate cancer vaccine developed by Dendreon. This is the first therapeutic cancer vaccine approved by the FDA in the US. The Company believes that this sets the stage for the approval of other cancer vaccines that are able to train the body's immune system to destroy or reduce tumors, and will also increase awareness of the clinical development programs of other companies, like Immunovaccine, working on vaccine treatments for cancer.

On March 25, 2011, the FDA approved Bristol-Myers Squibb's Ipilimumab (also known as Yervoy), for the treatment of previously treated adult patients with advanced melanoma. Such developments have renewed market interest in cancer immunotherapies.

Cancer vaccines may, in the Company's opinion, hold a lot of promise for effective cancer treatment, as well as potential profit generation. 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.

#### *Pseudomonas aeruginosa*

*Pseudomonas* has become an important cause of infection, especially in patients with compromised host defense mechanisms. Pseudomonal infections are complicated and can be life threatening. According to the Centers for Disease Control and Prevention ("CDC"), the overall prevalence of *Pseudomonas* infections in US hospitals is approximately 4 per 1000 discharges (0.4%). Patients predisposed to pseudomonal infections include immunosuppressed diabetics, cancer patients, burn victims, as well as individuals with cystic fibrosis, chronic obstructive pulmonary disease and neonates. Pseudomonal endocarditis may cause brain abscess and congestive heart failure, while Pseudomonal bacteremia can cause septic shock and death. Vaccines for prevention of infection are in development but an independent study looking at some current trial outcomes for patients with cystic fibrosis does not recommend the use of any vaccine currently in development due to severe side effects. There is, therefore, a need to develop a prophylactic *Pseudomonas aeruginosa* vaccine.

#### *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 worldwide livestock vaccine market is comprised of primarily 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 worldwide 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.

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, on December 14, 2010, preliminary safety results from its Phase I clinical trial, investigating the Company's therapeutic cancer vaccine, DPX-0907, which is formulated in the DepoVax™ platform. Obtaining positive safety

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 the year ended December 31, 2010, 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 February 2, 2010, the Company announced that it had engaged SectorSpeak Inc. for one year to assist with its investor relations activities, namely to introduce the Company to institutional investors and analysts, organize investor road shows and generally assist in corporate communications.
- On February 23, 2010, the Company announced the addition of Mr. James Hall as a member of the Board of Directors. Mr. Hall will also serve as Chairman of the Company's Audit Committee.
- On March 2, 2010, the Company announced that Pfizer had exercised a licensing option on the Company's vaccine enhancement and delivery platform to develop a third livestock vaccine.
- On March 19, 2010, the Company was successful in securing a non-repayable \$50,000 grant from the Atlantic Canada Opportunities Agency ("ACOA") towards certain research salaries in 2010. Also during March 2010, the Company was able to extend the expiry date of its existing business development loan with ACOA for an extra twelve months.
- On March 24, 2010, the Company presented at the Canada - US Partners in Biomedical Defense II Conference in Washington, D.C. The Company presented positive new research, done in collaboration with Defence Research and Development Canada (DRDC), confirming the number of required doses for an anthrax vaccine candidate can be reduced when formulated in the DepoVax™ platform. The new research shows that one dose of anthrax antigen, when formulated in the DepoVax™ platform, is able to raise antibody levels that are 10 times higher on average than a comparable alum-adjuvanted anthrax vaccine.
- On April 5, 2010, the Company announced the publication of data from a pre-clinical study with its candidate cancer vaccine, DPX-0907, in human class I MHC transgenic mice. The study compares the Company's novel DepoVax™ vaccine platform to a vaccine formulation commonly used to deliver peptide antigens in the clinic today. The study shows that the Company's DepoVax™ platform promotes antigen specific immune responses, however, unlike the control vaccine, the DepoVax™ formulation does not induce problematic immune regulatory responses.
- On April 22, 2010, the Company announced it had signed a collaborative agreement with the Dana-Farber Cancer Institute, a principal teaching affiliate of the Harvard Medical School. The research collaboration involves formulating Dana-Farber's HIV protein antigens in the Company's DepoVax™ vaccine enhancement and delivery platform. The goal of this pre-clinical research is to establish whether this novel vaccine formulation will induce a stronger immune response. Dana-Farber Cancer Institute ([www.dana-farber.org](http://www.dana-farber.org)) is a principal teaching affiliate of the Harvard Medical School and a federally designated Center for AIDS Research. It is also a founding member of the Dana-Farber/Harvard Cancer Center (DF/HCC) and designated comprehensive cancer center by the National Cancer Institute.
- On May 12, 2010, Mr. Paul Kirkconnell and Mr. James Hall were elected to the Board of Directors.
- On June 7, 2010, the Company announced that it had signed a collaborative research agreement with Vaxil BioTherapeutics ("Vaxil") to explore the efficacy of Vaxil's cancer antigens in the Company's DepoVax™ vaccine platform. Vaxil, based in Israel, is a pioneer in the development of novel T-cell synthetic vaccines for both therapeutic and prophylactic use.



- On June 9, 2010, the Company announced the appointment of Mr. Keith Abriel, CA, CFA, as Acting Chief Financial Officer. Mr. Abriel fulfilled the role of Acting Chief Financial Officer until December 31, 2010. Effective January 1, 2011, Ms. Kimberly Stephens, CA, who joined the Company on September 7, 2010, as Director of Finance, was appointed Chief Financial Officer.
- On June 29, 2010, the Company announced that it had signed a research agreement with Oncothyreon Inc. (“Oncothyreon”) to formulate Oncothyreon’s ONT-10, a therapeutic vaccine product candidate, in the Company’s DepoVax™ vaccine platform for pre-clinical testing. Oncothyreon, based in Seattle, is recognized for developing innovative oncology immunotherapeutics.
- On July 12, 2010, the Company announced that it had entered into an agreement with Merck KGaA to in-license EMD 640744, an investigational therapeutic survivin-based cancer vaccine known as DPX-Survivac, designed to target multiple solid tumors and hematological malignancies, pursuant to which the Company intends to build on the current on-going Phase I clinical trial for EMD 640744 by formulating DPX-Survivac in its DepoVax™ vaccine platform. The license agreement grants the Company exclusive worldwide rights, under issued patents and patent applications, to develop and commercialize DPX-Survivac for multiple cancer indications. Under the terms, the Company will pay Merck KGaA success-based milestone payments and royalties as a percentage of product sales. Merck KGaA, based in Darmstadt, Germany, is a global pharmaceutical and chemical company with total revenues of approximately €7.7 billion in 2009 and approximately 33,600 employees in 64 countries, according to its public filings.
- On July 29, 2010, the Company announced that Mr. Albert Scardino joined its Board of Directors.
- On August 27, 2010, Mr. Brian Lowe resigned as Vice President and Corporate Secretary of the Company.
- On September 16, 2010, the Company completed a public offering (the “Offering”) of 7,465,100 units at a price of \$1.00 per unit for aggregate gross proceeds of \$7,465,100. Each unit consisted of one common share and one-half of one common share purchase warrant, with each whole warrant entitling the holder to acquire one common share of the Company at an exercise price of \$1.30 for a period of three years, expiring on September 16, 2013. Total cash costs associated with the Offering for commissions, professional fees, and regulatory costs were approximately \$703,000, including commissions of \$405,006 paid to the Agents. The Company also granted 405,006 compensation options (the “Compensation Options”) to the Agents. Each Compensation Option entitles the holder to acquire one common share of the Company at an exercise price of \$1.00 for a period of two years, expiring on September 14, 2012.
- On September 15, 2010, the Company presented at the 12<sup>th</sup> Annual Rodman & Renshaw Healthcare Conference.
- On October 4, 2010, the Company presented a research poster entitled “Tumor Elimination by DepoVax™ Cancer Vaccine Platform is Accompanied by Reduced Regulatory or Suppressor Cell Infiltration” at the International Society for Biological Therapy of Cancer conference. The highlight of the study is the tumor elimination caused by the DepoVax™-based therapeutic cancer vaccine in animal models.
- On October 5, 2010, the Company announced it entered into a pre-clinical research collaboration with IRX Therapeutics, Inc. to evaluate the combination of IRX’s primary cell-derived biologic IRX-2 and DepoVax™-based therapeutic cancer vaccines. IRX Therapeutics, Inc. is developing immune therapies that activate a patient’s immune system to defeat cancer and related diseases.
- On October 13, 2010, the Company announced positive results of an efficacy study testing the formulation of a melioidosis antigen in the DepoVax™ platform. The study, conducted in collaboration with Defence Research and Development Canada, demonstrated that two doses of the combination Melioidosis-DepoVax™ vaccine provided 100% protection against an infection model, as opposed to three doses of the control vaccine, which only provides partial protection.

- On October 18, 2010, the Company announced it had entered into a collaborative research program with the National Research Council Canada, to evaluate the efficacy of a carbohydrate-based vaccine formulated in the DepoVax™ platform, which can produce significant antibody levels specific to the carbohydrate target and capable of neutralizing meningococci.
- On November 8, 2010, the Company announced positive results of a pre-clinical study testing the efficacy of combining CEL-SCI Corporation's rheumatoid arthritis ("RA") vaccine antigen CEL-2000 and the DepoVax™ platform. The study demonstrated that CEL-2000 formulated in the DepoVax™ platform effectively slowed the progression of RA and induced statistically significant reduction in Arthritic Index score compared to the untreated control group.
- On November 17, 2010, the Company announced it had successfully manufactured test batches of DPX-Survivac, established the analytical methods to support the release of future clinical trial batches, and that it will focus the Phase I/II clinical development plan for DPX-Survivac for the treatment of ovarian cancer.
- On November 29, 2010, the Company announced that it had signed a collaborative research agreement with OncoTherapy Science Inc., of Kawasaki City, Japan, to explore the efficacy of their novel peptide cancer antigen in the Company's DepoVax™ vaccine delivery and enhancement platform.
- On December 6, 2010, the Company announced issuance of common shares of its share capital to S.P. Angel Corporate Finance LLP ("S.P. Angel") in consideration for services rendered by S.P. Angel to the Company, for corporate finance and European capital market expertise, under the terms of a consulting agreement dated November 1, 2010. Pursuant to this agreement, the Company agreed to pay S.P. Angel \$9,000 a month, payable by the issuance of common shares on the last day of each month during which services were performed, based on the volume-weighted average price of the Company's shares in the last five trading days of that month. The Company has issued 56,895 common shares for services performed in the five month period, November 2010 through to March 2011.
- On December 14, 2010, the Company announced preliminary safety results for its Phase I clinical trial of DPX-0907. In this trial, patients with advanced stage breast, ovarian or prostate cancer received three subcutaneous injections of either 0.25 ml or 1 ml of DPX-0907, three weeks apart. The Company announced that as of December 14, 2010, 21 patients were vaccinated with DPX-0907, with no dose limiting toxicities (DLTs) or serious adverse events (SAEs) reported.
- On December 17, 2010, the Company announced that pursuant to terms and conditions of the Company's stock option plan, it granted 1,011,500 stock options to employees, consultants, officers and directors. Employees and consultants were granted an aggregate of 416,500 options and officers and directors were granted an aggregate of 595,000 options.
- 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.
- 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 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 March 21, 2011, the Company 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 the Company design future Phase II clinical trials.
- 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. The Company will perform a more detailed analysis of samples collected from all patients by the third quarter of 2011.
- On April 14, 2011, the Company announced the resignation of Dr. Randal Chase from the Board of Directors effective immediately on April 13, 2011 and his three month notice to terminate his contract as President and Chief Executive Officer. Dr. Chase will remain President and Chief Executive Officer until July 13, 2011, while the Board completes an executive search for his replacement.

## **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 ranging from certain forms of cancer, to hepatitis and anthrax.

The Company will continue to refine and focus its research activities on those candidates that show the most compelling technical results combined with identified 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. The Company does not currently have the resources to progress these candidates into clinical development. It will, however, continue to look for partners that have access to the specific antigens and who are interested in advancing these products. Additionally, use of the Company's platform is still in the early discovery stage for delivering various DNA/RNA-containing vaccines. The Company found that unlike peptide/protein-based vaccines which can be consistently enhanced by the DepoVax™ platform, the ability to enhance DNA-based vaccines is less certain and must be studied on a case-by-case basis. Initial results showed that the DepoVax™ platform may be well suited for delivering nucleotide-based immune modulating molecules such as small interference RNA (SiRNA).

With the enrolment for the Phase I clinical trial of DPX-0907 now completed and with positive clinical safety and immunogenicity results, the Company 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 vaccine candidates that are controlled by others.

The Company continues pre-clinical research studies on DPX-Survivac and intends to file an IND application with the FDA for DPX-Survivac by the end of the third quarter of 2011. The clinical success of DPX-0907 to date will help accelerate the clinical development of DPX-Survivac.

The Company is 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 consolidated financial statements. All values discussed below are expressed in thousands of Canadian dollars.

Quarter Ended In	Total Revenue \$	Total Expenses \$	Loss \$	Basic and Diluted Loss Per Share \$
Q4 - December 31, 2010	6,000	1,710,000	(1,704,000)	(0.04)
Q3 - September 30, 2010	6,000	1,505,000	(1,499,000)	(0.03)
Q2 - June 30, 2010	6,000	1,808,000	(1,802,000)	(0.04)
Q1 - March 31, 2010	58,000	1,556,000	(1,498,000)	(0.03)
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)
Q1 - June 30, 2009	-	914,000	(914,000)	(0.03)
Q4 - March 31, 2009	-	1,007,000	(1,007,000)	(0.03)

(\*) – 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 December 31, 2010 (“Q4 Fiscal 2010”), compared to the three month period ended December 31, 2009.

#### 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 \$346,000 during the three month period ended December 31, 2009 to a loss of \$1,704,000 in Q4 Fiscal 2010, an increase of \$1,358,000. Revenue decreased by \$965,000, from \$971,000 during the three month period ended December 31, 2009 to \$6,000 in Q4 Fiscal 2010. Operating expenses increased by \$393,000, including approximately \$110,000 related to an increase in expenses associated with the Phase I clinical trial of DPX-0907, \$374,000 related to pre-clinical research expenses on DPX-Survivac, \$167,000 related to increased business development costs and \$80,000 related to an increase in non-cash stock-based compensation. These increases are offset by an increase in refundable investment tax credits of \$96,000, an increase in government assistance of \$200,000, a decrease of \$35,000 in general and administration expenses, as well as minor differences in other research and development expenses, amortization of property and equipment and amortization of intangibles.

#### Revenues

During Q4 Fiscal 2010, revenue decreased by \$965,000 to \$6,000 in revenue from animal health, compared to \$971,000 during the three month period ended December 31, 2009. The entire amount of \$971,000 was for a non-refundable, upfront license fee pursuant to the signing of a new license agreement with Pfizer Animal Health during the three month period ended December 31, 2009. The \$6,000 in Q4 Fiscal 2010 related to the recognition of revenue that had been deferred until the services were completed.

All revenue recognized to date have been earned through the Company’s animal healthcare activities and relate to potential animal vaccines that are being developed by another company that has licensed the Company’s technology. As the animal vaccine candidates to which these licenses relate have not yet achieved final commercialization, the amount and timing of future revenue from animal healthcare are dependent on continued future development.

#### Operating expenses

Overall operating expenses increased by \$393,000 (30%) during Q4 Fiscal 2010 compared to the three month period ended December 31, 2009. 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.

The majority of the Company’s R&D efforts and related expenses for Q4 Fiscal 2010 continued to be focused on the Company’s ongoing Phase I clinical trial of DPX-0907. 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 increase as the Company begins 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 of \$1,383,000 for Q4 Fiscal 2010 represented a \$461,000 (50%) increase over the three month period ended December 31, 2009. The largest component of R&D expense was direct expenses associated with the Phase I clinical trial of \$447,000 (three month period ended December 31, 2009 - \$337,000). These expenses were incurred as required under the clinical trial timelines. Also in Q4 Fiscal 2010, the Company incurred \$374,000 of expenses associated with the pre-clinical research and development of DPX-Survivac (three month period ended December 31, 2009 - \$nil). Other R&D expenses decreased by \$23,000 (4%) to \$562,000 during Q4 Fiscal 2010 compared to \$585,000 during the three month period ended December 31, 2009.

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

G&A expenses of \$309,000 represented 18% of total expenses for Q4 Fiscal 2010 compared to \$344,000 (26% of total expenses) for the three month period ended December 31, 2009, an overall decrease of \$35,000 (10%).

The most significant components of G&A expenses are salaries and benefits and professional fees. Professional fees for Q4 Fiscal 2010 of \$118,000 (three month period ended December 31, 2009 - \$112,000) included: \$52,000 in costs to maintain and expand the Company’s patent portfolio; \$57,000 in respect of audit, accounting, taxation and other consulting services provided by the Company’s auditors; and \$9,000 in general legal and other professional fees. During the three month period ended December 31, 2009, patent related costs, accounting and related costs, and general legal and other professional costs were approximately \$73,000, \$11,000 and \$28,000, respectively.

G&A expenses related to salaries and benefits for Q4 Fiscal 2010 were approximately \$52,000 compared to \$133,000 for the three month period ended December 31, 2009. The decrease of \$81,000 is attributable to the departure of the Chief Financial Officer in June 2010 and the Vice President in August 2010. The Acting Chief Financial Officer was paid as a consultant, as described below.

Also included in G&A expenses for Q4 Fiscal 2010 are consulting fees of \$55,000 (three month period ended December 31, 2009 - \$27,000). The increase primarily relates to the appointment of Mr. Keith Abriel as Acting Chief Financial Officer, on a part-time basis, effective June 2010 and the hiring of a part-time Human Resource consultant during the first quarter of Fiscal 2010. The Company also incurred directors’ fees and costs of \$46,000 compared to \$3,000 during the three month period ended December 31, 2009 as the Company increased directors’ fees during the first quarter of Fiscal 2010.

Other Q4 Fiscal 2010 G&A expenses included a foreign exchange loss of \$9,000 related to US funds held by the Company, and \$6,000 in transfer agent and regulatory filing fees compared to a foreign exchange gain of \$5,000 and fees of \$34,000, respectively, during the three month period ended December 31, 2009. Other minor differences were noted in advertising, insurance and office expenses.

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

The Company continued to expand its business development activities during Q4 Fiscal 2010. Total BD expenses of \$218,000 represented an increase of \$167,000 compared to the three month period ended December 31, 2009. Included in this increase are consulting fees of \$77,000 and salaries and benefits of \$31,000, which includes

expenses for the Director of Communications, Director of Business Development and other technical consultants engaged to assist with expanding the Company's vaccine pipeline. Approximately \$32,000 of the increase related to the hiring of both an independent investor relations firm and an independent public relations firm. Such expenses were not incurred during the three month period ended December 31, 2009.

During Q4 Fiscal 2010, the Company attended a greater number of trade conferences, conducted a number of investor awareness road shows and increased marketing and communications efforts. As a result, expenses related to these costs increased from \$49,000 in the three month period ended December 31, 2009 to \$69,000 in Q4 Fiscal 2010.

#### *Stock-based compensation*

Non-cash stock-based compensation increased by \$80,000 to \$177,000 during Q4 Fiscal 2010 compared to the three month period ended December 31, 2009. The increase was due primarily to the increased number of presently vesting options compared to the three month period ended December 31, 2009, when there were a smaller number of unvested options outstanding.

#### *Investment tax credits*

Refundable investment tax credits increased to \$116,000 during Q4 Fiscal 2010, compared to \$20,000 during the three month period ended December 31, 2009. This increase is due to the increase of research and development costs to \$1,383,000 during Fiscal Q4 2010 compared to \$922,000 during the three month period ended December 31, 2009.

### **Results for the year ended December 31, 2010, compared to the nine month period ended December 31, 2009.**

In 2009, the Company changed its fiscal year end date from March 31 to December 31, with the nine month period ended December 31, 2009 representing the transition year.

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

As a result of decreased revenue and increased operating expenses, as discussed below, the net loss and comprehensive loss increased to \$6,503,000 for the year ended December 31, 2010, from a loss of \$1,664,000 during the nine month period ended December 31, 2009. The most significant components of net loss for the year ended December 31, 2010 included \$1,760,000 related to the Phase I clinical trial of DPX-0907, \$1,647,000 for research and development expenses, \$1,614,000 in general and administration costs, \$967,000 related to business development expenditures and \$732,000 related to non-cash stock-based compensation, offset by \$340,000 of investment tax credits.

#### **Revenue**

During the year ended December 31, 2010, the Company recognized approximately \$76,000 in revenues from animal health, a decrease of \$1,344,000 from the nine month period ended December 31, 2009. Revenue of \$52,000 related to a non-refundable, upfront license fee upon the signing of a new license agreement with Pfizer Animal Health compared to \$1,412,000 for the nine month period ended December 31, 2009. The remaining \$24,000 related to the recognition of revenue that had been deferred until the services were completed.

All revenue recognized to date has been earned through the Company's animal healthcare activities and relates to potential animal vaccines that are being developed by another company that has licensed the Company's technology. As the animal vaccine candidates to which these licenses relate have not yet achieved final commercialization, the amount and timing of future revenue from animal healthcare are dependent on continued future development.

## Operating expenses

The Company incurred operating expenses for the year ended December 31, 2010 of \$6,579,000, compared to \$3,084,000 during the nine month period ended December 31, 2009. 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, 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.

The majority of the Company’s R&D efforts and related expenses for the year ended December 31, 2010 continued to be focused on the Company’s ongoing Phase I clinical trial of DPX-0907. 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 increase 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.

R&D expenses of \$3,780,000 incurred during the year ended December 31, 2010 represented an increase of \$1,927,000 over the nine month period ended December 31, 2009. The largest component of R&D expense was direct expenses associated with the DPX-0907 Phase I clinical trial of \$1,760,000 (nine month period ended December 31, 2009 - \$940,000). These expenses were incurred as required under the clinical trial timelines. The Company also incurred expenses for the pre-clinical studies of DPX-Survivac of \$374,000 during the year ended December 31, 2010 (nine month period ended December 31, 2009 - \$nil). Total salaries and benefits of \$658,000 during the year ended December 31, 2010 increased by \$99,000 from the nine month period ended December 31, 2009. This increase was due primarily to the longer timeframe, twelve versus nine months, as well as to the increase of government grants received by the Company that offset the salary expense. Non-repayable government grants recorded as a reduction in salary expense were \$239,000 and \$118,000 during the year ended December 31, 2010 and the nine month period ended December 31, 2009, respectively. Salaries and benefits of \$587,000 during the year ended December 31, 2010 (nine month period ended December 31, 2009 - \$336,000) were allocated to the expenses associated with the DPX-0907 Phase I clinical trial and the pre-clinical research expenses for DPX-Survivac.

Other R&D expenses for the year ended December 31, 2010 include \$607,000 for third party consultants and research collaborations and \$181,000 for animal care facilities, compared to \$287,000 and \$69,000, respectively, for the nine month period ended December 31, 2009. During the year ended December 31, 2010, the Company signed a number of material transfer agreements with other biotechnology companies and organizations, including Dana-Farber Cancer Institute, Vaxil BioTherapeutics, Oncothyreon Inc., IRX Therapeutics Inc., Defence Research and Development Canada, National Research Council Canada and CEL-SCI Corporation. This increased focus on research collaborations during the year ended December 31, 2010 also led to an increase in overall research expenses, including animal care facilities. Other minor differences were noted in rent, insurance and travel related to R&D expenditures.

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

G&A expenses of \$1,614,000 represented 23% of total expenses for the year ended December 31, 2010 compared to \$938,000 (28% of total expenses) for the nine month period ended December 31, 2009. The level of G&A expenses within the Company has increased due primarily the longer time frame, twelve versus nine months, and to overall increased salaries and benefits, professional services, consulting fees and directors’ fees.

The most significant components of G&A expenses are salaries and benefits and professional fees. Professional fees for the year ended December 31, 2010 were \$518,000 (nine month period ended December 31, 2009 - \$333,000) and included: \$202,000 in costs to maintain and expand the Company’s patent portfolio; \$219,000 in respect of audit, accounting, taxation and other consulting services provided by the Company’s auditors; and \$97,000 in general legal and other professional fees. During the nine month period ended December 31, 2009, patent related

costs, accounting, tax and related costs, and general legal and other professional costs were approximately \$120,000, \$130,000 and \$83,000, respectively. Services provided by the Company's auditor increased significantly for the year ended December 31, 2010 due to the increased consultation required for the Company's investment tax credit returns, including the Notice of Objections described below, as well as for other tax services that arose from the reverse takeover.

G&A expenses related to salaries and benefits for the year ended December 31, 2010 were approximately \$464,000 compared to \$283,000 for the nine month period ended December 31, 2009. The increase of \$181,000 includes payments of approximately \$151,000 paid to former executives who departed during the year ended December 31, 2010.

Also included in G&A expenses for the year ended December 31, 2010 are consulting fees of \$226,000 (nine month period ended December 31, 2009 - \$90,000). The increase primarily relates to the appointment of Mr. Keith Abriel as Acting Chief Financial Officer, on a part-time basis, effective June 9, 2010 to December 31, 2010, and a part-time Human Resource consultant hired during the first quarter of 2010. The Company also incurred directors' fees of \$170,000 compared to \$19,000 during the nine month period ended December 31, 2009, as the Company increased directors fees' and increased the number of directors during the year ended December 31, 2010.

Other G&A expenses for the year ended December 31, 2010 include a foreign exchange loss of \$22,000 related to US funds held by the Company and \$60,000 in transfer agent and regulatory filing fees compared to a loss of \$1,000 and \$34,000, respectively, during the nine month period ended December 31, 2009.

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

The Company continued to expand its business development activities during the year ended December 31, 2010. Total BD expenses for the year ended December 31, 2010 were \$967,000 compared to \$365,000 incurred in the nine month period ended December 31, 2009. Included in this increase were \$134,000 in legal fees and \$214,000 in consulting fees directly related to expanding the Company's vaccine pipeline, leading to the completion of the Merck KGaA, Oncothyreon and other agreements during the year ended December 31, 2010. Approximately \$122,000 of the increase related to the hiring of both an independent investor relations firm and an independent public relations firm.

As a result of being a reporting issuer, the Company has attended a greater number of trade conferences and also conducted a number of investor awareness road shows. Accordingly, expenses related to travel and conferences increased from \$128,000 in the nine month period ended December 31, 2009 to \$218,000 in the year ended December 31, 2010. Other minor differences were noted in marketing and office expenses.

#### *Stock-based compensation*

Non-cash stock-based compensation increased to \$732,000 during the year ended December 31, 2010 compared to \$155,000 in the nine month period ended December 31, 2009. The increase was due primarily to the increased number of presently vesting options compared to the nine month period ended December 31, 2009, when there were a smaller number of unvested options outstanding.

#### *Investment tax credits*

During the year ended December 31, 2010, the Company recorded \$340,000 in refundable investment tax credits compared to \$180,000 during the nine month period ended December 31, 2009. During the year ended December 31, 2010, the Company received a favourable tax ruling from the Canada Revenue Agency related to two previously filed Notices of Objection concerning the Company's 2007 and 2008 refundable investment tax credits. Also, research and development costs increased from \$1,853,000 during the nine month period ended December 31, 2009 compared to the \$3,780,000 during the year ended December 31, 2010.



## CASH FLOWS, LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2010, the Company had cash and cash equivalents of \$10,413,000 and working capital of \$11,150,000 as compared to \$7,777,000 and \$8,326,000, respectively at December 31, 2009.

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 grants and tax credits.

During the year ended December 31, 2010, cash of \$5,522,000 was used in operating activities. This included the reported net loss of \$6,503,000 prior to being decreased for non-cash amortization, non-cash stock-based compensation and non-cash share issuance of \$118,000, \$732,000 and \$18,000, respectively.

During the year ended December 31, 2010, cash of \$112,000 was used as a result of changes in non-cash working capital balances. The primary uses of cash were a \$265,000 increase in investment tax credits receivable, a \$105,000 increase in prepaid expenses, a \$24,000 decrease in deferred revenue and a \$21,000 decrease in accounts payable and accrued liabilities. These decreases in cash were offset by a reduction in amounts receivable of \$416,000, an increase in amounts due to directors of \$82,000, and a decrease in share subscription receivable of \$29,000.

Approximately \$8,247,000 was raised through financing activities during the year ended December 31, 2010, primarily due to the completion of a financing on September 16, 2010, which raised net proceeds of \$6,762,000. Other sources of cash raised through financing activities during the year ended December 31, 2010 included \$970,000 in proceeds from long-term debt, \$319,000 received from the exercise of warrants, and \$262,000 received from the exercise of stock options. During the year ended December 31, 2010, the Company repaid \$67,000 of its long-term debt.

During the year ended December 31, 2010, the Company purchased \$89,000 of equipment for ongoing research and operating activities.

At December 31, 2010, the Company had approximately \$11.9 million of existing and identified potential sources of cash including:

- cash and equivalents of \$10.4 million;
- amounts receivable and investment tax credits receivable of \$1.3 million; and
- additional funding of \$0.2 million available from government grants and loans the Company has been awarded.

Subsequently, on March 21, 2011, ACOA announced the Company was awarded an Atlantic Innovation Fund ("AIF") interest-free loan, with a maximum contribution of \$2,944,000. This non-dilutive funding will enable Immunovaccine to continue its local research and development efforts.

For the year ended December 31, 2010, the Company's "cash burn rate" (defined as net loss for the period adjusted for non-cash transactions including amortization, stock-based compensation and shares issued for professional services) averaged approximately \$1.4 million per quarter. The cash burn rate is forecast to increase to between \$1.8 million and \$2.1 million per quarter over the next 12 months as the DPX-0907 Phase I clinical trial continues and the Company increases its Phase I/II clinical development work for DPX-Survivac. At December 31, 2010, the Company had cash resources of \$10.4 million and identified additional potential cash resources of \$1.5 million, not 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 end of 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.

On September 16, 2010, the Company completed a public offering (the "Offering") of 7,465,100 units at a price of \$1.00 per unit for aggregate gross proceeds of \$7,465,100. Each unit consisted of one common share and one-half of one common share purchase warrant, with each whole warrant entitling the holder to acquire one common share of the Company at an exercise price of \$1.30 for a period of 36 months, expiring September 16, 2013. Total cash costs associated with the Offering for commissions, professional fees and regulatory fees were approximately \$703,000, including commissions paid to the Agents of \$405,006. The Company also granted 405,006 compensation options (the "Compensation Options") to the Agents. Each Compensation Option entitles the holder to acquire one common share of the Company at an exercise price of \$1.00 for a period of two years, expiring on September 14, 2012. The value allocated to the common shares issued was \$5,853,000 and the value allocated to the warrants was \$1,612,000. The value allocated to the Compensation Options was \$166,000. The Company allocated \$683,000 of the issue costs to the common shares and \$188,000 of the issue costs to the warrants.

Pursuant to the completion of the Offering on September 16, 2010 which resulted in net proceeds of \$6,762,000, the Company is initiating work in order to carry out a Phase I/II clinical program of DPX-Survivac. This includes pre-clinical development and analysis and animal evaluation of DPX-Survivac, manufacturing of the clinical grade DPX-Survivac, completion of a multicenter Phase I clinical trial, and pre-clinical analysis and development of a Phase II clinical program. By December 31, 2010, the Company had commenced pre-clinical testing and development of DPX-Survivac, which resulted in incurred costs of \$374,000.

## **FUTURE ACCOUNTING CHANGES**

### *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. While IFRS is based on a conceptual framework similar to Canadian GAAP, there are significant differences with respect to recognition, measurement and disclosure. The Company will commence reporting under the new standards in the first quarter of Fiscal 2011.

In order to prepare for the transition to IFRS effective on January 1, 2011, the Company is following a three-phase transition plan: initial review and assessment; in-depth analysis; and implementation. The Company has performed an initial review of the expected impact of IFRS and is in the process of completing the in-depth analysis. The Company has trained finance personnel on the application of IFRS accounting policies and the potential impact on the consolidated financial statements. The Company is currently preparing a draft opening balance sheet, along with the accounting policies under IFRS, and will present them to the Audit Committee for review. The Company's external auditor is in the processes of reviewing the accounting policies under IFRS, the opening balance sheet and the disclosures under IFRS, however all amounts will be considered unaudited, as the Company has not yet prepared a full set of financial statements under IFRS.

At the implementation phase, the Company will implement the accounting policy changes and any required modifications to internal control procedures and accounting systems so they are in place and operating effectively for the first required IFRS reporting period.

Below is a summary of key differences between Canadian GAAP and IFRS that will affect the Company. This list is not intended to be exhaustive, but rather draws attention to significant differences that the Company believes will have the most potential for a significant change to its financial statements.

### *First-time adoption of International Financial Reporting Standard ("IFRS 1")*

IFRS 1 sets out the procedures that an entity must follow when it adopts IFRS for the first time as the basis for preparing its general purpose financial statements. IFRS 1 is mandatory guidance for entities preparing and applying IFRS consolidated financial statements for the first time. The transition guidance in IFRS 1 takes precedence over specific transition provisions in individual IFRS standards and contains specific optional exemptions and mandatory exceptions from the general requirement for retrospective application.

The following are IFRS 1 exemptions that the Company will elect on transition date:

- Fixed assets: An entity may elect to revalue property and equipment at fair value at the transition date and use this fair value as the deemed transition cost. The Company will not utilize this election.
- Share-based payments: The exemption allows first-time adopters to exempt from applying IFRS 2 to the following: equity instruments that were granted prior to November 7, 2002; equity instruments that were granted after November 7, 2002 but vested before transition to IFRS; and to liabilities settled before the transition date. The Company is utilizing this election.
- Financial instruments: Any entity may elect to change the designation of previously recognized financial instruments if certain conditions are met. The Company will keep the same classification of its financial instruments.

#### *IFRS 2 - Shared-based payments*

IFRS requires each instalment of a graded vesting award to be treated as a separate grant. This requires separately measuring and attributing expense to each tranche of the award, thereby accelerating the overall expense recognition, compared to straight-line attribution. Also, IFRS requires that forfeitures be estimated at the time of grant to eliminate distortion of remuneration expense recognized during the vesting period. The estimate should be revised if subsequent information indicates that actual forfeitures are likely to differ from previous estimates. As the Company stock options usually vest over an 18-month period, each tranche will be measured separately with different forfeiture rates.

#### *IAS 16 – Property, plant and equipment (“PP&E”)*

IFRS requires that separate significant components of an item of PP&E be recorded and depreciated separately. The Company does not have any compound assets that consist of significant parts in relation to the total cost of the item, where each significant part may be depreciated with different useful lives.

IFRS permits revaluation accounting to be applied to an entire class of PP&E. The revalued amount of an asset is the fair value at the revaluation date less any subsequent accumulated depreciation and subsequent accumulated impairment losses. The Company will be electing to measure its PP&E using the cost method.

#### *IAS 39 – Financial instruments: recognition and measurement*

Similarly with Canadian GAAP, IFRS requires financial instruments to be measured at fair value. Fair value is normally the transaction price, however, the transaction price may have to be adjusted to fair value where, for example, a non-interest bearing loan or receivable is acquired. Two of the Company’s significant interest-free government loans have repayment terms based on future revenues and, therefore these loans were not in scope under Canadian GAAP. Under IFRS, these loans must be recorded at fair value. The Company is currently assessing the impact of this revaluation.

#### *Other Canadian GAAP vs. IFRS differences*

The Company has completed a review of the differences between Canadian GAAP and IFRS and believe the following standards will not have a material impact on the Company’s financial statements, other than enhanced disclosures:

- Intangible assets
- Leases
- Income taxes
- Revenue recognition
- Related party transactions

Management is providing the Audit Committee with regular project status updates as well as indications, decisions, and expected conclusions regarding the transition to IFRS.

## **RELATED PARTY TRANSACTIONS**

During the year ended December 31, 2010, the Company incurred business development consulting fees of \$66,000 to a non-executive Director.

## **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 audited consolidated financial statements as at December 31, 2010 have been prepared in accordance with Canadian GAAP. Significant accounting estimates used in preparing the financial statements include 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 and accrued liabilities. 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. Through knowledge of the Company’s activities in the year ended December 31, 2010, Management has estimated the amount of accrued liabilities to be recorded.

## **OUTSTANDING SECURITIES**

The number of issued and outstanding common shares on April 20, 2011 is 53,987,084. The number of outstanding stock options on December 31, 2010 is 3,817,150. The outstanding stock options have a weighted average exercise price of \$0.97 per share and a weighted average remaining term of 3.64 years. The number of outstanding warrants on December 31, 2010 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 2.7 years.

## **REVERSE TAKE-OVER AND PRIVATE PLACEMENTS**

On June 8, 2009, ImmunoVaccine Technologies Inc. (“IVT”) and Rhino Resources Inc. (“Rhino”) announced that they had entered into a binding term sheet effective June 1, 2009 for Rhino’s non-arm’s length acquisition of IVT. The transaction closed on September 30, 2009 in the form of a share exchange whereby Rhino acquired all of the issued and outstanding common shares of IVT in consideration for common shares of Rhino. Prior to closing, the Rhino shares were consolidated on the basis of one new share for each existing five Rhino shares, and then each existing share of the IVT was exchanged for one new common share of Rhino. Upon closing, Rhino also changed its name to Immunovaccine Inc. (“Immunovaccine”).

In connection with this transaction, 6,230,399 shares of IVT were issued as part of a brokered private placement at a price of \$0.70 per share for gross proceeds of \$4,361,279, and 5,582,614 shares of IVT were issued as part of a non-brokered private placement at a price of \$0.70 per share for gross proceeds of \$3,907,830. The agents received an 8% cash commission and broker warrants equal to 8% of the number of shares sold to individuals not currently shareholders of IVT, with each broker warrant entitling the holder to acquire one new common share of Immunovaccine at a price of \$0.70 per share for a period of 12 months from closing.

As the former shareholders of IVT owned approximately 95% of Rhino following the exchange of shares, the transaction was accounted for as a reverse take-over of Rhino by IVT. Following the transaction, the operations of the Company were not significantly altered.

## **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 (US, Europe, Japan and Australia) and two pending patent applications in the US 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**

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 are classified as "Financial Assets Held for Trading". These financial assets are marked-to-market through net income at each period end;
- 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 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 December 31, 2010.

## **RISK ASSESSMENT**

The Company's activities are subject to certain risk factors and uncertainties that generally affect 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 period ended December 31, 2010, under the heading “Risk Factors”.