



I M M U N O V A C C I N E

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

**For the year ended December 31, 2017**

## LETTER TO SHAREHOLDERS

Dear Fellow Shareholders,

2017 was a truly pivotal year for Immunovaccine, as we released our first-ever clinical efficacy results, with the topline data for our lead product candidate, DPX-Survivac, in recurrent ovarian cancer. This announcement reflects our most significant clinical milestone so far for two major reasons: it supports the potential of the novel anti-cancer activity of DPX-Survivac; and reduces the risk-profile of our future clinical developments, thus providing a solid foundation to our ambitious development plan. We continued the significant expansion of our immuno-oncology clinical program in 2017 by adding two phase 2 clinical trials in collaboration with Merck. In addition, we continued to advance our phase 1b study in ovarian cancer with Incyte, and our partnered and early-stage programs experienced several significant milestones. Taken together, we believe we have significantly strengthened our value proposition in 2017, and well positioned the Corporation for the next stage of growth in 2018.

### Clinical program update

DPX-Survivac

- *Phase 1b clinical trial in ovarian cancer with Incyte*

In December 2017, the Corporation provided positive top-line clinical data from its continuing phase 1b trial evaluating the safety and efficacy of DPX-Survivac, in combination with Incyte Corp.'s IDO1 enzyme inhibitor epacadostat, and low-dose cyclophosphamide in patients with advanced ovarian cancer.

Initial results from 10 evaluable patients in the DPX-Survivac plus-100 milligrams epacadostat dosing cohort demonstrate a disease control rate of 70 percent, including partial responses (PR, defined as equal to 30-per-cent decrease in tumour lesion size) in 30 per cent of the patients (three out of ten). To date, the combination also exhibited a well-tolerated safety profile, with the majority of adverse events (AEs) reported as Grade 1 and Grade 2, and only one potential treatment-related AE.

- *Phase 2 clinical trial in Diffuse large B-cell lymphoma (DLBCL) with Merck*

In November 2017, Immunovaccine announced that Health Canada has granted regulatory clearance to begin recruiting patients for its Phase 2 clinical study. This trial was announced initially in May 2017.

- *Phase 2 clinical trial in ovarian cancer with Merck*

In February 2017, the Corporation announced an investigator-sponsored phase 2 clinical trial in ovarian cancer in combination with Merck's checkpoint inhibitor pembrolizumab in patients with recurrent, platinum-resistant ovarian cancer.

Others

- *DPX-RSV*

In April 2017, Immunovaccine announced additional positive data from an extended evaluation of patients in this trial. In the 25µg dose cohort, 100 percent of older adults (7/7 immune responders) vaccinated with DPX-RSV maintained the antigen-specific immune responses one year after receiving the booster dose. At one year, the antibody levels measured were still at peak, with no sign of decrease.

- *DPX-NEO*

The Corporation expanded its continuing collaboration with UConn Health to evaluate the anti-cancer activity of proprietary patient-specific epitopes developed at UConn Health and formulated in Immunovaccine's proprietary immune-activating technology formulation. Immunovaccine and UConn Health will begin working toward DPX-NEO's first clinical trial.

### Operational highlights of fiscal year 2017 to-date include

- **Strengthening the management team:** With the appointment in February 2018 of Joseph Sullivan to the newly created role of Senior Vice President, Business Development; and the appointment of Pierre Labbé as Chief Financial Officer. Mr. Sullivan and Mr. Labbé each bring over 25 years of experience, Mr. Sullivan with global pharmaceutical and vaccine experience with Merck & Co. Inc. and Mr. Labbé with publicly listed companies and with Medicago Inc.

- **Completion of two bought deal public offerings:** In the first, in June 2017, Immunovaccine raised \$10 million at \$1.30 per share, and a second in February 2018 raised \$14.375 million at \$2 per share.
- **Extension of the Province of Nova Scotia loan maturity date:** In October 2017, Immunovaccine received a two-year extension of the maturity of the loan authorized in 2013. Under terms of the agreement, the original maturity date of August 9, 2018 was extended to August 9, 2020.

Anticipated upcoming clinical milestones for the Corporation's lead product DPX-Survivac include:

- *Phase 1b clinical trial in ovarian cancer with Incyte*
  - Top line clinical results with the 300mg dose around mid-year
  - Update on the 300mg dose clinical results in Q-3 2018
- *Phase 2 clinical trial in ovarian cancer with Merck*
  - Preliminary clinical results around mid-year
  - Top line clinical results around the end of the year or beginning of 2019
- *Phase 2 clinical trial in Diffuse large B-cell lymphoma (DLBCL) with Merck*
  - Preliminary clinical results around mid-year
  - Top line clinical results around the end of the year or beginning of 2019

Our fundamental immuno-oncology offering has evolved significantly in the past few years, and 2018 will likely prove to be another very active, expansive year for the Corporation. We plan to publish clinical data from our multiple clinical programs in oncology with our partners Incyte and Merck, expand our immuno-oncology program, and continue to leverage the novel aspects of our technology and the potential of our clinical candidates to deliver value to our shareholders and partners.

Thank you for your continued support. We look forward to the opportunities throughout 2018, and beyond.



Frederic Ors  
Chief Executive Officer

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

The following analysis provides a review of the audited annual consolidated results of operations, financial condition and cash flows for the year ended December 31, 2017 (“Fiscal 2017”), with information compared to the year ended December 31, 2016 (“Fiscal 2016”), for Immunovaccine Inc. (“Immunovaccine” or the “Corporation”). This analysis should also be read in conjunction with the information contained in the audited consolidated financial statements and related notes for the years ended December 31, 2017 and December 31, 2016.

The Corporation prepares its audited annual consolidated financial statements in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (IASB). Management is responsible for the preparation of the consolidated financial statements and other financial information relating to the Corporation included in this report. The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting. In furtherance of the foregoing, the Board of Directors has appointed an Audit Committee comprised of independent directors. The Audit Committee meets with management and the auditors in order to discuss results of operations and the financial condition of the Corporation prior to making recommendations and submitting the consolidated financial statements to the Board of Directors for its consideration and approval for issuance to shareholders. The information included in this MD&A is as at March 20, 2018, the date when the Board of Directors approved the Corporation’s audited annual consolidated financial statements for the year ended December 31, 2017 following the recommendation of the Audit Committee.

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

Additional information regarding the business of the Corporation, including the Annual Information Form of the Corporation for the year ended December 31, 2017 (the “AIF”), is available on SEDAR at [www.sedar.com](http://www.sedar.com).

## FORWARD-LOOKING STATEMENTS

Certain statements in this MD&A may constitute “forward-looking” statements which involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Corporation, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. When used in this MD&A, such statements use such words as “will”, “may”, “could”, “intends”, “potential”, “plans”, “believes”, “expects”, “projects”, “estimates”, “anticipates”, “continue”, “potential”, “predicts” or “should” and other similar terminology. These statements reflect current expectations of management regarding future events and operating performance and speak only as of the date of this MD&A. Forward looking statements include, among others:

- the Corporation’s business strategy;
- statements with respect to the sufficiency of the Corporation’s financial resources to support its activities;
- potential sources of funding;
- the Corporation’s ability to obtain necessary funding on favorable terms or at all;
- the Corporation’s expected expenditures and accumulated deficit level;
- the Corporation’s expected outcomes from its ongoing and future research and research collaborations;
- the Corporation’s exploration of opportunities to maximize shareholder value as part of the ordinary course of its business through collaborations, strategic partnerships and other transactions with third parties,
- the Corporation’s plans for the research and development of certain product candidates;
- the Corporation’s strategy for protecting its intellectual property;
- the Corporation’s ability to identify licensable products or research suitable for licensing and commercialization;
- the Corporation’s ability to obtain licences on commercially reasonable terms;
- the Corporation’s plans for generating revenue;
- the Corporation’s plans for future clinical trials; and
- the Corporation’s hiring and retention of skilled staff.

Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors discussed in the AIF, under the heading “Risk Factors and Uncertainties”. Although the forward-looking statements contained in this MD&A are based upon what management of the Corporation believes are reasonable assumptions, the Corporation

cannot provide any assurance to investors that actual results will be consistent with these forward-looking statements and should not be unduly relied upon by investors.

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:

- obtaining additional funding on reasonable terms when necessary;
- positive results of pre-clinical studies and clinical trials;
- the Corporation's ability to successfully develop existing and new products;
- the Corporation's ability to hire and retain skilled staff;
- the products and technology offered by the Corporation's competitors;
- general business and economic conditions;
- the Corporation's ability to protect its intellectual property;
- the Corporation's ability to manufacture its products and to meet demand; and
- 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 March 20, 2018, the date of the Board's approval of the 2017 audited annual consolidated financial statements and of the MD&A. For additional information on risks, uncertainties and assumptions, including a more detailed assessment of the risks that could cause actual results to materially differ from current expectations, please refer to the AIF of Immunovaccine filed on SEDAR at [www.sedar.com](http://www.sedar.com).

## **CORPORATE OVERVIEW**

Immunovaccine is a clinical-stage company that develops products based on its proprietary platform and products with a primary focus on T cell activating therapies for cancer. The Corporation intends to capitalize on licensing opportunities of its platform for other applications such as infectious diseases. The Corporation's proprietary DepoVax™ delivery platform is believed to produce a strong, high-quality immune response that has a specific and sustained immune effect with potential applications in multiple markets in cancer, infectious diseases and other therapeutic areas.

The Corporation's cancer immunotherapy, DPX-Survivac, is currently being tested in a co-funded Phase 1b clinical trial with Incyte Corporation ("Incyte"), which evaluates the combination of DPX-Survivac with Incyte's investigational oral indoleamine 2,3-dioxygenase 1 ("IDO1") inhibitor, epacadostat, in ovarian cancer patients. DPX-Survivac is also being tested in two investigator-sponsored Phase 2 clinical trials in combination with checkpoint inhibitor pembrolizumab of Merck & Co Inc. ("Merck") in patients with recurrent, platinum-resistant and sensitive ovarian cancer and in patients with measurable or recurrent diffuse large B cell lymphoma ("DLBCL"). In infectious disease vaccine applications, the Corporation has completed a demonstration Phase 1 clinical trial with a target against the respiratory syncytial virus ("RSV"). The Corporation has a commercial licencing agreement with Zoetis for the development of two cattle vaccines and is also conducting several research and clinical collaborations, including a collaboration with the Dana-Farber Cancer Institute ("Dana-Farber") for Human Papillomavirus ("HPV") related cancers and with Leidos, Inc. ("Leidos") in the United States for the development of vaccine candidates for malaria and the Zika virus.

The common shares of the Corporation are listed on the Toronto Stock Exchange under the symbol "IMV" and trade on the OTCQX under the symbol "IMMVF".

## **BUSINESS MODEL AND STRATEGY**

Immunovaccine is dedicated to making immunotherapy more effective, more broadly applicable and more widely available to people facing cancer. The Corporation's lead product, DPX-Survivac, has demonstrated the ability to induce T Cell activation with the potential of tumor shrinkage in advanced ovarian cancer and is currently being used in clinical trials in combination with checkpoint inhibitors from the Corporation's collaborators, Incyte and Merck. The target of this T-cell stimulating therapy is broadly applicable to many different cancers. The novel mechanism of action of the underlying delivery platform, DepoVax, is to promote uptake and extend exposure of antigens to cells of the immune system, which enhances and sustains immune responses. This allows Immunovaccine to leverage this technology to become a preferred partner in combination trials in hard to treat cancers, and to explore additional immuno-oncology targets, such as HPV related cancers and neoepitopes. In addition, this platform is being used in other market indications, such as infectious disease vaccines, where the Corporation has demonstrated safety and immunogenicity with a novel proprietary vaccine to prevent RSV infections. The Corporation is currently collaborating with partners such as Incyte, Merck, Leidos and Dana-Farber to explore novel applications for the DepoVax platform.

The Corporation has a clinical-stage cancer immunotherapy, DPX-Survivac. Immunovaccine believes the principles behind a successful cancer immunotherapy should include a targeted antigen and an effective formulation and delivery technology, combined with a complementary therapeutic strategy. Antigens used in DPX-Survivac are believed to specifically target tumor cells without harming normal, healthy cells. These antigens are combined with the Corporation's DepoVax platform in an effort to optimize the presentation of these antigens to the immune system, resulting in an enhanced immune response. To be successful against cancer, the Corporation believes antigens must be administered in the right therapeutic setting, which includes a combination of therapies that help target various aspects of cancer. Immunovaccine believes that the effect of the therapy may be enhanced if an immune modulator is used simultaneously to prevent a patient's immune system from overriding the positive response to the antigen. The Corporation's goal in immuno-oncology is to advance its proprietary therapies in combination trials with pharmaceutical and large biotechnology companies to establish strategic partnerships and support further development and commercialization.

In collaboration with commercial and academic partners, the Corporation is also expanding the application of DepoVax as a delivery platform for vaccines targeted against infectious diseases. Pre-clinical and clinical studies have indicated that the platform may allow for the development of enhanced vaccines for a wide range of infectious diseases by generating a stronger and more durable immune response more quickly than is possible with existing delivery methods. For vaccine targets that are poorly immunogenic, the platform may significantly reduce the number of immunizations required. The Corporation's goal in infectious diseases is to out-license the DepoVax platform to selected partners. The Corporation is also exploring new applications of the DepoVax platform on its own and with partners.

The Corporation intends to be opportunistic in the development of products by exploring a variety of avenues, including co-development through potential collaborations, strategic partnerships or other transactions with third parties. The Corporation may seek additional equity and non-dilutive funding and partnerships to advance the development of its vaccine product candidates.

## **PLATFORM AND PRODUCTS IN DEVELOPMENT**

### ***Delivery Platform***

The DepoVax platform is a unique and patented formulation providing a new way to deliver active ingredients to the immune system. Active ingredients are formulated in lipid nanoparticles and, after freeze drying, suspended directly into oil. DepoVax has a novel mechanism of action whereby it promotes uptake and extends delivery to the immune system. The DepoVax platform forms the basis of all Immunovaccine's product development programs.

The Corporation believes the novel mechanism of action of DepoVax makes the platform uniquely suitable for cancer immunotherapies, which are designed to target tumor cells. DepoVax can induce prolonged target-specific and polyfunctional cellular responses, which are postulated to be required for effective tumor control.

In infectious diseases, DepoVax-formulated vaccines have shown an ability to induce rapid and robust immune responses that may protect against disease agents with as little as one dose. The single-dose capability could be a key factor for developing rapid response vaccines for pandemics and infectious disease outbreaks. The DepoVax platform can be combined with a variety of antigens, including recombinant proteins, synthetic peptides and nucleic acids, viruses and a wide range of adjuvants, which provides both versatility and flexibility to develop many different vaccine products using a single platform.

This unique formulation provides extended chemical stability. DepoVax-based products are lyophilized and stored in a dry format, which provides the added benefit of an extended shelf life. The DepoVax formulation is designed to be easy to re-suspend and administer.

The ongoing clinical studies with DepoVax-based therapies for cancer and for protection from infectious diseases are expected by the Corporation to demonstrate the competitive advantages of this platform.

## **IMMUNO-ONCOLOGY**

### ***Pipeline***

Indication	Product	Trials	Timing	Partners
Ovarian	DPX Survivac + mCPA + IDO1	Phase 1b	Ongoing	
	DPX Survivac + mCPA + PD-1	Phase 2	Ongoing	
DLBCL	DPX Survivac + mCPA + PD-1	Phase 2	Ongoing	
HPV cervical cancer	DPX E7 + mPCA	Phase 2	Ongoing	  

### ***DPX-Survivac***

#### ***Product Overview***

DPX-Survivac uses survivin-based peptides licensed from MerckKGaA, on a world-wide exclusive basis, formulated in DepoVax. Survivin is a major tumor-associated antigen over-expressed in many cancers, making it a viable target for a broadly applicable immunotherapy. DepoVax delivers the survivin-based antigens in a lipid depot-based format designed to generate a strong and prolonged immune response.

Survivin is essential for the survival of cancer cells and functions as an inhibitor of cell death, known as apoptosis. The presence of high levels of survivin in cancer cells is believed to make them susceptible to a survivin-targeted therapy. The Corporation's survivin-based therapeutic candidate, DPX-Survivac, aims to train the immune system to recognize and kill survivin-containing cancer cells. This could provide a clinical benefit to patients by reducing tumor burden, delaying cancer progression and/or increasing overall survival. The United States National Cancer Institute has recognized survivin as a promising antigen for cancer treatment based on its specificity, over-expression in cancer cells and immunogenicity potential.

The Corporation believes DPX-Survivac could have broad commercial potential as a cancer immunotherapy because it may be applicable for the treatment of multiple solid tumors and hematological cancers, including ovarian, glioblastoma, breast, pancreatic, multiple myeloma, B-cell lymphoma, and melanoma, among other cancers. The Corporation intends to continue the development of DPX-Survivac in a broader range of cancer indications to evaluate additional opportunity.

#### ***Phase 1b clinical trial in ovarian cancer with Incyte***

In June 2015, the Corporation announced it had entered into a non-exclusive clinical trial collaboration with Incyte to evaluate the combination of Immunovaccine's novel T cell activating immunotherapy, DPX-Survivac, with Incyte's investigational oral IDO1 inhibitor, epacadostat. Immunovaccine and Incyte are co-funding and conducting a multicenter, open-label, phase 1b study to evaluate the safety, tolerability and efficacy of the novel combination in platinum resistant or sensitive ovarian cancer patients who are at high risk of recurrence. All patients enrolled in the trial have recurrent ovarian cancer with evidence of progressive disease. The investigational new drug (IND) application for the study, which will test the triple combination of DPX-Survivac, epacadostat and low dose oral cyclophosphamide, was approved by the U.S. Food and Drug Administration ("FDA") and Health Canada in January 2016. The study was initiated on September 8, 2016 and is anticipated to enroll up to 40 patients. The Corporation announced in March 2017 the first interim data analysis from this clinical study. The analysis included the results of blood tests, tumor biopsies and CT scans to assess safety, disease progression and T cell response for the first four evaluable patients in the trial. Based on the interim analysis, the combination therapy appears to have an acceptable tolerable safety profile, with a single grade 3 and single grade 4 event reported and no serious adverse events ("SAEs"). At the time of the interim analysis, three of four patients exhibited stable disease, while a fourth patient progressed and exited the trial. In addition, researchers observed an increased T cell activity in tumors in three of the four patients based on RNA sequencing and indications of early tumor shrinkage in the patient who has been in trial for the longest duration thus far (based on CT scan at day 140).

In December 2017, the Corporation has provided positive top-line clinical data. Initial results from 10 evaluable patients in the DPX-Survivac plus-100 milligrams epacadostat dosing cohort demonstrated a disease control rate of 70 per cent, including partial responses (PR, defined as equal to 30-per-cent decrease in tumour lesion size) in 30 per cent of the patients (three out of 10). To date, the combination also exhibited a well-tolerated safety profile, with the majority of adverse events (“AEs”) reported as Grade 1 and Grade 2 AE.

Blood tests indicated that the majority of treated patients exhibited targeted T cell activation. Tumour biopsies and analyses thus far have supported the reported mechanism of action (“MOA”) of this immunotherapy combination, with DPX-Survivac triggering T cell infiltration into the tumor. This T cell activation was also correlated with tumor regression.

At the time of data cut-off, there were also preliminary data on the first three evaluable patients in the second dosing cohort evaluating the combination of 300 mg BID epacadostat, DPX-Survivac, and low-dose cyclophosphamide. From the first three evaluable patients, two showed stable disease, with one patient showing tumor regression of approximately 25 per cent. The second dosing cohort is continuing and is expected to enroll 16 to 40 patients in total. Immunovaccine expects to provide a clinical update on the second dosing cohort in the first half of 2018 and investigators are also planning to submit the study findings for scientific publication. If the results of this study are positive and if Incyte is in agreement, the Corporation would request a type C meeting with the FDA to discuss the possibility to conduct a registration trial for this combination. At this stage it is not possible to determine if the FDA would agree and if they agree, what type of clinical trial design would be requested and what would be the cost of this clinical trial.

The Corporation currently anticipates that, in addition to general clinical expenses which are distributed amongst the various clinical projects, its share of the cost (50%) to complete the Phase 1b clinical trial with Incyte will be approximately \$700,000 of which \$500,000 is expected to occur in 2018.

#### *Phase 2 clinical trial in ovarian cancer with Merck*

In February 2017, the Corporation announced an Investigator-Sponsored phase 2 clinical trial in ovarian cancer in combination with Merck’s checkpoint inhibitor pembrolizumab in patients with recurrent, platinum-resistant ovarian cancer. University Health Network’s (“UHN”) Princess Margaret Cancer Centre will conduct the Phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumor activity of the combination of pembrolizumab, DPX-Survivac, and low-dose cyclophosphamide. It is expected to enroll 42 subjects with advanced epithelial ovarian, fallopian tube or primary peritoneal cancer. The study’s primary objective is to assess overall response rate. Secondary study objectives include progression free survival rate, overall survival rate, and potential side effects, over a five-year period. At this stage the Corporation has no specific plan on the next steps after this trial as it will have to be discussed with its partner based on the clinical results.

The Corporation expects to disclose preliminary results around mid-2018 once provided by the UHN Princess Margaret Cancer Centre and currently anticipates that, in addition to general clinical expenses which are distributed amongst the various clinical projects, its share of the cost to complete this study will be of approximately \$400,000 that are expected to occur in 2018.

#### *Phase 2 clinical trial in Diffuse large B-cell lymphoma (“DLBCL”) with Merck*

On November 8, 2017, the Corporation announced that Health Canada has granted Sunnybrook Research Institute regulatory clearance to begin recruiting patients for its Phase 2 clinical study of a triple-combination immunotherapy in patients with measurable or recurrent diffuse large B-cell lymphoma. This trial, announced initially in May 2017, is designed to evaluate the safety and efficacy of Immunovaccine’s lead product candidate, DPX-Survivac, along with Merck’s pembrolizumab and low-dose cyclophosphamide in this patient population.

Researchers conducting the investigator sponsored study will test the novel immunotherapy combination in patients whose DLBCL expresses survivin, a tumor antigen highly expressed in 60 percent of DLBCL patients. DPX Survivac stimulates the immune system to produce T cell responses targeting survivin. The non-randomized, open label study is expected to enroll 25 evaluable participants at five centers in Canada. At this stage the Corporation has no specific plan on the next steps after this trial as it will have to be discussed with its partner based on the clinical results.

The Corporation expects to disclose preliminary results around mid-2018 once provided by the Investigator and currently anticipates that, in addition to general clinical expenses which are distributed amongst the various clinical projects, its share of the cost to complete this study will be approximately \$2,400,000 of which \$1,000,000 is expected to occur in 2018.

## *Orphan Drug Status and Fast Track Designation*

The Corporation announced in November 2016 that the European Medicines Agency (EMA) granted orphan drug designation status to Immunovaccine's DPX-Survivac in ovarian cancer, and in July 2015 the FDA also granted orphan drug status to DPX-Survivac for the treatment of ovarian cancer. This designation is valid for all applications of DPX-Survivac in ovarian cancer without restriction to a specific stage of disease.

Immunovaccine had previously received FDA fast track designation for DPX-Survivac. The designation is intended for patients with no measurable disease after their initial surgery and chemotherapy.

### ***DPX-E7***

On April 17, 2017, the Corporation announced that the first study participant has been treated in a Phase 1b/2 clinical study evaluating Immunovaccine's investigational cancer vaccine, DPX-E7, in combination with low-dose cyclophosphamide in patients with incurable oropharyngeal, cervical and anal cancers related to HPV.

Dana-Farber is leading the DPX-E7 study through a \$1.5 million research grant from Stand Up To Cancer and the Farrah Fawcett Foundation to clinically evaluate collaborative translational research that addresses critical problems in HPV-related cancers.

The Dana-Farber study is a single center, open label, non-randomized clinical trial that will investigate the safety and clinical efficacy of DPX-E7 in combination with low-dose metronomic oral cyclophosphamide in a total of 44 treated participants. Its primary objectives are to evaluate changes in CD8+ T cells in peripheral blood and tumor tissue, and to evaluate the safety of DPX-E7 vaccination in HLA-A2 positive patients with incurable HPV-related head and neck, cervical or anal cancers. DPX-E7 targets an HPV viral protein known as E7. Immunovaccine has the option to produce the DPX-E7 vaccine if it proves successful in the clinical trials.

The Corporation expects to disclose preliminary results around mid-2018 once provided by Dana-Farber.

## **INFECTIOUS DISEASES**



### ***DPX-RSV***

#### *Product Overview*

A significant component of the Corporation's business strategy is partnering the DepoVax platform within infectious and other diseases. The DepoVax platform has the potential to generate a rapid and robust immune response, often in a single dose. The unique vaccine enhancement and single-dose capability could prove to be beneficial in targeting difficult infectious and other disease candidates.

The Corporation has performed pre-clinical research activities for a vaccine targeting RSV, which is the second leading cause of respiratory illness in infants, the elderly and the immunosuppressed. Currently, there is no vaccine available for this virus and Immunovaccine is seeking to develop a novel vaccine formulation to be used in elderly and healthy adults, including women of child-bearing age. Immunovaccine has in-licensed the RSV antigen exclusively from VIB, a non-profit life sciences research institute funded by the Flemish government, to expand its pipeline of vaccine candidates. The novel RSV antigen being evaluated in DepoVax is based on the short hydrophobic protein present at low levels on the surface of the RSV virion but more importantly also present on the surface of RSV-infected cells. This vaccine has a unique mechanism of action, in that the resultant antibodies bind to and destroy infected cells rather than directly bind to and neutralize free virus.

*Phase 1 clinical trial in RSV*

A Phase 1 clinical study has been conducted in Canada with the Corporation’s RSV vaccine in healthy adults. The RSV vaccine is formulated in Immunovaccine’s proprietary DepoVax platform and is initially being developed to protect the elderly population from infection. The Phase 1 study, which was the first clinical trial of a DepoVax-based vaccine in an infectious disease indication, has evaluated the safety and immune response profile of the RSV vaccine candidate in 40 healthy older adult volunteers (age 50-64 years) and two dose cohorts, with 20 subjects in each cohort.

On July 6, 2016, the Corporation announced positive interim results from this trial. Investigators analyzed the safety and immune response data of all participants up to study day 84. The safety analysis indicates that the DPX-RSV was well tolerated among all study participants, with no SAEs recorded. Furthermore, immunogenicity data supported DPX-RSV’s ability to generate a relevant immune response; the vaccine candidate obtained antigen-specific antibody responses in 75 percent of subjects vaccinated with the lower dose and 100 percent of those vaccinated with the higher dose.

On October 13, 2016, the Corporation announced positive topline results from this trial. The report outlined that more than nine months after the last vaccination, 15 of 16 participants (93%) who received DPX-RSV demonstrated antigen-specific immune responses. The vaccine candidate also continued to have a positive safety profile and was well tolerated with no SAEs among all study participants.

On April 12, 2017, the Corporation announced additional positive data from an extended evaluation of patients in this trial. An amendment had been submitted to Health Canada to test subjects who received the higher dose of vaccine out to one year after the booster vaccination. In the 25 µg dose cohort, which was the only dose tested out to one year, 100 percent of older adults (7/7 immune responders) vaccinated with DPX-RSV maintained the antigen-specific immune responses one year after receiving the booster dose. At one year, the antibody levels measured were still at peak with no sign of decrease.

Immunovaccine has exclusive worldwide licenses on applications that target the SH ectodomain antigen in RSV. The Corporation intends to explore opportunities to out-license this product to potential partners.

**Platform collaboration**

DEPOVAX PARTNERSHIPS			
Indication	Candidate	Progress	Partners
Malaria	Multiple antigens in DepoVax	Preclinical Ongoing	
		Preclinical Ongoing	
Zika	Peptides in DepoVax	Preclinical Ongoing	
BVDV	Antigens in DepoVax	Animal trials	
Contraceptive	Antigens in DepoVax	Animal trials	

**Malaria**

In 2016, Immunovaccine was awarded a subcontract by Leidos, a health, national security, and infrastructure solutions company, to evaluate Immunovaccine’s DepoVax™ platform for the development of peptide-based malaria vaccine targets. The subcontract is funded through Leidos’ prime contract from the U.S. Agency for International Development (“USAID”) to provide vaccine evaluations in the preclinical, clinical and field stages of malaria vaccine development.

On November 21, 2017, an expansion of this collaboration was announced. Following the achievement of several preclinical milestones in the collaboration with USAID, Leidos and USAID selected the DepoVax-based platform as one of the preferred

formulations for further development under a new contract extension. Under the new subcontract, the collaborators will conduct additional research that focuses on identifying the most promising target-formulation combinations.

### ***Zika Virus Vaccine Antigen***

Immunovaccine and Leidos, a health, national security and infrastructure solutions company, are collaborating on developing a vaccine against the mosquito-borne Zika virus and infection, which may be linked to neurological birth defects. This collaboration, amended on June 23, 2016, is the first to expand on Immunovaccine's research project in which the Corporation will apply its DepoVax platform to development of a Zika virus vaccine candidate. Under the terms of the agreement, Leidos will utilize its Virtual Pharmaceutical Development Program to lead an antigen discovery and development team to identify the best candidate antigens for protecting against infection by the Zika virus. Immunovaccine will then formulate new antigens in its DepoVax delivery system for pre-clinical testing. The parties expect that this project could serve as a replicable model for expediting the development and manufacture of vaccines to address current and future health emergencies.

### ***Zoetis collaboration***

On August 31, 2017, the Corporation announced the achievement of several milestones in its ongoing collaboration with global animal health company Zoetis to develop cattle vaccines. In recent controlled studies, the Immunovaccine formulations met efficacy and duration of immunity end-points against two disease targets. These results will enable Zoetis to advance two Immunovaccine-formulated vaccine candidates into late-stage testing.

### ***Licensing Agreements***

While the Corporation is focused on developing a pipeline of cancer immunotherapies, it is also pursuing opportunities to license the Corporation's platform technology to other parties interested in creating enhanced vaccines on an application-by-application basis.

## **MARKET OVERVIEW**

### ***Cancer Immunotherapies***

Cancer is considered one of the most widespread and prevalent diseases globally. According to Global Cancer Facts & Figures, 3rd edition (released February 2015 by the American Cancer Society), it is predicted that new cancer cases will rise to 21.7 million and the number of cancer deaths to 13 million by 2030. Conventional cancer treatment involves surgery to remove the tumor when possible, as well as chemotherapy and radiation. Chemotherapies are widely used despite their associated toxicities because they interfere with the ability of cancer cells to grow and spread. However, tumors often develop resistance to chemotherapies, limiting their efficacy in preventing tumor recurrence. Despite recent advances, independent sources note a high unmet medical need in cancer therapy, noting the median survival rate remains poor. Cancer immunotherapies, including therapeutic cancer vaccines, may provide a new and effective treatment. According to a Market & Markets report released in January 2017, the global immunotherapy drugs market is projected to reach USD \$201.52 billion by 2021 from USD \$108.41 billion in 2016, growing at a compound annual growth rate ("CAGR") of 13.5% during the forecast period of 2016 to 2021. The major players operating in the immunotherapy drugs market include F. Hoffmann-La Roche AG (Switzerland), GlaxoSmithKline (U.K.), AbbVie, Inc. (U.S.), Amgen, Inc. (U.S.), Merck & Co., Inc. (U.S.), Bristol-Myers Squibb (U.S.), Novartis International AG (Switzerland), Eli Lilly and Corporation (U.S.), Johnson & Johnson (U.S.), and AstraZeneca plc (U.K.).

Cancer immunotherapy seeks to harness the immune system to assist in the destruction of tumors and to prevent their recurrence. There has been significant interest in the field of cancer immunotherapy stemming from recent clinical success in prolonging patient survival with novel compounds. The ability to apply these appropriately has resulted from a greater understanding of the immune dysfunction that is characteristic of cancer. One area in which there have been breakthroughs has been in the area of checkpoint inhibitors, compounds that target key regulatory molecules of the immune system. Yervoy (anti-CTLA-4, or ipilimumab, developed by Bristol-Myers Squibb) was the first compound in this class to be approved for use in advanced metastatic melanoma. In cancer, these regulators (CTLA-4, PD-1 and its ligand PD-L1) act to inhibit CD8 T cell mediated anti-tumor immune responses that are crucial for tumor control. Monoclonal antibodies that target PD-1 and PD-L1 have shown unusual efficacy in cancer patients, with a significant percentage of patients experiencing durable response to these therapies. Several of these compounds are in advanced clinical trials, with one compound, Merck's Keytruda (pembrolizumab), having received FDA approval in September 2014 for advanced melanoma patients who have stopped responding to other therapies. Bristol-Myers Squibb's compound nivolumab (Opdivo) has also been approved in the United States and Japan. These therapies have recently been approved for use in other advanced cancers including bladder cancer, non-small cell lung cancer, Hodgkin's Lymphoma, squamous cell carcinoma of the

head and neck and stomach cancer. In addition, Keytruda in particular has been approved for use in cancers with a specific molecular indication irrelevant of cancer type, having been approved in May for use to treat solid tumors having a biomarker for microsatellite instability (MSI-H), which is a defect in the DNA repair pathway. This represents about 5% of a number of different tumor types, including colorectal, breast, prostate and thyroid cancers.

Key opinion leaders in the field have indicated that the ideal combination, with checkpoint inhibitors, is likely to be a therapy that drives tumor specific immune responses. These include novel cancer vaccines and T cell-based therapies. These therapies fit well with checkpoint inhibition therapy because they simultaneously activate strong tumor specific immune responses, while releasing the brakes on immune suppression. The success of such combinations should allow pharmaceutical companies to significantly expand the market of their checkpoint inhibitors, which are currently effective in approximately 10% to 30% of patients.

The Corporation believes that T cell therapies will become an important component of these novel combination immunotherapies, with the potential of synergistic benefits potential to become an essential part of a multi-pronged approach for the treatment of cancer.

### *Infectious Diseases*

Vaccines are credited with saving millions of lives since their introduction into medical practice and the healthcare system. The reduction in morbidity and mortality caused by many infectious diseases world-wide can be directly correlated to currently available vaccines. According to data from the U.S. Centers for Disease Control and Prevention, ten infectious diseases have been at least 90% eradicated in the United States thanks to vaccines.

However, during the past decade, diseases thought to be under control or retreating, such as measles, mumps and pertussis have re-emerged, mostly due to decline in childhood vaccination rates. In addition, infectious diseases such as influenza, meningitis and yellow fever continue to be a significant public health concern, despite the availability of vaccines. Other diseases without a suitable vaccine, such as dengue and malaria have extended their geographical reach, due to expansion of the insects which carry them. While the effort to control these known infectious diseases continues, more than 30 additional emerging diseases have been identified in humans for the first time over the past two decades, such as severe acute respiratory syndrome (SARS) and Middle East respiratory virus (MERS) coronaviruses.

There is an increased awareness of the impact of current and emerging infectious diseases. Demand for newer treatments and vaccines are growing globally. The global market for infectious diseases treatment was valued in January 2016 by analyst Peggy Lehr of BCC Research at USD\$108.4 billion in 2015, should reach USD\$126.2 billion in 2016 and USD\$183.2 billion in 2021, demonstrating a CAGR of 7.7% from 2016 to 2021. According to TechNavio's analysts, the global human vaccines market is expected to grow at a CAGR of 11.69% during the period 2016-2020.

Many infectious diseases lack effective prophylactic vaccines, and the industry faces a variety of challenges in vaccine design and production. Adjuvants and delivery methods are viewed as key technologies for the success of future vaccines. Efforts to decrease treatment duration and develop single-dose vaccines are a strong focus at the research level to improve patient compliance and decrease monitoring of therapy by the healthcare provider. Better diagnostics are being sought for many infectious diseases. This advance could result in additional market expansion by increasing the number of patients identified for vaccine treatment. The Corporation believes this current market landscape offers significant commercial opportunities for both its technology platform and vaccines.

Pharmaceutical companies dominating the infectious diseases vaccine market include Sanofi Pasteur, GSK, Merck and Pfizer. Additionally, government and non-profit institutions play a significant role in vaccine development in both industrialized and developing markets. Support for infectious disease vaccine development and commercialization is also available through government and non-profit funding and granting mechanisms.

### *Respiratory Syncytial Virus (RSV)*

RSV is a respiratory virus that infects the lungs and breathing passages. It can be severe in infants, the elderly, and patients with compromised immune systems. RSV is the single most common cause of severe respiratory illness in infants under the age of one and is more often being recognized as an important cause of respiratory illness in older adults. Globally, it is estimated that 64 million cases of RSV infection occur annually, with 160,000 deaths. A vaccine that strengthens the immunity of adults to this virus would lower their risk of contracting infection later in life. It would also create a herd immunity in the adult population (i.e. parents, grandparents and caregivers) to protect vulnerable infants from contracting this virus.

There is currently no vaccine available for the prevention of RSV.

The World Health Organization (WHO) has designated RSV as a high-priority target for vaccine development. RSV is a significant problem in the elderly, particularly if they reside in a long-term care facility or participate in other senior day-care programs. RSV attack rates in nursing homes in the United States are approximately 5% to 10% per year with a 2% to 8% case fatality rate, amounting to approximately 10,000 deaths per year among persons greater than 64 years of age.

A vaccine would likely provide patients with a stronger efficacy profile and a more sustained immune response. The Corporation expects that the development of a vaccine with these improved characteristics could expand the market potential, adding the elderly and immunocompromised patients. With these patient populations, the Corporation believes that the market has a multibillion-dollar revenue potential.

Although there have been relatively few developments related to RSV over the past decade, a renewed interest in the area due to new technologies and early research into new methods of addressing immunity, such as maternal immunity transfer for pediatric RSV, could result in new transactions or alliances over the next several years. Most transactions and alliances that have taken place in this sector have minimized the risk with a relatively modest upfront payment, followed by larger milestone payments subject to successful progression through clinical development and commercialization.

## **INTELLECTUAL PROPERTY**

The Corporation strives to protect its intellectual property in established, as well as emerging, markets around the world. The Corporation's intellectual property portfolio relating to its vaccine platform technology includes fourteen patent families, the first of which contains eight patents issued in five jurisdictions (United States, Europe, Canada, Japan and Australia). The thirteen other families collectively contain twenty-six patents issued in nine jurisdictions (United States, Europe, Canada, Australia, Japan, India, Singapore, China and separately Hong Kong) and thirty-seven pending patent applications in eleven jurisdictions. Taking into account the validations of the European patents, the Corporation's intellectual property portfolio includes sixty-six patents. More details on the Corporation intellectual property strategy and patents can be found in the AIF filed on SEDAR at [www.sedar.com](http://www.sedar.com).

The platform name is protected by trademarks in the United States, Canada and Europe.

## **RECENT AND ANNUAL DEVELOPMENTS**

### *Key developments and achievements*

The Corporation announced:

- On February 15, 2018, that it has completed a bought deal public offering of common shares of the Corporation, including exercise of the overallotment option in full. An aggregate of 7,187,500 common shares were issued at a price of \$2.00 per common share, raising gross proceeds of \$14,375,000 (the "February 2018 Public Offering"). The Corporation intends to use the net proceeds of the Offering to continue to advance the Corporation's pipeline and conduct a phase 1 basket trial in up to five indications to be identified, for research and development, for working capital, and for general corporate purposes;
- On January 31, 2018, the publication in *The Journal of Biomedical Science* of a preclinical study using magnetic resonance imaging (MRI) to follow cancer peptide uptake in tumour models, and to correlate this immune activation to the resulting anti-cancer T cell activity. The *Journal of Biomedical Science* study, titled "Unique Depot Formed by an Oil Based Vaccine Facilitates Active Antigen Uptake and Provides Effective Tumour Control," compared the MOA of Immunovaccine's platform for immunotherapeutic stimulation with other technologies<sup>4</sup>.

In the study, published on January 27, 2018, researchers tracked how the cancer peptides were trafficked from the injection site to immunogenic activation in the lymph nodes. Researchers correlated this to both activation of T cells and the ensuing efficacy to control tumour progression. They concluded that Immunovaccine's delivery technology had a fundamentally unique MOA. This MOA enabled active and prolonged immune stimulation, as well as better tumour control, as compared with other technologies examined in the study;

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<sup>4</sup> Published online, January 27, 2018. DOI : 10.1186/s12929-018-0413-9

- On January 18, 2018, the appointment of Joseph Sullivan to the newly created role of Senior Vice-President, Business Development, effective January 22, 2018. Mr. Sullivan brings over 25 years of global pharmaceutical and vaccine experience with Merck & Co. Inc. to his new position at Immunovaccine. His experience includes launching two blockbuster products, licensing new indications, growing business franchises and forming external collaborations to expand market access.

At Immunovaccine, he will be responsible for providing strategic and operational leadership for the Corporation's business development efforts. This includes expanding late-stage candidate development and preparation for commercialization, as well as forging strategic commercial partnerships to support further advancement of the corporation's clinical assets and platform;

- On December 7, 2017, an expansion of its continuing collaboration with UConn Health. The collaboration is part of Immunovaccine's DPX-NEO program, which is evaluating the anti-cancer activity of proprietary patient-specific epitopes developed at UConn Health and formulated in the company's DepoVax-based vaccine formulation. Based on prior preclinical and manufacturing milestones achieved in evaluating cancer neoepitopes formulated in Immunovaccine's proprietary delivery formulation, Immunovaccine and UConn Health will begin working toward DPX-NEO's first clinical trial;
- On December 5, 2017, positive top-line clinical data from its continuing phase 1b trial evaluating the safety and efficacy of Immunovaccine's lead immuno-oncology candidate, DPX-Survivac, in combination with Incyte Corp.'s IDO1 enzyme inhibitor epacadostat, and low-dose cyclophosphamide in patients with advanced ovarian cancer. Immunovaccine is conducting the trial in a collaboration with Incyte.

Initial results from 10 evaluable patients in the DPX-Survivac plus-100 milligrams epacadostat dosing cohort demonstrate a disease control rate of 70 per cent, including partial responses (PR, defined as equal to 30-per-cent decrease in tumour lesion size) in 30 per cent of the patients (three out of 10). To date, the combination also exhibited a well-tolerated safety profile, with the majority of AEs reported as Grade 1 and Grade 2, and only one potential treatment-related AE;

- On November 21, 2017, an expansion of its collaboration with Leidos, a Fortune 500 science and technology company, to develop preventative, peptide-based malaria vaccine candidates. The U.S. Agency for International Development ("USAID") supported an initial collaboration via a Leidos Malaria Vaccine Development Program (MVDVP) subcontract. Following the achievement of several preclinical milestones in this initial collaboration, Leidos and USAID selected the DepoVax-based platform as one of the preferred formulations for further development under a new contract extension. Under the new subcontract, the collaborators will conduct additional research that focuses on identifying the most promising target-formulation combinations;
- On November 8, 2017, that Health Canada has granted Sunnybrook Research Institute regulatory clearance to begin recruiting patients for its Phase 2 clinical study of a triple-combination immunotherapy in patients with measurable or recurrent DLBCL. This investigator-sponsored Phase 2 trial, announced initially in May 2017, designed to evaluate the safety and efficacy of Immunovaccine's lead product candidate, DPX-Survivac, along with Merck's pembrolizumab and low-dose cyclophosphamide, will evaluate the use of a triple-combination immunotherapy in patients with measurable or recurrent DLBCL. Investigators will assess the efficacy and safety of DPX-Survivac, along with a checkpoint inhibitor drug currently marketed by a large pharmaceutical company, and low-dose cyclophosphamide. The Corporation has elected to conclude operations on its initial Phase 2 DLBCL study, opting to replace it with this triple-combination trial;
- On October 17, 2017, that it has received a two-year extension of the maturity of its \$5M Province of Nova Scotia loan authorized in 2013. The original maturity date of the loan was August 9, 2018 and is now August 9, 2020;
- On August 31, 2017, the achievement of several milestones in its ongoing collaboration with global animal health company Zoetis to develop cattle vaccines. In recent controlled studies, the Immunovaccine formulations met efficacy and duration of immunity end-points against two disease targets. These results will enable Zoetis to advance two Immunovaccine-formulated vaccine candidates into late-stage testing;
- On July 12, 2017, the Corporation announced a significant achievement in its personalized cancer medicine program. Immunovaccine scientists have successfully formulated 14 neoepitope cancer peptides into one single DepoVax formulation. In preclinical testing, the resulting personalized cancer vaccine demonstrated the ability to generate specific killer T-cell responses against cancer peptides. Immunovaccine has filed a patent application covering this novel DepoVax-

based rapid formulation process. The supporting data for the patent include what the Corporation believes to be one of the first documented reports of 14 different neoepitope peptides synthesized into a single formulation.

This breakthrough evolved as part of the Corporation's DPX-NEO program, which aims to develop patient-specific immunotherapies targeting neoepitopes (the mutated proteins and potential targets of an immune response that are produced by a patient's own tumours). The methodology under this patent application can include peptides with a wide range of physical and chemical characteristics - including those that are insoluble. Immunovaccine believes that this novel process combines the ease and speed of manufacturing with other advantages inherent in DepoVax formulations, including long-term formulation stability, as well as the potential to elicit a strong and specific T-cell response maintained for a year or more.

Neoepitope vaccines have demonstrated significant potential in the realm of personalized medicines. However, the complexity and potential expense of advancing these patient-specific vaccines include substantial challenges for development and large-scale deployment. Intensive work is required to identify patient-specific peptide epitopes and synthesize them rapidly into a single formulation. In addition, when the neoepitope peptides are selected from patients, investigators have not always been able to include many optimal candidates due to manufacturing limitations of the technology required to synthesize a single formulation.

Immunovaccine believes that the DepoVax-based formulations demonstrate the ability to address these limitations as they do not limit the target peptides to highly soluble peptides. This flexibility should enable investigators to optimize the choices of immunogenic targets access a broader range of candidates;

- On June 21, 2017, that the Corporation completed a bought deal public offering (the "June 2017 Public Offering") of common shares of the Corporation, raising gross proceeds of approximately \$10 million. The Corporation intends to use the net proceeds of the June 2017 Public Offering for the research and development and clinical advancement of its cancer and infectious disease vaccine candidates and for working capital and general corporate purposes;
- On April 18, 2017, that the first study participant has been treated in a Phase 1b/2 clinical study lead by Dana-Farber evaluating Immunovaccine's investigational cancer vaccine, DPX-E7, in combination with low-dose cyclophosphamide in patients with incurable oropharyngeal, cervical and anal cancers related to HPV;
- On April 12, 2017, updated data on its investigator-sponsored Phase 1 clinical trial testing the safety and immunogenicity of its DepoVax-based, small B-cell epitope peptide vaccine candidate for RSV. In the 25µg dose cohort, which was the only dose tested out to one year, 100 percent of older adults (7/7 immune responders) vaccinated with DPX-RSV maintained the antigen-specific immune responses one year after receiving the booster dose. At one year, the antibody levels measured were still at peak with no sign of decrease. The 25µg dose was delivered in a volume of 50 microliters. A standard flu vaccine is typically 60 µg delivered in 10 times this volume;
- On April 11, 2017, that UHN Princess Margaret Cancer Centre has received Health Canada clearance to initiate the Phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumor activity of the combination of Merck's pembrolizumab, Immunovaccine's DPX-Survivac, and low-dose cyclophosphamide;
- On April 5, 2017, that new preclinical data presented at the 2017 American Association for Cancer Research (AACR) Annual Meeting demonstrated that phosphatidylserine targeting antibodies can enhance the anti-cancer activity of its DepoVax-based therapeutic vaccine platform;
- On March 29, 2017, the first interim data analysis from its triple combination Phase 1b clinical trial in ovarian cancer, in combination with Incyte's epacadostat and low-dose cyclophosphamide. The analysis included the results of blood tests, tumor biopsies and CT scans to assess safety, disease progression and T cell response for the first four evaluable patients in the trial. All patients enrolled in the trial have recurrent ovarian cancer with evidence of progressive disease. Based on the interim analysis, the combination therapy appears to have an acceptable tolerable safety profile, with a single grade 3 and single grade 4 event reported and no SAEs. At the time of the interim analysis, three of four patients exhibited stable disease, while a fourth patient progressed and exited the trial. In addition, researchers observed an increased T cell activity in tumors in three of the four patients based on RNA sequencing and indications of early tumor shrinkage in the patient who has been in trial for the longest duration thus far (based on CT scan at day 140); and

- On February 20, 2017, that Pierre Labbé was appointed as Chief Financial Officer replacing Kimberly Stephens. In this role, Mr. Labbé will be responsible for leading the Corporation's financial strategy and operations, with an emphasis on expanding financing and business development operations.

#### SELECTED FINANCIAL INFORMATION

	Year ended December 31, 2017 \$	Year ended December 31, 2016 \$	Year ended December 31, 2015 \$
Net loss and comprehensive loss for the period	12,028,000	8,896,000	8,775,000
Basic and diluted loss per share	0.10	0.09	0.10

	As at December 31, 2017 \$	As at December 31, 2016 \$	As at December 31, 2015 \$
Cash and cash equivalents	14,909,000	13,547,000	3,842,000
Total assets	17,032,000	15,101,000	5,952,000
Long term debt	6,476,000	6,090,000	3,718,000

#### RESULTS FOR THE YEAR ENDED DECEMBER 31, 2017, COMPARED TO THE YEAR ENDED DECEMBER 31, 2016

	Year ended December 31, 2017 \$	Year ended December 31, 2016 \$
Revenue	(189,000)	(209,000)
Research and development	5,905,000	4,173,000
General and administrative	5,203,000	3,559,000
Government assistance	(1,078,000)	(1,006,000)
Business development and investor relations	1,222,000	678,000
Accreted interest	966,000	1,506,000
Impairment loss	-	195,000
<b>Net loss and comprehensive loss for the period</b>	<b>12,028,000</b>	<b>8,896,000</b>

#### Revenue

Revenue decreased by \$20,000 in 2017 in comparison with 2016. In the year ended December 31, 2015, the Corporation signed a license agreement with PharmAthene, Inc. - an agreement subsequently terminated in August 2016. The amount recognized in 2016 from this agreement was \$130,000 compared to nil in 2017. This was partly compensated by an increase in interest revenue of \$110,000 in 2017 compared to 2016 explained by higher cash balances in 2017.

#### Operating expenses

Overall operating expenses increased by \$3,112,000 to \$12,217,000 during Fiscal 2017 compared to Fiscal 2016. Explanations of the nature of costs incurred, along with explanations for those changes in costs are discussed below:

### Research and development expenses

R&D expenses include salaries and benefits, expenses associated with the Phase 1b and Phase 2 clinical trials of DPX-Survivac, clinical research and manufacturing of DPX-RSV and DPX-Survivac, consulting fees paid to various independent contractors with specific expertise required by the Corporation, the cost of animal care facilities, laboratory supplies, peptides and other chemicals, rental of laboratory facilities, insurance, as well as other non-material R&D related expenses.

The Corporation's R&D efforts and related expenses for Fiscal 2017 included costs surrounding the Corporation's clinical trials of DPX-Survivac, namely the Phase 1b clinical trial collaboration with Incyte in ovarian cancer, phase 2 clinical trial collaboration with Merck in ovarian cancer, phase 2 clinical trial collaboration with Merck in DLBCL and costs related to the Corporation's ongoing R&D activities associated with the investigation, analysis and evaluation of other potential vaccine candidates and technologies.

Research and development expenses consist of the following:

	Year Ended December 31, 2017 \$	Year Ended December 31, 2016 \$
General R&D expenses	1,070,000	1,226,000
DPX-Survivac preclinical and clinical expenses	2,312,000	1,281,000
Salaries and benefits	2,255,000	1,433,000
Stock-based compensation	185,000	158,000
Depreciation of equipment and amortization of intangible	83,000	75,000
<b>Total</b>	<b>5,905,000</b>	<b>4,173,000</b>

The decrease in general R&D expenses from \$1,216,000 for the year ended December 31, 2016 to \$1,070,000 in 2017 is attributable mainly to costs of approximately \$213,000 related to a research project the Corporation completed in 2016 to advance the DepoVax platform, which was mostly funded by government grant, as well as a \$77,000 decrease in DPX-RSV related expenditures. This is offset by a \$71,000 increase in research-based travel and a \$117,000 decrease in cost recoveries from collaborators.

The increase of \$1,031,000 in DPX-Survivac preclinical and clinical expenses for the year ended December 31, 2017 is mainly attributable to a \$721,000 increase in product development activities and procurement of raw materials for the manufacture of the third clinical lot of DPX-Survivac, as well as a \$358,000 increase in clinical trial costs related to the initiation of two investigator-sponsored Phase 2 clinical trials and the ongoing Phase 1B trial with Incyte. This is offset by a slight decrease in regulatory consulting costs.

The increase in R&D salaries of \$822,000 in Fiscal 2017 is mainly attributable to the hiring of a Chief Medical Officer late in 2016, a Senior Director of Quality Assurance in early 2017, the appointment of three employees who held a title of Director to the position of Vice President in August 2016 and other hiring.

### *General and administrative expenses*

G&A expenses consist of the following:

	<b>Year Ended December 31, 2017 \$</b>	<b>Year Ended December 31, 2016 \$</b>
General and administrative expenses, excluding salaries	2,173,000	1,850,000
Salaries and benefits	1,439,000	860,000
Stock-based and deferred share unit compensation	1,534,000	816,000
Depreciation of equipment	57,000	31,000
<b>Total</b>	<b>5,203,000</b>	<b>3,479,000</b>

For Fiscal 2017 G&A expenses, excluding salaries, increased by \$323,000 mainly due to a \$470,000 increase in legal fees for patent costs and general corporate matters and a \$55,000 increase in travel and conferences partly offset by a decrease of \$270,000 in management restructuring fees.

Salaries and benefits increased by \$579,000 for the year ended December 31, 2017 due to new Human Resource, Project Management and Contract Management positions created in late 2016, as well as an overall increase in compensation for the senior executive team and other hiring in 2017.

The increase in stock-based compensation in 2017 is mainly attributable to the Deferred Share Units (“DSUs”). An amount of \$356,000 represents the value of the DSUs issued during the year ended December 31, 2017 as part of the compensation of the non-executive members of the Board of Directors and the remaining \$791,000 represents the variation of the fair value during Fiscal 2017.

### *Government assistance*

Government assistance consists of the following:

	<b>Year Ended December 31, 2017 \$</b>	<b>Year Ended December 31, 2016 \$</b>
Investment tax credits (“ITC”)	537,000	279,000
Government loans and assistance	542,000	727,000
<b>Total</b>	<b>1,079,000</b>	<b>1,006,000</b>

The increase in investment tax credits for Fiscal 2017 is explained by the increase in R&D salaries and also includes an adjustment of \$65,000 to the estimated 2016 ITC receivable for changes in the expected recoverable amount.

The government assistance in 2017 relates mainly to the revaluation of the low-interest bearing government loan from the Province of Nova Scotia upon the receipt of the two-year extension. The government assistance in 2016 relates to a \$314,000 adjustment to the initial valuation of the fourth installment of the low-interest bearing government loan from the Province of Nova Scotia in the amount of \$1,250,000 and \$391,000 of funding received for a research project to advance the DepoVax platform.

### *Business development and investor relations expenses*

The Corporation’s business development and investor relations activities increased in Fiscal 2017 by \$544,000, compared to Fiscal 2016, to a total of \$1,222,000. This variation is mainly explained by an increase of \$364,000 in investor relations activities, a \$173,000 increase in marketing costs related to the rebranding of the Corporation, a \$46,000 increase in business development

travel and a \$100,000 increase related to an ongoing market study. This was partly offset by a \$59,000 and \$63,000 decrease in salary and benefits and stock-based compensation, respectively, relating to the Chief Business Officer being appointed Chief Executive Officer in April 2016.

#### *Accreted Interest*

Accreted interest relates entirely to the valuation of low-interest bearing government loans which are repayable based on a percentage of future gross revenue. The decrease is a result of a change in assumptions about the expected timing and amount of future cash flows.

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

The net loss and comprehensive loss was \$12,028,000 or \$0.10 per basic and diluted share for Fiscal 2017 which was \$3,132,000 higher than the net loss and comprehensive loss of \$8,896,000 or \$0.09 per basic and diluted share for Fiscal 2016.

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

At December 31, 2017, the Corporation had cash and cash equivalents of \$14,909,000 and working capital of \$13,627,000, compared to \$13,547,000 and \$12,982,000, respectively as at December 31, 2016.

Since the Corporation's inception, operations have been financed through the issuance of equity securities, debt, revenue from licenses, cost recoveries from collaborations, interest income on funds available for investment, government assistance and tax credits.

During the year ended December 31, 2017, \$8,995,000 was used in operating activities. This included the reported net loss of \$12,028,000 prior to being decreased for non-cash DSU compensation, non-cash depreciation, non-cash accretion and adjustments to long-term debt, and non-cash stock-based compensation. The Corporation had a net increase of cash of \$714,000 as a result of changes in working capital balances.

Sources of cash included: \$10,000,000 raised through financing activities less cash issuance costs of \$990,000; \$1,698,000 through the exercise of warrants; and \$109,000 through the exercise of stock options. The Corporation used \$72,000 to repay long-term debt during the period.

During the year ended December 31, 2017, the Corporation purchased equipment for ongoing research and operating activities for an aggregate amount of \$387,000.

The Corporation aims to maintain adequate cash and cash resources to support planned activities which include: the Phase 1b combination trial with DPX-Survivac and Incyte's IDO1 inhibitor epacadostat; initiation of the Phase 2 investigator-sponsored combination trial with DPX-Survivac and Merck's checkpoint inhibitor, pembrolizumab; initiation of the investigator sponsored Phase 2 triple combination clinical trial in patients with measurable or recurrent DLBCL; initiation of a basket trial in up to 5 new indications; and other research and development activities, business development efforts, administration costs, and intellectual property maintenance and expansion.

At December 31, 2017, the Corporation had approximately \$15.6 million of existing and identified potential sources of cash including:

- cash and equivalents of \$14.9 million; and
- amounts receivable and investment tax credits receivable of \$0.7 million.

In February 2018, the Corporation also completed the February 2018 Public Offering, raising gross proceeds of \$14,375,000 adding to the cash and cash equivalents available.

For the year ended December 31, 2017, the Corporation's "cash burn rate" (defined as net loss for the year adjusted for operations not involving cash (depreciation, stock-based compensation, DSU compensation, accreted interest and revaluation of long-term debt)) was \$9.7 million. Based on the current business plan, the Corporation forecasts the cash burn rate to be between \$3.5 million to \$4.5 million per quarter over the next 12 months, as it continues to execute: the Phase 1b combination trial with DPX-Survivac and Incyte's IDO1 inhibitor epacadostat; its Phase 2 investigator-sponsored combination trial in ovarian cancer with DPX-Survivac and Merck's checkpoint inhibitor pembrolizumab; it's the investigator sponsored Phase 2 triple combination clinical trial in patients

with measurable or recurrent DLBCL; and initiates a Phase 1b combination trial with DPX Survivac and a checkpoint inhibitor in up to five indications (basket trial).

It is common for early-stage biotechnology companies to require additional funding to further develop product-candidates until successful commercialization of at least one product candidate. Immunovaccine's product candidates are still in the early-development stage of the product cycle and therefore are not generating revenue to fund operations. The Corporation continuously monitors its liquidity position, the status of its development programs including those of its partners, cash forecasts for completing various stages of development, the potential to license or co-develop each vaccine candidate, and continues to actively pursue alternatives to raise capital, including the sale of its equity securities, debt and non-dilutive funding.

Management believes that its cash resources of \$14.9 million, its additional potential cash resources of \$0.7 million as at December 31, 2017, and the cash resources coming from the \$14.4 million financing completed in February 2018 will be sufficient to fund operations for the next twelve months while maintaining adequate working capital well into 2019. The Corporation continually reassesses the adequacy of its cash resources, evaluating existing clinical trials, research projects and/or potential collaboration opportunities, to determine when and how much additional funding is required.

#### **JUNE 2017 EQUITY OFFERING AND USE OF PROCEEDS**

On June 21, 2017, the Corporation completed the June 2017 Public Offering, issuing 7,692,308 common shares at a price of \$1.30 per share for aggregate proceeds of \$10,000,000. The Corporation intends to use the net proceeds of the June 2017 Public Offering for the research and development and clinical advancement of its cancer and infectious disease vaccine candidates and for working capital and general corporate purposes. The table below provides the amount used to date and any variances (except for working capital and general corporate purposes).

<b>Intended Use of Proceeds</b>	<b>Estimated amount</b> \$	<b>Amount to date</b> \$	<b>Variances</b>
Phase 2 clinical trial in DLBCL with a Merck	2,400,000	259,000	No variances anticipated
Phase 1 clinical trial for multiple indications	4,200,000	Nil	No variances anticipated

#### **FEBRUARY 2018 EQUITY OFFERING AND USE OF PROCEEDS**

On February 15, 2018, the Corporation completed the February 2018 Public Offering, issuing 7,187,500 common shares at a price of \$2.00 per share for aggregate proceeds of \$14,375,000. The Corporation intends to use the net proceeds of the February 2018 Public Offering to continue to advance the Corporation's pipeline and conduct a phase 1 basket trial in up to five indications to be identified, for research and development, working capital, and for general corporate purposes. The table below provides the amount used to date and any variances (except for working capital and general corporate purposes).

<b>Intended Use of Proceeds</b>	<b>Estimated amount</b> \$	<b>Amount to date</b> \$	<b>Variances</b>
Clinical trials in 2019	4,800,000	Nil	No variances anticipated
Research & development in 2019	5,300,000	Nil	No variances anticipated

#### **SUMMARY OF QUARTERLY RESULTS**

The following consolidated quarterly data was drawn from the audited annual consolidated financial statements and the unaudited interim condensed consolidated financial statements. All values discussed below are rounded to the nearest thousand. The information is reported on an IFRS basis.

Quarter Ended In	Total Revenue \$	Total Expenses \$	Loss \$	Basic and Diluted Loss Per Share \$
Q4 - December 31, 2017	66,000	4,997,000	(4,931,000)	(0.04)
Q3 - September 30, 2017	53,000	2,175,000	(2,122,000)	(0.02)
Q2 - June 30, 2017	36,000	2,642,000	(2,606,000)	(0.02)
Q1 - March 31, 2017	34,000	2,403,000	(2,369,000)	(0.02)
Q4 - December 31, 2016	21,000	3,762,000	(3,741,000)	(0.04)
Q3 - September 30, 2016	32,000	1,931,000	(1,899,000)	(0.02)
Q2 - June 30, 2016	81,000	1,486,000	(1,405,000)	(0.01)
Q1 - March 31, 2016	74,000	1,926,000	(1,852,000)	(0.02)

Revenues from quarter to quarter may vary significantly. Revenues are non-recurring by nature and are generated by license agreements as well as contract research agreements. It is also important to note that historical patterns of expenses cannot be taken as an indication of future expenses. The amount and timing of expenses and availability of capital resources vary substantially from quarter to quarter, depending on the level of R&D activities being undertaken at any time and the availability of funding from investors or collaboration partners.

**Results for the three months ended December 31, 2017 (“Q4 Fiscal 2017”), compared to the three months ended December 31, 2016 (“Q4 Fiscal 2016”).**

	Q4 Fiscal 2017 \$	Q4 Fiscal 2016 \$
Revenue	(66,000)	(21,000)
Research and development	2,296,000	1,179,000
General and administrative	2,370,000	1,330,000
Government assistance	(75,000)	(116,000)
Business development and investor relations	259,000	210,000
Accreted interest	147,000	1,159,000
Impairment loss	-	-
<b>Net loss and comprehensive loss for the period</b>	<b>4,931,000</b>	<b>3,741,000</b>

## Revenue

Revenue is composed of interest revenue and the increase from 2016 is explained by higher cash balances in Q4 Fiscal 2017.

## Operating expenses

Overall operating expenses increased by \$1,233,000 (33%) to \$4,995,000 during Q4 Fiscal 2017 compared to Q4 Fiscal 2016. Explanations for these changes in costs are discussed below:

### *R&D expenses*

The Corporation’s R&D efforts and related expenses for Q4 Fiscal 2017 included costs surrounding the Corporation’s clinical trials of DPX-Survivac namely - the Phase 1b clinical trial collaboration with Incyte in ovarian cancer, phase 2 clinical trial collaboration with Merck in ovarian cancer, phase 2 clinical trial collaboration with Merck in DLBCL and costs related to the Corporation’s ongoing R&D activities associated with the investigation, analysis and evaluation of other potential vaccine candidates and technologies.

Research and development expenses consist of the following:

	Q4 Fiscal 2017 \$	Q4 Fiscal 2016 \$
General research and development expenses	327,000	348,000
DPX-Survivac preclinical and clinical expenses	1,124,000	255,000
Salaries and benefits	795,000	516,000
Stock-based compensation	23,000	40,000
Depreciation of equipment and amortization of intangible	27,000	20,000
<b>Total</b>	<b>2,296,000</b>	<b>1,179,000</b>

The decrease in general R&D expenses from \$348,000 in Q4 Fiscal 2016 to \$327,000 in Q4 Fiscal 2017 is attributable mainly to a \$14,000 decrease in DPX-RSV related expenditures.

The increase of \$869,000 in DPX-Survivac preclinical and clinical expenses in Q4 Fiscal 2017 is mainly attributable to a \$444,000 increase in the purchase of raw materials for the manufacture of the third clinical lot of DPX-Survivac, a \$75,000 increase in costs related to the Phase 1b clinical trial collaboration with Incyte in ovarian cancer patients, a \$105,000 increase in costs related to the initiation of the phase 2 clinical trial collaboration with Merck in ovarian cancer, and a \$237,000 increase in costs related to the initiation of the phase 2 clinical trial collaboration with Merck in DLBCL.

The increase in R&D salaries of \$279,000 in Q4 Fiscal 2017 is mainly attributable to the hiring of a Chief Medical Officer late in 2016, a Senior Director of Quality Assurance in early 2017 and other hiring in the department in 2017.

*General and administrative expenses*

G&A expenses consist of the following:

	Q4 Fiscal 2017 \$	Q4 Fiscal 2016 \$
General and administrative expenses, excluding salaries	962,000	620,000
Salaries and benefits	606,000	354,000
Stock-based compensation	782,000	338,000
Depreciation of equipment	20,000	18,000
<b>Total</b>	<b>2,370,000</b>	<b>1,330,000</b>

G&A expenses, excluding salaries, increased by \$342,000 in Q4 Fiscal 2017 mainly due to a \$334,000 increase in legal fees for patent cost and general corporate matters.

Salaries and benefits increased by \$252,000 in Q4 Fiscal 2017 due to new Human Resource, Project Management and Contract Management positions created in late 2016 as well as an overall increase in compensation for the senior executive team, other hiring and higher bonuses in 2017 as a result of 100% achievement of the Corporation's 2017 objectives.

The increase in stock-based compensation in Q4 Fiscal 2017 is mainly attributable to the DSUs. An amount of \$89,000 (2016 - \$224,000) represents the value of the DSUs issued during the three months ended December 31, 2017 as part of the compensation for the non-executive members of the Board of Directors and the remaining \$663,000 represents the variation in fair value of outstanding DSUs during Q4 Fiscal 2017.

### *Business development and investor relations expenses*

The Corporation's business development and investor relations activities increased in Q4 Fiscal 2017 by \$49,000, compared to Q4 Fiscal 2016, to a total of \$259,000. This is mainly due to a \$83,000 increase in investor relations activities offset by a decrease of \$10,000 in business development activities and a \$24,000 increase in marketing and public relations activities.

### *Accreted Interest*

Accreted interest relates entirely to the valuation of low-interest bearing government loans which are repayable based on a percentage of future gross revenue. The decrease is a result of a change in assumptions about the expected timing and amount of future cash flows.

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

The net loss and comprehensive loss was \$4,931,000 or \$0.04 per basic and diluted share for Q4 Fiscal 2017, which is \$1,190,000 higher than the net loss and comprehensive loss of \$3,741,000 or \$0.03 per basic and diluted share for Q4 Fiscal 2016.

### **OUTLOOK FOR 2018**

The Corporation has many clinical studies ongoing and expects the following timing to disclose results for the following studies:

<b>Product/study</b>	<b>Partner</b>	<b>Indication</b>	<b>Type of results</b>	<b>Expected Timing</b>
DPX-Survivac – Phase 1b	Incyte	Ovarian cancer	Top line clinical results 300mg cohort	Mid-2018
DPX-Survivac – Phase 2	Merck	Ovarian cancer	Interim clinical results	Mid-2018
DPX-Survivac – Phase 2	Merck	DLBCL	Preliminary clinical results	Mid-2018
DPX-E7 – Phase 1/Phase 2	Dana-Farber	HPV related cancers	Interim clinical results	Mid-2018

The exact timing of disclosure of the above results could differ from our expectations but are currently management's best estimate.

### **RELATED PARTY TRANSACTIONS**

During Fiscal 2017, there were no related party transactions (Fiscal 2016 - \$nil).

## CONTRACTUAL OBLIGATIONS

The following table outlines the contractual maturities for long-term debt repayable over the next five years and thereafter:

Contractual Obligations	Payments Due by Period				
	Total	Less than 1 year	1 - 3 years	4 - 5 years	After 5 years
Accounts payable and accrued liabilities	2,760,228	2,760,228	-	-	-
Amounts due to directors	21,245	21,245	-	-	-
Long-term debt	15,402,083	220,408	5,381,154	117,206	9,683,315
Operating leases	2,536,415	253,193	497,585	481,412	1,304,225
<b>TOTAL</b>	<b>20,719,971</b>	<b>3,255,074</b>	<b>5,878,739</b>	<b>598,618</b>	<b>10,987,540</b>

## OFF-BALANCE SHEET ARRANGEMENTS

The Corporation was not party to any off-balance sheet arrangements as of December 31, 2017.

## OUTSTANDING SECURITIES

The number of issued and outstanding common shares on March 20, 2018 is 137,106,558. A total of 11,355,339 stock options, warrants, and deferred share units were outstanding on March 20, 2018.

## SUBSEQUENT EVENT TO DECEMBER 31, 2017

On February 15, 2018, the Corporation completed the February 2018 Public Offering, issuing an aggregate of 7,187,500 common shares at a price of \$2.00 per common share and raising gross proceeds of \$14,375,000. The Corporation intends to use the net proceeds of the February 2018 Public Offering to continue to advance the Corporation's pipeline and conduct a phase 1 basket trial in up to five indications to be identified, for research and development, for working capital, and for general corporate purposes.

## RISKS AND UNCERTAINTIES

The Corporation is a clinical-stage company that operates in an industry that is dependent on a number of factors that include the capacity to raise additional capital on reasonable terms, obtain positive results of clinical trials - including clinical trials on DPX-Survivac, obtain positive results of clinical trials without serious adverse or inappropriate side effects, and obtain market acceptance of its product by physicians, patients, healthcare payers and others in the medical community for commercial success, etc. An investment in the Corporation's common shares is subject to a number of risks and uncertainties. An investor should carefully consider the risks described in the Corporation's AIF and the other information filed with the Canadian securities regulators before investing in the Corporation's common shares. If any of the such described risks occur, or if others occur, the Corporation's business, operating results and financial condition could be seriously harmed and investors may lose a significant proportion of their investment.

There are important risks which management believes could impact the Corporation's business. For information on risks and uncertainties, please also refer to the "Risk Factors" section of our most recent AIF filed on SEDAR at [www.sedar.com](http://www.sedar.com).

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

Under applicable securities laws, the Corporation's Chief Executive Officer and Chief Financial Officer certify on the design of the disclosure controls and procedures ("DC&P") and the internal controls over financial reporting ("ICFR") of the Corporation. 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 and 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. The control framework used by the Chief Executive Officer and Chief Financial Officer of the Corporation to design the Corporation's ICFR is the Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of the Corporation's DC&P and ICFR. They concluded that as of December 31, 2017, the Corporation's design and operation of its DC&P and ICFR were effective in providing reasonable assurance that material information regarding this MD&A, and the annual consolidated financial statements and other disclosures was made known to them on a timely basis and reported as required and that the financial statements present fairly, in all material aspects, the financial position of the Corporation as of December 31, 2017. The Chief Executive Officer and Chief Financial Officer also concluded that no material weaknesses existed in the design of the ICFR.

There have been no changes in the Corporation's ICFR that occurred during the year ended December 31, 2017 that have materially affected or are reasonably likely to materially affect the Corporation's ICFR.

## **BASIS OF PRESENTATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES**

The consolidated financial statements have been prepared in accordance with the IFRS as issued by the IASB. The accounting policies, methods of computation and presentation applied in the consolidated financial statements are consistent with those of previous financial year except for the presentation of government assistance now presented as a separate item in the consolidated statements of loss and comprehensive loss and the interest revenue now presented as part of the revenue. Certain comparative figures have been reclassified to conform the presentation adopted in the current year for government assistance and interest revenue.

The significant accounting policies of Immunovaccine are detailed in the notes to the audited consolidated financial statements for the year ended December 31, 2017 filed on SEDAR at [www.sedar.com](http://www.sedar.com).

## **CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS**

Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The determination of estimates requires the exercise of judgement based on various assumptions and other factors such as historical experience and current and expected economic conditions. Actual results could differ from those estimates.

Critical judgements in applying the Corporation's accounting policies are detailed in the audited consolidated financial statements for the year ended December 31, 2017 filed on SEDAR at [www.sedar.com](http://www.sedar.com).

## **FINANCIAL INSTRUMENTS**

Financial instruments are defined as a contractual right or obligation to receive or deliver cash on another financial asset. The Corporation recognizes financial instruments based on their classification. Depending on the financial instrument's classification, changes in subsequent measurements are recognized in net loss or other comprehensive loss.

A description of the financial instruments, their fair value and risk management is included in the Corporation's audited consolidated financial statements for the year ended December 31, 2017 filed on SEDAR at [www.sedar.com](http://www.sedar.com).

**(Signed) Frédéric Ors**

Frédéric Ors  
Chief Executive Officer

**(Signed) Pierre Labbé**

Pierre Labbé  
Chief Financial Officer

**March 20, 2018**