



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

**For the three-month period ended March 31, 2018**

## LETTER TO SHAREHOLDERS

Dear Fellow Shareholders,

In continuing to deliver value to its shareholders and partners, IMV has made remarkable progress this quarter in validating its potential in immuno-oncology. Since the beginning of 2018 IMV has expanded its clinical collaboration with Incyte, observed the dosing of first patients in both Phase 2 combination trials evaluating DPX-Survivac with Merck's checkpoint inhibitor, pembrolizumab, and completed a \$14.375 million financing that provides funds for the Corporation through Q4 of 2019 which is beyond our major upcoming clinical milestones. These achievements have significantly advanced its programs, and together with the anticipated milestones – including an oral presentation at this year's ASCO conference and early data read-outs from the Phase 2 combination trials with Merck, we look forward to further indications of DPX-Survivac advancing immunotherapy options.

These achievements have come at a critical time in the Corporation's history, as it is now entering a new phase of anticipated growth having announced plans to list its common shares on the Nasdaq exchange, as well as a change to the Company's name, from Immunovaccine to IMV, to better reflect the technologies.

### Clinical program update

DPX-Survivac

- *Phase 1b clinical trial in ovarian cancer with Incyte*  
Shortly following the end of the quarter, IMV announced an agreement with Incyte Corporation to expand the companies' clinical trial collaboration, adding a Phase 2 component to the ongoing combination study. The Phase 2 arm will evaluate DPX-Survivac and low dose cyclophosphamide with, and without, Incyte's epacadostat in advanced ovarian cancer patients. In accordance with regulatory guidelines for combination trials, the goal of this portion of the program is to evaluate the clinical contribution of each investigational drug in the combination regimen.
- *Phase 2 clinical trial in Diffuse large B-cell lymphoma (DLBCL) with Merck*  
On March 28, 2018, the Corporation announced that the first patient was treated in the Phase 2 study combining DPX-Survivac, low-dose cyclophosphamide, and Merck's checkpoint inhibitor, pembrolizumab, in patients with persistent or recurrent/refractory DLBCL.
- *Phase 2 clinical trial in ovarian cancer with Merck*  
During the first quarter, clinicians treated the first patient in the investigator-sponsored Phase 2 clinical trial evaluating DPX-Survivac, in combination with Merck's checkpoint inhibitor pembrolizumab, in patients with recurrent, platinum-resistant ovarian cancer.

### Operational highlights of Q1 2018 to-date include:

- **Potential Nasdaq listing:** In May 2018, IMV announced that it has applied to list its common shares on the Nasdaq Stock Market LLC. In connection with the planned U.S. listing, and as previously authorized by its shareholders at more than 99%, the Corporation has implemented a consolidation of its outstanding common shares that was done on the basis of one new common share for every 3.2 outstanding common shares at the date of the consolidation, and changed its name to IMV Inc. The company currently anticipates that, subject to the receipt of all required approvals, its common shares would begin trading on the Nasdaq before the end of Q2 2018.
- **Completion of a bought deal public offering:** In February 2018, IMV completed a bought deal public offering of common shares of the Corporation, including the exercise of the overallotment option-in-full. An aggregate of 7,187,500 common shares pre-consolidation (2,246,094 post-consolidation) were issued at a price of \$2.00 per common share pre-consolidation (\$6.40 post-consolidation). IMV raised \$14.375 million in gross proceeds.
- **Strengthening the management team:** The Corporation named Joseph Sullivan to the newly created role of Senior Vice-President, Business Development, in February 2018. Mr. Sullivan brings over 25 years of global pharmaceutical and vaccine experience with Merck & Co. Inc. to his new position at IMV.

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

- *Phase 1b clinical trial in ovarian cancer with Incyte*
  - Oral presentation at the 2018 American Society of Clinical Oncology (ASCO) annual meeting on June 3, 2018
  - Top line clinical results with the 300mg dose of Incyte's epacadostat at ASCO
  - Update on the 300mg dose of epacadostat clinical results in Q3 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 DLBCL with Merck*
  - Preliminary clinical results around mid-year
  - Top line clinical results around the end of the year or beginning of 2019

We are celebrating the great progress we have recently made, and we anticipate tremendous opportunities that will continue to improve immunotherapy treatment options, particularly in underserved cancers. We are grateful for the continued support of our partners, Incyte and Merck, as well as our shareholders and investors, and look forward to another productive quarter.



Frederic Ors  
Chief Executive Officer

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

The following analysis provides a review of the unaudited interim condensed consolidated results of operations, financial condition and cash flows for the three months ended March 31, 2018 (“Q1 2018”), with information compared to the three months ended March 31, 2017 (“Q1 2017”), for IMV Inc. – formerly Immunovaccine Inc. (“IMV” 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 May 14, 2018, the date when the Board of Directors approved the Corporation’s unaudited interim condensed consolidated financial statements for the three months ended March 31, 2018 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 May 14, 2018, the date of the Board's approval of the Q1 2018 unaudited interim condensed 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 IMV filed on SEDAR at [www.sedar.com](http://www.sedar.com).

## **CORPORATE OVERVIEW**

IMV is a clinical-stage company pioneering a new class of immunotherapies based on a disruptive drug delivery technology (DPX) with potential applications in multiple markets in cancer, infectious diseases and other therapeutic areas. The DPX platform is based on a novel mechanism of action (MOA) for targeted delivery of active ingredients to immune cells using a patented lipid nanoparticle technology. The Corporation leverages this MOA to generate a new generation of therapeutic capabilities with a primary focus on T cell therapies for cancer.

The Corporation's first cancer immunotherapy uses survivin-based peptides licensed from Merck KGaA, on a world-wide exclusive basis, formulated in DPX. Survivin is a well characterized and recognized tumor associated antigen known to be expressed during fetal development and across most tumour cell types, but is rarely present in normal, non-malignant adult cells. It has been shown that survivin was expressed in all 60 different human tumour lines used in the National Cancer Institute's cancer drug-screening program.

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 also 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 "IMMVD".

## **BUSINESS MODEL AND STRATEGY**

IMV 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, DPX, is to promote

uptake and extend exposure of antigens to cells of the immune system, which enhances and sustains immune responses. This allows IMV 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 DPX platform.

The Corporation has a clinical-stage cancer immunotherapy, DPX-Survivac. IMV 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 DPX 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. IMV 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 DPX 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 DPX platform to selected partners. The Corporation is also exploring new applications of the DPX 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 DPX platform is a unique and patented formulation providing a new way to deliver active ingredients to the immune system. It relies on a no release MOA forcing an active uptake by antigen presenting cells.

IMV is exploiting this MOA to pioneer a new class of Immunotherapy that represents a paradigm shift from current approaches. By not releasing the active ingredients at the site of injection it bypasses the steps involved in conventional immune "native responses" such as vaccines and enables to directly access and program immune cells in-vivo to generate new "synthetic" therapeutic capabilities

Active ingredients are formulated in lipid nanoparticles and, after freeze drying, suspended directly into oil. DPX has a novel mechanism of action whereby it promotes uptake and extends delivery to the immune system. The DPX platform forms the basis of all of IMV's product development programs.

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







In infectious diseases, DPX-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 DPX platform can be combined with a variety of active ingredients, 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. DPX-based products are lyophilized and stored in a dry format, which provides the added benefit of an extended shelf life. The DPX formulation is designed to be easy to re-suspend and administer.

The ongoing clinical studies with DPX-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 + epacadostat	Phase 1b/2	Ongoing	
	DPX-Survivac + mCPA + pembrolizumab	Phase 2	Ongoing	
DLBCL	DPX-Survivac + mCPA + pembrolizumab	Phase 2	Ongoing	
HPV related cancer	DPX-E7 + mPCA	Phase 2	Ongoing	  

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

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

DPX-Survivac uses survivin-based peptides licensed from Merck KGaA, on a world-wide exclusive basis, formulated in DPX. Survivin is a major tumor-associated antigen over-expressed in many cancers, making it a viable target for a broadly applicable immunotherapy. DPX 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 IMV's novel T cell activating immunotherapy, DPX-Survivac, with Incyte's investigational oral IDO1 inhibitor, epacadostat. IMV 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. IMV 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.

On April 24, 2018, the Corporation announced that it has entered into an agreement with Incyte Corporation to expand their ongoing clinical trial collaboration. The Companies plan to add a Phase 2 component to their ongoing Phase 1b combination study evaluating the safety and efficacy of IMV’s lead candidate, DXP-Survivac, in combination with Incyte’s IDO1 enzyme inhibitor epacadostat and low dose cyclophosphamide in advanced ovarian cancer patients.

The Phase 2 component will be a randomized, open label, efficacy study that will include up to 32 additional evaluable subjects. It will evaluate DPX-Survivac and low dose cyclophosphamide with, and without, epacadostat in patients with advanced recurrent ovarian cancer. In accordance with regulatory guidelines for combination trials, the goal of this portion of the program is to evaluate the clinical contribution of each investigational drug in the combination regimen.

The Phase 2 arm of the study will be conducted under an amendment to the existing collaboration, in which IMV and Incyte are co-funding the trial.

The Corporation currently anticipates that, in addition to general clinical expenses which are distributed amongst its various clinical projects, its share of the cost (50%) to complete the Phase 1b/2 clinical trial with Incyte will be approximately \$2,000,000 of which \$1,000,000 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 assessed with its partner based on the clinical trial 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 costs to complete this study, that are expected to occur in 2018, will be approximately \$400,000.

#### *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 IMV’s lead product candidate, DPX-Survivac, along with Merck’s pembrolizumab and low-dose cyclophosphamide in this patient population. On March 28, 2018, the Corporation announced that the first patient has been treated.

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 will be spent 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 IMV’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.

IMV 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 IMV’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. IMV has the option to produce the DPX-E7 vaccine if it proves successful in the clinical trials.

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

## **INFECTIOUS DISEASES**



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

#### *Product Overview*

A significant component of the Corporation's business strategy is partnering the DPX platform within infectious and other diseases. The DPX 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 IMV is seeking to develop a novel vaccine formulation to be used in elderly and healthy adults, including women of child-bearing age. IMV 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 DPX 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 IMV's proprietary DPX 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 DPX-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.





In July 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.

In October 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 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.

IMV 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	
Zika	Peptides in DepoVax	Preclinical Ongoing	
BVDV	Antigens in DepoVax	Animal trials	
Contraceptive	Antigens in DepoVax	Animal trials	

### Malaria

In 2016, IMV was awarded a subcontract by Leidos, a health, national security, and infrastructure solutions company, to evaluate IMV's DPX™ 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.

In November, 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 DPX-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

IMV 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 IMV's research project in which the Corporation will apply its DPX 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. IMV will then formulate new antigens in its DPX 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

In August, 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 IMV formulations met efficacy and duration of immunity end-points against two disease targets. These results will enable Zoetis to advance two IMV-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.

In April 2018, IMV signed a licensing agreement and granted SpayVac-for-Wildlife (SFW Inc.) a license to two of its proprietary delivery platforms. SFW Inc. have global exclusive rights to use both of these platforms to develop humane, immunocontraceptive vaccines for control of overabundant, feral and invasive wildlife populations against royalties on sales.

## **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 QUARTERLY DEVELOPMENTS**

### *Key developments and achievements*

The Corporation announced:

- On May 3, 2018, that it has applied to list its common shares on the Nasdaq Stock Market LLC ("Nasdaq"). In connection with the planned U.S. listing, and as previously authorized by its shareholders at more than 99%, the Corporation has implemented a consolidation of its outstanding common shares, and changing the Corporation name to IMV Inc.

The consolidation has been done on the basis of one new common share for every 3.2 outstanding common shares. The consolidation has taken effect on May 2, 2018, and the Corporation's common shares commenced trading on the Toronto Stock Exchange under the name IMV Inc. on a post-consolidation basis on May 10, 2018. There were 137,383,353 common shares issued and outstanding before the consolidation, and it is expected that there will be 42,932,315 common shares issued and outstanding following the consolidation, subject to rounding for any fractional shares. No fractional shares will be issued as a result of the share consolidation. Fractional interests of 0.5 or greater were rounded up to the nearest whole number of shares and fractional interests of less than 0.5 were rounded down to the nearest whole number of common shares.

The Corporation currently anticipates that, subject to the receipt of all required approvals, its common shares would begin trading on the Nasdaq before the end of Q2 2018. The listing of the Corporation's common shares on the Nasdaq listing remains subject to the approval of that exchange and the satisfaction of all applicable listing requirements

Concurrently with the consolidation and as previously authorized by its shareholders, the Corporation has changed its name from "Immunovaccine Inc." to "IMV Inc." This change has been implemented in an effort to ensure that its corporate denomination does not convey any ambiguities as to the nature of the activities and technologies of the Corporation, which are not limited to vaccines;

- On April 24, 2018, that it has entered into an agreement with Incyte Corporation to expand their ongoing clinical trial collaboration. The Companies plan to add a Phase 2 component to their ongoing Phase 1b combination study evaluating the safety and efficacy of IMV's lead candidate, DPX-Survivac, in combination with Incyte's IDO1 enzyme inhibitor epacadostat and low dose cyclophosphamide in advanced ovarian cancer patients.

The Phase 2 component will be a randomized, open label, efficacy study that will include up to 32 additional evaluable subjects. It will evaluate DPX-Survivac and low dose cyclophosphamide with, or without, epacadostat in patients with advanced recurrent ovarian cancer. In accordance with regulatory guidelines for combination trials, the goal of this portion of the program is to evaluate the clinical contribution of each investigational drug in the combination regimen.

The Phase 2 arm of the study will be conducted under an amendment to the existing collaboration, in which IMV and Incyte are co-funding the trial;

- On April 16, 2018, the presentation of new research on its T cell activating platform at the American Association for Cancer Research (AACR) annual meeting 2018. In collaboration with Incyte Corp., researchers presented a poster supporting the enhanced anti-cancer immune responses from the combination of IMV's proprietary T cell activating technology and Incyte's IDO1 inhibitor program. A second poster analyzed the novel capability, as compared with other formulation technologies, of IMV's delivery technology to combine a large range of anti-cancer peptides into a single formulation.

In the poster titled, "Combination of a T cell activating immunotherapy with immune modulators alters the tumour microenvironment and promotes more effective tumour control in preclinical models," researchers presented new preclinical analysis on the combination of IMV's DPX-based therapies, Incyte's epacadostat and low-dose cyclophosphamide in tumour models. As part of the analysis, researchers also examined the potential for heightened tumour response from T cell infiltration in the tumour microenvironment. The study indicated that the triple combination immunotherapy demonstrated a significant delay in tumour progression. Analysis of the T cells suggested that other immune modulating therapies, such as checkpoint inhibitors, could additionally enhance tumour control.

Related to IMV's neoepitope program, researchers presented the poster, "A novel delivery platform containing up to 25 neoantigens can induce robust immune responses in a single formulation." This study investigated the effects on immune response when formulating a broad range of peptides across multiple delivery technologies, including the Corporation's proprietary formulation. The study indicated that IMV's novel technology could incorporate at least 25 neoantigens into a single formulation, which generated strong CD8 and T cell responses, in excess of those induced by other formulations;

- On March 28, 2018, the first patient was treated in IMV Inc.'s phase 2 study combining DPX-Survivac with low-dose cyclophosphamide administered with pembrolizumab in patients with persistent or recurrent/refractory DLBCL;
- On February 15, 2018, that it 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 I 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 resource 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 IMV's platform for immunotherapeutic stimulation with other technologies.

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 IMV'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; and

- 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 IMV. His experience includes launching two blockbuster products, licensing new indications, growing business franchises and forming external collaborations to expand market access.

At IMV, 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.

## SELECTED FINANCIAL INFORMATION

	<b>Three months ended March 31, 2018</b>	<b>Three months ended March 31, 2017</b>
	\$	\$
Net loss and comprehensive loss for the period	3,067,000	2,369,000
Basic and diluted loss per share	0.07	0.06

	As at March 31, 2018 \$	As at December 31, 2017 \$
Cash and cash equivalents	24,019,000	14,909,000
Total assets	26,904,000	17,032,000
Long term debt	6,725,000	6,476,000

**RESULTS FOR THE THREE MONTHS ENDED MARCH 31, 2018, COMPARED TO THE THREE MONTHS ENDED MARCH 31, 2017**

	Three months ended March 31, 2018 \$	Three months ended March 31, 2017 \$
Revenue	(96,000)	(34,000)
Research and development	1,882,000	1,009,000
General and administrative	921,000	1,032,000
Business development and investor relations	369,000	271,000
Government assistance	(275,000)	(177,000)
Accreted interest	266,000	268,000
<b>Net loss and comprehensive loss for the period</b>	<b>3,067,000</b>	<b>2,369,000</b>

**Revenue**

Revenue increased by \$62,000 in Q1 2018 in comparison with Q1 2017. An increase in interest revenue of \$35,000 in Q1 2018 compared to Q1 2017 explained by higher cash balances in Q1 2018. The remainder of the increase is attributable to a \$27,000 increase in other revenue.

**Operating expenses**

Overall operating expenses increased by \$760,000 to \$3,163,000 during Q1 2018 compared to Q1 2017. 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 Q1 2018 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 product candidates and technologies.

Research and development expenses consist of the following:



	Three months ended March 31, 2018 \$	Three months ended March 31, 2017 \$
General R&D expenses	427,000	209,000
DPX-Survivac preclinical and clinical expenses	715,000	267,000
Salaries and benefits	647,000	450,000
Stock-based compensation	69,000	69,000
Depreciation of equipment and amortization of intangible	24,000	14,000
<b>Total</b>	<b>1,882,000</b>	<b>1,009,000</b>

The increase in general R&D expenses from \$209,000 for Q1 2017 to \$427,000 in Q1 2018 is mainly attributable to a \$63,000 increase in professional fees and consulting for analysis of clinical results, a \$50,000 increase in raw materials and supplies, and \$45,000 for research-based travel and conferences.

The increase of \$448,000 in DPX-Survivac preclinical and clinical expenses for Q1 2018 is mainly attributable to higher enrollment in the Phase 1B Incyte trial in ovarian cancer compared with Q1 2017 and milestone payments for the initiation of the Phase 2 study in DLBCL and Phase 2 study in ovarian.

The increase in R&D salaries of \$202,000 in Q1 2018 is mainly attributable to hiring of new employees in the second half in 2017 and since the beginning of 2018 and annual salary increases.

#### *General and administrative expenses*

G&A expenses consist of the following:

	Three months ended March 31, 2018 \$	Three months ended March 31, 2017 \$
General and administrative expenses, excluding salaries	574,000	328,000
Salaries and benefits	398,000	249,000
Stock-based and deferred share unit compensation	(70,000)	448,000
Depreciation of equipment	19,000	7,000
<b>Total</b>	<b>921,000</b>	<b>1,032,000</b>

For Q1 2018 G&A expenses, excluding salaries, increased by \$246,000 mainly explained by an increase of \$135,000 in professional and consulting fees related to recruitment and the annual general meeting. Legal fees related to general corporate matters increased by \$73,000 related to Nasdaq listing preparation.

Salaries and benefits increased by \$149,000 in Q1 2018 due to an overall increase in compensation for the senior executive team, the fact that the CFO was there for the entire quarter in 2018 compared to one month in 2017 and other hiring in the second half of 2017 and beginning of 2018.

The decrease in stock-based and deferred share unit compensation in Q1 2018 is explained by a decrease of \$157,000 in stock-based compensation as less stock options vested in Q1 2018 compared to Q1 2017, and a decrease of \$362,000 in deferred share units ("DSU") compensation. The decrease in DSU compensation is mainly attributable to the decrease in the fair value of the DSUs outstanding at the end of 2017 during Q1 2018.

### *Government assistance*

Government assistance consists of the following:

	<b>Three months ended March 31, 2018</b>	<b>Three months ended March 31, 2017</b>
	<b>\$</b>	<b>\$</b>
Investment tax credits (“ITC”)	259,000	163,000
Government loans and assistance	16,000	14,000
<b>Total</b>	<b>275,000</b>	<b>177,000</b>

The increase in investment tax credits for Q1 2018 is explained by the increase in R&D salaries and also includes an adjustment of \$79,000 to the estimated 2017 ITC receivable for changes in the expected recoverable amount.

### *Business development and investor relations expenses*

The Corporation’s business development and investor relations activities increased in Q1 2018 by \$98,000, compared to Q1 2017, to a total of \$369,000. This variation is mainly explained by a \$58,000 and \$33,000 increase in salary and benefits and stock-based compensation, respectively, relating to the hiring of the Senior Vice President, Business Development, an increase of \$24,000 in investor relations activities and a \$35,000 increase in travel. This was partly offset by a \$68,000 decrease in marketing costs related to the rebranding of the Corporation occurring in 2017.

### *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 and is comparable to 2017.

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

The net loss and comprehensive loss was \$3,067,000 or \$0.07 per basic and diluted share for Q1 2018 which was \$698,000 higher than the net loss and comprehensive loss of \$2,369,000 or \$0.06 per basic and diluted share for Q1 2017.

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

At March 31, 2018, the Corporation had cash and cash equivalents of \$24,019,000 and working capital of \$24,067,000, compared to \$14,909,000 and \$13,627,000, respectively as at December 31, 2017.

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 Q1 2018, \$4,057,000 was used in operating activities. This included the reported net loss of \$3,067,000 prior to being decreased for non-cash DSU compensation, non-cash depreciation, non-cash accretion to long-term debt and lease obligations, and non-cash stock-based compensation. The Corporation had a net decrease of cash of \$1,333,000 as a result of changes in working capital balances.

Sources of cash included: \$14,375,000 raised through financing activities less cash issuance costs of \$1,148,000; and \$15,000 through the exercise of stock options. The Corporation used \$21,000 to repay long-term debt and lease obligations during the period.

During Q1 2018, the Corporation purchased equipment for ongoing research and operating activities for an aggregate amount of \$54,000.

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 March 31, 2018, the Corporation had approximately \$25.1 million of existing and identified potential sources of cash including:

- cash and equivalents of \$24 million; and
- amounts receivable and investment tax credits receivable of \$1.1 million.

For Q1 2018, the Corporation’s “cash burn rate” (defined as net loss for the period adjusted for operations not involving cash (depreciation, stock-based compensation, DSU compensation, accreted interest and revaluation of long-term debt) was \$2.7 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 in 2018, 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. IMV’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 \$24 million, its additional potential cash resources of \$1.1 million as at March 31, 2018 will be sufficient to fund operations for the next twelve months while maintaining adequate working capital well up to the fourth quarter of 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 a public offering, issuing 7,692,308 common shares common shares pre-consolidation (2,403,846 post-consolidation) at a price of \$1.30 per share pre-consolidation (\$4.16 post-consolidation) for aggregate proceeds of \$10,000,000. The Corporation intends to use the net proceeds of this 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	373,000	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 a public offering, issuing 7,187,500 common shares pre-consolidation (2,246,094 post-consolidation) at a price of \$2.00 per share pre-consolidation (\$6.40 post-consolidation) for aggregate proceeds of

\$14,375,000. The Corporation intends to use the net proceeds of this 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.

<b>Quarter Ended In</b>	<b>Total Revenue \$</b>	<b>Total Expenses \$</b>	<b>Loss \$</b>	<b>Basic and Diluted Loss Per Share \$</b>
<i>Q1</i> – March 31, 2018	96,000	3,163,000	(3,067,000)	(0.07)
<i>Q4</i> - December 31, 2017	66,000	4,997,000	(4,931,000)	(0.13)
<i>Q3</i> - September 30, 2017	53,000	2,175,000	(2,122,000)	(0.06)
<i>Q2</i> – June 30, 2017	36,000	2,642,000	(2,606,000)	(0.06)
<i>Q1</i> – March 31, 2017	34,000	2,403,000	(2,369,000)	(0.06)
<i>Q4</i> - December 31, 2016	21,000	3,762,000	(3,741,000)	(0.013)
<i>Q3</i> - September 30, 2016	32,000	1,931,000	(1,899,000)	(0.06)
<i>Q2</i> - June 30, 2016	81,000	1,486,000	(1,405,000)	(0.03)

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.

## OUTLOOK FOR THE REMAINDER OF 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
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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 Q1 2018, there were no related party transactions (Q1 2017 - \$nil).

## **CONTRACTUAL OBLIGATIONS**

There is no material change in the contractual obligations of the Corporation since the beginning of the 2018 fiscal year. Details on the contractual obligations of the Corporation can be found in the in the audited consolidated financial statements and related notes for the year ended December 31, 2017.

## **OFF-BALANCE SHEET ARRANGEMENTS**

The Corporation was not party to any off-balance sheet arrangements as of March 31, 2018.

## **OUTSTANDING SECURITIES**

The number of issued and outstanding common shares on May 14, 2018 is 42,960,767. A total of 3,972,700 stock options, warrants, and deferred share units were outstanding on May 14, 2018.

## **SUBSEQUENT EVENT TO MARCH 31, 2018**

On May 2, 2018, the Corporation completed a share consolidation on the basis of one new common share for every 3.2 currently outstanding shares. Effective at the opening of trading on May 10, 2018, the Corporation’s common shares commenced trading on the Toronto Stock Exchange on a consolidated basis.

## **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 March 31, 2018, 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 March 31, 2018. 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 March 31, 2018 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 IMV 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

**May 14, 2018**