Management’s Report on Financial Position and Operating Results

For the year ended December 31, 2019
LETTER TO SHAREHOLDERS

Dear Fellow Shareholders,

The 2019 novel coronavirus pandemic (COVID-19) has caused the greatest global disruption many of us have seen in our lifetimes. It has significantly impacted businesses across all sectors and the Healthcare industry is not spared.

As the COVID-19 pandemic continues to spread, we have taken precautionary measures to prioritize the health and safety of our employees, patients, investigators and each of their families. In parallel, we remain committed to serving the unmet needs of patients, both through our efforts to develop a prophylactic vaccine to curb this novel coronavirus and across clinical studies of DPX-Survivac in advanced-stage cancer patients, which are ongoing.

Amidst these very challenging times we have implemented measures to ensure the continuity of our business and clinical operations, and launched the development of vaccine against COVID-19 (“DPX-COVID-19”). We are proud to be working on a vaccine solution with the potential to contribute to the global fight against COVID-19 pandemic.

At IMV, we are leveraging the versatility of our platform to produce targeted immunotherapies and vaccines that can program immune cells in vivo. Every day, we work to deliver this novel class of immunotherapies and vaccines, applying the ‘no-release’ mechanism of our DPX technology to elicit a more rapid, robust and sustained immune response. We believe the DPX platform enables our candidates to fill the unmet needs of patients with cancer and serious diseases such as COVID-19, and we are committed as much as ever to this mission.

Throughout 2019 and into the new year, we have made significant progress in validating this approach and in advancing our clinical pipeline. Importantly, we announced promising clinical results from three ongoing Phase 2 studies of our lead program, DPX-Survivac – DeCidE1, evaluating DPX-Survivac in advanced ovarian cancer; SPIrL, an investigator-led study of DPX-Survivac in combination with Merck’s Keytruda® in relapsed/refractory diffuse large B cell lymphoma (r/r DLBCL); and a basket study, evaluating DPX-Survivac and Keytruda® across five solid tumor types, to identify follow-on indications for this program.

Together, these results demonstrated DPX-Survivac’s ability to shrink both solid and hematologic tumors, with long-lasting clinical responses and a favorable tolerability and safety profile. Of note, DPX-Survivac produced some of the first clinically meaningful results from a T cell therapy in solid tumors, nearly doubling the standard-of-care response rate in advanced ovarian cancer, with potential for deeper responses still as patients remain on therapy. In addition, our interim results from SPIrL demonstrated three complete responses (3/9) in r/r DLBCL. Notably, both of these indications have historically been difficult to treat, and we believe DPX-Survivac is poised to improve patient outcomes and quality of life over the standard of care. Throughout the year, we published studies clearly supporting the T cell-activating mechanism of action of our proprietary DPX platform, further validating our novel approach. We look forward to reporting updated clinical results for DPX-Survivac, which we hope will endorse this strategy and lay the groundwork to pursue an accelerated path to registration.

Over the past year, we have also entered into numerous new collaborations with well recognized research institutions in Canada and the United States. These partnerships enable us to expand our pipeline, as we explore additional combinations with DPX-Survivac and load our DPX delivery platform with peptides aimed at other cancer targets of interest (i.e. BRAF, MAGEA9).

To that end and as a product of this research, in collaboration with Centre de recherche du CHU de Québec-Université Laval and La Fondation du CHU de Québec (FCHUQc), we plan to initiate a Phase 1 clinical trial for DPX-SurMAGE in bladder cancer in 2020.

Additionally, in recognition of COVID-19 and the global public health crisis surrounding this pandemic, we recently announced our plans to develop a DPX-based vaccine candidate incorporating peptides targeting epitopes identified from this novel coronavirus strain. We believe the safe and immunogenic profile our candidates have produced across our studies to date reflects our platform’s ability to elicit a robust immune response with sustained effect, including in sensitive populations (i.e. older adults and those with pre-existing conditions) who are most at-risk to this virus and generally more difficult to vaccinate. With the support of experts in immunization and infectious disease, we are advancing DPX-COVID-19 and believe this candidate offers meaningful potential as a single-dose prophylactic vaccine.

Finally, in the United States, IMV also successfully increased the investor awareness and trading activity. On the heels of our May 2018 Nasdaq listing, we completed our first US financing in March 2019 and continue to engage with large institutions to drive long-term value and liquidity for our investors.
Considering these achievements and the current global pandemic, we are committed to continue advancing our pipeline and leveraging our DPX platform to meet the needs of patients. The noteworthy milestones we intend to deliver in 2020 include:

- The development of DPX-COVID-19, a vaccine candidate against COVID-19, in collaboration with renowned lead investigators who will be responsible for the Phase 1 clinical study which is targeted to be initiated this summer;
- Top line Phase 2 clinical results update from SPIReL, a clinical study of DPX-Survivac in combination with Merck’s Keytruda® for the treatment of r/r DLBCL; and
- Updated Phase 2 results from the basket study of DPX-Survivac in collaboration with Merck’s Keytruda® for the treatment of multiple solid tumors.

2019 and early 2020 Highlights

**Phase 2 DeCidE1 Study in Advanced Recurrent Ovarian Cancer**

In February 2020, IMV reported interim data from this study, demonstrating amongst others:

- 15/19 (79%) evaluable subjects demonstrated disease control, including 10 tumor regressions (53%).
- 7/19 subjects (37%) achieved clinical benefit with partial/stable responses lasting > 6 months. Additionally, the treatment was well-tolerated with the majority of adverse events being grade 1-2 reactions at the injection site.

**Phase 2 SPIReL Study in Relapsed/refractory DLBCL**

In December 2019, updated clinical results were reported in a poster presentation at the American Society of Hematology (ASH) annual meeting in Orlando, FL. The highlights included:

- 7/9 (78%) evaluable subjects exhibited clinical benefits, including three (33%) complete responses and two (22%) partial responses. Also, reproducible survivin-specific T cell responses were observed in all subjects that achieved clinical responses on treatment and a favorable toxicity profile was observed in a heterogenous population including patients of advanced age and/or with comorbidities.

**Phase 2 Basket Trial in Multiple Advanced Metastatic Solid Tumors**

In September 2019, preliminary data from this open label, multi-center Phase 2 study, evaluating the safety and efficacy of DPX-Survivac and CPA in combination with Keytruda® across five cohorts of patients, was presented during the Immunotherapy of Cancer poster session at the European Society for Medical Oncology (ESMO) 2019 Congress. The highlights included:

- The first study scan showed tumor regressions and partial responses in subjects with ovarian, non-small cell lung and bladder cancer;
- Treatment was well-tolerated, with no related Grade 3-4 or immune-related adverse events

As illustrated above, we continue making great progress in demonstrating the value of our very unique platform and are grateful for the continued support of our partners, shareholders and employees. We look forward working closely with them as we continue to deliver on IMV’s great opportunities throughout 2020, 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, 2019 (“Fiscal 2019”), with information compared to the year ended December 31, 2018 (“Fiscal 2018”), for IMV 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, 2019 and December 31, 2018.

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 the 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 of March 30, 2020, the date when the Board of Directors approved the Corporation’s audited annual consolidated financial statements for the year ended December 31, 2019, on 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 thousands of Canadian dollars.

Additional information regarding the business of the Corporation, including the Annual Information Form of the Corporation for the year ended December 31, 2019 (the “AIF”) and included in the Corporation’s registration statement on Form 40-F filed with the U.S. Securities and Exchange Commission, is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar.

FORWARD-LOOKING STATEMENTS

Certain statements in this MD&A may constitute “forward-looking” statements which involve known and unknown risks, uncertainties and other factors that 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 ability to obtain necessary regulatory approvals;
- The Corporation’s expected outcomes from its pre-clinical studies and trials;
- 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
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, performance and achievements 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, including as a result of the pandemic outbreak of COVID-19;
- The Corporation’s ability to protect its intellectual property;
- The Corporation’s ability to manufacture its products and to meet demand;
- The general regulatory environment in which the Corporation operates; and
- Obtaining necessary regulatory approvals and the timing in respect thereof.

These statements reflect management’s current views and beliefs and are based on estimates, assumptions, and information currently available to, and considered reasonable by, management. The forward looking information in this MD&A does not include a full assessment or reflection of the unprecedented impacts of the COVID-19 pandemic occurring in the first quarter of 2020 and the ongoing and developing resulting indirect global and regional economic impacts. The Corporation is currently experiencing uncertainty related to the rapidly developing COVID-19 situation. It is anticipated that the spread of COVID-19 and global measures to contain it, will have an impact on the Corporation, however it is challenging to quantify the potential magnitude of such impact at this time. The Corporation is regularly assessing the situation and remains in contact with its partners, clinical sites and investigators, and suppliers to assess any impacts and risks.

The information contained herein is dated as of March 30, 2020, the date of the Board’s approval of the Fiscal 2019 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 IMV filed on SEDAR at www.sedar.com and included in the registration statement on Form 40-F filed on EDGAR at www.sec.gov/edgar.

CORPORATE OVERVIEW

IMV is a clinical-stage biopharmaceutical company dedicated to making immunotherapy more effective, more broadly applicable, and more widely available to people facing cancer, infectious and other serious diseases. IMV is pioneering a new class of immunotherapies based on the Corporation’s proprietary drug delivery platform (“DPX”). This patented technology leverages a novel mechanism of action (“MOA”) discovered by the Corporation. This MOA does not release the active ingredients at the site of injection but forces an active uptake by immune cells (antigen-presenting cells) and delivery of active ingredients into lymph nodes. This unique MOA enables the programming of immune cells in vivo, which are aimed at generating powerful target-specific therapeutic capabilities. DPX’s no-release MOA can be leveraged to generate “first-in-class” T cell therapies with the potential, in the opinion of IMV, to be disruptive in the treatment of cancer.

The Corporation’s first cancer immunotherapy uses survivin-based peptides licensed from Merck KGaA, on a world-wide exclusive basis, formulated in DPX (“DPX-Survivac”). Survivin is a well characterized and tumor-associated antigen known to be overexpressed in more than 20 different cancers. DPX-Survivac leverages the MOA of the DPX platform to generate a
constant flow of killer T cells in the blood that are targeted against survivin expressed on cancer cells. It is comprised of five minimal MHC class I peptides to activate naïve T cells against survivin.

DPX-Survivac is currently being tested in:

- A phase 2 clinical trial that evaluates DPX-Survivac in an open label safety and efficacy study in ovarian cancer patients with advanced platinum-sensitive and resistant ovarian cancer;
- Two investigator-sponsored phase 2 clinical trials in combination with the checkpoint inhibitor Keytruda® (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’); and
- A phase 2 basket trial in combination with Merck’s Keytruda® (pembrolizumab) in patients with select advanced or recurrent solid tumors in bladder, liver (hepatocellular carcinoma), ovarian, or non-small-cell lung (NSCLC) cancers, as well as tumors shown to be positive for the microsatellite instability high (MSI-H) biomarker.

In infectious disease indications, 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 licensing agreement with Žoetis for the development of two targeted therapies for cattle 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 targeted therapies for malaria and the Zika virus.

The common shares of the Corporation (the “Common Shares”) are listed on the Nasdaq Stock Market LLC (“Nasdaq”) and on the Toronto Stock Exchange (“TSX”) under the symbol “IMV”.

BUSINESS MODEL AND STRATEGY

IMV is dedicated to making immunotherapy more effective, more broadly applicable, and more widely available to people facing cancer and other serious diseases. The Corporation’s lead product candidate, DPX-Survivac, has demonstrated the ability to induce prolonged T cell activation leading to tumor regressions in advanced ovarian cancer and DLBCL.

Foremost, the Corporation’s clinical strategy is to target late stage unmet medical needs for a shorter path to clinical demonstration and first regulatory approval. In addition, the Corporation is evaluating combination with Merck’s Keytruda® checkpoint inhibitor in multiple solid tumor indications.

In collaboration with commercial and academic partners, the Corporation is also expanding the application of DPX as a delivery platform for other applications. Pre-clinical and clinical studies have indicated to date that the Corporation’s delivery platform may allow for the development of enhanced targeted therapies for a wide range of infectious diseases by generating a stronger and more durable immune response than with existing delivery methods.

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 product candidates.

PLATFORM AND PRODUCTS IN DEVELOPMENT

Delivery Platform

The DPX platform is a unique and patented formulation discovered by the Corporation that provides a new way to deliver active ingredients to the immune system using a novel MOA. This MOA does not release the active ingredients at the site of injection but forces an active uptake by immune cells (antigen-presenting cells) and delivery of active ingredients into lymph nodes. IMV is exploiting this unique MOA to pioneer a new class of immunotherapies that represents a paradigm shift from current approaches. Thanks to its ‘no release’ MOA, the DPX-based targeted therapies allow the programming of immune cells in-vivo to generate new target-specific therapeutic capabilities. The DPX platform can be leveraged to generate “first-in-class” T cell therapies with the potential to be disruptive in the treatment of cancer. The Corporation believes that the novel MOA of DPX makes the platform uniquely suitable for cancer immunotherapies, which are designed to target tumor cells.
DPX-based candidates can induce prolonged, target-specific, and polyfunctional T cell activation, which are postulated to be required for effective tumor control.

The DPX platform is based on active ingredients formulated in lipid nanoparticles and, after freeze drying, suspended directly into a lipidic formulation. DPX-based products are stored in a dry format, which provides the added benefit of an extended shelf life. The formulation is designed to be easy to re-suspend and administer to patients.

DPX also has multiple manufacturing advantages: it is fully synthetic; can accommodate hydrophilic and hydrophobic compounds; is amenable to a wide-range of applications (for example, peptides, small-molecules, RNA/DNA, or antibodies); and provides long term stability as well as low cost of goods.

The DPX platform forms the basis of all IMV’s product development programs.

**DPX-Survivac**

*Product Candidate Overview*

DPX-Survivac, the Corporation’s first cancer immunotherapy candidate, uses survivin-based peptides licensed from Merck KGaA on a world-wide exclusive basis that are formulated in DPX. DPX-Survivac leverages the MOA of DPX to generate a constant flow of T cells in the blood that are targeted against survivin expressed on cancer cells and is comprised of five minimal MHC class I peptides to activate patients’ naïve T cells against survivin.

Survivin is a well characterized and recognized tumor associated antigen known to be expressed during fetal development and across most tumor cell types, but it is rarely present in normal non-malignant adult cells. Survivin controls key cancer processes (apoptosis, cell division, and metastasis) and has been associated with chemoresistance and cancer progression. It has been shown that survivin was expressed in all 60 different human tumor lines used in the National Cancer Institute’s cancer drug screening program and is documented in the literature to be overexpressed in more than 20 indications.

In clinical trials exploring the activity of DPX-Survivac, an intermittent low-dose oral regimen of cyclophosphamide is used as an immune-modulator. Conventional chemotherapeutic drugs are traditionally used for their cytotoxic effect on tumors but cyclophosphamide can also be used at lower doses to potentiate the activity of other immunotherapies without inducing significant cytotoxicity.

Several studies have demonstrated that low-dose regimens of cyclophosphamide can have multiple beneficial effects for T cell therapies such as DPX-Survivac, including reduction of T regulatory cell numbers and increase in effector T cells (Hugues et al, Immunology. 2018). In Phase 1 clinical studies, IMV demonstrated that intermittent low-dose oral cyclophosphamide can act as an immune-modulator increasing the number of survivin-specific T cells generated by DPX-Survivac (Weir et Al, AACR, 2016).

<table>
<thead>
<tr>
<th>Cancer</th>
<th>Survivin %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ovarian</td>
<td>90</td>
</tr>
<tr>
<td>Breast</td>
<td>90</td>
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<tr>
<td>Melanoma</td>
<td>90</td>
</tr>
<tr>
<td>Lung</td>
<td>53</td>
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<tr>
<td>Colorectal</td>
<td>64</td>
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<td>Gastric</td>
<td>64</td>
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<tr>
<td>Kidney</td>
<td>23-82</td>
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<td>Glioblastoma</td>
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<tr>
<td>ALL</td>
<td>70</td>
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<td>CML</td>
<td>70</td>
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<tr>
<td>MDS</td>
<td>50</td>
</tr>
<tr>
<td>DLBCL</td>
<td>50</td>
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</tbody>
</table>

*Figure 1: Examples of % of patients with survivin expression in different indications*
IMMUNO-ONCOLOGY

DPX-Survivac is being tested in 6 different cancer indications through multiple phase 2 clinical trials.

Ongoing Clinical Programs

<table>
<thead>
<tr>
<th>T cell therapy</th>
<th>Indication</th>
<th>Preclinical</th>
<th>Phase 1</th>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Sponsor</th>
<th>Collaborators</th>
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<tbody>
<tr>
<td>DPX-Survivac /CPA (Survivin)</td>
<td>Ovarian</td>
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<td><em>IMV</em></td>
<td><em>MERCK</em></td>
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<td></td>
<td>DLBCL Combination with Keytruda®</td>
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<td><em>Sunnybrook Health Sciences Centre</em></td>
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<td><em>MERCK</em></td>
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<td>MSI-H Combination with Keytruda®</td>
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<td><em>MERCK</em></td>
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<td>Liver (HCC) Combination with Keytruda®</td>
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<td><em>MERCK</em></td>
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<td>Ovarian Combination with Keytruda®</td>
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<td><em>MERCK</em></td>
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<td>Ovarian Combination with Keytruda®</td>
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<td></td>
<td>Bladder Combination with Keytruda®</td>
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<td><em>IMV</em></td>
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In all cases, intermittent low dose CPA is abbreviated to CPA.

**DPX- Survivac – Ongoing Clinical Trials**

**COVID-19 Impact on Clinical Program**

It is anticipated that the COVID-19 pandemic crisis will impact ongoing trial activities across the industry due to the pressure placed on the healthcare system as well as governmental and institutional restrictions. IMV’s clinical team is working closely with each clinical site and our CRO on a contingency plan to ensure that patient safety and the integrity of data is maintained. IMV is following the FDA guidance issued for the COVID-19 pandemic: “FDA Guidance on Conduct of Clinical Trials of Medical Products during COVID-19 Pandemic Guidance for Industry, Investigators, and Institutional Review Boards”. Additionally, the team continues to monitor updated institutional, regional and national guidance to fully comply with applicable guidelines as they are issued. It is noted that some clinical sites have paused or slowed enrollment in clinical trials, while other sites, less impacted, are continuing activities as planned. The overall enrollment rate may decrease, but clinical activities are continuing. Patients are encouraged to comply with directives from public health officials and, subject to such compliance, attend visits as planned or to discuss alternatives with their physician. The current activities performed at central labs to assess the eligibility of patients and the management of clinical samples is not impacted, and IMV is working with the vendors to ensure continuity of activities. Drug supply is not expected to be impacted at this time. As added precaution, IMV is working on a contingency plan to ensure proper provisioning of drugs to all clinical sites in the event of future transportation or other constraints.

**Ovarian subpopulation – DeCidE1 phase 1b/2**

The DeCidE1 phase 2 study is a multicenter, randomized, open-label study to evaluate the safety and effectiveness of DPX-Survivac with intermittent low dose cyclophosphamide (CPA). This phase 2 arm enrolled 22 patients with recurrent, advanced platinum-sensitive and resistant ovarian cancer. Patients received 2 subcutaneous injections of DPX-Survivac 3 weeks apart and every eight weeks thereafter, and intermittent low dose CPA one week on and one week off for up to 1 year. Paired tumor biopsies were performed prior to treatment and on treatment.
Primary endpoints of this study are overall response rate, disease control rate and safety. Secondary endpoints include cell mediated immunity, immune cell infiltration in paired biopsy samples, duration of response, time to progression, overall survival and biomarker analyses.

On June 3, 2019, investigators shared new positive data for IMV Inc.’s DeCidE1 clinical trial at the 2019 American Society for Clinical Oncology (ASCO) annual meeting.

New data from evaluable patients from the phase 2 DPX-Survivac/CPA arm of the trial indicated the potential for DPX-Survivac to impact solid tumor growth in hard-to-treat ovarian cancer patients. Longer-term follow-up from the phase 1b portion of the trial continued to demonstrate that the levels of survivin-specific T cells in the blood of patients, a measure of DPX-Survivac’s novel mechanism of action, correlated with durable clinical benefits.

On February 4, 2020, the Corporation presented clinical translational data supporting the mechanism of action of its lead compound, DPX-Survivac/CPA during the 2020 ASCO-SITC Clinical Immuno-Oncology Symposium. The Corporation measured systemic immune responses, tumor immune infiltrates and clinical tumor response from pre- and post-treatment patient samples in connection with three Phase 1 and/or Phase 2 clinical studies, each evaluating DPX-Survivac/CPA alone or in a combination regimen in patients with platinum-sensitive or resistant, advanced ovarian cancer. Highlights from these translational data include:

- DPX-Survivac generates robust, functional, targeted, and sustained survivin-specific T cell response in ovarian cancer subjects in the maintenance setting as well as with recurrent disease.
- DPX-Survivac induced activation of cytolytic T cell pathway is correlated with clinical response highlighting its unique mechanism of action.
- Enhanced number of unique survivin-specific T cell clones are detected in on-treatment tumor samples and the T cell infiltration on-treatment correlated with clinical responses.
- DPX-Survivac mechanism of action has been confirmed across multiple clinical trials and has shown to provide clinical benefit and long-term clinical response in some subjects with advanced recurrent ovarian cancer.

On February 25, 2020, the Corporation reported updated results from the ongoing DeCidE1 Phase 2 study of DPX-Survivac/CPA, in patients with advanced recurrent ovarian cancer. The new results show that DPX-Survivac immunotherapy is active and well-tolerated.

19 patients were evaluable for efficacy with six patients (31%) still receiving treatment. Key preliminary findings are outlined below:

- 15 patients (79%) achieved disease control, defined as Stable Disease (“SD”) or Partial Response (“PR”) on target lesions:
  o Tumor shrinkage of target lesions was observed in 10 patients (53%).
- Durable clinical benefits lasting ≥6 months were observed in seven patients (37%) so far:
  o Four of these seven patients (21% of evaluable patients) achieved PR with tumor regression >30% on target lesions;
  o Three stable diseases were ongoing for > 6 months (range 7-9) including -29.5% and -12% tumor regressions; and
  o Median duration not reached yet, with five of these seven (71%) patients still on treatment at > 6 months (range 7-10).
- Analysis of Baseline Tumor Burden (“BTB”) showed durable clinical benefits across a broad range of BTB (1.5-7.7 cm) with a higher number of patients achieving benefits in BTB < 5 cm as previously observed in other arms of the study:
  o Six out 11 with BTB < 5 cm (55%) achieved clinical benefits lasting > 6 months.
- Durable clinical benefits include platinum-resistant and refractory patients who previously received PARP inhibitors and bevacizumab.
- Treatment was well-tolerated, with most adverse events being Grade 1-2 reactions at the injection site.
IMV plans to take these results to the U.S. Food and Drug Administration (“FDA”) for a Type B meeting, to align on the design of a Phase 2b study with potential to support registration under accelerated approval in this indication.

In December 2018, IMV met with the FDA in a Type B meeting to discuss the results to date of its DeCidE1 clinical trial and continuing development plan, as well as to obtain agency guidance on a potential accelerated regulatory pathway for DPX-Survivac as a T cell immunotherapy for the treatment of advanced ovarian cancer in patients with progressing disease.

The purpose of IMV’s Type B meeting with the FDA was to request feedback on the design of the clinical program for DPX-Survivac. This program includes the continuing DeCidE1 phase 2 clinical study and a potential future registration trial for accelerated approval in a subset of ovarian cancer patients.

The FDA reviewed the Corporation’s proposed clinical development plan and acknowledged the potential for accelerated approval in advanced ovarian cancer based on objective response rate (“ORR”) according to Recist 1.1 criteria with reported median duration of response (“DOR”). In addition, the FDA provided important guidance on clinical design considerations for different lines of therapy and platinum-sensitive and resistant patient populations.

<table>
<thead>
<tr>
<th>Drug</th>
<th>Registralional Clinical Trials</th>
<th>Indication</th>
<th>Base for approval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Olaparib (Lynparza)</strong>&lt;br&gt;Approved December 2014&lt;br&gt;Single arm, open label, Phase 2&lt;br&gt;(Study 42)</td>
<td>Germine BRCA mutation ≥3 prior lines of chemotherapy</td>
<td>N=137&lt;br&gt;ORR: 34% - platinum-resistant: 30%&lt;br&gt;mDoR: 7.9 mo</td>
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<tr>
<td><strong>Rubraca (Rucaparib)</strong>&lt;br&gt;Breakthrough in April 2015&lt;br&gt;Approved December 2016&lt;br&gt;Single arm, open label, Phase 2&lt;br&gt;(Study 10 and ARI1EL2)</td>
<td>Germine and/or somatic BRCA mutation ≥2 prior lines of chemotherapy</td>
<td>N=106&lt;br&gt;ORR: 42% platinum-resistant: 25%&lt;br&gt;mDoR: 8.7 mo-9.2 mo</td>
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Figure 2: Examples of previous US FDA accelerated approvals in ovarian cancer (source: FDA website)

In addition, IMV submitted a protocol amendment for a predictive enrichment approach to the phase 2 DeCidE1 trial, and further discussed those details with the FDA during the Type B meeting. The phase 2 primary end point, based on ORR per Recist 1.1 criteria, is intended to confirm the high response rate and duration of clinical benefits observed in previously announced results in a patient population defined by a clinical biomarker based on baseline tumor burden.

The Corporation believes that there is still an urgent medical need in advanced recurrent ovarian cancer (Sources: 1. NCCN Guidelines Ovarian Cancer V2.2018; SEER Ovarian Cancer; JCO, vol 33; 32 Nov 2015, Gyn Onc 133(2014) 624-631):

- Nearly 70% of ovarian cancers are diagnosed in advanced stage;
- The overall 5-year survival rate is 46.5%, and only 29% for advanced disease;
- Most patients develop advanced, platinum-resistant, poor prognosis disease; and
- Limited options exist with current single-agents at 6-30% response rates and median progression free survival (“mPFS”) of 2.1 - 4.2 months.
The Corporation believes that it has the potential to be “best-in-class” in the competitive landscape of recurrent ovarian cancer as other immunotherapeutic treatments tested in this patient population (Merck’s Keytruda, and Pfizer/Merck KGaA’s Bavencio) are unlikely to proceed into registration trials based on the published results available:

Subject to phase 2 results, IMV plans to schedule a follow-up meeting with FDA to finalize the design of a potential pivotal trial based on ORR and DOR.

The Corporation’s clinical strategy with this trial is to establish the targeted T cell activity of its lead compound in order to increase value and de-risk clinical development, and to target late stage unmet medical needs for a shorter path to clinical demonstration and first regulatory approval.

The Corporation anticipates that, in addition to general clinical expenses which are distributed amongst the various clinical projects, the costs to complete this phase 2 clinical trial is currently estimated at $750 of which $750 is expected to occur in 2020.

**Combinations with Merck’s Keytruda® (pembrolizumab)**

**Phase 2 clinical trial in DLBCL – SPiRel Phase 2 (investigator-sponsored)**

This phase 2 study is a combination trial with Merck’s Keytruda® (pembrolizumab) in patients with measurable or recurrent DLBCL led by Sunnybrook Research Institute (investigator-sponsored). This investigator sponsored trial, announced initially in May 2017, is designed to evaluate the safety and efficacy of DPX-Survivac, Merck’s Keytruda® (pembrolizumab), and intermittent low-dose cyclophosphamide. IMV has provided an update on this trial at the American Society of Hematology Annual meeting held on December 6-10, 2019.

The primary objective of this study is to document the response rate to this treatment combination using modified Cheson criteria. Secondary objectives include duration of response and safety. Exploratory endpoints include T cell response, tumor immune cell infiltration, and gene expression analysis.

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**CR**: Nodal disease less than 1.5 cm, absence of extranodal disease, no new lesions and normal bone marrow (BM);

**PR**: ≥50% decrease in the sum of the product of the diameters (SPD), no new lesion;

**PD**: Longest diameter of node > 1.5 cm and ≥50% increase from Product of Perpendicular Diameter and increase in longest or smallest diameter from nadir (lowest value), unequivocal progression of non target, new lesions or BM involvement.
As of March 24, 2020, 19 subjects have been enrolled across five different clinical sites in Canada.

Researchers conducting the investigator sponsored study are testing 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.

On December 8, 2019, IMV provided updated data on this study. Seven of the nine patients demonstrated clinical benefit, including three complete responses and two partial responses.

Updated SPIReL data highlights:

At the time of data cut-off for this analysis, efficacy data based on modified Cheson criteria was available from nine evaluable patients:

- 7/9 (77.8%) evaluable subjects exhibited clinical benefit, including three (33.3%) complete responses and two (22.2%) partial responses;
- Reproducible survivin-specific T cell responses observed in all subjects that achieved clinical responses on treatment;
- One subject, who received three prior lines of systemic therapies and failed autologous stem cell transplant, reached a complete response at the first on-study scan following treatment with the DPX-Survivac combination regimen and remains free of disease recurrence after completing the study; and
- Clinical benefits and favorable toxicity profile observed in a heterogenous population of r/r DLBCL patients, including patients of advanced age and/or with comorbidities, who are more susceptible to adverse effects and more difficult to treat.

The Corporation 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 is currently estimated at $600, of which $600 is expected to be spent in 2020.

Phase 2 basket trial in 5 solid tumor indications

In September 2018, the Corporation announced the expansion of its clinical program with a phase 2 basket trial in collaboration with Merck evaluating its lead candidate, DPX-Survivac/CPA, and Merck’s KEYTRUDA® (pembrolizumab), in patients with select advanced or recurrent solid tumors.

The open-label, multicenter, phase 2 basket study will evaluate the safety and efficacy of the immunotherapeutic combination in patients with bladder, liver (hepatocellular carcinoma), ovarian, or non-small cell lung NSCLC cancers, as well as tumors shown to be positive for the microsatellite instability high (MSI-H) biomarker. Investigators plan to enroll up to 184 patients across five indications in 20 medical centers in Canada and the United States.

The ASCO defines a basket clinical study as a trial that investigates the effects of a drug regimen in multiple tumor types that share a common molecular target, regardless of where the disease originated.

This is the third clinical trial evaluating the combination of DPX-Survivac/CPA and KEYTRUDA® (pembrolizumab) in advanced recurrent cancers.

On September 30, 2019, IMV presented preliminary results from its ongoing phase 2 basket trial, during the Immunotherapy of Cancer poster session at the European Society for Medical Oncology (ESMO) 2019 Congress in Barcelona, Spain.
Preliminary Results from the Phase 2 Basket Trial

At the time of cut-off, 23 patients were enrolled across all five patient cohorts. This includes 19 patients across all cohorts who received DPX-Survivac in combination with pembrolizumab with CPA, and four patients from the ovarian cancer cohort receiving DPX-Survivac with only pembrolizumab:

- Preliminary results from the first on-study scan showed tumor reduction in patients with ovarian cancer (with and without CPA), NSCLC and bladder cancer;
- Partial responses observed at first scan in two subjects (bladder cancer, ovarian cancer); 19/23 subjects are still active on study treatment;
- T cell infiltration observed in biopsy samples from subjects who achieved tumor reduction on treatment;
- Eight ovarian cancer patients were enrolled in the study, randomized 1:1 to treatment with and without CPA. Tumor control and tumor reductions were observed in both groups; and
- Safety evaluation on all evaluable patients demonstrated that treatment was well-tolerated, with no related Grade 3-4 or immune-related adverse events (AEs) reported.

As at March 24, 2020, 19 clinical sites were open, and 82 patients had been enrolled across the five indications. The Corporation expects to disclose preliminary data in the second half of 2019 and anticipates that, in addition to general clinical expenses, which are distributed amongst the various clinical projects, $22,400 is currently estimated to be spent for stage 1 for this trial, of which $6,500 is estimated to be spent in 2020.

Phase 2 clinical trial in ovarian cancer (investigator-sponsored)

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 conducts the phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumor activity of the combination of pembrolizumab, DPX-Survivac, and intermittent 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.

As of July 29, 2019, 13 patients were enrolled in the trial and the Corporation will disclose results 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, currently expected to be spent in 2020, are estimated at $200.

DPX-SurMAGE

In March 2019, IMV announced that CQDM, a Canadian bioresearch consortium, had awarded a grant for a collaboration among IMV Inc., Centre de recherche du CHU de Quebec-Universite Laval (“CHU”) and La Fondation du CHU de Quebec (“FCHUQc”). The collaboration will receive a grant of up to $1,200 from the CQDM and $300 from the FCHUQc over three years, to develop a novel dual target T cell therapy for an initial clinical application in bladder cancer. IMV currently expects to contribute $2,800 over the next three years towards this project of which $1,600 has been contributed in 2019 and $500 is estimated to be contributed in 2020.

The work will target immunogenic peptides from the MAGE protein family member A9 (MAGE-A9). This protein is frequently expressed in various human cancers including bladder, lung and kidney. These peptides will be combined with selected immunogenic peptides from the survivin protein composing the DPX-Survivac T cell drug candidate.

The researchers believe that MAGE-A9 and survivin peptides presented on the surface of cancer cells can be used to program T cells to destroy tumors and may represent ideal targets for anti-cancer T cell immunotherapies. The collaborators will combine these peptides with IMV’s proprietary DPX technology to develop a first-in-class dual target T cell therapy (DPX-SurMAGE).
DPX-SurMAGE will be initially evaluated in preclinical studies. Upon successful completion of these preclinical evaluations, researchers are aiming to test the candidate in two clinical studies in patients with:

- Muscle invasive bladder cancer combined with an anti-PD-1 and intermittent low-dose cyclophosphamide (CPA) prior to cystectomy; and
- Low-grade highly recurrent nonmuscle invasive bladder cancer combined with CPA prior to transurethral resection.

This collaboration is expected to span a three-year period and as part of the collaboration agreement, IMV holds an exclusive option to in-license intellectual property related to this collaboration.

In June 2019, IMV met with Health Canada for a pre-clinical trial application meeting. The objectives of this meeting were to present and discuss the strategy for the development (including pre-clinical and clinical plans) of DPX-SurMAGE, to the agency to ensure the strategy was aligned with the agency’s expectations. The agency agreed with the approach for pre-clinical, manufacturing and clinical development and made suggestions to facilitate its review by the agency.

Given the ongoing COVID-19 pandemic, the pressure placed on the healthcare system, as well as governmental and institutional restrictions, and the fact that IMV had not initiated a phase 1 trial of DPX-SurMAGE prior to the pandemic, IMV is uncertain of when it will initiate this trial. The Corporation intends to provide an update when more information is available.

Orphan Drug Status and Fast Track Designation

The Corporation announced, in November 2016, that the European Medicines Agency (EMA) had granted orphan drug designation status to IMV’s DPX-Survivac in ovarian cancer. 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.

Other Programs

Oncology

**DPX-NEO**

On January 17, 2019, treatment of the first patient occurred in the phase 1 trial evaluating neoepitopes formulated in the Corporation’s proprietary DPX delivery platform in patients with ovarian cancer. The study is part of the Corporation’s DPX-NEO program, which is a continuing collaboration between UConn Health and IMV to develop neoepitope-based anti-cancer therapies.

Investigators will assess the safety and efficacy of using patient-specific neoepitopes discovered at UConn Health and formulated in IMV’s proprietary DPX-based delivery technology in women with ovarian cancer. Investigators plan to enroll up to 15 patients in the phase 1 study. UConn Health is financing the trial with IMV providing materials and advice.

The Corporation expects to disclose results only when those are made available by Uconn Health.

**DPX-E7**

Dana-Farber is leading the DPX -E7 study through a $1,500 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 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 in HLA-A2 positive patients with incurable HPV-related head and neck, cervical, or anal cancers. The trial has pre-consented 76 patients so far, from which 11 patients have been treated.

The Corporation expects to disclose results only when those are made available by Dana-Farber.
Other Applications

Product Overview

A component of the Corporation’s business strategy is partnering the DPX platform for infectious and other disease applications. The DPX platform has the potential to generate a rapid and robust immune response, often in a single dose. The unique single-dose capability could prove to be beneficial in targeting difficult infectious and other disease candidates.

DPX-COVID-19

The ongoing pandemic outbreak of COVID-19 and its alarmingly quick transmission to over 125 countries across the world resulted in the World Health Organization (WHO) declaring a pandemic on March 11, 2020.

The outbreak is caused by a novel coronavirus, the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). There is an urgent need to develop vaccines to control its spread and help protect vulnerable populations. However, the bottleneck with current conventional vaccine approaches is the length of time required for vaccine development. The Corporation believes IMV’s DPX delivery technology offers the possibility of a fully synthetic epitope-based approach with the potential for accelerated development and rapid, large-scale production of a vaccine that would be compliant with current good manufacturing practice (cGMP).

Research in coronaviruses has identified the benefit of humoral and cellular (B and T cell) immune responses for treatment and protection from infection.

IMV believes that it has already demonstrated in multiple clinical trials in oncology and infectious diseases the potential of its technology for the induction of robust and sustained B and T cells. The Corporation believes there is an opportunity to pursue a COVID-19 development program to establish the clinical safety and immunogenicity using a similar approach for COVID-19.

The Corporation intends to develop its vaccine candidate DPX-COVID-19 in collaboration with lead investigators for the phase 1 clinical study: Joanne Langley, M.D. and Scott Halperin, M.D., of the Canadian Center for Vaccinology (CCfV) at Dalhousie University, the Izaak Walton Killam Health Center and the Nova Scotia Health Authority and the Canadian Immunization Research Network (CIRN); along with Dr. Gary Kobinger, Ph.D., Director of the Research Centre on Infectious Diseases at the University Laval in Quebec City and Global Urgent and Advanced Research and Development (GUARD) in Canada. The investigators will assist with preclinical and clinical evaluation and with further development strategy in collaboration with the Canadian government and others.

Third-party research in related coronaviruses has identified the benefit of humoral and cellular (B and T cell) immune responses for protection and resolution of infection, and the Corporation believes the body of data it has produced to date supports its DPX platform for peptide-based induction of B cells and T cells. The Corporation is now designing a vaccine candidate against COVID-19 based on third-party immunological studies of SARS-CoV and third-party sequencing data available for SARS-CoV-2 with the goal of selecting potentially immunogenic epitopes within the virus that induce neutralizing antibody responses and protective T cell responses.

Through the Corporation’s other clinical studies, the Corporation believes its DPX technology has demonstrated a favorable safety profile and immunogenicity in both cancer and infectious disease settings, with sustained effect and potential for single-dose effectiveness as a prophylactic vaccine. Over 200 patients have been dosed with DPX-based immunotherapies and data from these studies suggest treatment is well-tolerated, including in heavily pre-treated cancer patients with advanced-stage disease. The Corporation has also applied this technology for the prevention of RSV, the second-leading cause of respiratory illness in infants, the elderly and the immunosuppressed. The Corporation reported its Phase 1 data from its clinical candidate, DPX-RSV, which demonstrated a favorable safety profile and immunogenicity in older adults (age 50-64), as well as preclinical data from research-stage candidates aimed at other infectious diseases, including malaria and anthrax.

RSV

The Corporation has performed preclinical research activities for an RSV targeted candidate, which is the second leading cause of respiratory illness in infants, the elderly, and the immunosuppressed. Currently, there is no preventive therapy available for this virus and IMV is seeking to develop a novel DPX-based 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 VZW, a non-profit life sciences research institute funded by the Flemish government, to expand its pipeline of DPX-based candidates. The novel RSV antigen being evaluated in the DPX platform is based on the short hydrophobic protein present at low levels on the surface of the RSV virion. But, more importantly, it is also present on the surface of RSV-infected cells. This DPX-based candidate has a unique mechanism of action in which the resultant antibodies bind to and destroy infected cells.

Phase 1 clinical trial in RSV

A phase 1 clinical study has been conducted in Canada with the Corporation’s RSV targeted candidate in healthy adults. The RSV candidate 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 formulation in an infectious disease indication, evaluated the safety and immune response profile of the DPX-RSV candidate in 40 healthy older adult volunteers (age 50-64 years) and two dose cohorts, with 20 subjects in each cohort.

In October 2016 and April 2017, 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 candidate also continued to have a positive safety profile and was well tolerated with no SAEs among all study participants. Within the 25µg dose patient 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. After one year, the antibody levels measured were still at peak with no sign of decrease.

On September 27, 2018, IMV announced results of ongoing research to further explore the novel MOA of its candidate. New data from a preclinical study highlighted the effects of two potential approaches to preventing RSV, comparing a single dose bovine version of DPX-RSV to a two-dose conventional investigational bovine RSV (bRSV) preventive therapy. Researchers found that IMV’s targeted therapy yielded strong antigen-specific immune responses and a protective effect on disease pathology.

They found SH antibodies in 14 of the 15 animals that received DPX-bRSV, and the improvements observed in disease pathology were comparable between the two cohorts. These were the first bovine animal health data to directly correlate the induced immune response against IMV’s novel RSV target – the SH viral protein – with measures of disease protection.

Conventional RSV preventive therapies target either the F or G proteins of the virus and provide protection by neutralizing the RSV virus. Clinical measures of efficacy focus on the amount of neutralizing antibodies in the bloodstream. DPX-RSV works differently; it targets the SH viral ectodomain of the RSV virus and, instead of neutralizing the virus, it enables the immune system to recognize and destroy infected cells. Because there are no neutralizing antibodies resulting from the DPX-RSV MOA, a different clinical assessment is required to determine the candidate’s protective effect. IMV has exclusive worldwide licenses on applications that target the SH ectodomain antigen in RSV. The Corporation is exploring opportunities to out-license this product to potential partners.

Leidos Collaboration

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 targets. The subcontract is funded through Leidos’ prime contract from the U.S. Agency for International Development (“USAID”) to provide DPX-based candidate evaluations in the preclinical, clinical, and field stages of malaria preventative therapy development. Leidos and IMV are working together to identify adjuvant and antigen combinations that can be used to protect against malaria and, with the DPX delivery system, formulate promising targeted therapy candidates for potential clinical testing.

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 are conducting additional research that focuses on identifying the most promising target-formulation combinations.

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 targeted T cell therapy for cattle. In recent controlled studies, the IMV
formulations met efficacy and duration of immunity endpoints against two disease targets. These results will enable Zoetis to advance two DPX-formulation 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 its platform technology to other parties interested in creating enhanced T cell targeted therapies 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. has global exclusive rights to use both of these platforms to develop humane, immune-contraceptive compounds 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 the 2019 Cancer Facts & Figures released by the American Cancer Society, it is predicted that the global cancer burden will rise to 27.5 million and the number of cancer deaths to 16.3 million by 2040 solely due to the growth of the aging population. However, these projections may be underestimates given the adoption of unhealthy behaviors and lifestyles associated with rapid income growth and changes in reproductive patterns in economically transitioning countries. According to the 2019 Cancer Facts & Figures, cancer usually develops in older people; 80% of all cancers in the United States are diagnosed in people 55 years of age or older. The “oldest old”, adults ages 85 and older are the fastest-growing population group in the US and women outnumber men in this age group because of a longer life expectancy.

Conventional cancer treatment involves surgery to remove the tumor whenever 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, studies have shown that older patients often receive little or no treatment because the benefit of prolonged survival does not outweigh potential adverse effects and impact on quality of life. Also, in all groups of patients, tumors often develop resistance to chemotherapies, thus 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 may provide new and effective treatments. According to a Market & Markets report released in September 2016, the global immunotherapy drug market is projected to reach USD$119.39 billion by 2021 from USD$61.97 billion in 2016, growing at a compound annual growth rate (“CAGR”) of 14% during the forecast period of 2016 to 2021. The major players operating in the immunotherapy drug 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, which are 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 have been approved in multiple indications. Merck’s Keytruda® (pembrolizumab) and Bristol Myers Squibb’s Opdivo® (nivolumab) received FDA approval in 2014 for advanced melanoma patients who have stopped responding to other therapies. These therapies have subsequently 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 2017 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.

These drugs have been shown to be helpful in treating several types of cancer but with success only in a limited percentage of patients. It is not yet known exactly why, though researchers have noticed that these drugs seem to work especially well for patients whose cancer cells have a higher number of mutations.

Key opinion leaders in the field have indicated that the solution lies in combining checkpoint inhibitors with other cancer treatments and that the ideal combination is likely to be a therapy that drives tumor specific immune responses. These include novel T cell-based therapies. These targeted therapies fit well with checkpoint inhibition therapy because they simultaneously activate strong tumor-specific T cell activation, while also releasing the brakes on immune suppression. The success of such combinations should allow pharmaceutical companies to significantly expand the market of their checkpoint inhibitors.

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

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 platform technology includes 17 patent families, the first of which contains eight patents issued in five jurisdictions (United States, Europe, Canada, Japan, and Australia). The 16 other families collectively contain 41 patents issued in 10 jurisdictions (United States, Europe, Canada, Australia, Japan, India, Israel, Singapore, China, and, separately, Hong Kong) and 61 pending patent applications in 9 jurisdictions. Taking into account the validations of the European patents, the Corporation’s intellectual property portfolio includes 94 patents. More details on the Corporation’s intellectual property strategy and patents can be found in the AIF filed on SEDAR at www.sedar.com.

The Corporation owns registered trademarks in the United States, Canada, and Europe.

RECENT AND ANNUAL DEVELOPMENTS

In March 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic. We continue to monitor the COVID-19 situation, which is rapidly developing. In addition to adhering to directives from public health officials, we have implemented a pandemic contingency plan to guide our employees, contractors, visitors, facilities and operations. Our plan includes identifying essential business activities to help ensure continuity of business, restricting access to our offices and operation sites and encouraging all employees to work from home to the extent possible, asking business partners to engage us by telephone or video conference where possible, eliminating business travel and requiring self-isolation for employees travelling outside of Canada and increasing the frequency and emphasis on cleaning and sanitizing. As the COVID-19 health-crisis further develops, we will continue to rely on guidance and recommendations from local health authorities and the Centers for Disease Control and Prevention to update our policies.

The Corporation announced:

- On March 30, 2020, that it has made significant progress on the development of DPX-COVID-19, a vaccine candidate against the novel coronavirus, including:
  - The Corporation has used sequences of the virus and immunoinformatics to predict and identify several hundred epitopes, of which 23 were selected for their biological relevance to the virus and potential to generate neutralizing antibodies against SARS-CoV-2;
  - Based on this analysis, IMV has begun manufacturing peptide candidates targeting these epitopes as well as planning with IMV’s suppliers and contract manufacturers to prepare for the cGMP batch required to support a clinical study in humans;
  - In collaboration with Gary Kobinger, Ph.D., Director of the Research Centre on Infectious Diseases at the University Laval in Quebec City, preclinical assays in animal models are also planned in April through May of this year to validate the safety and potency of the vaccine candidate before initiating the human clinical study;
o In collaboration with Joanne Langley, M.D. at the Canadian Center for Vaccinology (CCfV) and the Canadian Immunization Research Network (CIRN) the design of a Phase 1 clinical study in 48 healthy subjects has been completed and clinical sites identified in both Nova Scotia and Quebec;

o IMV has initiated discussions with Health Canada in preparation for a Clinical Trial Application (CTA). A meeting is being scheduled in the week of April 20, 2020 with the goal to initiate the clinical study in the summer of 2020; and

o The company has submitted several grant applications in Canada in an effort to help support its clinical program.

- On March 18, 2020, that it is advancing the clinical development of a DPX-based vaccine candidate against COVID-19. The goal of the development program, in collaboration with lead investigators for the phase 1 clinical study: Joanne Langley, M.D. and Scott Halperin, M.D., of the CCfV at Dalhousie University, the Izaak Walton Killam Health Center and the Nova Scotia Health Authority and the CIRN; along with Dr. Gary Kobinger, Ph.D., Director of the Research Centre on Infectious Diseases at the University Laval in Quebec City and GUARD in Canada, is to establish the clinical safety and immunogenicity of a vaccine candidate based on the Corporation’s DPX delivery technology and incorporating peptides targeting novel epitopes from the coronavirus strain.

- On March 18, 2020, that it has entered into an equity distribution agreement with Piper Sandler & Co. (“Piper Sandler”) pursuant to which the Corporation may, from time to time sell, through “at-the-market” offerings with Piper Sandler acting as sales agent, on the Nasdaq such number of Common Shares as would have an aggregate offering price of up to US$30 million (the “ATM Distribution”). The Corporation plans to use the net proceeds from the ATM Distribution, if any, for general corporate purposes, including but not limited to working capital expenditures, capital expenditures, research and development expenditures, and clinical trial expenditures, including expenditures related to a COVID-19 vaccine candidate.

- On February 25, 2020, that updated results from DeCidE1, an ongoing Phase 2 study of its lead candidate, DPX-Survivac, in patients with advanced recurrent ovarian cancer were reported during a conference call and webcast. All 22 patients with advanced recurrent ovarian cancer enrolled in this arm of the study were heavily pre-treated, with the median number of prior therapies greater than three. As of February 24, 2020, 19 patients were evaluable for efficacy with six patients (31%) still receiving treatment. Key preliminary findings are outlined below:
  o 15 patients (79%) achieved disease control, defined as Stable Disease (SD) or Partial Response (PR) on target lesions:
    ▪ Tumor shrinkage of target lesions was observed in 10 patients (53%).
  o Durable clinical benefits lasting ≥6 months were observed in seven patients (37%) so far:
    ▪ Four of these seven patients (21% of evaluable patients) achieved PR with tumor regression >30% on target lesions;
    ▪ Three stable diseases were ongoing for > 6 months (range 7-9) including -29.5% and -12% tumor regressions; and
    ▪ Median duration not reached yet, with five of these seven (71%) patients still on treatment at > 6 months (range 7-10).
  o Analysis of Baseline Tumor Burden (BTB) showed durable clinical benefits across a broad range of BTB (1.5-7.7 cm) with a higher number of patients achieving benefits in BTB < 5 cm as previously observed in other arms of the study:
    ▪ Six out 11 with BTB < 5 cm (55%) achieved clinical benefits lasting > 6 months.
  o Durable clinical benefits include platinum-resistant and refractory patients who previously received PARP inhibitors and bevacizumab; and
  o Treatment was well-tolerated, with most adverse events being Grade 1-2 reactions at the injection site.

- On February 14, 2020, that Albert Scardino was to retire from the IMV Board of Directors effective February 28, 2020.
On February 4, 2020, the presentation of clinical translational data supporting the mechanism of action of its lead compound, DPX-Survivac, during the 2020 ASCO-SITC Clinical Immuno-Oncology Symposium, being held in Orlando, FL.

As part of this analysis, the Corporation measured systemic immune responses, tumor immune infiltrates and clinical tumor response from pre- and post-treatment patient samples in connection with three Phase 1 and/or Phase 2 clinical studies, each evaluating DPX-Survivac alone or in a combination regimen in patients with platinum-sensitive or resistant, advanced ovarian cancer. Highlights from these translational data include:

- DPX-Survivac generated survivin-specific T cells in the blood of 80% of patients sampled;
- Clinical anti-tumor responses were correlated with increased infiltration of T cells into tumors following treatment with DPX-Survivac;
- DPX-Survivac induced enrichment in T cell, cytotoxic lymphocytes and B cell-specific signatures which correlate with clinical response; and
- Antigen-specific T cells retained their functionality throughout the duration of treatment.

On December 8, 2019, the Corporation announced updated results on the SPiReL study, an ongoing Phase 2 investigator-sponsored study of DPX-Survivac in combination with pembrolizumab in patients with recurrent/refractory diffuse large B-cell lymphoma (r/r DLBCL) that were presented in a poster session at the 61st American Society of Hematology (“ASH”) Annual Meeting in Orlando, FL.

In the poster presentation, Dr. Neil Berinstein reported updated clinical results from the ongoing Phase 2 SPiReL study. Highlights of this preliminary data are outlined below:

- 7/9 (77.8%) evaluable subjects exhibited clinical benefit, including three (33.3%) complete responses and two (22.2%) partial responses;
- Reproducible survivin-specific T cell responses observed in all subjects that achieved clinical responses on treatment;
- One subject, who received three prior lines of systemic therapies and failed autologous stem cell transplant, reached a complete response at the first on-study scan following treatment with the DPX-Survivac combination regimen and remains free of disease recurrence after completing the study; and
- Clinical benefits and favorable toxicity profile observed in a heterogenous population of r/r DLBCL patients, including patients of advanced age and/or with comorbidities, who are more susceptible to adverse effects and more difficult to treat.

On October 30, 2019, the Corporation announced the appointment of Dr. Joanne Schindler, M.D., D.V.M. as its new Chief Medical Officer, effective November 4, 2019. Dr. Schindler brings over 15 years of experience in the biopharmaceutical industry, primarily in early-stage oncology drug development. Most recently, she had served as Vice President, Clinical Development and Executive Medical Director at H3 Biomedicine, overseeing the company’s clinical development efforts.

On September 30, 2019, IMV presented preliminary results from its ongoing Phase 2 basket trial, during the Immunotherapy of Cancer poster session at the European Society for Medical Oncology (ESMO) 2019 Congress in Barcelona, Spain.

Preliminary results from the phase 2 Basket Trial:

- At the time of cut-off, 23 patients were enrolled across all five patient cohorts. This includes 19 patients across all cohorts who received DPX-Survivac in combination with pembrolizumab with CPA, and four patients from the ovarian cancer cohort receiving DPX-Survivac with only pembrolizumab;
- Preliminary results from the first on-study scan showed tumor reduction in patients with ovarian cancer (with and without CPA), NSCLC and bladder cancer;
- Partial responses observed at first scan in two subjects (bladder cancer, ovarian cancer); 19 out of 23 subjects are still active on study treatment;
- T cell infiltration observed in biopsy samples from subjects who achieved tumor reduction on treatment;
Eight ovarian cancer patients were enrolled in the study, randomized 1:1 to treatment with and without CPA; Tumor control and tumor reductions were observed in both groups; and Safety evaluation on all evaluable patients demonstrated that treatment was well-tolerated, with no related Grade 3-4 or immune-related adverse events (AEs) reported.

- On September 4, 2019, the Corporation announced a collaboration with The Wistar Institute and Meenhard Herlyn, D.V.M., D.Sc., professor in the Molecular and Cellular Oncogenesis Program and director of Wistar’s Melanoma Research Center.

Under this collaboration, IMV and The Wistar Institute will partner to develop a targeted T cell therapy against the common BRAF cancer mutation, based on peptides identified by the Herlyn lab. Mutations in this gene are the most frequently identified cancer-causing mutations in melanoma and have been identified in various other cancers, including non-Hodgkin lymphoma, colorectal cancer, thyroid cancer, and non-small cell lung and ovarian carcinomas.

The project scope includes optimizing the DPX formulation with the BRAF peptides and testing the investigational T cell therapy in the pioneering pre-clinical research models at Wistar. As part of the collaboration agreement, IMV holds an exclusive option to in-license intellectual property related to the program.

- On June 12, 2019, IMV provided updated data on the phase 2 combination trial with Merck’s Keytruda® (pembrolizumab) in DLBCL and at the first “on treatment” assessment, five of the first six patients demonstrated clinical benefit, including four patients with tumor regressions. Two patients reached a complete radiological response, one a partial response and two had stable disease while on study. In addition, the combination continued to demonstrate an acceptable safety profile.

Updated SPIReL data highlights:

At the time of data cut-off for this analysis, 11 patients were enrolled in the trial. Efficacy data from the first six evaluable patients are based on modified Cheson criteria:

- Two patients achieved a complete radiological response:
  - These patients have shown the best survivin specific T-cell responses to DPX-Survivac among the analyzed samples; and
  - One patient with a complete response (“CR”) has completed the one-year study period.
- One patient achieved a PR at first on treatment scan;
- Two patients have reached stable disease:
  - Each of these patients has remained progression free for six and eight months while on treatment.
- Objective response rate (“ORR”): 3/6 (50%);
- Disease Control Rate (DCR): 5/6 (83%);
- One patient with bulky disease progressed at first scan;
- Two subjects are not evaluable, coming off trial at day seven and day 28;
- The treatment combination appears to be well tolerated with only two serious adverse events related to treatment (low white blood count and low neutrophil count); and
- Radiological results from three additional patients are pending.

- On June 3, 2019, investigators shared new positive data for IMV’s DeCidE1 clinical trial at the 2019 American Society for Clinical Oncology (“ASCO”) annual meeting.

New data from evaluable patients from the phase 2 monotherapy arm of the trial indicated the potential for DPX-Survivac to impact solid tumor growth in hard-to-treat ovarian cancer patients. Longer-term follow-up from the phase 1b portion of the trial continued to demonstrate that the levels of survivin-specific T cells in the blood of patients – a measure of DPX-Survivac’s novel MOA – correlated with durable clinical benefits.

In a poster presentation, Dr. Janos L. Tanyi, MD, PhD, assistant professor of obstetrics and gynecology at the Hospital of the University of Pennsylvania, provided an update on the clinical results from the first patients enrolled in the phase 2 monotherapy cohort. At the time of this presentation, researchers had enrolled 19 of 28 participants to date:
o Of seven patients evaluable at data cut-off in the monotherapy arm, five showed signs of treatment benefits, including reduction of target lesions in two patients, while two patients progressed;

o Within the group of four patients with low tumor burden – a potential predictor of response – three showed stable diseases including two reductions in tumor burden continuing the positive trend seen in earlier results;

o All subjects evaluable for T cell responses (five of five) showed survivin specific T cell activation in the blood, four of five showed a robust response. IHC analysis for tumor infiltration is continuing; and

o Treatments have been well tolerated.

The data also highlighted long-lasting responders from the phase 1b portion of the study with key takeaways as follows:

o Prolonged duration of clinical benefits reaching up to more than two years, surpassing the progression-free survival to previous treatments, including platinum-based chemotherapy;

o Long-lasting clinical benefits and high levels of survivin specific T cells are associated with long-term treatment;

o One subject has received DPX-Survivac for more than 21 months so far. This finding is the longest duration of treatment for DPX-Survivac on record to date; and

o It is supportive of DPX Survivac’s ability to maintain high levels of survivin-specific T cells in the blood over a prolonged period of time.

• On April 3, 2019, the Corporation announced that it presented preclinical research at the American Association for Cancer Research (“AACR”) Annual Meeting 2019 that demonstrated how the MOA of IMV’s proprietary DPX technology can enhance a broad spectrum of immune cell infiltration into tumors, which included T cells, Natural Killer (“NK”) cells, and macrophages. Analysis also revealed the differentiated characteristics of the immune cell responses and the potential implications for enhanced anti-tumor activity. In the poster titled, T-distributed stochastic neighbor embedding (t-SNE) analysis of tumor infiltrating lymphocytes after treatment with a T cell activating therapy identifies a unique population of recruited CD8+ T cells and novel options for combination immunotherapy, IMV researchers used specialized data analytics to examine how DPX-based agents, when combined with CPA, induced T cells to infiltrate tumors and attack cancerous cells. The study closely examined the types of immune cell responses and how and why they were able to affect disease. The data indicated that this approach stimulated the infiltration of a broad base of immune cells into tumors, including T cells, NK cells, and macrophages. The specific T cell population that moved into tumors could be grouped based on the co-expression of different checkpoint molecules such as PD-1 and Tim-3. However, those stimulated to infiltrate tumors generally did not express CTLA-4 (a protein found on T cells that inhibits the immune response).

• On March 26, 2019, the Corporation announced preliminary data from the phase 2 cohort of the DeCidE1 clinical study. Six patients receiving DPX-Survivac monotherapy with intermittent low-dose cyclophosphamide (mCPA) have reached the first CT scan assessment with key related findings as follows:

  o 83 per cent of the subjects (five of six) show SD, including two tumor regressions; and

  o 80 per cent (four of five) with stable disease are in subjects with a lower BTB, which also includes the two tumor regressions.

This initial phase 2 data confirms the earlier trends observed in the phase 1b portion of the study. The Corporation believes it supports the potential of DPX-Survivac as a monotherapy and the use of its patient selection strategy. Importantly, in earlier stages of this trial, durable clinical responses occurred after 140 days, and have now lasted for 20 months or more.

• On March 18, 2019, that Canadian bioresearch consortium, CQDM, awarded a grant to a collaboration among IMV, Centre de recherche du CHU de Quebec-Universite Laval (“CHU”), and La Fondation du CHU de Quebec (“FCHUQc”). Under the leadership of Yves Fradet, M.D., professor of surgery and researcher in cancer immunotherapy, this project will receive a grant of up to $1.2M from CQDM and $300,000 from the FCHUQc, to develop a novel dual target T cell therapy for an initial clinical application in bladder cancer. The work will target immunogenic peptides identified by Dr. Fradet’s team from the MAGE protein family member A9 (“MAGE-A9”). These peptides will be combined with selected immunogenic peptides from the survivin protein composing DPX-
Survivac. The collaborators will combine these peptides with IMV’s proprietary DPX technology to develop a first-in-class dual target T cell therapy (DPX-SurMAGE).

- On March 6, 2019, IMV completed a public offering of Common Shares. An aggregate of 4,900,000 Common Shares was issued at a price of $5.45 per Common Share, raising gross proceeds of $26.7 million (the “March 2019 Public Offering”) and on March 11, 2019, the underwriters partially exercised their over-allotment option to purchase additional Common Shares, resulting in the issuance of an additional 504,855 Common Shares at a price of $5.45 per Common Share for additional gross proceeds of approximately $2.75 million, increasing the gross proceeds to approximately $29.46 million. The Corporation intends to use the net proceeds of the Offering to accelerate the development of DPX-Survivac in combination with Keytruda as part of the phase 2 basket trial with Merck in patients with select advanced or recurrent solid tumors in bladder, liver (hepatocellular carcinoma), ovarian, or non-small-cell lung cancers, as well as tumors shown to be positive for the microsatellite instability high biomarker and for general corporate purposes.

- On January 30, 2019, the Corporation announced an update on its clinical program for its lead investigational treatment, DPX-Survivac, as a potential monotherapy in advanced recurrent ovarian cancer. In December, 2018, IMV met with the FDA in a Type B meeting to discuss the results to date of its DeCidE1 clinical trial and continuing development plan, as well as to obtain agency guidance on a potential accelerated regulatory pathway for DPX-Survivac as a T-cell immunotherapy for the treatment of advanced ovarian cancer in patients with progressing disease.

**FDA meeting highlights include:**

- The purpose of IMV’s Type B meeting with the FDA was to request feedback on the design of the clinical program for DPX-Survivac. This program includes the continuing DeCidE1 phase 2 clinical study and a potential future registration trial for accelerated approval in a subset of ovarian cancer patients;
- The FDA reviewed the Corporation’s proposed clinical development plan and acknowledged the potential for accelerated approvals in advanced ovarian cancer based on ORR according to Recist 1.1 criteria with reported median DOR. In addition, the FDA provided important guidance on clinical design considerations for different lines of therapy and platinum-sensitive and resistant patient populations; and
- In addition, IMV submitted a protocol amendment for a predictive enrichment approach to the phase 2 DeCidE1 trial, and further discussed those details with the FDA during the Type B meeting. The phase 2 primary endpoint, based on ORR per Recist 1.1 criteria, is intended to confirm the high response rate and duration of clinical benefits observed in previously announced results in a patient population defined by a clinical biomarker based on BTB.

Multiple clinical sites are now open for enrolment in the DeCidE1 phase 2 trial. Subject to phase 2 results, IMV plans to schedule a follow-up meeting with the FDA to finalize the design of a potential pivotal trial based on ORR and DOR.

- On January 17, 2019, treatment of the first patient in its phase 1 trial evaluating neoepitopes formulated in the Corporation’s proprietary DPX delivery platform in patients with ovarian cancer. The study is part of the Corporation’s DPX-NEO program, which is a continuing collaboration between UConn Health and IMV to develop neoepitope-based anti-cancer therapies.

Investigators will assess the safety and efficacy of using patient-specific neoepitopes discovered at UConn Health and formulated in IMV’s proprietary DPX-based delivery technology in women with ovarian cancer. Investigators plan to enroll up to 15 patients in the phase 1 study. UConn Health is financing the trial with IMV providing materials and advice.

**SELECTED FINANCIAL INFORMATION**

The selected statements of loss and comprehensive loss data for the periods presented and the selected statement of financial position data as of the dates presented are derived from the unaudited interim condensed consolidated financial statements. The selected historical financial data below should be read in conjunction with the financial statements and related notes and the sections titled “Components of Operations Overview” and “Results of Operations” appearing elsewhere in this report.
## COMPONENTS OF OPERATIONS OVERVIEW

### Revenue

The Corporation has no products approved for commercial sale and has not generated any revenue from product sales. Revenue consists primarily of income earned on cash balances held at a commercial bank. The Corporation also generates immaterial revenue from providing formulation services under research collaboration agreement with Leidos for the development of targeted therapies for malaria and the Zika virus. Revenue is recognized when the formulation services are performed.

### Operating Expenses

#### Research and development expenses

To date, the Corporation’s research and development expenses have related primarily to discovery efforts and preclinical, manufacturing and clinical development of its product candidates. The most significant research and development expenses for the year relate to costs incurred for the development of the Corporation’s most advanced product candidates, DPX-Survivac and DPX-SurMAGE, which include:

- Expenses incurred under agreements with contract research organizations (“CROs”), as well as investigative sites and consultants that conduct clinical trials, preclinical studies and other scientific development services;
- Costs related to the production and scale-up of clinical materials, including fees paid to contract manufacturers;
• Employee-related expenses, including salaries, related benefits, travel and share-based compensation expense for employees engaged in research and development functions;
• Expenses incurred for outsourced professional scientific and regulatory development services;
• Laboratory materials and supplies used to support research activities; and
• Facilities and other expenses, which includes depreciation on laboratory equipment.

The Corporation expenses all research and development costs in the periods in which they are incurred. The Corporation accrues for costs incurred as the services are being provided by monitoring the status of the project and the invoices received from its external service providers. Accruals are adjusted as actual costs become known. Where contingent milestone payments are due to third parties under research and development arrangements or license agreements, the milestone payment obligations are expensed when the milestone results are achieved.

Research and development activities are central to IMV’s business model. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-staged clinical trials. The Corporation expects that research and development expenses will increase substantially over the next few years as it increases personnel, advances manufacturing processes, initiates and conducts additional clinical trials and prepares regulatory filings related to its product candidates. The Corporation also expects to incur increased research and development expenses as it selectively identifies and develops additional product candidates. However, it is difficult to determine with certainty the duration and completion costs of current or future preclinical programs and clinical trials of product candidates.

The duration and timing of clinical trials and development of the Corporation’s product candidates will depend on a variety of factors that include, but are not limited to, the following:

• The scope, progress, outcome and costs of clinical trials and other research and development activities, including establishing an appropriate safety profile with IND-directed studies;
• Patient enrollment, discontinuation rates, per patient trial costs, and number and location of clinical trial sites in clinical trials;
• The ability of the Corporation’s clinical partners and sponsors for investigator-sponsored trials to manage clinical trials;
• Establishing commercial manufacturing capabilities or making arrangements with third party manufacturers;
• Timing, receipt and terms of any marketing approvals from applicable regulatory authorities;
• Obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights;
• Significant and changing government regulation; and
• Significant competition and rapidly changing technologies within the biopharmaceutical industry.

The probability of success for each product candidate is highly uncertain. The Corporation will determine which programs to pursue and what resources to allocate to each program in response to the scientific and clinical success of each product candidate as well as an assessment of each product candidate’s commercial potential. Further, because IMV’s product candidates are still in clinical development, the Corporation cannot estimate the actual amounts necessary to successfully complete the development and commercialization of product candidates or whether, or when, it may achieve profitability.

General and administrative

General and administrative expenses consist primarily of salaries and other staff-related costs, including share-based compensation expense for personnel in executive, finance, human resources, project management, business development, investor relations and administrative functions. General and administrative expenses also include, but are not limited to, facilities and overhead costs, legal fees related to corporate, securities and patent matters, investor relations costs, insurance and professional fees for assurance, taxation, information technology communications and human resources matters. General and administrative costs are expensed as incurred and the Corporation accrues for services provided by third parties related to
the above expenses by monitoring the status of services provided and receiving estimates from its service providers, adjusting accruals as actual costs become known.

The Corporation expects that its general and administration expenses will increase in the future as it increases personnel to support the continued development of its product candidates. The Corporation has experienced and expects to continue to experience, increased expense associated with being a Nasdaq listed company including increased accounting, audit, legal, regulatory and compliance costs, director and officer insurance premiums, as well as higher investor relations and public relations costs.

**Government Assistance**

Government assistance consists primarily of research and development investment tax credits awarded through the Canada Revenue Agency’s Scientific Research and Economic Development (“SR&ED”) program for research expenditures incurred in Canada. Government assistance also contains other government funding for research projects and employment funding as well as fair market value adjustments to interest-free and low-interest government loans.

**Accreted interest**

Accreted interest relates entirely to the valuation of interest-free and low interest-bearing government loans, most of which are repayable based on a percentage of future gross revenue.

**RESULTS OF OPERATIONS**

**Comparison of the Three Months Ended December 31, 2019 and 2018**

The following table summaries the Corporations results of operations for the three months ended December 31, 2019 and 2018 (in thousands of Canadian dollars):

<table>
<thead>
<tr>
<th></th>
<th>Three months ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
</tr>
<tr>
<td>Subcontract revenue</td>
<td>$32</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>104</td>
</tr>
<tr>
<td>Total revenue</td>
<td>136</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
</tr>
<tr>
<td>Research and Development</td>
<td>5,518</td>
</tr>
<tr>
<td>General and administrative</td>
<td>3,362</td>
</tr>
<tr>
<td>Government assistance</td>
<td>(339)</td>
</tr>
<tr>
<td>Accreted interest</td>
<td>70</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>8,611</td>
</tr>
<tr>
<td>Net loss and comprehensive loss</td>
<td>$ (8,475)</td>
</tr>
</tbody>
</table>

**Revenue**

Revenue did not fluctuate significantly period over period.

**Research and development expenses**

Research and development expenses increased to $5.5 million for the three months ended December 31, 2019 from $4.5 million for the three months ended December 31, 2018. The increase of $1 million is mainly attributable to $548 in preclinical expenses relating to the DPX-SurMAE collaboration with CQDM, CHU, and FCHUQc, $577 in clinical costs related to the basket trial, and $285 in personnel and stock based compensation costs due to an increase in headcount. The increase is partly offset by a $347 decrease in purchases of GMP grade materials for DPX-Survivac.
General and administrative expenses

General and administrative expenses increased to $3.4 million for the three months ended December 31, 2019 from $3.0 million for the three months ended December 31, 2018. The increase of $400 compared with Q4 2018 can be further explained by an increase of $143 in salaries, benefits and share-based compensation due to an increase in headcount, $126 in legal and recruiting fees, $200 in investor relations consulting fees, and $50 in D&O insurance premium partly offset by a $170 foreign exchange gain compared with Q4 2018. Effective August 8, 2019, the Corporation elected to settle all future deferred share units (“DSUs”) redemptions in shares. As a result, DSUs are now accounted for as equity-settled instruments and will not need to be revalued at each reporting period. The Corporation expects that this will reduce the volatility in the deferred share unit compensation expense going forward.

Government Assistance

The increase in government assistance for the period ended December 31, 2019 compared with December 31, 2018 is mainly attributable to the increase in SR&ED investment tax credits consistent with increased spend on R&D salaries, raw materials as well as increased clinical trial activity being performed in Canada.

Comparison of the Year Ended December 31, 2019 and 2018

The following table summarizes the Corporation’s results of operations for the years ended December 31, 2019 and 2018 (in thousands of Canadian dollars):

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>Change ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subcontract revenue</td>
<td>$59</td>
<td>$82</td>
<td>($23)</td>
</tr>
<tr>
<td>Interest revenue</td>
<td>$509</td>
<td>$401</td>
<td>$108</td>
</tr>
<tr>
<td><strong>Total revenue</strong></td>
<td>$568</td>
<td>$483</td>
<td>$85</td>
</tr>
<tr>
<td><strong>Operating Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research and Development</td>
<td>18,986</td>
<td>12,852</td>
<td>6,134</td>
</tr>
<tr>
<td>General and administrative</td>
<td>10,140</td>
<td>9,243</td>
<td>897</td>
</tr>
<tr>
<td>Government assistance</td>
<td>(2,432)</td>
<td>(1,062)</td>
<td>(1,370)</td>
</tr>
<tr>
<td>Accreted interest</td>
<td>1,239</td>
<td>1,385</td>
<td>(146)</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>27,933</td>
<td>22,418</td>
<td>5,515</td>
</tr>
<tr>
<td><strong>Net loss and comprehensive loss</strong></td>
<td>($27,365)</td>
<td>($21,935)</td>
<td>($5,430)</td>
</tr>
</tbody>
</table>

Revenue

Revenue did not fluctuate significantly period over period.

Research and development expenses

Research and development expenses increased to $19 million for the year ended December 31, 2019 from $12.9 million for the year ended December 31, 2018. The increase of $6.1 million is mainly attributable to $1.6 million in preclinical expenses relating to the DPX-SurMAGE collaboration with CQDM, CHU, and FCHUQc, $3.6 million increase in clinical costs related to the basket trial, $453 increase in clinical costs related to the monotherapy arm of the DeCidE1 ovarian trial, and $988 in personnel and share-based compensation costs due to an increase in headcount. The increase is partly offset by a $300 decrease in purchases of GMP grade materials for DPX-Survivac.

General and administrative expenses

General and administrative expenses increased to $10.1 million for the year ended December 31, 2019 from $9.2 million for the year ended December 31, 2018. The increase of $897 compared with 2018 can be further explained by an increase of $756 in salaries, benefits and share-based compensation due to an increase in headcount, $404 in facilities and amortization costs
following the head office relocation in mid 2018, $331 in D&O premium and $94 in Directors fees following the Nasdaq listing in mid-2018, $353 in investor relations and communications consulting fees, partly offset by a $228 decrease in professional and legal fees, a $223 foreign exchange gain, and a $697 decrease in deferred share unit compensation related to fluctuation in the share price. Effective August 8, 2019, the Corporation elected to settle all future DSU redemptions in shares. As a result, DSUs are now accounted for as equity-settled instruments and will not need to be revalued at each reporting period. The Corporation expects that this will reduce the volatility in the deferred share unit compensation expense going forward.

**Government Assistance**

The increase in government assistance for the year ended December 31, 2019 compared with December 31, 2018 is mainly attributable to an $840 revaluation of the low interest-bearing government loan from the Province of Nova Scotia upon receipt of the extension and amended repayment plan, and a $554 increase in SR&ED investment tax credits consistent with increased spend on R&D salaries, raw materials as well as increased clinical trial activity being performed in Canada.

**CASHFLOWS, LIQUIDITY AND CAPITAL RESOURCES**

**Liquidity and Capital Resources**

The Corporation has incurred losses and negative cash flows from operations since inception. As of December 31, 2019, the Corporation had an accumulated deficit of $120 million and anticipates that it will continue to incur net losses for the foreseeable future.

At December 31, 2019, the Corporation had approximately $16.6 million of existing and identified potential sources of cash including:

- cash and equivalents of $14.1 million; and
- amounts receivable and investment tax credits receivable of $2.5 million.

Management believes that its cash resources of $14.1 million and its additional potential cash resources of $2.5 million, as at December 31, 2019, will be sufficient to fund operations for the first three quarters of 2020 based on current forecasts. This estimate does not take into account any utilization of the ATM Distribution allowing the Corporation to offer and sell Common Shares from time-to-time up to an aggregate offering amount of US$30M through Piper Sandler, as agent. As of March 30, 2019, 243,121 Common Shares have been sold under the ATM Distribution for total gross proceeds of US$483. The ability of the Corporation to continue as a going concern is dependent upon raising additional financing through equity and non-dilutive funding and partnerships. There can be no assurance that the Corporation will have sufficient capital to fund its ongoing operations, develop or commercialize any products without future financings. There can be no assurance that additional financing will be available on acceptable terms or at all. The Corporation is currently pursuing financing alternatives that may include equity, debt, and non-dilutive financing alternatives including co-development through potential collaborations, strategic partnerships or other transactions with third parties, that may or may not include merger and acquisitions activities. If the Corporation is unable to obtain additional financing when required, the Corporation may have to substantially reduce or eliminate planned expenditures, or the Corporation may be unable to continue operations. These uncertainties cast doubt as to the ability of the Corporation to meet its obligations as they come due and, accordingly, the appropriateness of the use of accounting principles applicable to a going concern.

The Corporation’s primary use of cash is to fund operating expenses, which consist primarily of funding clinical and preclinical trials, research and development expenditures and related personnel costs and to a lesser extent, general and administrative expenditures. Cash used to fund operating expenses is impacted by the timing of when the Corporation pays these expenses, as reflected in the change in its outstanding accounts payable and accrued expenses.

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. The Corporation’s product candidates are still in the early stages of clinical and preclinical development and the outcome of these efforts is uncertain. Accordingly, the Corporation cannot estimate the actual amounts necessary to successfully complete the development and commercialization of its product candidates or whether, or when, it may achieve profitability. Until such time, if ever, as the Corporation can generate substantial product revenue, it expects to finance cash needs through a combination of equity or debt financings and collaboration arrangements. If the Corporation does raise additional capital through public or private equity offerings, the ownership interest of its existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that
adversely affect its stockholders’ rights. If IMV raises additional capital through debt financing, it may be subject to covenants limiting or restricting its ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If the Corporation is unable to raise capital when needed, it will need to delay, reduce or terminate planned activities to reduce costs. Doing so will likely harm the Corporation’s ability to execute its business plans. 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 product candidate, and continues to actively pursue alternatives to raise capital, including the sale of its equity securities, debt and non-dilutive funding.

**Cash Flows**

The following table summarizes the Corporation’s cash flows for the periods indicated (in thousands of Canadian dollars):

<table>
<thead>
<tr>
<th></th>
<th>Years Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Net cash (used in) provided by:</td>
<td></td>
</tr>
<tr>
<td>Operating activities</td>
<td>(27,288)</td>
</tr>
<tr>
<td>Financing activities</td>
<td>26,935</td>
</tr>
<tr>
<td>Investing activities</td>
<td>(476)</td>
</tr>
<tr>
<td>Net increase (decrease) in cash and cash equivalents</td>
<td>(829)</td>
</tr>
</tbody>
</table>

**Cashflows from operating activities**

During the year ended 2019, $27,288 was used in operating activities. This included the reported net loss of $27,365 prior to being decreased by $1,875 for non-cash expenses including DSU compensation, depreciation, revaluation of long-term debt, accretion of long-term debt and lease obligations, loss on disposal of assets and stock-based compensation. The Corporation had a net decrease of cash of $1,798 as a result of changes in working capital balances, which was mainly attributable to a $1,418 decrease in accounts payable and accrued liabilities, a $333 increase in prepaid expenses, and a $550 increase in investment tax credits receivable, partly offset by a decrease of $492 in amounts receivable.

During the year ended 2018, $17,223 was used in operating activities. This included the reported net loss of $21,935 prior to being decreased by $3,456 for non-cash expenses including DSU compensation, depreciation, accretion of long-term debt and lease obligations, loss on disposal of assets and stock-based compensation. The Corporation had a net increase of cash of $1,256 as a result of changes in working capital balances, which was mainly attributable to a $3,570 increase in accounts payable and accrued liabilities offset by a $1,076 increase in amounts receivable.

**Cashflows from financing activities**

During the year ended December 31, 2019, sources of cash from financing activities included: $29,456 proceeds raised in the March 2019 Public Offering less cash issuance costs of $2,499, and $156 through the exercise of stock options and warrants. The Corporation used $178 to repay long-term debt and lease obligations during the period.

During the year ended December 31, 2018, sources of cash from financing activities included: $14,375 proceeds raised in the February 2018 Public Offering less cash issuance costs of $1,148; and $5,763 through the exercise of stock options and warrants. The Corporation received $896 in incentive contributions from its lessor and borrowed $300 from its lessor to fund leasehold improvements at the new facility in Dartmouth. The Corporation used $100 to repay long-term debt and lease obligations during the period.

**Cashflows from investing activities**

During the year ended December 31, 2019, IMV used $476 of cash in investing activities, consisting mainly of purchases of furniture and equipment for ongoing research and operating activities. During the year ended December 31, 2018, the Corporation purchased equipment and leasehold improvements for an aggregate amount of $2,185 when it relocated its head office and laboratory from Halifax to Dartmouth, Nova Scotia. The Corporation raised $14 in proceeds from the sale of used furniture and equipment at its former Halifax facility.
JUNE 2017 EQUITY OFFERING AND USE OF PROCEEDS

On June 21, 2017, the Corporation completed a public offering, issuing 2,403,846 Common Shares at a price of $4.16 per share for aggregate proceeds of $10,000. The Corporation intended to use the net proceeds of this offering for the research and development and clinical advancement of its cancer and infectious disease therapy 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).

<table>
<thead>
<tr>
<th>Intended Use of Proceeds</th>
<th>Estimated amount $</th>
<th>Amount to date $</th>
<th>Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>phase 2 clinical trial in DLBCL with Merck</td>
<td>2,400</td>
<td>1,859</td>
<td>No variances anticipated</td>
</tr>
<tr>
<td>phase 1 clinical trial for multiple indications</td>
<td>4,200</td>
<td>4,200</td>
<td>None</td>
</tr>
</tbody>
</table>

FEBRUARY 2018 EQUITY OFFERING AND USE OF PROCEEDS

On February 15, 2018, the Corporation completed a public offering, issuing 2,246,094 Common Shares at a price of $6.40 per share for aggregate proceeds of $14,375. The Corporation intended 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).

<table>
<thead>
<tr>
<th>Intended Use of Proceeds</th>
<th>Estimated amount $</th>
<th>Amount to date $</th>
<th>Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical trials in 2019</td>
<td>4,800</td>
<td>4,800</td>
<td>None</td>
</tr>
<tr>
<td>Research &amp; development in 2019</td>
<td>5,300</td>
<td>5,300</td>
<td>None</td>
</tr>
</tbody>
</table>

MARCH 2019 EQUITY OFFERING AND USE OF PROCEEDS

On March 6, 2019, the Corporation completed a public offering, issuing 5,404,855 Common Shares (including 504,855 Common Shares upon the exercise of the underwriters’ over-allotment option on March 11, 2019) at a price of $5.45 per share for aggregate proceeds of $29.5M. The Corporation intends to use the net proceeds of this offering to accelerate the development of DPX-Survivac in combination with Keytruda as part of the basket trial in selected advanced or recurrent solid tumors in bladder, liver (hepatocellular carcinoma), ovarian and non-small-cell lung cancers, as well as tumors shown to be positive for the microsatellite instability high biomarker 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).

<table>
<thead>
<tr>
<th>Intended Use of Proceeds</th>
<th>Estimated amount $</th>
<th>Amount to date $</th>
<th>Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 2 clinical trial for multiple indications</td>
<td>16,000</td>
<td>401</td>
<td>No variances anticipated</td>
</tr>
</tbody>
</table>

SUMMARY OF QUARTERLY RESULTS

The selected quarterly financial information(1) for the past eight financial quarters is outlined below:

(in thousands of dollars, except for amounts per share)
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 2020

The exact timing could differ from expectations but are currently management’s best estimate.

RELATED PARTY TRANSACTIONS

For the year ending December 31, 2019, there were no related party transactions (2018 - $nil).

CONTRACTUAL OBLIGATIONS

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

<table>
<thead>
<tr>
<th>Contractual Obligations</th>
<th>Payments Due by Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>6,157</td>
</tr>
<tr>
<td>Amounts due to directors</td>
<td>60</td>
</tr>
<tr>
<td>Short term and low value leases</td>
<td>52</td>
</tr>
<tr>
<td>Long-term leases</td>
<td>2,028</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>15,766</td>
</tr>
</tbody>
</table>

(1) Unless otherwise noted, financial information in thousands of Canadian dollars and prepared in accordance with IFRS.
### Contractual Obligations and Payments Due by Period

<table>
<thead>
<tr>
<th>Payments Due by Period</th>
<th>Total</th>
<th>Less than 1 year</th>
<th>1 - 3 years</th>
<th>4 - 5 years</th>
<th>After 5 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>24,063</td>
<td>6,737</td>
<td>2,948</td>
<td>2,697</td>
<td>11,681</td>
</tr>
</tbody>
</table>

### OFF-BALANCE SHEET ARRANGEMENTS

The Corporation was not party to any off-balance sheet arrangements as of December 31, 2019.

### OUTSTANDING SECURITIES

As of March 30, 2020, the number of issued and outstanding common shares was 51,028,180 and a total of 1,959,452 stock options and deferred share units were outstanding.

### 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 Corporation’s capacity to raise additional funding on reasonable terms when necessary, obtain positive results of pre-clinical studies and clinical, successfully develop existing and new products, to hire and retain skilled staff, protect its intellectual property, manufacture its products and to meet demand, and obtain necessary regulatory approvals and the timing in respect thereof, etc. An investment in the 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 registration statement on Form 40-F filed with the U.S. Securities and Exchange Commission, as well as the other information filed with the securities regulators before investing in the 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 the Corporation’s most recent AIF filed on SEDAR at [www.sedar.com](http://www.sedar.com) and included in the registration statement on Form 40-F filed on EDGAR at www.sec.gov/edgar.

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

#### Disclosure Controls and Procedures

The Chief Executive Officer (the “CEO”) and the Chief Financial Officer (the “CFO”) of the Corporation are responsible for establishing and maintaining the Corporation’s disclosure controls and procedures (“DCP”) including adherence to the Disclosure Policy adopted by the Corporation. The Disclosure Policy requires all staff to keep senior management fully apprised of all material information affecting the Corporation so that they may evaluate and discuss this information and determine the appropriateness and timing for public disclosure.

The Corporation maintains DCP designed to ensure that information required to be disclosed in reports filed under applicable securities laws, is recorded, processed, summarized and reported within the appropriate time periods and that such information is accumulated and communicated to the Corporation’s management, including the CEO and CFO, to allow for timely decisions regarding required disclosure.

The CEO and CFO have evaluated whether there were changes to the DCP during the year ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, the DCP. No such changes were identified through their evaluation.

In designing and evaluating DCP, the Corporation recognizes that any disclosure controls and procedures, no matter how well conceived or operated, can only provide reasonable, not absolute, assurance that the objectives of the control system are met, and management is required to exercise its judgment in evaluating the cost-benefit relationship of possible controls and procedures.
Internal Control over Financial Reporting

The Corporation’s management, including the CEO and the CFO, are responsible for establishing and maintaining adequate internal control over financial reporting (“ICFR”) for the Corporation to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. The fundamental issue is ensuring all transactions are properly authorized and identified and entered into a well-designed, robust and clearly understood accounting system on a timely basis to minimize risk of inaccuracy, failure to fairly reflect transactions, failure to fairly record transactions necessary to present financial statements in accordance with IFRS, unauthorized receipts and expenditures, or the inability to provide assurance that unauthorized acquisitions or dispositions of assets can be detected.

The CEO and CFO have evaluated whether there were changes to the ICFR during the year ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, the ICFR. No such changes were identified through their evaluation.

The Corporation’s ICFR may not prevent or detect all misstatements because of inherent limitations. Additionally, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because changes in conditions or deterioration in the degree of compliance with the Corporation’s policies and procedures.

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 business development and investor relations expenses are now presented in general and administrative expenses on the consolidated statements of loss and comprehensive loss. Certain comparative figures have been reclassified to conform the presentation adopted in the current year for general and administrative expenses.

The significant accounting policies of IMV are detailed in the notes to the annual audited consolidated financial statements for the year ended December 31, 2019 filed on SEDAR www.sedar.com and included in the registration statement on Form 40-F filed on EDGAR at www.sec.gov/edgar.

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.

While the Corporation’s significant accounting policies and critical judgements in applying the Corporation’s accounting policies are detailed in the annual audited consolidated financial statements for the year ended December 31, 2019 filed on SEDAR www.sedar.com and included in the registration statement on Form 40-F filed on EDGAR at www.sec.gov/edgar, the Corporation believes that the following critical accounting policies, estimates and judgements are most important to understanding and evaluating its financial results.

Calculation of initial fair value and carrying amount of long-term debt

Atlantic Innovation Fund Loans ("AIF Loans")

The initial fair value of the AIF Loans is determined by using a discounted cash flow analysis for each of the loans, which require a number of assumptions. The difference between the face value and the initial fair value of the AIF Loans is recorded in the consolidated statement of loss and comprehensive loss as government assistance. The carrying amount of the AIF Loans requires management to adjust the long-term debt to reflect actual and revised estimated cash flows whenever revised cash flow estimates are made or new information related to market conditions is made available. Management recalculates the carrying amount by computing the present value of the estimated future cash flows at the original effective interest rate. Any adjustments are recognized in the consolidated statement of loss as accreted interest after initial recognition.
The significant assumptions used in determining the discounted cash flows include estimating the amount and timing of future revenue for the Corporation and the discount rate.

As the AIF Loans are repayable based on a percentage of gross revenue, if any, the determination of the amount and timing of future revenue significantly impacts the initial fair value of the loan, as well as the carrying value of the AIF Loans at each reporting date. The expected revenue streams include i) estimated royalties generated from the eventual commercialization of the Corporation’s products, and ii) estimated milestone payments generated upon entering into potential contractual partnerships and achieving development and sales milestones. The amount and timing of estimated milestone payments forecasted are earlier and less predictable, therefore, changes in the amount and timing of milestone payments could have a significant impact on the fair value of the loans. Further, the Corporation is in the early stages of research for its product candidates; accordingly, determination of the amount and timing of any revenue streams requires significant judgment by management.

The discount rate determined on initial recognition of the AIF Loans is used to determine the present value of estimated future cash flows expected to be required to settle the debt. In determining the appropriate discount rates, the Corporation considered the interest rates of similar long-term debt arrangements with similar terms. The AIF Loans are repayable based on a percentage of gross revenue, if any; accordingly, finding financing arrangements with similar terms is difficult and management was required to use significant judgment in determining the appropriate discount rates. Management used a discount rate of 35% to discount the AIF Loans.

Province of Nova Scotia (“The Province”)

The initial fair value of the Province loan is determined by using a discounted cash flow analysis for the loan. The interest rate on the loan is below the market rate for a commercial loan with similar terms.

The significant assumption used in determining the discounted cash flows is the discount rate.

Any changes in the discount rate would impact the amount recorded as initial fair value of the long-term debt and the carrying value of the long-term debt at each reporting date. In determining the appropriate discount rate, the Corporation considers the interest rates of similar long-term debt arrangements with similar terms. The Province loan is a government loan with principal payments only required at the end of seven years; accordingly, finding financing arrangements with similar terms is difficult and management was required to use significant judgment in determining the appropriate discount rates. Management used a discount rate of 11% to discount the Province loan.

The difference between the book value and the initial fair value of the Province loan is recorded in the consolidated statement of loss as government assistance on initial recognition. Any changes in the amounts recorded on the consolidated statement of financial position for the Province loan result in an offsetting charge to accreted interest after initial recognition in the consolidated statement of loss.

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 annual audited consolidated financial statements for the year ended December 31, 2019 filed on SEDAR www.sedar.com and included in the registration statement on Form 40-F filed on EDGAR at www.sec.gov/edgar.

(Signed) Frédéric Ors
Frédéric Ors
Chief Executive Officer

(Signed) Pierre Labbé
Pierre Labbé
Chief Financial Officer

March 30, 2020