# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# FORM 40-F

(Check One)

[ ] REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

[X] ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended: December 31, 2018

# IMV Inc.

(Exact name of Registrant as specified in its charter)

#### Canada

(Province or other jurisdiction of incorporation or organization)

#### 2834

(Primary Standard Industrial Classification Code Number (if applicable))

# Not Applicable

(I.R.S. Employer Identification Number (if applicable))

130 Eileen Stubbs Avenue Suite 19 Dartmouth Nova Scotia B3B 2C4 Canada (902) 492-1819

(Address and telephone number of Registrant's principal executive offices)

C T Corporation System 28 Liberty Street New York, NY 10011 (212) 894-8800

(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class

Common Shares

Name of each exchange on which registered

Commission File Number: 001-38480

The NASDAQ Stock Market LLC

Securities registered or to be registered pursuant to Section 12(g) of the Act:

#### None

(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

#### None (Title of Class)

For annual reports, indicate by check mark the information filed with this Form:

[ X ] Annual information form [ X ] Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 45,106,401

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

YES[X]NO[]

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

YES[X]NO[]

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.

Emerging growth company [ X ]

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]



#### EXPLANATORY NOTE

IMV Inc. (the "Registrant") is a Canadian corporation eligible to file its Annual Report pursuant to Section 13(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on Form 40-F. The Registrant is a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act. Equity securities of the Registrant are accordingly exempt from Sections 14(a), 14(b), 14(c), 14(f) and 16 of the Exchange Act pursuant to Rule 3a12-3 thereunder.

#### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 40-F are forward-looking statements within the meaning of Section 21E of the Exchange Act and Section 27A of the Securities Act of 1933, as amended (the "Securities Act"). Additionally, the safe harbor provided in Section 21E of the Exchange Act and Section 27A of the Securities Act applies to any forward-looking information provided pursuant to "Off-Balance Sheet Arrangements" and "Disclosure of Contractual Obligations" in this Annual Report on Form 40-F. Please see "Forward-Looking Statements" beginning on page 4 of the Management Discussion and Analysis for the fiscal year ended December 31, 2018 of the Registrant, attached as Exhibit 99.3 to this Annual Report on Form 40-F, and "Introduction and Forward-Looking Statements" beginning on page 1 of the Annual Information Form for the fiscal year ended December 31, 2018 of the Registrant, attached as Exhibit 99.1 to this Annual Report on Form 40-F.

#### DIFFERENCES IN UNITED STATES AND CANADIAN REPORTING PRACTICES

The Registrant is permitted, under a multijurisdictional disclosure system adopted by the United States, to prepare this Annual Report on Form 40-F in accordance with Canadian disclosure requirements, which are different from those of the United States.

The Registrant prepares its consolidated financial statements, which are filed with this Annual Report on Form 40-F, in accordance with International Financial Reporting Standards, as issued by the International Accounting Standards Board ("IFRS"). Such financial statements may not be comparable to financial statements prepared in accordance with United States generally accepted accounting principles.

Unless otherwise indicated, all dollar amounts in this Annual Report on Form 40-F are in Canadian dollars. The exchange rate of Canadian dollars into United States dollars, on December 31, 2018, based upon the Bank of Canada published daily average exchange rate, was U.S.\$1.00 = CDN\$1.3642.

Purchasing, holding, or disposing of securities of the Registrant may have tax consequences under the laws of the United States and Canada that are not described in this Annual Report on Form 40-F.

#### PRINCIPAL DOCUMENTS

#### Annual Information Form

The Registrant's Annual Information Form for the fiscal year ended December 31, 2018 is filed as Exhibit 99.1 and incorporated by reference in this Annual Report on Form 40-F.

#### Audited Annual Financial Statements

The audited consolidated financial statements of the Registrant for the fiscal year ended December 31, 2018, including the Independent Auditor's Report with respect thereto, are filed as Exhibit 99.2 and incorporated by reference in this Annual Report on Form 40-F.

#### Management Discussion and Analysis

The Registrant's Management Discussion and Analysis for the fiscal year ended December 31, 2018 is filed as Exhibit 99.3 and incorporated by reference in this Annual Report on Form 40-F.

# CONTROLS AND PROCEDURES

#### **Certifications**

The required certifications are included in Exhibits 99.4, 99.5, 99.6 and 99.7 of this Annual Report on Form 40-F.

#### Disclosure Controls and Procedures

At the end of the period covered by this report, an evaluation of the effectiveness of the design and operation of the Registrant's "disclosure controls and procedures" (as such term is defined in Rules 13a-15(e) under the Exchange Act) was carried out by the Registrant's principal executive officer and principal financial officer. Based upon that evaluation, the Registrant's principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this report, the design and operation of the Registrant's disclosure controls and procedures are effective to ensure that (i) information required to be disclosed in reports that the Registrant files or submits to regulatory authorities is recorded, processed, summarized and reported within the time periods specified by regulation, and (ii) is accumulated and communicated to management, including the Registrant's principal executive officer (the "CEO") and principal financial officer (the "CFO"), to allow timely decisions regarding required disclosure.

It should be noted that while the Registrant's CEO and CFO believe that the Registrant's disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that the Registrant's disclosure controls and procedures will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

#### Management Report on Internal Control Over Financial Reporting

This Annual Report on Form 40-F does not include a report of management's assessment regarding internal control over financial reporting due to a transition period established by rules of the Securities and Exchange Commission (the "Commission") for newly public companies.

#### Attestation Report of Independent Auditor

In accordance with the United States Jumpstart Our Business Startup Act (the "JOBS Act") enacted on April 5, 2012, the Registrant qualifies as an "emerging growth company" (an "EGC"), which entitles the Registrant to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not EGCs. Specifically, the JOBS Act defers the requirement to have the Registrant's independent auditor assess the Registrant's internal controls over financial reporting under Section 404(b) of the Sarbanes-Oxley Act. As such, the Registrant is exempted from the requirement to include an auditor attestation report in this Form 40-F for so long as the Registrant remains an EGC, which may be for as long as five years following its initial registration in the United States.

# Changes in Internal Control over Financial Reporting

During the year ended December 31, 2018, there were no changes in the Registrant's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Registrant's internal control over financial reporting.

#### NOTICES PURSUANT TO REGULATION BTR

There were no notices required by Rule 104 of Regulation BTR that the Registrant sent during the year ended December 31, 2018 concerning any equity security subject to a blackout period under Rule 101 of Regulation BTR.

#### AUDIT COMMITTEE AND AUDIT COMMITTEE FINANCIAL EXPERT

#### Audit Committee

The Board of Directors has a separately-designated standing Audit Committee established in accordance with Section 3(a)(58)(A) of the Exchange Act for the purpose of overseeing the accounting and financial reporting processes of the Registrant and audits of the Registrant's annual financial statements. As of the date of this Annual Report on Form 40-F, the members of the Audit Committee are James Hall, Wayne Pisano and Julia P. Gregory.

The Board of Directors of the Registrant has determined that all members of the Audit Committee are "independent," as such term is defined under the rules of The NASDAQ Stock Market LLC ("NASDAQ"). Further, the Registrant has determined that all members of the Audit Committee are financially literate, meaning that they must be able to read and understand fundamental financial statements.

#### Audit Committee Financial Expert

The Board of Directors of the Registrant has determined that the Chairman of the Audit Committee, James Hall, is an "audit committee financial expert," as defined in General Instruction B(8)(b) of Form 40-F. The U.S. Securities and Exchange Commission has indicated that the designation of James Hall as an audit committee financial expert does not make him an "expert" for any purpose, impose any duties, obligations or liability on him that are greater than those imposed on members of the audit committee and board of directors who do not carry this designation or affect the duties, obligations or liability of any other member of the audit committee.

#### CODE OF ETHICS

The Registrant has adopted a written code of ethics for its directors, officers and employees entitled "Code of Business Conduct and Ethics" (the **Code**") that complies with Section 406 of the Sarbanes-Oxley Act of 2002 and with NASDAQ Listing Rule 5610. The Code includes, among other things, written standards for the Registrant's principal executive officer, principal financial officer and principal accounting officer or controller, or persons performing similar functions, which are required by the Commission for a code of ethics applicable to such officers. A copy of the Code is posted on the Registrant's website at www.imv-inc.com under the Investors tab and under the Corporate Governance tab.

No substantive amendments to the Code were adopted during the year ended December 31, 2018. No "waiver" or "implicit waiver," as such terms are defined in Note 6 to General Instruction B(9) of Form 40-F, was granted relating to any provision of the Code during the year ended December 31, 2018.

#### PRINCIPAL ACCOUNTANT FEES AND SERVICES

PricewaterhouseCoopers LLP has served as the Registrant's auditing firm since 2003. Aggregate fees billed to the Registrant for professional services rendered by PricewaterhouseCoopers LLP and its affiliates during the fiscal years ended December 31, 2018 and December 31, 2017 are detailed below (stated in Canadian dollars):

	<u>F</u>	<u>'iscal 2018</u>	<b>Fiscal 2017</b>
Audit Fees	\$	87,000 \$	86,850
Audit-Related Fees	\$	89,350 \$	44,600
Tax Fees	\$	33,500 \$	41,200
All Other Fees	\$	- \$	12,000
Total Fees	\$	209,850 \$	184,650

The nature of each category of fees is as follows:

#### Audit Fees

Audit fees were paid for professional services rendered by the auditors for the audit of the Registrant's annual financial statements (2017 – \$52,350 and 2018 – \$53,000) and reviews of the Registrant's consolidated interim financial statements (2017 – \$34,500 and 2018 – \$34,000).

#### Audit-Related Fees

Audit-related fees consist of the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Registrant's financial statements and are not reported under the Audit Fees item above. This category is comprised of fees billed for the provision of comfort letters and consents, the consultation concerning financial accounting and reporting of specific issues (2017 - \$44,600 and 2018 - \$49,550) and the review of documents filed with regulatory authorities (2017 - \$nil and 2018 - \$39,800).

#### Tax Fees

Tax fees include fees billed for tax compliance, tax advice and tax planning services, including the preparation of original tax returns and claims for refund (2017 - \$21,200 and 2018 - \$16,000); tax consultations, such as assistance and representation in connection with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from taxing authorities (2017 - \$20,000 and 2018 - \$17,500); tax planning services; and consultation and planning services(2017 - \$nil and 2018 - \$nil).

#### All Other Fees

All Other Fees include the aggregate fees billed for products and services provided by the auditors, other than the services reported above.

#### Pre-Approval Policies and Procedures

All audit and non-audit services performed by the Registrant's auditor must be pre-approved by the Audit Committee of the Registrant. For the fiscal year ended December 31, 2018, all audit and non-audit services performed by the Registrant's auditor were pre-approved by the Audit Committee of the Registrant, pursuant to Rule 2-01(c)(7)(i) of Regulation S-X.

#### OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2018, the Registrant does not have any "off-balance sheet arrangements" (as that term is defined in paragraph 11(ii) of General Instruction B to Form 40-F) that have or are reasonably likely to have a current or future effect on its financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

#### DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following table lists, as of December 31, 2018, information with respect to the Registrant's known contractual obligations:

Payments Due by Period (All amounts in thousands of Canadian dollars) Less than 1 1-3 years 3-5 years More than Total **Contractual Obligations** year 5 years 7,575 Accounts payable and accrued liabilities 7,575 Amounts due to directors 49 49 \_ Shor term and low value leases 18 27 21 66 1,072 2,398 Long-term leases 275 533 518 Long-term debt 264 5,324 142 9,882 15,612 Total 8,181 5,884 681 10,954 25,700

#### INTERACTIVE DATA FILE

The Registrant is submitting as Exhibit 101 to this Annual Report on Form 40-F its Interactive Data File.

#### MINE SAFETY DISCLOSURE

Not applicable.

#### CORPORATE GOVERNANCE

The Registrant is a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act and its common shares are listed on NASDAQ. NASDAQ Marketplace Rule 5615(a)(3) permits a foreign private issuer to follow its home country practices in lieu of certain requirements in the NASDAQ Listing Rules. A foreign private issuer that follows home country practices in lieu of certain corporate governance provisions of the NASDAQ Listing Rules must disclose each NASDAQ corporate governance requirement that it does not follow and include a brief statement of the home country practice the issuer follows in lieu of the NASDAQ corporate governance requirement(s), either on its website or in its annual filings with the Commission. A description of the significant ways in which the Registrant's corporate governance practices differ from those followed by domestic companies pursuant to the applicable NASDAQ Listing Rules is disclosed on the Registrant's website at www.imv-inc.com under "Investors/Corporate Governance/Governance Documents/Website Disclosure".

#### UNDERTAKING

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the Commission staff, and to furnish promptly, when requested to do so by the Commission staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an Annual Report on Form 40-F arises; or transactions in said securities.

#### CONSENT TO SERVICE OF PROCESS

The Registrant filed an Appointment of Agent for Service of Process and Undertaking on Form F-X with the Commission on May 31, 2018, which was amended on March 26, 2019 with respect to the class of securities in relation to which the obligation to file this Annual Report on Form 40-F arises.

Any change to the name or address of the Registrant's agent for service of process shall be communicated promptly to the Commission by an amendment to the Form F-X referencing the file number of the Registrant.

# EXHIBIT INDEX

Exhibit No	<u>Title of Exhibit</u>
99.1	Annual Information Form of the Registrant for the year ended December 31, 2018
99.2	Audited Consolidated Financial Statements of the Registrant for the year ended December 31, 2018, together with the Auditors' Report thereon
99.3	Management Discussion and Analysis of the Registrant for the year ended December 31, 2018
99.4	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the United States Securities Exchange Act of 1934
99.5	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the United States Securities Exchange Act of 1934
99.6	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the United States Sarbanes Oxley Act of
	2002
<u>99.7</u>	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the United States Sarbanes Oxley Act of
	<u>2002</u>
99.8	Consent of Independent Registered Public Accounting Firm PricewaterhouseCoopers LLP
<u>77.0</u>	Consent of independent Registered Lubic Accounting Firm Theewaternousecoopers EEF
101	XBRL Document
101	ADAL Document

# **SIGNATURES**

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this Annual Report to be signed on its behalf by the undersigned, thereunto duly authorized.

IMV Inc.

By: /s/ Pierre Labbé

Name: Pierre Labbé

Title: Chief Financial Officer

Date: April 1, 2019



# ANNUAL INFORMATION FORM FOR THE YEAR ENDED DECEMBER 31, 2018

April 1, 2019

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#### I. INTRODUCTION AND FORWARD-LOOKING STATEMENTS

The information contained in this Annual Information Form is stated as at December 31, 2018, unless otherwise indicated. Unless otherwise indicated or if the context otherwise requires, "IMV", "the Corporation", "we", "us" and "our" refer collectively to IMV Inc., 130 Eileen Stubbs Avenue, Suite 19, Dartmouth, Nova Scotia, Canada, B3B 2C4 and to its subsidiary, Immunovaccine Technologies Inc. ("IVT").

Unless specified otherwise, all amounts are presented in Canadian dollars.

Certain statements in this Annual Information Form ("AIF") 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 AIF, such statements use such words as "will", "may", "could", "intends", "potential", "plans", "believes", "expects", "expects", "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 AIF. Forward looking statements include, among others:

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

Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors discussed under the heading "Risk Factors and Uncertainties". Although the forward-looking statements contained in this AIF 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 AIF. Such statements are based on a number of assumptions which may prove to be incorrect, including, but not limited to, assumptions about:

- Obtaining additional funding on reasonable terms when necessary;
- Positive results of pre-clinical studies and clinical trials;
- The Corporation's ability to successfully develop existing and new products;
- The Corporation's ability to hire and retain skilled staff;
- The products and technology offered by the Corporation's competitors;
- General business and economic conditions;
- The Corporation's ability to protect its intellectual property;
- The Corporation's ability to manufacture its products and to meet demand; and
- Regulatory approvals.

These statements reflect management's current views and beliefs and are based on estimates, assumptions, and information currently available to, and considered reasonable by, management. A more detailed assessment of the risks that could cause actual results to materially differ from current expectations is contained in the section entitled "Risk Factors and Uncertainties" of this AIF.

Statistical information and other data relating to the pharmaceutical and biotechnology industry included in this AIF are derived from recognized industry reports published by industry analysts, industry associations and/or independent consulting and data compilation organizations. Market data and industry forecasts used throughout this AIF were obtained from various publicly available sources. Although the Corporation believes that these independent sources are generally reliable, the accuracy and completeness of the information from such sources are not guaranteed and have not been independently verified.

#### II. CORPORATE STRUCTURE

The Corporation was incorporated on May 18, 2007 under the name of Rhino Resources Inc. pursuant to the Canada Business Corporations Act. In September 2009, the Corporation changed its name to Immunovaccine Inc. and consolidated its outstanding share capital on a 5 to 1 basis. On May 2, 2018, the Corporation changed its name to IMV Inc. and consolidated its outstanding share capital on a 3.2 to 1 basis. The Corporation's head and registered office is located at 130 Eileen Stubbs Avenue, Suite 19, Dartmouth, Nova Scotia, Canada, B3B 2C4.

The Corporation has one wholly-owned subsidiary, Immunovaccine Technologies Inc., which is incorporated under the laws of the Province of Nova Scotia.

#### III. GENERAL DEVELOPMENT OF THE BUSINESS

#### 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 and other serious diseases. IMV is headquartered in Dartmouth, Nova Scotia and has an office in Quebec City, Quebec and as at December 31, 2018, had 51 full time employees. 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 and delivery of active ingredients into immune cells and lymph nodes. It enables the programming of immune cells in vivo, which are aimed at generating powerful new synthetic therapeutic capabilities. DPX no-release MOA can be leveraged to generate "first-in-class" T cell therapies with the potential to be transformative in the treatment of cancer.

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 and antibodies); and provides long term stability as well as low cost of goods. 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"). 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. It is comprised of five minimal MHC class I peptides to activate naïve T cells against survivin.

Survivin is a well characterized and recognized tumour associated antigen known to be expressed during fetal development and across most tumour 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 tumour lines used in the National Cancer Institute's cancer drug screening program and documented in the literature to be overexpressed in more than 20 indications.

Foremost, the Corporation's clinical strategy is to establish monotherapy activity of DPX-Survivac in order to increase value, de-risk clinical development, and to target late stage unmet medical needs for a shorter path to clinical demonstration and first regulatory approval.

In addition we are evaluating DPX Survivac in combination with Merck's KEYTRUDA® checkpoint inhibitor in multple oncology targets. The Corporation is focusing on a fast path to market in ovarian and diffuse large B cell lymphoma ("DLBCL") cancers and on repeating its clinical demonstrations of activity in other indications.

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 with sum of base line target lesions per Response evaluation criteria in solid tumours ("Recist 1.1 criteria") less than five centimeters;
- 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 tumours in bladder, liver (hepatocellular carcinoma), ovarian, or non-small-cell lung (NSCLC) cancers, as well as tumours shown to be positive for the microsatellite instability high (MSI-H) biomarker.

In infectious disease vaccine applications, the Corporation has completed a demonstration phase 1 clinical trial with a target against the respiratory syncytial virus ("RSV"). The Corporation also has a commercial licensing agreement with Zoetis for the development of two cattle vaccines and is also conducting several research and clinical collaborations, including a collaboration with the Dana-Farber Cancer Institute ("Dana-Farber") for Human Papillomavirus ("HPV") related cancers and with Leidos, Inc. ("Leidos") in the United States for the development of vaccine candidates for malaria and the Zika virus.

The common shares of the Corporation are listed on the NASDAQ Stock Market LLC and on the Toronto Stock Exchange under the symbol "IMV".

#### History

The Corporation commenced operations in March 2000, based on animal health research pioneered at Dalhousie University in Halifax, Nova Scotia, when it was contracted by the Department of Fisheries and Oceans to develop a contraceptive to control the seal population. The Corporation was able to develop a contraceptive and delivery system that demonstrated effectiveness such that 90% of seals, 10 years after treatment, were still contracepted after a single dose.

From 2000 to 2008, the Corporation concentrated its research efforts on animal contraception for both wildlife and companion animals, while also working on vaccines for infectious diseases in livestock with CSL Animal Health, a division of CSL Limited, which was subsequently acquired by Pfizer Inc. ("Pfizer"). The Pfizer Animal Health division was later spun out into Zoetis.

Over those years the corporation continued to develop its various technologies and began exploring potential new human applications. This research eventually led to acquiring survivin cancer targets from Merck KGaA. Using traditional vaccine delivery technology, Merck had been unable to generate optimal T cell activation. Reformulating survivin cancer targets in its delivery platform, IMV saw different results in preclinical research highlighting the potential for the treatment of human cancers. Thus, the Corporation's first clinical candidate, DPX-Survivac, emerged. Since then, several clinical studies have demonstrated the potential of DPX-Survivac in cancer and today the corporation is continuing its development in 6 different cancer indications across multiple phase 2 studies.

#### Recent Developments

Since January 1, 2019, the Corporation has announced:

- On March 26, 2019, preliminary data from the phase 2 cohort of the Decide 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% of the subjects (5 of 6) show stable disease (SD), including two tumor regressions
  - 80% (4 of 5) with stable disease are in subjects with a lower baseline tumor burden (BTB), which also includes the two tumor regressions

Importantly, in earlier stages of this trial, durable clinical responses occurred after 140 days, and have now lasted for 20 months or more. Additional data at the 140 days mark of this cohort will be available by the end of the first half of 2019.

This amended phase 2 study evaluates the safety and efficacy of DPX-Survivac monotherapy with mCPA in patients with advanced recurrent ovarian cancer. As of the March 25, 2019 data cut-off date, 13 patients have been enrolled in the phase 2 portion of the trial in addition to the 53 enrolled in the phase 1b cohort. Five patients were randomized into the DPX-Survivac monotherapy cohort. Seven patients had been randomized into DPX-Survivac/mCPA in combination with epacadostat before the phase 2 protocol was amended to stop enrollment in the combination arm. One of the patients in the combination arm elected to switch to the monotherapy arm of the trial. Positive data from the phase 1bportion of the trial led IMV to amend the study to monotherapy inpatients with lower tumor burden.

The amended phase 2 cohort of the DECIDE trial is targeting an enrollment of at least additional 16 patients in the population with a lower tumor burden. Enrollment is ongoing at multiple sites in the U.S. and Canada.

• On March 18, 2019, that the Canadian bioresearch consortium CQDM has awarded a grant to a collaboration among IMV Inc., Centre de recherche du CHU de Quebec-Universite Laval and La Fondation du CHU de Quebec (FCHUQc).

Under the leadership of Dr. Yves Fradet, MD, professor of surgery and researcher in cancer immunotherapy, and his team, in collaboration with IMV's team, this project will receive a grant of up to \$1.2-million 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). This protein is frequently expressed in various human cancers including bladder, lung and kidney (1). 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 tumours 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;
- · Low-grade highly recurrent non muscle invasive bladder cancer combined with CPA prior to transurethral resection.
- On March 6, 2019, that it has completed a public offering of common shares of the Corporation. 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, that the underwriters have partially exercised their over-allotment option to purchase additional common shares, resulting in the issuance of an additional 504,855 common shares of the Corporation at a price of C\$5.45 per share for additional gross proceeds of approximately C\$2.75 million. As a result of the exercise of this option, the Corporation has raised total gross proceeds of approximately C\$29.46 million before deducting the underwriting commissions and offering expenses. The Corporation intends to use the net proceeds of the Offering to accelerate the development of DPX-Survivae in combination with Keytruda as part of the phase 2 basket trial with Merck in patients with select advanced or recurrent solid tumours in bladder, liver (hepatocellular carcinoma), ovarian or non-small-cell lung cancers, as well as tumours shown to be positive for the microsatellite instability high biomarker and for general corporate purposes.

• On January 30, 2019, 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 U.S. Food and Drug Administration ("FDA") in a Type B meeting to discuss the results to date of its DeCidE1 (DPX-Survivac with low-dose cyclophosphamide and epacadostat) 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 company'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 duration of response rate ("DOR").
- In addition, the FDA provided important guidance on clinical design considerations for different lines of therapy and platinum-sensitive and resistant patient populations. o 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 objective response rate (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 tumour burden (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 necepitopes 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 necepitope-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 counsel.

#### Overview of the Last 3 Years

The following events significantly influenced the general development of the business of the Corporation:

#### Year ended December 31, 2018

• On December 13, 2018, investigators shared new positive data from IMV Inc.'s continuing DeCidE1 clinical trial at the 2018 ESMO Immuno-Oncology Congress. The phase 1b/2 study is evaluating the safety and efficacy of the combination of IMV's lead candidate DPX-Survivac, low-dose cyclophosphamide, and 100 milligrams or 300 mg of Incyte Corporation's ("Incyte") IDO1 enzyme inhibitor epacadostat in patients with advanced recurrent ovarian cancer.

In a poster presentation, Dr. Oliver Dorigo, MD, PhD, associate professor of obstetrics and gynecology (oncology), Stanford University Medical Center, who served as the trial's lead investigator and author on the poster, shared top-line safety results from 53 enrolled patients and efficacy data from the 32 participants evaluable for immune-related and clinical responses, as well as blood sample and tumour biopsy analyses;

#### Key findings included:

- Evidence of a clinical marker based on baseline tumour burden (BTB), a measure of tumour size predictive of patient response to DPX-Survivac;
- o 37.5 per cent (12/32) of evaluable study subjects began treatment with a non-bulky disease defined as BTB under five centimetres;
- 73 per cent (8/11) of tumour regressions and 80 per cent of clinical responses (4/5) observed in subset of patients with BTB less than five centimeters;
- Responders thus far showing prolonged duration of clinical benefits reaching up to more than two years, surpassing the progression-free interval from their previous chemotherapy treatment;
- Robust systemic survivin-specific T-cell responses and evidence of survivin-specific T cells tumour infiltration correlated with clinical benefits;
- 100 per cent of durable clinical responses correlated with T-cell infiltration; o Epacadostat triggered inhibition of the conversion of tryptophan into kynurenine
  that was dose dependent; and
- Cohort demographics were balanced and the combination yielded a tolerable safety profile.

At the time of data cut-off, 53 patients were enrolled in the phase 1b clinical trial, including 14 from the 100 mg epacadostat dosing cohort and 39 from 300 mg epacadostat cohort. Based on 300 mg cohort results, IMV and Incyte agreed to stop dosing patients with epacadostat before completion of the study. Patients who completed at least one CT scan, as required per the trial protocol, were evaluable for response analysis.

Seventy-one per cent of patients were evaluable for responses in the 100 mg cohort and 56 per cent in the 300 mg dose cohort. At time of data cut-off, eight participants remained on treatment and were being evaluated for clinical responses.

Efficacy	Total target lesion size < 5 cm			Total target lesion size ≥ 5 cm		
Parameter	100 mg (N=5)	300 mg (N=7)	All (N=12) N (%)	100 mg (N=5)	300 mg (N=15)	All (N=20) N (%)
Regression	5 (100)	3 (42.9)	8 (66.7)	0 (0)	3 (20.0)	3 (15.0)
PR <sup>(1)</sup>	3 (60.0)	1 (14.3)	4 (33.3)	0 (0)	1 (6.7)	1 (5.0)
SD <sup>(2)</sup>	2 (40.0)	4 (57.1)	6 (50.0)	2 (40.0)	10 (66.7)	12 (60.0)
DCR <sup>(3)</sup>	5 (100)	5 (71.4)	10 (83.3)	2 (40.0)	11 (73.3)	13 (65.0)

<sup>(1)</sup> Partial Response (PR) is defined as 230% decrease in sum of target testons (2) Stable Disease (SD) is defined as < 30% decrease and \$ 20% increase in sum of target tumor featons (3) Disease Control Rate (OCR) refers to the total number of patients achieving complete response.

• On November 20, 2018, an amendment of its phase 1b/2 clinical trial evaluating the safety and efficacy of IMV's lead candidate, DPX-Survivac, in combination with either 100 milligrams or 300 mg of epacadostat in patients with recurrent ovarian cancer.

Review of new data from the phase 1b portion of the clinical trial demonstrate a high response rate and a durable clinical benefit in a subpopulation of patients with a clinical marker predictive of a response to DPX-Survivac and correlated to its novel MOA. New data included:

- Efficacy signals in the subpopulation of patients who received 100 mg dose epacadostat (n = 5) included 100 percent tumour regressions and 100 percent disease control rate; and 60 percent of these patients (3/5) reached a best response of a partial response (PR);
- Long duration of clinical benefit observed in responders with a median duration of 590 days, including one patient that has passed the two-year mark without disease progression;
- Clinical benefit correlated to DPX-Survivac's MOA and clinical study primary end points: survivin-specific T cells in the blood and T cell infiltration into tumours; and
- The safety profile of DPX-Survivac is consistent with the profile observed in the company's previously reported studies.

Based on 300 mg cohort results, IMV and Incyte have agreed to stop dosing patients with epacadostat. IMV will continue the phase 1b/2 trial as a monotherapy study evaluating DPX- Survivac in the recurrent ovarian cancer subpopulation. IMV will inform and work with investigators to appropriately modify the study in a manner consistent with the best interests of each patient;

IMV and Incyte will continue to explore the potential of additional combination studies.

On November 6, 2018, the appointment of Dr. Markus Warmuth, MD, a seasoned biopharmaceutical executive, to its board of directors. Dr. Warmuth currently
serves as an entrepreneur in residence at the life science venture capital firm Third Rock Ventures. He brings more than 20 years of drug discovery experience and
scientific acumen, with a strong focus on developing targeted therapy and immuno-oncology programs, to his new role on IMV's board.

• On September 27, 2018, results of ongoing research to further explore the novel MOA of its RSV vaccine candidate. New data from a preclinical study highlighted the effects of two potential approaches to preventing RSV, comparing a single dose of the bovine version of DPX-RSV to a two-dose conventional investigational bovine RSV vaccine. Researchers found that IMV's vaccine candidate yielded strong antigen-specific immune responses and a protective effect on disease pathology. The degree of protection was comparable between the two vaccine candidates.

In this study, researchers compared the effects of both the IMV and conventional RSV vaccine approaches among bovines with known RSV infections (the bovine animal model is considered an optimal model of RSV infection). Researchers administered one dose of DPX-bRSV to one cohort; the second received two doses of a subunit RSV bovine vaccine. Researchers measured immune response with an antibody titer test and assessed disease pathology with a lung lesion score and other clinical parameters (such as body temperature changes).

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 vaccine-induced immune response against IMV's novel RSV target - the SH viral protein—with measures of disease protection.

• On September 18, 2018, details of the initial data from its ongoing investigator-sponsored phase 2 clinical trial in DLBCL. In the study, investigators are evaluating IMV's lead candidate, DPX- Survivac, in combination with low dose cyclophosphamide and Merck's checkpoint inhibitor Keytruda® (pembrolizumab), in patients with persistent or recurrent/refractory DLBCL.

The preliminary data included assessments of safety and clinical activity (based on modified Cheson criteria ) for the first four evaluable patients who have completed their first CT scan after the start of treatment. The data showed that:

- Two of the first four evaluable participants showed tumour regressions at the first on-treatment CT scan:
  - The first enrolled participant demonstrated a tumour regression of 48% at first on-treatment scan; and
  - The second participant demonstrated a partial response (PR) via a tumour regression of 66% at first on-treatment scan.
- Preliminary data from the third participant demonstrated stable disease;
- The other participant had early disease progression less than two months following treatment initiation and was discontinued from the study; and
- The combination therapy appears to demonstrate an acceptable safety profile, with no serious adverse events reported to date.

<sup>i</sup> Cheson, B.D.,, Pfistner, B., Juweid, M.E., Gascoyne, R.D., Specht, L., Horning, S.J. and Diehl, V. (2007). Revised Response Criteria for Malignant Lymphoma. Journal of Clinical Oncology, 25(5) DOI: 10.1200/JCO.2006.09.2403

On September 11, 2018, an expansion of its clinical program with a phase 2 basket trial in collaboration with Merck evaluating its lead candidate, DPX-Survivac, in combination with low- dose cyclophosphamide and Merck's anti-PD-1 therapy, Keytruda ® (pembrolizumab), in patients with select advanced or recurrent solid tumours across five indications.

The open-label, multicentre, phase 2 basket study will evaluate the safety and efficacy of the immunotherapeutic combination agents in patients with bladder, liver (hepatocellular carcinoma), ovarian or non-small-cell lung (NSCLC) cancers, as well as tumours shown to be positive for the microsatellite instability high (MSI-H) biomarker. Investigators plan to enroll more than 200 patients across five indications at multiple medical centres in Canada and the United States.

- On August 9, 2018, IMV reached two important milestones in its continuing clinical trial collaboration with Incyte Investigators completed enrolment for both phase 1b dosing cohorts and treated the first patient in the phase 2 component of the combination trial, which was evaluating the safety and efficacy of IMV's lead candidate, DPX-Survivac, and low-dose cyclophosphamide with (and without) epacadostat in patients with advanced ovarian cancer.
  - Investigators completed enrolment in the phase 1b cohorts of the study, with a total of 50 patients across the two dosing groups. The phase 1b study focused on evaluating the safety and efficacy of combining DPX-Survivac, 100 milligrams or 300 milligrams of epacadostat, and low-dose cyclophosphamide in individuals with advanced, platinum-sensitive and resistant ovarian cancer.
- On June 7, 2018, the addition of Julia P. Gregory to the Board of Directors. Ms. Gregory is a seasoned biotechnology executive with chief executive officer, chief
  financial officer, board and investment banking experience. She recently served as Chief Executive Officer and board member of ContraFect Corporation, a public
  biotechnology company developing innovative anti- infectives. She also served as the chief executive officer and board member of the immuno- oncology company
  Five Prime Therapeutics.
- On June 3, 2018, that investigators shared new positive data in an oral presentation for its DeCidE1 (DPX-Survivac with low dose Cyclophosphamide and
  Epacadostat) clinical study at the 2018 American Society for Clinical Oncology (ASCO) annual meeting. This data from the ongoing phase 1b/2 trial evaluated the
  safety and efficacy of the combination of IMV's lead candidate, DPX-Survivac, and low dose cyclophosphamide, with Incyte's IDO1 enzyme inhibitor epacadostat,
  in patients with advanced recurrent ovarian cancer.

At the time of data cut-off, 39 patients were enrolled (including 25 new participants in the 300mg cohort with 8 evaluable from day 56 first CT scan). Data from the first 18 evaluable patients across both dosing cohorts showed:

- 7 tumour regressions, including 4 Partial Responses (PR) reported so far (PR, defined as ≥30% decrease in tumour lesion size); and
- Study participants were generally tolerating treatments well, with no related SAEs reported.

Data from the first 8 evaluable participants in the 300mg epacadostat dosing cohort at first CT scan included:

- 6 patients demonstrated stable disease (SD) at day 56, with 4 of these SDs still on trial at data cut-off; and
- 2 patients with tumour regressions observed so far, including one PR with a tumour regression ongoing for more than 9 months.

Researchers also analyzed patient data to study the combination's MOA. They examined blood samples and tumour biopsies for the 10 evaluable patients treated in the first dosing cohort. This data showed:

- Survivin-specific T cell responses detected in 100% (10/10) of patients;
- Increase in T cell infiltration post treatment in 37% (3/8) of the analyzable tumour biopsies based on two complementary testing methodologies (RNA sequencing and immunohistochemistry);
- 2 of the 3 patients with T cell infiltration showed PRs with significant and durable tumour regressions lasting more than one year; and
- The third patient with T cell infiltration exhibited Progressive Disease (PD) with evidence of down regulation of the major histocompatibility (MHC) presentation pathway and significant increases in suppressive markers, both indicative of mechanisms of resistance.
- On May 31, 2018, that its common shares have been approved for listing on the NASDAQ under the symbol "IMV". Trading commenced on, June 1, 2018 and the common shares concurrently ceased to be traded on OTCQX. The Corporation retained its listing on the Toronto Stock Exchange under the symbol "IMV."
- On May 3, 2018, that it applied to list its common shares on the NASDAQ Stock Market LLC ("NASDAQ"). In connection with the planned U.S. listing, and as previously authorized by its shareholders at more than 99%, the Corporation implemented a consolidation of its outstanding common shares and changed the Corporation name to IMV Inc.

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

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

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

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

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

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

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

- On March 28, 2018, that the first patient was treated in IMV Inc.'s phase 2 study combining DPX-Survivac with low-dose cyclophosphamide administered with pembrolizumab in patients with persistent or recurrent/refractory DLBCL.
- On February 15, 2018, that it has closed the previously announced bought deal public offering (the "February 2018 Public Offering") of common shares of the Corporation, including exercise of the over-allotment option in full, raising gross proceeds of \$14.375 million.
- On January 31, 2018, the publication of a preclinical study using magnetic resource imaging ("MRI") to follow cancer peptide uptake in tumour models, and to correlate this immune activation to the resulting anti-cancer T cell activity. The *Journal of Biomedical Science* study, titled "Unique Depot Formed by an Oil Based Vaccine Facilitates Active Antigen Uptake and Provides Effective Tumour Control," compared the MOA of IMV's platform for immunotherapeutic stimulation with other technologies.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Published online, January 27, 2018. DOI: 10.1186/s12929-018-0413-9

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

• On January 18, 2018, the appointment of Joseph Sullivan to the newly created role of Senior Vice President, Business Development, effective January 22, 2018. Mr. Sullivan will be responsible for providing strategic and operational leadership for the Corporation's business development efforts. This includes expanding late-stage candidate development and preparation for commercialization, as well as forging strategic commercial partnerships to support further advancement of the company's clinical assets and platform.

#### Year ended December 31, 2017

During the year ended December 31, 2017, the Corporation announced:

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

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

• On November 21, 2017, an expansion of its collaboration with Leidos to develop preventative, peptide-based malaria vaccine candidates. The U.S. Agency for International Development ("USAID") supported an initial collaboration via a Leidos Malaria Vaccine Development Program (MVDP) subcontract. Following the achievement of several preclinical milestones in this initial collaboration, Leidos and USAID selected the DPX-based platform as one of the preferred formulations for further development under a new contract extension. Under the new subcontract, the collaborators will conduct additional research that focuses on identifying the most promising target-formulation combinations;

- On November 8, 2017, that Health Canada has granted Sunnybrook Research Institute regulatory clearance to begin recruiting patients for its Phase 2 clinical study of a triple-combination immunotherapy in patients with measurable or recurrent DLBCL. This investigator-sponsored Phase 2 trial, designed to evaluate the safety and efficacy of IMV's lead product candidate, DPX- Survivac, along with Merck's pembrolizumab and low-dose cyclophosphamide, will evaluate the use of a triple-combination immunotherapy in patients with measurable or recurrent DLBCL. Investigators will assess the efficacy and safety of DPX-Survivac, along with a checkpoint inhibitor drug currently marketed by a large pharmaceutical company, and low-dose cyclophosphamide. The Corporation has elected to conclude operations on its initial Phase 2 DLBCL study, opting to replace it with this triple-combination trial;
- On October 17, 2017, that it has received a two-year extension of the maturity of its \$5M Province of Nova Scotia loan authorized in 2013. The original maturity date of the loan was August 9, 2018 and is now August 9, 2020;
- On August 31, 2017, the achievement of several milestones in its ongoing collaboration with global animal health company Zoetis to develop cattle vaccines. In
  recent controlled studies, the IMV formulations met efficacy and duration of immunity end-points against two disease targets. These results will enable Zoetis to
  advance two IMV-formulated vaccine candidates into late-stage testing;
- On July 12, 2017, a significant achievement in its personalized cancer medicine program. IMV scientists have successfully formulated 14 neoepitope cancer peptides into one single DPX formulation. In preclinical testing, the resulting personalized cancer vaccine demonstrated the ability to generate specific killer T-cell responses against cancer peptides. IMV has filed a patent application covering this novel DPX-based rapid formulation process. The supporting data for the patent include what the Corporation believes to be one of the first documented reports of 14 different neoepitope peptides synthesized into a single formulation;
- On June 21, 2017, that the Corporation completed a bought deal public offering (the "June 2017 Public Offering") of Common Shares, raising gross proceeds of approximately \$10 million. The Corporation intends to use the net proceeds of the June 2017 Public Offering for the research and development and clinical advancement of its cancer and infectious disease vaccine candidates and for working capital and general corporate purposes;
- On April 18, 2017, that the first study participant has been treated in a Phase 1b/2 clinical study lead by Dana-Farber evaluating IMV's investigational cancer vaccine, DPX-E7, in combination with low-dose cyclophosphamide in patients with incurable oropharyngeal, cervical and anal cancers related to HPV;
- On April 12, 2017, updated data on its investigator-sponsored Phase 1 clinical trial testing the safety and immunogenicity of its DPX-based, small B-cell epitope peptide vaccine candidate for RSV. In the 25µg dose cohort, which was the only dose tested out to one year, 100 percent of older adults (7/7 immune responders) vaccinated with IMV's DPX<sup>TM</sup>-based small B cell epitope peptide vaccine candidate for RSV ("DPX-RSV") maintained the antigen-specific immune responses one year after receiving the booster dose. At one year, the antibody levels measured were still at peak with no sign of decrease. The 25µg dose was delivered in a volume of 50 microliters. A standard flu vaccine is typically 60µg delivered in 10 times this volume;
- On April 11, 2017, that University Health Network's ("UHN") Princess Margaret Cancer Centre has received Health Canada clearance to initiate the Phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumour activity of the combination of Merck's pembrolizumab, IMV's DPX-Survivac, and low-dose cyclophosphamide;

- On April 5, 2017, that new preclinical data presented at the 2017 American Association for Cancer Research ("AACR") Annual Meeting demonstrated that phosphatidylserine targeting antibodies can enhance the anti-cancer activity of its DPX-based therapeutic vaccine platform;
- In March 2017, the first interim data analysis from the triple combination Phase 1b clinical trial in ovarian cancer, in combination with Incyte's epacadostat and low-dose cyclophosphamide. The analysis included the results of blood tests, tumour biopsies and CT scans to assess safety, disease progression and T-cell response for the first four evaluable patients in the trial. All patients enrolled in the trial have recurrent ovarian cancer with evidence of progressive disease. Based on the interim analysis, the combination therapy appears to have an acceptable tolerable safety profile, with a single grade 3 and single grade 4 event reported and no serious adverse events ("SAEs"). At the time of the interim analysis, three of four patients exhibited stable disease, while a fourth patient progressed and exited the trial. In addition, researchers observed an increased T- cell activity in tumours in three of the four patients based on RNA sequencing and indications of early tumour shrinkage in the patient who has been in trial for the longest duration thus far (based on CT scan at day 140);
- On February 6, 2017, 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. UHN Princess Margaret Cancer Centre will conduct the Phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumour activity of the combination of Pembrolizumab, DPX-Survivac, and low-dose cyclophosphamide; and
- On February 3, 2017, that Pierre Labbé was appointed as Chief Financial Officer replacing Kimberly Stephens. In this role, Mr. Labbé will be responsible for leading the Corporation's financial strategy and operations, with an emphasis on expanding financing and business development operations.

#### Year ended December 31, 2016

During the year ended December 31, 2016, the Corporation announced:

- In December 2016, that it had completed a bought-deal private placement (the "December 2016 Private Placement") of Common Shares, for gross proceeds of approximately \$8 million, to be used for general corporate and working capital purposes;
- In November 2016, that it had been granted "Orphan Drug Designation" status by the European Medicines Agency ("EMA") for the use of DPX-Survivac for the treatment of ovarian cancer in the European Union;
- In November 2016, that it had received positive results from preclinical studies completed in collaboration with UConn Health for IMV's DPX-NEO program, which is designed to develop patient-specific necepitope immunotherapies to further expand the immuno-oncology applications for its DPX<sup>TM</sup>-based vaccines. Results from the first study in mouse tumour models have shown positive anti-cancer activity;
- In November 2016, the appointment of Gabriela Rosu, M.D. as the Corporation's first Chief Medical Officer. In this newly created executive role, Dr. Rosu will oversee the strategy and execution of the Corporation's expanding clinical portfolio of programs;
- In October 2016, positive topline results from its Phase 1 trial evaluating the safety and immunogenicity of DPX-RSV. The results, six months after vaccination, confirmed earlier- reported interim data on the ability of DPX<sup>TM</sup>-formulated antigens to generate a relevant, durable immune response, that the vaccine had a positive safety profile and was well tolerated with no SAEs among all study participants. Also, antigen-specific immune responses were detected at least six months after the last vaccination in 93 percent (15/16) of patients receiving DPX-RSV, in both low-dose (8/8 participants) and high-dose (7/8 participants) cohorts;

- In October 2016, the presentation by malarial researcher J. Alexandra Rowe, D Phil, of The University of Edinburgh, of topline preclinical data for IMV's DPX<sup>TM</sup>-based malarial vaccine which was presented at the World Vaccine Congress Europe in Barcelona, Spain on October 10, 2016. Results from studies in mice, conducted in collaboration with the University of Edinburgh's Centre for Immunity, Infection and Evolution ("CIIE") as part of a preclinical collaboration announced in June 2016, indicated that the novel CIIE-identified targets, when formulated in the DPX targeting platform, generated strong, sustained, antibody responses that could prevent, after a single injection, a process in severe malaria known as 'rosetting';
- In September 2016, the beginning of the treatment of the first patient with recurrent ovarian cancer in a Phase 1b clinical study of IMV's novel T cell activating therapy, DPX-Survivac, in combination with epacadostat and low-dose cyclophosphamide. This triple combination study is the result of collaboration between IMV and Incyte to assess the safety and effectiveness of DPX- Survivac, along with Incyte's investigational oral indoleamine IDO1 inhibitor, epacadostat, and low-dose cyclophosphamide in patients with recurrent ovarian cancer who have measurable disease;
- In August 2016, the obtention of new data from its Phase 1/1b trial in ovarian cancer, which reinforced previously reported results showing that DPX-Survivac was well tolerated, with no unexpected treatment-related SAEs and that it demonstrated the ability to generate a relevant, sustained immune response. New data from the Phase 1/1b trial yielded positive findings on tumour clinical response, including the presence of relevant circulating T cells and increased expression of several checkpoint inhibitor molecules;
- In July 2016, that it had received results from an interim analysis of the safety and immunogenicity of DPX-RSV in a Phase 1 clinical trial in healthy older adult volunteers completed by a team of investigators. The safety analysis indicates that the DPX-RSV was well tolerated among all study participants, with no SAEs recorded. Furthermore, immunogenicity data supported DPX-RSV's ability to generate a relevant immune response; the vaccine candidate obtained antigen-specific antibody responses in 75 percent (%) of subjects vaccinated with the lower dose, and 100 percent (%) of those vaccinated with the higher dose;
- In June 2016, that it had been awarded a subcontract by Leidos to evaluate IMV's DPX platform for the development of peptide based malaria vaccine targets. The
  subcontract is funded through Leidos' prime contract from the USAID to provide vaccine evaluations in the preclinical, clinical and field stages of malaria vaccine
  development. Leidos and IMV will work together to identify adjuvant and antigen combinations that can be used to protect against malaria and with the DPX
  delivery system, formulate promising vaccine candidates for potential clinical testing;
- In June 2016, that it had completed a bought deal private placement (the "June 2016 Private Placement") of units, for gross proceeds of approximately \$8 million used to advance the research and development and clinical advancement of the Corporation's cancer and infectious vaccine candidates and for general corporate and working capital purposes. Each unit was comprised of one Common Share and one-half of one common share purchase warrant (each whole common share purchase warrant, a "Warrant"). Each Warrant entitles its holder to acquire one additional Common Share at a price of \$0.72 per Common Share until June 8, 2018;

- In June 2016, the appointment of Shermaine Tilley, PhD, Managing Partner of CTI Life Sciences Fund, to its Board of Directors;
- In April 2016, new preclinical data at the AACR Annual Meeting 2016. The investigators' findings showed that a combination immunotherapy using a DPX<sup>TM</sup>-based vaccine could enhance the anti-tumour effects of a PD-1 blockade, controlling growth in advanced HPV-expressing tumours in animal models;
- In April 2016, the appointment of Andrew Sheldon to the Board of Directors. Mr. Sheldon was also appointed Chairman of the Board of Directors following the annual meeting of shareholders of the Corporation held on April 14, 2016;
- In April 2016, the appointment of Frederic Ors as Chief Executive Officer, replacing Marc Mansour, Ph.D., who, prior to stepping down in March 2016, was Chief Executive Officer since June 2014, and a member of the Board of Directors since December 2013. Mr. Ors had been with the Corporation since April 2015 as Chief Business Officer:
- In April 2016, a collaboration with Leidos on developing a vaccine against the mosquito-borne Zika virus and infection, which may be linked to neurological birth
  defects. This collaboration is the first to expand on IMV's previously announced research project in which the Corporation will apply its DPX platform to
  development of a Zika virus vaccine candidate. The project builds upon earlier promising results with DPX vaccines targeting the Ebola virus, anthrax and RSV; and
- In January 2016, the obtention of clearance from the FDA and Health Canada to initiate a clinical study of DPX-Survivac in combination with low-dose cyclophosphamide and epacadostat. The Phase 1b clinical trial will assess the safety and effectiveness of IMV's novel T cell activating therapy, DPX-Survivac, along with Incyte's IDO1 inhibitor, epacadostat (INCB24360), and low-dose cyclophosphamide in patients with recurrent ovarian cancer who have measurable disease.

#### IV. DESCRIPTION OF THE BUSINESS

#### BUSINESS MODEL AND STRATEGY

IMV is dedicated to making immunotherapy more effective, more broadly applicable and more widely available to people facing cancer. The Corporation's lead product candidate, DPX-Survivac, has demonstrated the ability to induce prolonged T cell activation leading to tumour regressions in advanced ovarian cancer and is currently being used in clinical trials as monotherapy and in combination with Merck's KEYTRUDA® checkpoint inhibitor.

Foremost, the Corporation's clinical strategy is to establish monotherapy activity of DPX-Survivac in order to increase value, de-risk clinical development, and to target late stage unmet medical needs for a shorter path to clinical demonstration and first regulatory approval, and to establish strategic partnerships to support further development and commercialization. In addition we are evaluating DPX Survivac in combination with Merck's KEYTRUDA® checkpoint inhibitor in multiple oncology targets. The Corporation is focusing on fast path to market in ovarian and DLBCL cancers and on repeating its clinical demonstrations of activity in other 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 that the platform may allow for the development of enhanced vaccines for a wide range of infectious diseases by generating a stronger and more durable immune response than is possible 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 and delivery of active ingredients into immune cells and lymph nodes. IMV is exploiting this MOA to pioneer a new class of immunotherapies that represents a paradigm shift from current approaches By not releasing the active ingredients at the site of injection, it bypasses the steps involved in conventional immune "native responses", such as vaccines, and enables access and programming of immune cells *in-vivo* to generate new "synthetic" therapeutic capabilities. The DPX no-release MOA can be leveraged to generate "first-in-class" T cell therapies with the potential to be transformative 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 tumour cells. DPX can induce prolonged, target-specific, and polyfunctional T cell activation, which are postulated to be required for effective tumour control.

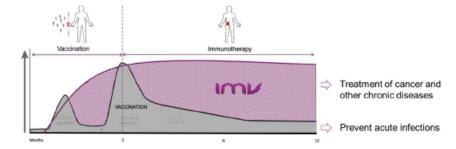


Figure 1: Illustrative representation of IMV's DPX new MOA

The DPX platform is based on active ingredients formulated in lipid nanoparticles and, after freeze drying, suspended directly into oil. DPX-based products are stored in the 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 of 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 it is comprised of five minimal MHC class I peptides designed to activate naïve T cells against survivin.

Survivin is a well characterized and recognized tumour associated antigen known to be expressed during fetal development and across most tumour 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 tumour 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.

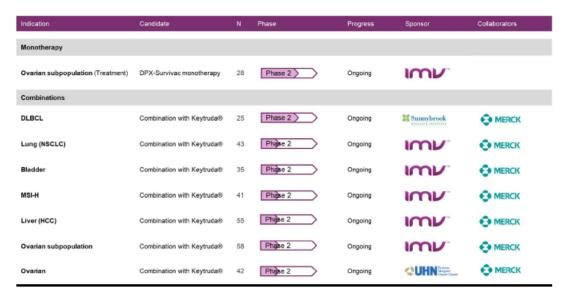
DPX-Survivac is being tested in 6 different cancer indications through multiple phase 2 clinical trials.

Cancer	Survivin %
Ovarian	90
Breast	90
Melanoma	90
Lung	53
Colorectal	54
Gastric	94
Kidney	23-82
Glioblastoma	80
ALL	70
CML	70
MDS	90
DURCI	80

Figure 2: Examples of % of patients with survivin expression in different indications

#### IMMUNO-ONCOLOGY

#### **Ongoing Clinical Trials**



DPX-Survivac - Ongoing Clinical Trials

**Monotherapy** 

Ovarian subpopulation - DeCidE1 phase 2

The DeCidE1 phase 2 study is an open label safety and efficacy study for individuals with advanced platinum-sensitive and resistant ovarian cancer with sum of base line target lesions per Recist criteria less than five centimeters. Primary and secondary end points include:

- Safety profile;
- ORR and DOR using Recist 1.1 criteria;
- Induction of systemic survivin-specific T-cells in the blood; and
- · Induction of T-cell infiltration into tumours.

The objective is to enroll up to 28 patients in this study.

On March 26, 2019, preliminary data from the phase 2 cohort of the Decide 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:

- 83% of the subjects (5 of 6) show stable disease (SD), including two tumor regressions
- 80% (4 of 5) with stable disease are in subjects with a lower base linetumor burden (BTB), which also includes the two tumor regressions

Importantly, in earlier stages of this trial, durable clinical responses occurred after 140 days, and have now lasted for 20 months or more. Additional data at the 140 days mark of this cohort will be available by the end of the first half of 2019.

This amended phase 2 study evaluates the safety and efficacy of DPX-Survivac monotherapy with mCPA in patients with advanced recurrent ovarian cancer. As of the March 25, 2019 data cut-off date, 13 patients have been enrolled in the phase 2 portion of the trial in addition to the 53 enrolled in the phase 1b cohort. Five patients were randomized into the DPX-Survivac monotherapy cohort. Seven patients had been randomized into DPX-Survivac/mCPA in combination with epacadostat before the phase 2 protocol was amended to stop enrollment in the combination arm. One of the patients in the combination arm elected to switch to the monotherapy arm of the trial. Positive data from the phase 1 bportion of the trial led IMV to amend the study to monotherapy inpatients with lower tumor burden.

The amended phase 2 cohort of the DECIDE trial is targeting an enrollment of at least additional 16 patients in the population with a lower tumor burden. Enrollment is ongoing at multiple sites in the U.S. and Canada.

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 company'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.

Drug	Registrational Clinical Trials	Indication	Base for approval
Olaparib (Lynparza) Approved December 2014	Single arm, open label, Phase 2 (Study 42)	Germline BRCA mutation ≥3 prior lines of chemotherapy	N=137 ORR: 34% - platinum-resistant: 30% mDoR: 7.9 mo
Rubraca (Rucaparib) Breakthrough in April 2015 Approved December 2016	Single arm, open label, Phase 2 (Study 10 and ARIEL2)	Germline and/or somatic BRCA mutation ≥2 prior lines of chemotherapy	N=108 ORR: 42% platinum-resistant: 25% mDoR: 6.7 mo-9.2 mo

Figure 3: 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 tumour burden (BTB).

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 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 (Incyte's epacadostat, Merck's Keytruda and Pfizer/Merck KGaA's Bavencio) are unlikely to proceed into registration trials based on the published results available:

#### **Epacadostat**

- Kristeleit et Al ,Gynecologic Oncology 2017
- · No activity



- ASCO 2018
- ORR 8% longest duration of response reported in 376 patients 18.6 months

#### Antitumor Activity: Confirmed Objective Response Rate Based on RECIST v1.1 per BICR

	Gohorts A+B All-comers	
	n = 376	
ORR % (96% Ct)	(8.0 (5.4 - 11.2)	
DCR % (95% CI)	37.2 (32.3 - 62.3)	
Best overall response		
Complete response n (%)	7 (1.9)	
Partial response n (%)	23 (6.1)	
Stable disease n (%)	110 (29.3)	
Progressive disease n (%)	215 (57.2)	
Responders (n)	30	
Time to response, median months (range)	2.1 (1.8 - 12.3)	
Duration of response, median months (range)	R2 (3.3+ (1861)	



- Pfizer/Merck KGaA, Nov. 19, 2018: Avelumab Misses Primary Endpoints in Phase III Ovarian Cancer Trial – ORR 3.7%
- 556 patients with platinum-resistant or -refractory ovarian cancer - up to 3 lines of systemic therapy
- Avelumab alone or in combination with pegylated liposomal doxorubicin (PLD), a type of chemotherapy, compared with PLD did not meet the prespecified primary endpoints of overall survival (OS) or progression-free survival (PFS)
- The ORR was 13.3% (95% CI, 8.8%-19.0%) for avelumab combined with PLD, 3.7% (95% CI, 1.5%-7.5%) for single-agent avelumab, and 4.2% (95% CI, 1.8%-8.1%) for PLD alone.

Figure 4: Recurrent ovarian cancer immunotherapy competitive landscape

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 FDA to finalize the design of a potential pivotal trial based on ORR and DOR.

IMV expects to provide a clinical update at ASCO and investigators are also planning to submit the study findings for scientific publication.

The Corporation's clinical strategy with this trial is to establish monotherapy activity in order to increase value and de-risk clinical development, and to target late stage unmet medical needs for shorter path to clinical demonstration and first regulatory approval.

The Corporation currently 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 are estimated at \$2,500,000 of which \$1,000,000 is expected to occur in 2019.

#### **Combinations**

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

This phase 2 study is a triple-combination immunotherapy in patients with measurable or recurrent diffuse large B-cell lymphoma led by Sunnybrook Research Institute. This investigator sponsored trial, announced initially in May 2017, is designed to evaluate the safety and efficacy of DPX-Survivac, Merck's pembrolizumab, and low-dose cyclophosphamide. Primary and secondary end points include:

- Safety profile; and
- · ORR and DOR using Recist 1.1 criteria.

The non-randomized, open label study is expected to enroll 25 evaluable participants at five centers in Canada.

Researchers conducting the investigator sponsored study are testing the novel immunotherapy combination in patients whose DLBCL expresses survivin, a tumour antigen highly expressed in 60 percent of DLBCL patients. DPX-Survivac stimulates the immune system to produce T cell responses targeting survivin.

On November 8, 2017, the Corporation announced that Health Canada had granted Sunnybrook Research Institute regulatory clearance to begin recruiting patients. On March 28, 2018, the Corporation announced that the first patient had been treated.

On September 18, 2018, IMV announced details of the initial data from this clinical trial. The preliminary data included assessments of safety and clinical activity (based on modified Cheson criteria<sup>i</sup>) for the first four evaluable patients who have completed their first CT scan after the start of treatment. The data showed that:

- Two of the first four evaluable participants showed tumour regressions at the first on-treatment CT scan:
  - The first enrolled participant demonstrated a tumour regression of 48% at first on-treatment scan; and
  - The second participant demonstrated a partial response (PR) via a tumour regression of 66% at first on-treatment scan.
  - Preliminary data from the third participant demonstrated stable disease.
- The other participant had early disease progression less than two months following treatment initiation and was discontinued from the study.
- The combination therapy appears to demonstrate an acceptable safety profile, with no serious adverse events reported to date.

The Corporation expects to disclose top-line results around the end of the second quarter of 2019 once provided by the investigator. The Corporation currently anticipates that, in addition to general clinical expenses, which are distributed amongst the various clinical projects, its share of the cost to complete this study will be approximately \$1,500,000, of which \$1,000,000 is expected to be spent in 2019.

Phase 2 basket trial in 5 indications with Merck

On September 11, 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, in combination with low dose cyclophosphamide, and Merck's anti-PD-1 therapy, KEYTRUDA® (pembrolizumab) in patients with select advanced or recurrent solid tumours.

The open-label, multicenter, phase 2 basket study will evaluate the safety and efficacy of the immunotherapeutic combination agents in patients with bladder, liver (hepatocellular carcinoma), ovarian, or non-small cell lung (NSCLC) cancers as well as tumours shown to be positive for the microsatellite instability high (MSI-H) biomarker. Investigators plan to enroll more than 200 patients across five indications at multiple medical centers in Canada and the United States.

i Cheson, B.D., Pfistner, B., Juweid, M.E., Gascoyne, R.D., Specht, L., Horning, S.J. and Diehl, V. (2007). Revised Response Criteria for Malignant Lymphoma. Journal of Clinical Oncology, 25(5) DOI: 10.1200/JCO.2006.09.2403

The American Society of Clinical Oncology (ASCO) defines a basket clinical study as a trial that investigates the effects of a drug regimen in multiple tumour 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, low dose cyclophosphamide, and pembrolizumab in advanced recurrent cancers.

The Corporation expects to disclose preliminary data in the second half of 2019 and currently anticipates that, in addition to general clinical expenses, which are distributed amongst the various clinical projects, \$5,000,000 is estimated to be spent in 2019 with a total of \$12,600,000 for the safety lead-in for this trial.

Phase 2 clinical trial in ovarian cancer with Merck (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 will conduct the phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumour activity of the combination of pembrolizumab, DPX-Survivac, and low-dose cyclophosphamide. It is expected to enroll 42 subjects with advanced epithelial ovarian, fallopian tube or primary peritoneal cancer. The study's primary objective is to assess overall response rate. Secondary study objectives include progression free survival rate, overall survival rate, and potential side effects, over a five-year period. At this stage, the Corporation has no specific plan on the next steps after this trial as it will have to be assessed with its partner based on the clinical trial results.

The Corporation 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, expected to be spent in 2019, are estimated at \$400,000.

#### Clinical Trial Development - Completed Trials

Phase 1b Clinical trial in ovarian cancer with Incyte

In June 2015, the Corporation announced it had entered into a non-exclusive clinical trial collaboration with Incyte to evaluate the combination of DPX-Survivac, with Incyte's investigational oral IDO1 inhibitor, epacadostat. This trial was an open-label, phase 1b study to evaluate the safety, tolerability and efficacy of the combination in platinum resistant or sensitive ovarian cancer patients who are at high risk of recurrence. All patients enrolled in the trial had recurrent ovarian cancer with evidence of progressive disease. The investigational new drug ("IND") application for the study was approved by the FDA and Health Canada in January 2016. The study was initiated on September 8, 2016 and the Corporation announced in March 2017 the first interim data analysis from this clinical study. Based on the interim analysis, the combination therapy appears to have an acceptable safety profile with a single grade 3 and single grade 4 event reported and no SAEs. At the time of the interim analysis, three of four patients exhibited stable disease, while a fourth patient progressed and exited the trial. In addition, researchers observed increased T cell activity in tumours in three of the four patients based on RNA sequencing and indications of early tumour shrinkage in the patient who has been in trial for the longest duration thus far (based on CT scan at day 140).

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

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

Investigators completed enrolment of 10 evaluable patients for the study's first dosing cohort, which consisted of 100 mg epacadostat twice daily (BID), DPX-Survivac, and low-dose cyclophosphamide.

In the first dosing cohort, investigators observed:

- A 30 percent overall response rate, with three out of 10 PRs;
- Two of the patients exhibiting PRs had completed one year of treatment with responses continuing at 12 and 14 months, respectively;
- Four patients (40 per cent) had stable disease;
- Two of the patients exhibiting stable disease were still enrolled in the trial, with one of those patients showing a 21 percent tumour reduction; and
- A 70 percent disease control rate (defined as the total number of patients achieving complete response, partial response and stable disease).

At the time of data cut-off, there were also preliminary data on the first three evaluable patients in the second dosing cohort evaluating the combination of 300 mg BID epacadostat, DPX-Survivac, and low-dose cyclophosphamide. From the first three evaluable patients, two showed stable disease, with one patient showing tumour regression of approximately 25 per cent.

On April 24, 2018, the Corporation announced that it entered into an agreement with Incyte to expand the ongoing clinical trial collaboration. The Companies added a phase 2 component to their ongoing phase 1b combination study.

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

On November 20, 2018, the Corporation announced an amendment to its phase 1b/2 clinical trial evaluating the safety and efficacy of IMV's lead candidate, DPX-Survivac, in combination with either 100 mg or 300 mg of epacadostat in patients with recurrent ovarian cancer.

Review of new data from the phase 1b portion of that clinical trial demonstrate a high response rate and a durable clinical benefit in a subpopulation of patients with a clinical marker predictive of a response to DPX-Survivac and correlated to its novel MOA. New data include:

• Efficacy signals in the subpopulation of patients who received 100 mg dose epacadostat (n=5) included 100% tumour regressions and 100% disease control rate; and 60% of these patients (3/5) reached a best response of a partial response ("PR");

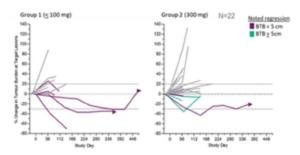


Figure 5: Phase 1b tumour regressions (ESMO-IO 2018)

• Long duration of clinical benefit observed in responders that lasted beyond treatment duration (1 year), median duration of 590 days, including one patient that has passed the two-year mark without disease progression, and prolonged tumour control observed in 3 out 4 PRs in that subpopulation.

	Previous Chemotherapy treatment Best response and PFS	P1b study Best response and PFS	Improvement over previous treatment
601	PR - 4.6 months (Topotecan)	PR - 22 months	+ 17.4 months
606	CR - 15.8 months (Platinum)	PR - 25 months ongoing	+ 9.2 months ongoing
614	SD - 10 months (Platinum)	PR - 16 months ongoing	+ 6 months ongoing
611	CR - 33 months (Platinum)	PR - 5 months (non-target lesion – PI decision)	na

Figure 6: Longer progression-free Survival (PFS) than previous chemotherapy treatment (ESMO IO 2018)

- Clinical benefit correlated to DPX-Survivac's MOA and the primary endpoints of survivin-specific T cells in the blood and T cell infiltration into tumours; and
- The safety profile of DPX-Survivac is consistent with the profile observed in the Corporation's previously reported studies.

Based on 300 mg cohort results, IMV and Incyte have agreed to stop dosing patients with epacadostat. IMV will continue the phase 1b/2 trial as a monotherapy study evaluating DPX-Survivac in the recurrent ovarian cancer subpopulation. IMV will inform and work with investigators to appropriately modify the study in a manner consistent with the best interests of each patient.

IMV and Incyte will continue to explore the potential of additional combination studies.

On December 13, 2018, the Corporation announced that investigators shared new positive data from the Corporation's ongoing DeCidE1 clinical trial at the 2018 ESMO Immuno-Oncology Congress. The phase 1b/2 study was evaluating the safety and efficacy of the combination of IMV's lead candidate DPX-Survivac, low dose cyclophosphamide, and 100 mg or 300mg of Incyte's IDO1 enzyme inhibitor epacadostat in patients with advanced recurrent ovarian cancer.

## Key findings included:

- Evidence of a clinical marker based on Baseline Tumour Burden ("BTB"), a measure of tumour size predictive of patient response to DPX-Survivac:
  - o 37.5% (12/32) of evaluable study subjects began treatment with a non-bulky disease defined as BTB < 5 cm; and
  - 73% (8/11) of tumour regressions and 80% of clinical responses (4/5) observed in subset of patients with BTB < 5 cm.
- Responders showing prolonged duration of clinical benefits reaching up to more than two years, surpassing the progression-free interval from their previous chemotherapy treatment;
- · Robust systemic survivin-specific T cell responses and evidence of survivin-specific T cells tumour infiltration correlated with clinical benefits:
  - 100% of durable clinical responses correlated with T cell infiltration.
- · Epacadostat triggered inhibition of the conversion of tryptophan into kynurenine that was dose dependent; and
- Cohort demographics were balanced and the combination yielded a tolerable safety profile.

At the time of data cut-off, 53 patients were enrolled in the phase 1b clinical trial, including 14 from the 100 mg epacadostat dosing cohort and 39 from 300 mg epacadostat cohort. Based on 300 mg cohort results, IMV and Incyte agreed to stop dosing patients with epacadostat before completion of the study. Patients who completed at least one CT scan, as required per the trial protocol, were evaluable for response analysis.

71% of patients were evaluable for responses in the 100 mg cohort and 56% in the 300mg dose cohort. At time of data cut-off, 8 participants remained on treatment and were being evaluated for clinical responses.

Efficacy	Total target lesion size < 5 cm			Total target lesion size ≥ 5 cm		
Parameter	100 mg (N=5)	300 mg (N=7)	All (N=12) N (%)	100 mg (N=5)	300 mg (N=15)	All (N=20) N (%)
Regression	5 (100)	3 (42.9)	8 (66.7)	0 (0)	3 (20.0)	3 (15.0)
PR <sup>(1)</sup>	3 (60.0)	1 (14.3)	4 (33.3)	0 (0)	1 (6.7)	1 (5.0)
SD <sup>(2)</sup>	2 (40.0)	4 (57.1)	6 (50.0)	2 (40.0)	10 (66.7)	12 (60.0)
DCR <sup>(3)</sup>	5 (100)	5 (71.4)	10 (83.3)	2 (40.0)	11 (73.3)	13 (65.0)

<sup>(1)</sup> Partial Response (PR) is defined as 230% decrease in sum of target festons
(2) Stable Disease (SD) is defined as < 30% decrease and < 20% increase in sum of target tumor fesions
(3) Disease Control Rate (DCR) refers to the total number of patients achieving complete response,
partial response, and stable disease.

First-in-human Phase 1 and 1b clinical trials in Ovarian cancer

DPX-Survivac was first tested in humans in maintenance therapy in subjects with advanced ovarian cancer who have no measurable disease following surgery and front-line platinum/taxane chemotherapy. Together, the completed phase 1 and phase 1b studies (n=56) identified a dose that was taken forward into the current phase 1b and 2 clinical studies.

Key findings from these clinical studies are summarized below:

- DPX-Survivac has been well tolerated, and the most frequent treatment related adverse events (AEs) in clinical studies conducted to date have been Grade 1 and Grade 2 injection site reactions;
- An active immune response was detected in >92% of assayed subjects following treatment with DPX-Survivac and intermittent low dose CPA;
- There was an increase in systemic survivin-specific T cells on treatment and a measurable decrease in tumour burden (PR) in a subject with residual disease
  following treatment with DPX-Survivac in combination with intermittent low dose CPA; and
- DPX-Survivac in combination with the intermittent low dose CPA enhanced the systemic immune activation elicited by DPX-Survivac. Robust immune responses were generated after 1 to 2 doses, and these immune responses were maintained by subsequent dosing.

The results from these clinical trials were published in the peer-reviewed scientific journal Oncoimmunology in May 2015 at the ASCO 2015 conference.

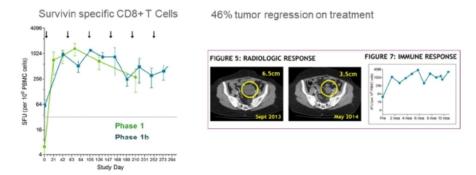


Figure 7: Phase 1/1b results (Oncoimmunology and ASCO 2015)

## 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

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 necepitopes 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 when provided by UConn Health.

## DPX-E7

On April 17, 2017, the Corporation announced that the first study participant has been treated in a phase 1b/2 clinical study evaluating an investigational cancer target for HPV (E7) formulated in DPX and in combination with low-dose cyclophosphamide in patients with incurable oropharyngeal, cervical and anal cancers related to HPV.

Dana-Farber is leading the DPX-E7 study through a \$1.5 million research grant from Stand Up To Cancer and the Farrah Fawcett Foundation to clinically evaluate collaborative translational research that addresses critical problems in HPV-related cancers. The Dana-Farber study is a single center, open label, non-randomized clinical trial that will investigate the safety and clinical efficacy in a total of 44 treated participants. Its primary objectives are to evaluate changes in CD8+ T cells in peripheral blood and tumour tissue, and to evaluate the safety in HLA-A2 positive patients with incurable HPV-related head and neck, cervical or anal cancers. IMV has the option to produce the DPX-E7 vaccine if it proves successful in the clinical trials.

The Corporation expects to disclose results when provided by Dana-Farber.

Other Applications

#### Product Overview

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

## RSV

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

## Phase 1 clinical trial in RSV

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

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

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

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

On September 27, 2018, IMV announced results of ongoing research to further explore the novel MOA of its vaccine 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 vaccine. Researchers found that IMV's vaccine candidate yielded strong antigen-specific immune responses and a protective effect on disease pathology. The degree of protection was comparable between the two vaccine candidates.

In this study, researchers compared the effects of both the IMV and conventional RSV vaccine approaches among bovines with known RSV infections (the bovine animal model is considered an optimal model of RSV infection). Researchers administered one dose of DPX-bRSV to one cohort; the second received two doses of a subunit RSV bovine vaccine. Researchers measured immune response with an antibody titer test, and assessed disease pathology with a lung lesion score and other clinical parameters (such as body temperature changes).

They found SH antibodies in 14 of the 15 subjects 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 vaccine-induced immune response against IMV's novel RSV target - the SH viral protein— with measures of disease protection.

Conventional RSV vaccine candidates 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 vaccine candidate's protective effect. IMV has exclusive worldwide licenses on applications that target the SH ectodomain antigen in RSV. The Corporation intends to explore opportunities to out-license this product to potential partners.

#### Malaria

In 2016, IMV Inc. was awarded a subcontract by Leidos, a health, national security, and infrastructure solutions company, to evaluate IMV's DPX platform for the development of peptide-based malaria vaccine targets. The subcontract is funded through Leidos' prime contract from the USAID to provide vaccine evaluations in the preclinical, clinical, and field stages of malaria vaccine 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 vaccine 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 will conduct 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 cattle vaccines. In recent controlled studies, the IMV formulations met efficacy and duration of immunity end-points against two disease targets. These results will enable Zoetis to advance two IMV-formulated vaccine candidates into late-stage testing.

## Licensing Agreements

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

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

## Intellectual Property

The Corporation strives to protect its intellectual property in established, as well as emerging, markets around the world. The Corporation's intellectual property portfolio relating to its vaccine platform technology includes seventeen patent families, the first of which contains eight patents issued in five jurisdictions (United States, Europe, Canada, Japan, and Australia). The sixteen other families collectively contain thirty-four patents issued in ten jurisdictions (United States, Europe, Canada, Australia, Japan, India, Israel, Singapore, China and separately Hong Kong) and forty-seven pending patent applications in nine jurisdictions. Taking into account the validations of the European patents, the Corporation's intellectual property portfolio includes eighty-two patents.

U.S. Patent 6,793,923, issued in 2004, contains claims to the Corporation's platform, covering a vaccine composition comprising any antigen other than a zona-pellucidaderived antigen, any adjuvant, any liposomes and a carrier, including any oil. Trademark protection is being and has been sought for the platform name, and other marks, in the United States and Canada.

## Additional granted patents include:

- European Patent 1,333,858, granted February 8, 2006;
- Australian Patent 2002214861, granted January 11, 2007;
- Japanese Patent 4164361, granted August 1, 2008;
- United States Patent 7,824,686, granted November 2, 2010;
- Australian Patent 2006301891, granted December 20, 2012;
- Chinese Patent 101282742, granted September 18, 2013;
- European Patent 1,948,225, granted December 11, 2013;
- United States Patent 8,628,937, granted January 14, 2014;
- Australian Patent 2008303023, granted April 24, 2014;

- Japanese Patent 5528703, granted April 25, 2014;
- Australian Patent 2008307042, granted May 15, 2014;
- Singaporean Patent 166901, granted May 27, 2014;
- Japanese Patent 5591705, granted August 8, 2014;
- European Patent 2,296,696, granted August 27, 2014;
- Australian Patent 2009253780, granted November 27, 2014;
- Japanese Patent 5715051, granted March 20, 2015;
- Japanese Patent 5731198, granted April 17, 2015;
- Indian Patent 266563, granted May 18, 2015;
- Canadian Patent 2,428,103, granted June 9, 2015;
- Hong Kong Patent 1155642, granted July 24, 2015;
- United States Patent 9,114,174, granted August 25, 2015;
- Chinese Patent 101815529, granted March 9, 2016;
- Chinese Patent 102056622, granted April 6, 2016;
- European Patent 2,197,497, granted June 1, 2016;
- Japanese Patent 6016970, granted October 7, 2016;
- United States Patent 9,498,493, granted November 22, 2016;
- Canadian Patent 2,700,828, granted January 24, 2017;
- Japanese Patent 6143731, granted May 19, 2017;
- Australian Patent 2012321022, granted July 6, 2017;
- Japanese Patent 6240077, granted November 10, 2017;
- Canadian Patent 2,700,808, granted November 14, 2017;
- Japanese Patent 6254251, granted December 12, 2017;
- Canadian Patent 2,723,918, granted January 9, 2018;
- United States Patent 9,925,142, granted March 27, 2018;
- Israeli Patent 231888, granted May 29, 2018;
- United States Patent 10,022,441, granted July 17, 2018;
- Israeli Patent 209775, granted July 31, 2018;
- Singaporean Patent 11201401177W, granted October 10, 2018;
- United States Patent 10,105,435, granted October 23, 2018;
- United States Patent 10,022,441, granted October 23, 2018;
- European Patent 2978450, granted September 19, 2018;
- Australian Patent 2013384879, granted December 13, 2018; and
- Japanese Patent 6448676, granted January 9, 2019.

Since 2008, the Corporation has filed 14 Patent Cooperation Treaty ("PCT") applications relating to the Corporation's technologies, some or all of which have now been filed in the United States, Europe, Japan, Canada, Australia, China, India, Brazil, Israel, Hong Kong and Singapore. These PCT applications cover specific DPX™ compositions with broad utility for infectious diseases and cancer applications, as well as methods of manufacture and other applications of the platform technology. Some of these applications have issued to patent as listed above. These patents, together with the other pending applications if allowed, extend patent protection for some or all DPXTMbased compositions, and/or uses thereof, approximately up to the year 2037. The latest published PCT application covers methods of preparing DepoVax<sup>TM</sup>, DepoVax<sup>TM</sup> compositions, and uses and kits of same.

The Corporation also has a licensing agreement with VIB in relation to patent applications for a Respiratory Synctial Virus Vaccine (PCT/EP2011/070161) that were filed in Australia, Canada, China, Europe, Japan, and the United States. The licensing agreement stipulates that the Corporation will assume the cost of prosecuting and maintaining the fees associated with the patent applications and issued patents. These applications if allowed, could provide patent protection for a RSV vaccine formulated in DPXTM, thereby extending patent protection for DPXTM-based vaccines. To date, a patent on this RSV vaccine technology has issued in China, Europe, Japan, Australia and the United States.

## Markets and Competition

## Cancer Immunotherapies

Cancer is considered one of the most widespread and prevalent diseases globally. According to Global Cancer Facts & Figures, 4th edition (released in 2018 by the American Cancer Society), it is predicted that new cancer cases will rise to 27.5 million and the number of cancer deaths to 16.3 million by 2040 simply due to the growth of the aging population. Conventional cancer treatment involves surgery to remove the tumour 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, tumours often develop resistance to chemotherapies, thus limiting their efficacy in preventing tumour 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 January 2017, the global immunotherapy drugs market is projected to reach USD\$201.52 Billion by 2021 from USD\$108.41 billion in 2016, growing at a compound annual growth rate ("CAGR") of 13.5% during the forecast period of 2016 to 2021. The major players operating in the immunotherapy 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 tumours 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 ipilumumab, 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-tumour immune responses that are crucial for tumour control. Monoclonal antibodies that target PD-1 and PD-L1 have shown unusual efficacy in cancer patients, with a significant percentage of patients experiencing durable response to these therapies. Several of these compounds are in advanced clinical trials, with one compound, Merck's KEYTRUDA® (pembrolizumab), having received FDA approval in September of 2014 for advanced melanoma patients who have stopped responding to other therapies. Bristol-Myers Squibb's compound nivolumab (Opdivo®) has also been approved in the United States and Japan. These therapies have recently been approved for use in other advanced cancers including bladder cancer, non-small cell lung cancer, Hodgkin's Lymphoma, squamous cell carcinoma of the head and neck and stomach cancer. In addition, KEYTRUDA® in particular has been approved for use in cancers with a specific molecular indication irrelevant of cancer type, having been approved in May for use to treat solid tumours 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 tumour types, including colorectal, breast, prostate, and thyroid cancers. Key opinion leaders in the field have indicated that the ideal combination, with checkpoint inhibitors, is likely to be a therapy that drives tumour specific immune responses. These include novel T cell-based therapies. These therapies fit well with checkpoint inhibition therapy because they simultaneously activate strong tumour-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 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.

#### Manufacturing and Scalability

The Corporation has developed and implemented GMP (Good Manufacturing Practices) manufacturing process for DPX-Survivac. The scale-up methods have been transferred to, and manufacturing has been contracted out to reputable contract manufacturing organizations to manufacture sterile products for clinical purposes.

## **Facilities**

The Corporation's laboratory and head office is located at 130 Eileen Stubbs Avenue, Suite 19, Dartmouth, Nova Scotia where the Corporation is currently renting premises of approximately 14,941sq. ft. The Corporation is also renting an administrative office in Quebec City of approximately 1,743 sq. ft. located at 2875 Boulevard Laurier, Suite 220, Quebec.

#### Regulatory Process

The FDA and Health Canada share similar processes by which new products are approved. In both cases, development and approval can be a lengthy process, in some cases over five to 10 years. The FDA approves products for the United States market and Health Canada does so for the Canadian market. Though the processes are generally similar, each regulatory body has its own unique requirements for a product. In order to sell a product in each market, it has to be approved by the appropriate governing body. In most cases, early studies conducted in one jurisdiction will be accepted in the other; however, further and somewhat modified studies may be required in order to have a product approved in another jurisdiction.

All products typically go through the following steps in order to be approved:

- · discovery: early laboratory work to show that a compound can have unique chemical medicinal properties;
- pre-clinical proof-of-concept studies: studies usually conducted in laboratory animals (mice, etc.) to show that a compound is active in a living creature and retains its medicinal properties;
- Phase 1 clinical trial: a small study in human subjects which looks mainly at safety of the compound in humans. In order to be eligible to do a Phase 1 clinical trial, an IND application in the United States or a Clinical Trial Application ("CTA") in Canada must be filed and approved by the regulatory body. This application must contain information about the safety and efficacy of the compound in laboratory animals, any manufacturing information and chemical analysis. This is a lengthy process, requiring much involved research, conferences with regulatory authorities, clinicians, etc. At the conclusion of a successful Phase 1 clinical trial, a compound is shown safe in humans and further studies are warranted to show its efficacy to treat an illness;

- Phase 2 clinical trial: in a Phase 2 clinical trial, a larger population is used in order to establish appropriate dosing for the compound. This and any other clinical studies are also approved by the regulatory agencies. At the end of a successful Phase 2 clinical trial, the compound is shown to be active in the correct population and a relevant dose is chosen to continue its development;
- Phase 3 clinical trial: a large and sometimes multi-level trial, involving a statistically significant sample of the population for which the compound is designed. Stringent Chemistry, Manufacturing and Controls (CMC) are required which may delay the initiation of the trial. Phase 3 trials are designed to establish the efficacy of the compound and identify potential safety issues that may surface in the general population in order for the regulatory agency to better assess the risk/benefit of the compound when a registration application is made;
- registration application: a New Drug Application ("NDA") or Biologics Licence Application ("BLA") has to be filed with the regulatory body describing all of the clinical trials conducted to date, the relevant population, safety data, the label which will be placed on the pharmaceutical product, the sales/marketing information, etc. The regulatory body looks at the package and decides whether approval should be granted; and
- approval: once received, the pharmaceutical product may be sold to the target population. However, clinical studies may continue for the pharmaceutical product for a different segment of population (e.g. children vs. adults).

## Specialized Skill and Knowledge

The business of the Corporation requires personnel with specialized skills and knowledge in the fields of basic and applied immunology. Researchers must be able to design and implement studies to assess the efficacy of DPX in generating humoral and cellular responses. Specialized knowledge and skills relating to chemistry and formulation process development are also needed. Such knowledge and skills are needed to develop product specific analytical methods and formulation processes. The Corporation has trained scientists with broad experience in these fields.

The Corporation has subcontracted out several key functions to conduct the clinical program for its clinical trials. However, the Corporation has internal resources, such as a Chief Medical Officer, Vice President of Clinical Research, Clinical and Regulatory Affairs Manager(s) and Clinical Research Associates and utilizes the services of consultants to ensure proper and timely completion of the required activities.

The Corporation also continues to conduct internal discovery and proof-of-concept work for other potential DPX applications, some of which is anticipated to be done with a partner organization.

## Scientific and Clinical Advisory Committee

The Corporation has retained experienced academic and industry experts to assist its management in dealing with industry-related issues and how these issues may affect the Corporation's scientific research and product development.

The Scientific and Clinical Advisory Committee consists of the following members:

## Barney Graham, PhD, MD

Senior Investigator, Viral Pathogenesis Laboratory, National Institute of Allergy and Infectious Diseases Vaccine Research Center National Institutes of Health

#### Ramy Ibrahim, MD

Vice President, Clinical Development Parker Institute for Cancer Immunotherapy

## James Johnston, MB, BCh, FRCPC

Senior Scientist, Research Institute in Oncology and Hematology Cancer Care Manitoba

## Grant McFadden, PhD

Director, Biodesign Center for Immunotherapy, Vaccines and Virotherapy Arizona State University

## Michael Aaron Morse, MD

Professor of Medicine and Professor in the Department of Surgery Duke University Medical Center

## Brad Nelson, PhD

Director and Distinguished Scientist, Deeley Research Centre BC Cancer Agency

## Kunle Odunsi, PhD, MD, FRCOG, FACOG

Cancer Center Deputy Director; Chair of the Department of Gynecologic Oncology; and Executive Director, Center for Immunotherapy Roswell Park Cancer Institute

## David Spaner, PhD, MD

Senior Scientist, Biological Sciences, Odette Cancer Research Program Sunnybrook Research Institute

## Pramod Srivastava, PhD, MD

Director, Center for Immunotherapy of Cancer and Infectious Diseases Eversource Energy Chair in Experimental Oncology Director of The Carole and Ray Neag Comprehensive Cancer Center University of Connecticut School of Medicine

## Equipment and components required to conduct activities

Standard raw materials, component parts, and products required by the Corporation in pursuing its research and development activities are supplied from reputable companies active in the biotechnology industry. Pricing is predictable as there are many alternatives of such supplies that are readily available. In the event where a custom product is required, such materials are obtained from custom synthesis and/or purification manufacturers which operate in accordance with their respective regulations (ISO). These manufacturers are reputable and have been supplying such materials for the biotechnology/ pharmaceutical industry for a long time. There may be a lead time of weeks/months for such custom materials which is known and anticipated. The Corporation has identified the necessary providers of raw materials and services required for producing clinical grade product for its clinical trial activities.

#### Environmental Protection

The Corporation's discovery and development processes involve the controlled use of hazardous and radioactive materials and, accordingly, the Corporation is subject to federal, provincial and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. To the knowledge of the Corporation, compliance with such environmental laws and regulations does not and will not have any significant impact on its capital spending, profits or competitive position within the normal course of its operating activities. There can be no assurance, however, that the Corporation will not be required to incur significant costs to comply with environmental laws and regulations in the future or that its operations, business or assets will not be materially adversely affected by current or future environmental laws or regulations.

## **Employees**

As at December 31, 2018, the Corporation had 51 full-time and part-time, including nine employees holding PhD degrees, including one MD, and a number of other employees holding M.Sc. or MBA degrees. The Corporation's employees are not governed by a collective bargaining agreement. The Corporation depends on certain key members of its management and scientific staff and the loss of services of one or more of these persons could adversely affect the Corporation. See "Risk Factors and Uncertainties".

## V. RISK FACTORS AND UNCERTAINTIES

Investing in the Corporation's securities involves a high degree of risk. Prospective investors should carefully consider the risks described below, together with all of the other information included or referred to in this Annual Information Form. There are numerous and varied risks, known and unknown, that may prevent the Corporation from achieving its goals. The risks described below are not the only ones that the Corporation will face. If any of these risks actually occur, the Corporation's business, financial condition or results of operations may be materially adversely affected. In that case, the trading price of the Corporation's securities could decline and investors in the Corporation's securities could lose all or part of their investment.

## Risks Related to the Financial Position and Need for Additional Capital

The Corporation has incurred significant losses since inception and expects to incur losses for the foreseeable future and may never achieve or maintain profitability.

Since inception, the Corporation has incurred significant operating losses. The net loss was \$21.9 million for the year ended December 31, 2018, \$12.0 million for the year ended December 31, 2017 and \$8.9 million for the year ended December 31, 2016. As of December 31, 2018, the Corporation had an accumulated deficit of \$92.8 million. To date, the Corporation has financed operations primarily through public offerings in Canada, private placements of securities, grants and license and collaboration agreements. The Corporation has devoted substantially all efforts to research and development, including clinical trials. IMV expects to continue to incur significant expenses and increasing operating losses for at least the next several years. The Corporation anticipates that the expenses will increase substantially if and as the Corporation:

- initiates or continues the clinical trials of DPX-Survivac and other product candidates;
- seeks regulatory approvals for the product candidates that successfully complete clinical trials;

- establishes a sales, marketing and distribution infrastructure to commercialize products for which the Corporation may obtain regulatory approval;
- maintains, expands and protects the Corporation's intellectual property portfolio;
- continues other research and development efforts;
- hires additional clinical, quality control, scientific and management personnel; and
- adds operational, financial and management information systems and personnel, including personnel to support product development and planned commercialization
  efforts.

To become and remain profitable, the Corporation must develop and eventually commercialize a product or products with significant market potential. This development and commercialization will require the Corporation to be successful in a range of challenging activities, including successfully completing preclinical testing and clinical trials of the product candidates, obtaining regulatory approval for these product candidates and marketing and selling those products that obtain regulatory approval. The Corporation is only in the preliminary stages of some of these activities. The Corporation may never succeed in these activities and may never generate revenues that are significant or large enough to achieve profitability. Even if profitability is achieved, the Corporation may not be able to sustain or increase profitability on a quarterly or annual basis. Failure to become and remain profitable would decrease the value of the Corporation and could impair the Corporation's ability to raise capital, expand the business, maintain research and development efforts or continue operations. A decline in the value of the Corporation could also cause shareholders to lose all or part of their investment.

The Corporation will need substantial additional funding. If the Corporation is unable to raise capital when needed, the Corporation would be forced to delay, reduce, terminate or eliminate product development programs, potentially including the ongoing and planned clinical trials of DPX-Survivac or commercialization efforts.

The Corporation expects expenses to increase in connection with the ongoing activities, particularly as the Corporation continues the research, development and clinical trials of, and seeks regulatory approval for, the product candidates. In addition, if the Corporation obtains regulatory approval of any of the product candidates, the Corporation expects to incur significant commercialization expenses for product sales, marketing, manufacturing and distribution. Furthermore, the Corporation will need to obtain additional funding in connection with continuing operations. If the Corporation is unable to raise capital when needed or on attractive terms, the Corporation would be forced to delay, reduce, terminate or eliminate the product development programs, potentially including the ongoing and planned clinical trials of DPX-Survivac.

As of December 31, 2018, the Corporation had cash and cash equivalents of \$14.9 million and working capital of \$12.2 million.

The Corporation will need to obtain significant financing prior to the commercialization of DPX-Survivac, including funding to complete all of the required clinical trials of DPX-Survivac. The Corporation does not currently have funds available to enable the Corporation to complete all of the required clinical trials for the commercialization of DPX-Survivac and to fund operating expenses through the completion of these trials. The Corporation expects that it will require more than \$50 million or more to conduct the clinical trials and fund operating expenses through the completion of these trials.

The Corporation's future capital requirements will depend on many factors, including:

- the progress and results of the clinical trials of DPX-Survivac;
- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for other product candidates;
- the costs, timing and outcome of regulatory review of the product candidates;
- the costs of commercialization activities, including product sales, marketing, manufacturing and distribution, for any of the product candidates for which regulatory
  approval is received;
- revenue, if any, received from commercial sales of the Corporation's product candidates, should any of the product candidates be approved by the FDA, Health Canada or a similar regulatory authority outside the United States and Canada;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing the Corporation's intellectual property rights and defending intellectual property-related claims;
- the extent to which the Corporation acquires or invests in other businesses, products and technologies;
- the Corporation's ability to obtain government or other third-party funding; and
- the Corporation's ability to establish collaborations on favorable terms, if at all, particularly arrangements to market and distribute product candidates on a worldwide basis.

Conducting preclinical testing and clinical trials is a time-consuming, expensive and uncertain process that takes years to complete, and the Corporation may never generate the necessary data or results required to obtain regulatory approval and achieve product sales. In addition, the Corporation's product candidates, if approved, may not achieve commercial success. The Corporation's commercial revenues, if any, will be derived from sales of products that the Corporation does not expect to be commercially available for several years, if at all. Accordingly, the Corporation will need to continue to rely on additional financing to achieve the Corporation's business objectives. Additional financing may not be available on acceptable terms to the Corporation, or at all.

Raising additional capital may cause dilution to existing shareholders, restrict operations or require the Corporation to relinquish rights to its technologies or product candidates.

Until such time, if ever, as the Corporation can generate substantial product revenues, the Corporation expects to finance the cash needs through a combination of equity offerings, debt financings, government or other third-party funding, marketing and distribution arrangements and other collaborations, strategic alliances and licensing arrangements. Currently, the Corporation does not have any committed external source of funds. The Corporation will require substantial funding to complete the ongoing and planned clinical trials of DPX-Survivac and to fund operating expenses and other activities. To the extent that the Corporation raises additional capital through the sale of equity or convertible debt securities, the shareholders ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the shareholders rights as a stockholder. Debt financing, if available, may involve agreements that include covenants limiting or restricting the Corporation's ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If the Corporation raises additional funds through government or other third-party funding, marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, the Corporation may have to relinquish valuable rights to its technologies, future revenue streams, research programs or product candidates or to grant licenses on terms that may not be favorable.

## Risks Related to the Development and Commercialization of the Corporation's Product Candidates

The Corporation depends heavily on the success of DPX-Survivac and other product candidates. All of the product candidates are still in preclinical or clinical development. Clinical trials of the product candidates may not be successful. If the Corporation is unable to commercialize the product candidates or experiences significant delays in doing so, the business may be materially harmed.

All of the product candidates of the Corporation are still in preclinical or clinical development. The Corporation may never be able to obtain regulatory approval for any of its product candidates. The Corporation has committed significant human and financial resources to the development of DPX-Survivac, and the DPX Platform. The ability to generate product revenues, which is not expected to occur for at least the next several years, if ever, will depend heavily on the successful development and eventual commercialization of these product candidates, especially DPX-Survivac, the most advanced product candidate. The success of these product candidates will depend on several factors, including the following:

- successful completion of preclinical studies and clinical trials;
- · receipt of marketing approvals from the FDA, Health Canada and similar regulatory authorities outside the United States and Canada;
- establishing commercial manufacturing capabilities by identifying and making arrangements with third-party manufacturers for the product candidates;
- maintaining patent and trade secret protection and regulatory exclusivity for the product candidates;
- launching commercial sales of the products, if and when approved, whether alone or in collaboration with others;
- acceptance of the products, if and when approved, by patients, the medical community and third-party payors;
- · effectively competing with other therapies; and
- a continued acceptable safety profile of the products following approval.

If the Corporation does not achieve one or more of these factors in a timely manner or at all, the Corporation could experience significant delays or an inability to successfully commercialize its product candidates, which would materially harm its business.

If clinical trials of the product candidates, such as the ongoing and planned clinical trials of DPX-Survivac, fail to demonstrate safety and efficacy to the satisfaction of the FDA, Health Canada or similar regulatory authorities outside the United States and Canada or do not otherwise produce positive results, the Corporation may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of the product candidates.

Before obtaining regulatory approval for the sale of the product candidates, the Corporation must conduct extensive clinical trials to demonstrate the safety, purity and potency, or efficacy, of the product candidates in humans. Clinical testing is expensive, difficult to design and implement, can take many years to complete and is uncertain as to outcome. A failure of one or more of the Corporation's clinical trials can occur at any stage of testing. The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and interim results of a clinical trial do not necessarily predict final results. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their products.

The Corporation may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent the Corporation's ability to receive regulatory approval or commercialize its product candidates. Unforeseen events that could delay or prevent the Corporation's ability to receive regulatory approval or commercialize its product candidates include:

- regulators or institutional review boards may not authorize the Corporation or its investigators to commence a clinical trial or conduct a clinical trial at a prospective trial site:
- the Corporation may have delays in reaching or fail to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites;
- clinical trials of the product candidates may produce negative or inconclusive results, and the Corporation may decide, or regulators may require, additional clinical trials be conducted or product development programs be abandoned;
- the number of patients required for clinical trials of the product candidates may be larger than anticipated, enrollment in these clinical trials may be slower than anticipated or participants may drop out of these clinical trials at a higher rate than anticipated;
- the Corporation's third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations in a timely manner, or at all;
- the Corporation might have to suspend or terminate clinical trials of its product candidates for various reasons, including a finding that the participants are being exposed to unacceptable health risks;
- regulators or institutional review boards may require that the Corporation or its investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements or a finding that the participants are being exposed to unacceptable health risks;
- the cost of clinical trials of the product candidates may be greater than anticipated;
- the supply or quality of the product candidates or other materials necessary to conduct clinical trials of the product candidates may be insufficient or inadequate; and
- the Corporation's product candidates may have undesirable side effects or other unexpected characteristics, causing the Corporation or its investigators, regulators or institutional review boards to suspend or terminate the trials.

In addition, the patients recruited for clinical trials of the product candidates may have a disease profile or other characteristics that are different than expected and different than what the clinical trials were designed for, which could adversely impact the results of the clinical trials.

If the Corporation is required to conduct additional clinical trials or other testing of its product candidates beyond those that are currently contemplated, if the Corporation is unable to successfully complete clinical trials of its product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, the Corporation may:

- · be delayed in obtaining marketing approval for its product candidates;
- not obtain marketing approval at all;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use restrictions or safety warnings, including boxed warnings;
- have the product removed from the market after obtaining marketing approval;
- be subject to additional post-marketing testing requirements; or
- be subject to restrictions on how the product is distributed or used.

The Corporation's product development costs will also increase if delays in testing or approvals are experienced. The Corporation does not know whether any clinical trials will begin as planned, will need to be restructured or will be completed on schedule, or at all. Significant clinical trial delays could also shorten any periods during which the Corporation may have the exclusive right to commercialize its product candidates or allow the Corporation's competitors to bring products to market before the Corporation does and impair the Corporation's ability to commercialize its product candidates and may harm the business and results of operations.

## If the Corporation experiences delays or difficulties in the enrollment of patients in clinical trials, receipt of necessary regulatory approvals could be delayed or prevented.

The Corporation may not be able to initiate or continue clinical trials for its product candidates, if the Corporation is unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA, Health Canada or similar regulatory authorities outside the United States and Canada. In addition, many of the Corporation's competitors have ongoing clinical trials for product candidates that could be competitive with the Corporation's product candidates, and patients who would otherwise be eligible for the Corporation's clinical trials may instead enroll in clinical trials of the Corporation's competitors' product candidates.

Patient enrollment is affected by other factors including:

- · severity of the disease under investigation;
- eligibility criteria for the study in question;
- perceived risks and benefits of the product candidate under study;
- · efforts to facilitate timely enrollment in clinical trials;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment; and
- proximity and availability of clinical trial sites for prospective patients.

The actual amount of time for full enrollment could be longer than planned. Enrollment delays in these ongoing and planned trials or any of the Corporation's other clinical trials may result in increased development costs for its product candidates, which would cause the value of the Corporation to decline and limit the Corporation's ability to obtain additional financing, including financing needed to complete the ongoing and planned trials of DPX-Survivac. The Corporation's inability to enroll a sufficient number of patients for these clinical trials or any of the other clinical trials would result in significant delays or may require the Corporation to abandon one or more clinical trials altogether.

If serious adverse or undesirable side effects are identified during the development of the product candidates, the Corporation may need to abandon or limit the development of some of its product candidates.

All of the Corporation's product candidates are still in preclinical or clinical development and their risk of failure is high. It is impossible to predict when or if any of the Corporation's product candidates will prove effective or safe in humans or will receive regulatory approval. If the Corporation's product candidates are associated with undesirable side effects or have characteristics that are unexpected, the Corporation may need to abandon their development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective.

#### The design or the Corporation's execution of clinical trials may not support regulatory approval.

The design or execution of a clinical trial can determine whether its results will support regulatory approval and flaws in the design or execution of a clinical trial may not become apparent until the clinical trial is well advanced. In some instances, there can be significant variability in safety or efficacy results between different trials of the same product candidate due to numerous factors, including changes in trial protocols, differences in size and type of the patient populations, adherence to the dosing regimen and other trial protocols and the rate of dropout among clinical trial participants. The Corporation does not know whether any Phase 2, Phase 3 or other clinical trials the Corporation may conduct will demonstrate consistent or adequate efficacy and safety to obtain regulatory approval to market the Corporation's product candidates.

Further, the FDA, Health Canada and comparable foreign regulatory authorities have substantial discretion in the approval process and in determining when or whether regulatory approval will be obtained for any of the Corporation's product candidates. The Corporation's product candidates may not be approved even if they achieve their primary endpoints in future Phase 3 clinical trials or registration trials. The FDA, Health Canada or other regulatory authorities may disagree with the Corporation's trial design and the Corporation's interpretation of data from preclinical studies and clinical trials. In addition, any of these regulatory authorities may change requirements for the approval of a product candidate even after reviewing and providing comments or advice on a protocol for a pivotal Phase 3 clinical trial that has the potential to result in FDA, Health Canada or other agencies' approval. In addition, any of these regulatory authorities may also approve a product candidate for fewer or more limited indications than the Corporation requests or may grant approval contingent on the performance of costly post-marketing clinical trials. The FDA, Health Canada or other regulatory authorities may not approve the labeling claims that the Corporation believes would be necessary or desirable for the successful commercialization of its product candidates.

Even if any of the Corporation's product candidates, including DPX-Survivac, receive regulatory approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

If DPX-Survivac or any other product candidates receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors and others in the medical community. Gaining market acceptance for the DPX<sup>TM</sup>-based products may be particularly difficult as, to date, the FDA has only approved a limited number of cancer immunotherapies and the DPX<sup>TM</sup>-based products are based on a novel technology. If these products do not achieve an adequate level of acceptance, the Corporation may not generate significant product revenues and may not become profitable. The degree of market acceptance of the Corporation's product candidates, if approved for commercial sale, will depend on a number of factors, including:

- efficacy and potential advantages compared to alternative treatments;
- the ability to offer its product candidates for sale at competitive prices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support;
- sufficient third-party coverage or reimbursement; and
- the prevalence and severity of any side effects.

If the Corporation is unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market its product candidates, the Corporation may not be successful in commercializing its product candidates if and when they are approved.

The Corporation does not have a sales or marketing infrastructure and has no experience in the sale, marketing or distribution of pharmaceutical products. To achieve commercial success for any of its product that would be approved in the future, the Corporation must either develop a sales and marketing organization or outsource these functions to third parties. The Corporation currently intends to establish commercialization arrangements with third parties.

There are risks involved with entering into arrangements with third parties to perform these services. If the Corporation enters into arrangements with third parties to perform sales, marketing and distribution services, its product revenues or the profitability of these product revenues are likely to be lower than if the Corporation were to market and sell any products that it develops. In addition, the Corporation may not be successful in entering into arrangements with third parties to sell and market its product candidates or doing so on terms that are favorable to the Corporation. The Corporation likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market its products effectively. If the Corporation does not establish sales and marketing capabilities successfully, either on its own or in collaboration with third parties, it will not be successful in commercializing its product candidates.

## The Corporation faces substantial competition, which may result in others discovering, developing or commercializing products before or more successfully than it may.

The development and commercialization of new drug products is highly competitive. The Corporation faces competition with respect to its current product candidates, and will face competition with respect to any products that it may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. There are a number of large pharmaceutical and biotechnology companies that currently market and sell products or are pursuing the development of products for the treatment of the disease indications for which the Corporation is developing its product candidates. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Some of these competitive products and therapies are based on scientific approaches that are the same as or similar to the Corporation's approaches, and others are based on entirely different approaches. Many marketed therapies for the indications that the Corporation is currently pursuing, or indications that it may in the future seek to address using the DPX platform, are widely accepted by physicians, patients and payors, which may make it difficult for the Corporation to replace with any products that the Corporation successfully develops and are permitted to market.

There are many FDA-approved cancer therapies that may provide equivalent or better efficacy compared to DPX-Survivac.

In addition, the Corporation estimates that there are numerous cancer immunotherapy products in clinical development by many public and private biotechnology and pharmaceutical companies targeting numerous different cancer types. A number of these are in late stage development. For example, Stimuvax (Merck KGaA), a cancer vaccine in late stage clinical development for the treatment of non-small lung cancer (NSLC) may successfully improve overall survival to a better extent than DPX-Survivac in the same patient population.

The Corporation's competitors may develop products that are more effective, safer, more convenient or less costly than any that the Corporation is developing or that would render its product candidates obsolete or non-competitive. The Corporation's competitors may also obtain FDA, Health Canada or other regulatory approval for their products more rapidly than the Corporation.

Many of the Corporation's competitors have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than the Corporation. Mergers and acquisitions in the pharmaceutical, biotechnology and device industries may result in even more resources being concentrated among a smaller number of the Corporation's competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with the Corporation in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, the Corporation's programs.

Even if the Corporation is able to commercialize any product candidates, the products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, which would harm the business.

The regulations that govern marketing approvals, pricing and reimbursement for new drug products vary widely from country to country. In the United States, recently passed legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, the Corporation might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay the commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenues the Corporation is able to generate from the sale of the product in that country. Adverse pricing limitations may hinder the Corporation's ability to recoup its investment in one or more product candidates, even if its product candidates obtain regulatory approval.

The Corporation's ability to commercialize any products successfully also will depend in part on the extent to which reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the United States healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. The Corporation cannot be sure that reimbursement will be available for any product that it commercializes and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which the Corporation obtains marketing approval. Obtaining reimbursement for the Corporation's products may be particularly difficult because of the higher prices often associated with drugs administered under the supervision of a physician. If reimbursement is not available only to limited levels, the Corporation may not be able to successfully commercialize any product candidate for which the Corporation obtained marketing approval.

There may be significant delays in obtaining reimbursement for newly approved drugs, and coverage may be more limited than the purposes for which the drug is approved by the FDA, Health Canada or similar regulatory authorities outside the United States or Canada. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers the Corporation's costs, including research, development, manufacture, sale and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover the Corporation's costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs, and may be incorporated into existing payments for other services. Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in Canada or the United States. Third party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. The Corporation's inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved products that the Corporation's overall financial condition.

## The Corporation's reliance on government funding adds uncertainty to the Corporation's research and commercialization efforts of its government-funded product candidates.

The Corporation has received significant funding from government organizations since its inception totaling over \$15 million. There is no assurance the Corporation will continue to apply for and/or be awarded government funding in the future. If the Corporation is unable to obtain additional government funding, it will have to either obtain funds through raising additional capital or arrangements with strategic partners or others, if available, that may require the Corporation to relinquish material rights to certain technologies or potential markets. There is no certainty that financing will be available in amounts the Corporation requires to pursue the planned activities or on acceptable terms, if at all.

Product liability lawsuits against the Corporation could cause the Corporation to incur substantial liabilities and to limit commercialization of any products that the Corporation may develop.

The Corporation faces an inherent risk of product liability exposure related to the testing of its product candidates in human clinical trials and will face an even greater risk if the Corporation commercially sells any products that it may develop. None of the Corporation's product candidates have been widely used over an extended period of time, and therefore, safety data is limited.

If the Corporation cannot successfully defend itself against claims that its product candidates or products caused injuries, it will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or products that it may develop;
- injury to the Corporation's reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- · significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- · loss of revenue; and
- the inability to commercialize any products that the Corporation may develop.

The Corporation currently maintains a clinical trial liability insurance coverage in the amount of \$10 million, which may not be adequate to cover all liabilities that it may incur. The Corporation will need to increase its insurance coverage when it begins commercializing its product candidates. Insurance coverage is increasingly expensive. The Corporation may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

The Corporation may expend its limited resources to pursue a particular product candidate or indication and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because the Corporation has limited financial and managerial resources, the Corporation focuses on research programs and product candidates for specific indications. As a result, the Corporation may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. The Corporation's resource allocation decisions may cause the Corporation to fail to capitalize on viable commercial products or profitable market opportunities. The Corporation's spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products.

The Corporation has based its research and development efforts on its DPX platform. Notwithstanding the large investment to date and anticipated future expenditures in its DPX platform, the Corporation has not yet developed, and may never successfully develop, any marketed drugs using this approach. As a result of pursuing the development of product candidates using the DPX platform, the Corporation may fail to develop product candidates or address indications based on other scientific approaches that may offer greater commercial potential or for which there is a greater likelihood of success.

The Corporation's long-term business plan is to develop DPX<sup>TM</sup>-based products for the treatment of various cancers and infectious diseases. The Corporation may not be successful in its efforts to identify or discover additional product candidates that may be manufactured using its DPX platform. Research programs to identify new product candidates require substantial technical, financial and human resources. These research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development.

If the Corporation does not accurately evaluate the commercial potential or target market for a particular product candidate, the Corporation may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for the Corporation to retain sole development and commercialization rights to such product candidate.

## Risks Related to the Corporation's Dependence on Third Parties

## If the Corporation is not able to establish collaborations, the Corporation may have to alter its development and commercialization plans.

The Corporation's drug development programs and the potential commercialization of its product candidates will require substantial additional cash to fund expenses. For some of the Corporation's product candidates, the Corporation plans to collaborate with pharmaceutical and biotechnology companies for the development and potential commercialization of those product candidates.

The Corporation faces significant competition in seeking appropriate collaborators. Whether the Corporation reaches a definitive agreement for a collaboration will depend, among other things, upon its assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration, and the proposed collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by the FDA, Health Canada or similar regulatory authorities outside the United States and Canada, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to the Corporation's ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with the Corporation for its product candidate. The Corporation may also be restricted under existing license agreements from entering into agreements on certain terms with potential collaborators. Collaborations are complex and time-consuming to negotiate and document. The Corporation may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all.

The Corporation will need to raise capital or develop collaborations with third parties to commercialize its products. If the Corporation is not able to obtain such funding or enter into collaborations for any such product candidate, the Corporation may have to curtail the development of such product candidate, reduce or delay its development program or one or more of its other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase its expenditures and undertake development or commercialization activities at the Corporation's own expense. If the Corporation elects to increase its expenditures to fund development or commercialization activities on its own, the Corporation may need to obtain additional capital, which may not be available to the Corporation on acceptable terms or at all. If the Corporation does not have sufficient funds, the Corporation may not be able to further develop these product candidates or bring these product candidates to market and generate product revenue.

The Corporation expects to depend on collaborations with third parties for the development and commercialization of its product candidates. If those collaborations are not successful, the Corporation may not be able to capitalize on the market potential of these product candidates.

The Corporation intends to establish commercialization arrangements with third-parties. The Corporation's likely collaborators for any development, distribution, marketing, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies.

Potential delays include delays in manufacture or clinical trials, failure to produce sufficient quantities of product to conduct trials, or failure to complete trials. The Corporation's collaborators may fail to meet contractual obligations. They could also pursue other technologies or develop alternative products that could compete with the products the Corporation is developing. If the Corporation does enter into any such arrangements with any third parties, the Corporation will likely have limited control over the amount and timing of resources that its collaborators dedicate to the development or commercialization of its product candidates. The Corporation's ability to generate revenues from these arrangements will depend on its collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving the Corporation's product candidates would pose the following risks to the Corporation:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not pursue development and commercialization of the Corporation's product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with the Corporation's products or product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than the Corporation's;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- collaborators may not properly maintain or defend the Corporation's intellectual property rights or may use the Corporation's proprietary information in such a way
  as to invite litigation that could jeopardize or invalidate the Corporation's proprietary information or expose the Corporation to potential litigation;
- disputes may arise between the collaborators and the Corporation that result in the delay or termination of the research, development or commercialization of the Corporation's products or product candidates or that result in costly litigation or arbitration that diverts management attention and resources; and

• collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates. For example, the Corporation could have to build a sales force.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, or at all. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. If a present or future collaborator of the Corporation were to be involved in a business combination, the continued pursuit and emphasis on the Corporation's product development or commercialization program could be delayed, diminished or terminated.

# The Corporation relies on third parties to conduct its clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials.

The Corporation does not independently conduct clinical trials of its product candidates. The Corporation relies on third parties, such as contract research organizations, clinical data management organizations, medical institutions and clinical investigators, to perform this function. The Corporation's reliance on these third parties for clinical development activities reduces its control over these activities but does not relieve the Corporation of its responsibilities. The Corporation remains responsible for ensuring that each of its clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Moreover, the FDA requires the Corporation to comply with standards, commonly referred to as Good Clinical Practices, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. The Corporation is also required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions. Furthermore, these third parties may also have relationships with other entities, some of which may be the Corporation's competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct the Corporation's clinical trials in accordance with regulatory requirements or the Corporation's stated protocols, the Corporation will not be able to obtain, or may be delayed in obtaining, regulatory approvals for its product candidates and will not be able to, or may be delayed in its efforts to, successfully commercialize its product candidates.

The Corporation also relies on other third parties to store and distribute drug supplies for its clinical trials. Any performance failure on the part of the Corporation's existing or future distributors could delay clinical development or regulatory approval of its product candidates or commercialization of its products, producing additional losses and depriving the Corporation of potential product revenue.

# The Corporation depends on third-party suppliers to obtain the Corporation's raw ingredients and intermediate drug substances, which are necessary for the production of the Corporation's products.

The Corporation currently procures ingredients and intermediate drug substances for the manufacturing of the Corporation's pipeline products from specialized suppliers. For some components, including raw ingredients, the Corporation has so far identified only one supplier which is qualified for the Corporation's GMP process. In the event that a supplier stops supplying the required ingredient(s), the Corporation may need to identify an alternative source of such components and may need to wait until it is qualified for the Corporation's GMP process before procuring the components, which may cause substantial delays to one or all of the Corporation's clinical programs.

## Risks Related to the Manufacturing of the Corporation's Product Candidates

## If the Corporation is unable to commercially manufacture its products, the Corporation could face delayed trial approvals or sales.

The Corporation has no experience manufacturing commercial quantities of products and does not currently have the resources to commercially manufacture any products that the Corporation may develop. Accordingly, if the Corporation becomes successful in developing any product with commercial potential, the Corporation would either be required to develop the facilities to manufacture independently or secure a contract manufacturer or enter into another arrangement with third parties to manufacture such products. If the Corporation is unable to develop such capabilities or enter into any such arrangement on favourable terms, the Corporation may be unable to compete effectively in the marketplace. If the Corporation is unable to manufacture or contract for a sufficient supply of product on acceptable terms, or if the Corporation encounters delays or difficulties in its relationships with manufacturers or collaborators, its preclinical, clinical testing and/or product sales could be delayed, thereby delaying the submission of products for regulatory approval and/or market introduction and subsequent sales of such products.

Currently the Corporation is utilizing the GMP services of a contract manufacturing organization ("CMO") located in the United States for its clinical drug product manufacturing and does not have a fully qualified and approved backup facility. The Corporation may need to approve an alternative CMO to avoid delays in planned clinical programs should there be any issues with the current CMO. The Corporation's products require a unique manufacturing process and uses specialized equipment manufactured by another third party to manufacture the Corporation's clinical candidate vaccines. The specialized equipment used during the manufacturing process is made by only one manufacturer. In the event of catastrophic equipment failure and in the event that this particular supplier of the equipment ceases its operations and/ or replacement equipment cannot be procured, alternative suppliers of similar equipment may be sought and additional product development may be required, which may cause significant delays to some or all of the Corporation's clinical programs.

#### Risks Related to the Corporation's Intellectual Property

If the Corporation fails to comply with its obligations under its intellectual property licenses with third parties, the Corporation could lose license rights that are important to its business.

The Corporation is a party to a number of intellectual property license agreements with third parties and expects to enter into additional license agreements in the future. The Corporation's existing license agreements impose, and the Corporation expects that future license agreements will impose, various diligences, milestone payment, royalty, insurance, indemnification and other obligations on the Corporation. If the Corporation fails to comply with its obligations under these licenses, its licensors may have the right to terminate these license agreements, in which event the Corporation might not be able to market any product that is covered by these agreements, or to convert the license to a non-exclusive license, which could materially adversely affect the value of the product candidate being developed under the license agreement. Termination of these license agreements or reduction or elimination of the Corporation's licensed rights may result in the Corporation having to negotiate new or reinstated licenses with less favorable terms.

If the Corporation is unable to obtain and maintain patent protection for its technology and products, or if the Corporation's licensors are unable to obtain and maintain patent protection for the technology or products that the Corporation licenses from them, or if the scope of the patent protection obtained is not sufficiently broad, the Corporation's competitors could develop and commercialize technology and products similar or identical to that of the Corporation's, and its ability to successfully commercialize its technology and products may be adversely affected.

The Corporation's success depends in large part on its and its licensors' ability to obtain and maintain patent protection in the United States and other countries with respect to its proprietary technology and products. The Corporation and its licensors have sought to protect the Corporation's proprietary position by filing patent applications in the United States and abroad related to its novel technologies and products that are important to its business. This process is expensive and time-consuming, and the Corporation may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that the Corporation will fail to identify patentable aspects of its research and development output before it is too late to obtain patent protection. Moreover, in some circumstances, the Corporation does not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology or products that it licenses from third parties and are reliant on its licensors. Therefore, the Corporation cannot be certain that these patents and applications will be prosecuted and enforced in a manner consistent with the best interests of its business. If such licensors fail to maintain such patents, or lose rights to those patents, the rights the Corporation has licensed may be reduced or eliminated.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of the Corporation's and its licensors' patent rights are highly uncertain. The Corporation and its licensors' pending and future patent applications may not result in patents being issued which protect its technology or products or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of the Corporation's patents or narrow the scope of its patent protection.

The laws of foreign countries may not protect the Corporation's rights to the same extent as the laws of Canada and the United States. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in Canada and the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, the Corporation cannot be certain that itself or its licensors were the first to make the inventions claimed in its owned or licensed patents or pending patent applications, or that the Corporation or its licensors were the first to file for patent protection of such inventions.

Assuming the other requirements for patentability are met, in the United States, the first to invent the claimed invention is entitled to the patent, while outside the United States, the first to file a patent application is generally entitled to the patent. Under the America Invents Act, or AIA, enacted in September 2011, the United States moved to a first inventor to file system in March 2013. The Corporation may become involved in opposition or interference proceedings challenging its patent rights or the patent rights of others. An adverse determination in any such proceeding or litigation could reduce the scope of, or invalidate, the Corporation's patent rights, allowing third parties to commercialize its technology or products and compete directly with the Corporation, without payment to the Corporation, or result in its inability to manufacture or commercialize products without infringing third-party patent rights. For example, Merck has to maintain patents on antigens licensed to the Corporation.

Even if the Corporation's owned and licensed patent applications issue as patents, they may not issue in a form that will provide the Corporation with any meaningful protection, prevent competitors from competing with the Corporation or otherwise provide the Corporation with any competitive advantage. The Corporation's competitors may be able to circumvent its owned or licensed patents by developing similar or alternative technologies or products in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity or enforceability, and the Corporation's owned and licensed patents may be challenged in the courts or patent offices in Canada, the United States and abroad. Such challenges may result in patent claims being narrowed, invalidated or held unenforceable, which could limit the Corporation's ability to or stop or prevent the Corporation from stopping others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of its technology and products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, the Corporation's owned and licensed patent portfolio may not provide it with sufficient rights to exclude others from commercializing products similar or identical to the Corporation's.

## The Corporation may become involved in lawsuits to protect or enforce its patents, which could be expensive, time consuming and unsuccessful.

Competitors may infringe the Corporation's patents. To counter infringement or unauthorized use, the Corporation may be required to file infringement claims, which can be expensive and time consuming. In addition, in an infringement proceeding, a court may decide that a patent of the Corporation's is invalid or unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that its patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of the Corporation's patents at risk of being invalidated or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of the Corporation's confidential information could be compromised by disclosure during this type of litigation. In addition, the Corporation's licensors may have rights to file and prosecute such claims and it is reliant on them.

Third parties may initiate legal proceedings alleging that the Corporation is infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of the Corporation's business.

The Corporation's commercial successes depends upon its ability and the ability of its collaborators to develop, manufacture, market and sell its product candidates and use its proprietary technologies without infringing the proprietary rights of third parties. The Corporation may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to its products and technology, including interference proceedings before the U.S. Patent and Trademark Office or other similar regulatory authorities. Third parties may assert infringement claims against the Corporation based on existing patents or patents that may be granted in the future. If the Corporation is found to infringe a third party's intellectual property rights, it could be required to obtain a license from such third party to continue developing and marketing its products and technology. However, the Corporation may not be able to obtain any required license on commercially reasonable terms or at all. Even if the Corporation was able to obtain a license, it could be non-exclusive, thereby giving its competitors access to the same technologies licensed to the Corporation. The Corporation could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, the Corporation could be found liable for monetary damages. A finding of infringement could prevent the Corporation from commercializing its product candidates or force the Corporation to cease some of its business operations, which could materially harm the Corporation's business. Claims that the Corporation has misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on its business.

The Corporation has research licenses to certain reagents and their use in the development of its product candidates. The Corporation would need commercial licenses to these reagents for any of the Corporation's product candidates that receive approval for sale in the United States or Canada. The Corporation believes that commercial licenses to these reagents will be available. If the Corporation is unable to obtain any such commercial licenses, it may be unable to commercialize its product candidates without infringing the patent rights of third parties. If the Corporation did seek to commercialize its product candidates without a license, these third parties could initiate legal proceedings against the Corporation.

## The Corporation may be subject to claims that its employees have wrongfully used or disclosed alleged trade secrets of their former employers.

Many of the Corporation's employees were previously employed at universities or other biotechnology or pharmaceutical companies. Although the Corporation tries to ensure that its employees do not use the proprietary information or know-how of others in their work for the Corporation, the Corporation may be subject to claims that it or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. Litigation may be necessary to defend against these claims. If the Corporation fails in defending any such claims, in addition to paying monetary damages, it may lose valuable intellectual property rights or personnel. Even if the Corporation is successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

## Intellectual property litigation could cause the Corporation to spend substantial resources and distract its personnel from their normal responsibilities.

Even if resolved in the Corporation's favor, litigation or other legal proceedings relating to intellectual property claims may cause the Corporation to incur significant expenses, and could distract the Corporation's technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of the Corporation's common shares. Such litigation or proceedings could substantially increase the Corporation's operating losses and reduce the resources available for development activities. The Corporation may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of the Corporation's competitors may be able to sustain the costs of such litigation or proceedings more effectively than it can because of their greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on the Corporation's ability to compete in the marketplace.

## If the Corporation is unable to protect the confidentiality of its trade secrets, the Corporation's business and competitive position would be harmed.

In addition to seeking patents for some of the Corporation's technology and products, it also relies on trade secrets, including unpatented know-how, technology and other proprietary information, to maintain its competitive position. The types of protections available for trade secrets are particularly important with respect to the DPX platform's manufacturing capabilities, which involve significant unpatented know-how. The Corporation seeks to protect these trade secrets, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as the Corporation's employees, corporate collaborators, outside scientific collaborators, sponsored researchers, contract manufacturers, consultants, advisors and other third parties. The Corporation also enters into confidentiality and invention or patent assignment agreements with its employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose the Corporation's proprietary information, including its trade secrets, and the Corporation may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, courts in certain jurisdictions are less willing or unwilling to protect trade secrets. If any of the Corporation's trade secrets were to be disclosed to or independently developed by a competitor, it would have no right to prevent them from using that technology or information to compete with the Corporation. If any of the Corporation's trade secrets were to be disclosed to or independently developed by a competitor, its competitive position would be harmed.

## Cyber security incidents and privacy breaches could result in important remediation costs, increased cyber security costs, litigation and reputational harm.

Cyber security incidents can result from deliberate attacks or unintentional events. Cyber-attacks and security breaches could include unauthorized attempts to access, disable, improperly modify or degrade the Corporation's information, systems and networks, the introduction of computer viruses and other malicious codes and fraudulent "phishing" emails that seek to misappropriate data and information or install malware onto users' computers. Cyber-attacks in particular vary in technique and sources, are persistent, frequently change and are increasingly more targeted and difficult to detect and prevent against.

Disruptions due to cyber security incidents could adversely affect the Corporation's business. In particular, a cyber security incident could result in the loss or corruption of data from the Corporation's research and development activities, including clinical trials, which may cause significant delays to some or all of the Corporation's clinical programs. Also, the Corporation's trade secrets, including unpatented know-how, technology and other proprietary information could be disclosed to competitors further to a breach, which would harm the Corporation's business and competitive position. If the Corporation is unable to protect the confidentiality of its trade secrets, the Corporation's business and competitive position would be harmed.

The Corporation is subject to privacy and security regulations with respect to the use and disclosure of protected health information. Subject to limited exceptions, the regulations restrict the Corporation's ability to use or disclose patient identifiable information without patient consent for purposes other than treatment or health-care operations. Any breach of the Corporation's systems that results in personal information being obtained by unauthorized persons could adversely affect the reputation of the Corporation and lead to litigation, fines and liability for failure to comply with privacy and information security laws.

The Corporation relies on a third-party for its information technology ("IT") function. The Corporation meets with its third-party IT experts on a bi-annual basis to discuss matters related to cyber security. An IT risk assessment is performed on an annual basis with oversight by the Audit Committee and the functionality of internal controls established as a result of this risk assessment are confirmed with the Corporation's third-party IT experts on a quarterly basis.

## The Corporation must successfully upgrade and maintain its information technology systems.

The Corporation relies on various information technology systems to manage its operations. There are inherent costs and risks associated with maintaining, modifying and/or changing these systems and implementing new systems, including potential disruption of the Corporation's internal control structure, substantial capital expenditures, additional administration and operating expenses, retention of sufficiently skilled personnel to implement and operate its systems, demands on management time and other risks and costs of delays or difficulties in transitioning to new systems or of integrating new systems into the Corporation's current systems. In addition, the Corporation's information technology system implementations may not result in productivity improvements at a level that outweighs the costs of implementation, or at all. The implementation of new information technology systems may also cause disruptions in the Corporation's business operations and have an adverse effect on its business, prospects, financial condition and operating results.

## Risks Related to Regulatory Approval of the Corporation's Product Candidates and Other Legal Compliance Matters

If the Corporation is not able to obtain, or if there are delays in obtaining, required regulatory approvals, the Corporation may not be able to commercialize its product candidates, and its ability to generate revenue may be materially impaired.

The Corporation's product candidates, including DPX-Survivac, and the activities associated with their development and commercialization, including their design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale and distribution, are subject to comprehensive regulation by the FDA, Health Canada and by comparable authorities in other countries. Failure to obtain regulatory approval for a product candidate will prevent the Corporation from commercializing the product candidate. The Corporation has not received regulatory approval to market any of its product candidates in any jurisdiction. The Corporation has only limited experience in filing and supporting the applications necessary to gain regulatory approvals and expect to rely on third-party contract research organizations to assist it in this process. Securing FDA or Health Canada approval requires the submission of extensive preclinical and clinical data and supporting information to the FDA or Health Canada for each therapeutic indication to establish the product candidate's safety and efficacy. Securing FDA or Health Canada approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the FDA or Health Canada. The Corporation's product candidates may not be effective, may be only moderately effective or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude the Corporation from obtaining regulatory approval or prevent or limit commercial use.

The process of obtaining regulatory approvals, both in the United States and abroad, is expensive, may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity and novelty of the product candidates involved. To date, the FDA has only approved one active cellular immunotherapy product. Changes in regulatory approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. The FDA or Health Canada has substantial discretion in the approval process and may refuse to accept any application or may decide that the Corporation's data is insufficient for approval and require additional preclinical, clinical or other studies. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent regulatory approval of a product candidate. Any regulatory approval the Corporation ultimately obtains may be limited or subject to restrictions or post-approval commitments that render the approved product not commercially viable.

If the Corporation experiences delays in obtaining approval or if it fails to obtain approval of its product candidates, the commercial prospects for the Corporation's product candidates may be harmed and its ability to generate revenues will be materially impaired.

## Failure to obtain regulatory approval in international jurisdictions would prevent the Corporation's product candidates from being marketed abroad.

The Corporation intends to enter into arrangements with third parties under which they would market its products outside Canada or the United States. In order to market and sell the Corporation's products in the European Union and many other jurisdictions, the Corporation or such third parties must obtain separate regulatory approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA or Health Canada approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA or Health Canada approval. In addition, in many countries outside the United States or Canada, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. The Corporation or these third parties may not obtain approvals from regulatory authorities outside the United States or Canada on a timely basis, if at all. Approval by the FDA or Health Canada does not ensure approval by regulatory authorities in other countries or jurisdictions, and approval by one regulatory authority outside the United States or Canada does not ensure approval by regulatory authorities in other countries or jurisdictions or by the FDA. The Corporation may not be able to file for regulatory approvals and may not receive necessary approvals to commercialize its products in any market.

# If the Corporation fails to comply with environmental, health and safety laws and regulations, it could become subject to fines or penalties or incur costs that could have a material adverse effect on the success of the Corporation's business.

The Corporation is subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. The Corporation's operations involve the use of hazardous and flammable materials, including chemicals and radioactive and biological materials. The Corporation's operations also produce hazardous waste products. The Corporation generally contract with third parties for the disposal of these materials and wastes. The Corporation cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from the Corporation's use of hazardous materials, it could be held liable for any resulting damages, and any liability could exceed its resources. The Corporation also could incur significant costs associated with civil or criminal fines and penalties.

Although the Corporation maintains workers' compensation insurance to cover it for costs and expenses it may incur due to injuries to its employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. The Corporation does not maintain insurance for environmental liability or toxic tort claims that may be asserted against the Corporation in connection with its storage or disposal of biological, hazardous or radioactive materials.

In addition, the Corporation may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair the Corporation's research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Any product candidate for which the Corporation obtains marketing approval could be subject to restrictions or withdrawal from the market and the Corporation may be subject to penalties if it fails to comply with regulatory requirements or if it experiences unanticipated problems with its products, when and if any of them are approved.

Any product candidate for which the Corporation obtains marketing approval, along with the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and other regulatory authorities. These requirements include, among others, submissions of safety and other post-marketing information and reports, registration and listing requirements, cGMP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, cGTP requirements, requirements regarding the distribution of samples to physicians and recordkeeping. Even if regulatory approval of a product candidate is granted, the approval may be subject to limitations on the indicated uses for which the product may be closely regulates the post-approval marketing and promotion of drugs to ensure drugs are marketed only for the approved indications and in accordance with the provisions of the approved label. The FDA imposes stringent restrictions on manufacturers' communications regarding off-label use and if the Corporation does not market its products for their approved indications, the Corporation may be subject to enforcement action for off-label marketing.

In addition, later discovery of previously unknown problems with the Corporation's products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- · restrictions on such products, manufacturers or manufacturing processes;
- · restrictions on the marketing of a product;
- restrictions on product distribution;
- · requirements to conduct post-marketing clinical trials;
- warning or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that it submits;
- recall of products;
- fines, restitution or disgorgement of profits or revenue;
- · suspension or withdrawal of regulatory approvals;
- refusal to permit the import or export of the Corporation's products;
- · product seizure; or
- injunctions or the imposition of civil or criminal penalties.

The Corporation's future relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose the Corporation to criminal sanctions, civil penalties, program exclusion, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors play a primary role in the recommendation and prescription of any product candidates for which the Corporation obtains marketing approval. The Corporation's future arrangements with third-party payors and customers may expose the Corporation to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which it markets, sells and distributes its products for which it obtains marketing approval. Restrictions under applicable United States federal and state healthcare laws and regulations that may impact the Corporation's activities, include the following:

- the federal healthcare anti-kickback statute prohibits, among other things, persons from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under federal and state healthcare programs such as Medicare and Medicaid;
- the federal False Claims Act imposes civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, imposes criminal and civil liability for executing a scheme to defraud any healthcare benefit program and also imposes obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information;
- the federal false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement in connection with the delivery of, or payment for, healthcare benefits, items or services;
- the federal transparency requirements under the Health Care Reform Law will require manufacturers of drugs, devices, biologics and medical supplies to report to the
  Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests;
  and
- analogous state laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving
  healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, and some state laws require pharmaceutical companies to
  comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government in addition
  to requiring drug manufacturers to report information related to payments to physicians and other health care providers or marketing expenditures.

Efforts to ensure that the Corporation's business arrangements with third parties will comply with applicable healthcare laws and regulations in each jurisdiction when the Corporation products will eventually be offered will involve substantial costs. It is possible that governmental authorities will conclude that the Corporation's business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If the Corporation's operations are found to be in violation of any of these laws or any other governmental regulations that may apply to it, it may be subject to significant civil, criminal and administrative penalties, damages, fines, exclusion from government funded healthcare programs, such as Medicare and Medicaid in the United States, and the curtailment or restructuring of the Corporation's operations. If any of the physicians or other providers or entities with whom the Corporation expects to do business are found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs.

Contemporary and future legislation may increase the difficulty and cost for the Corporation to obtain marketing approval of and commercialize its product candidates and affect the prices it may obtain.

In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of the Corporation's product candidates, restrict or regulate post-approval activities and affect its ability to profitably sell any product candidates for which it obtains marketing approval.

In the United States, the *Medicare Prescription Drug, Improvement, and Modernization Act of 2003* ("Medicare Modernization Act"), changed the way Medicare covers and pays for pharmaceutical products. The legislation expanded Medicare coverage for drug purchases by the elderly and introduced a new reimbursement methodology based on average sales prices for physician administered drugs. In addition, this legislation provided authority for limiting the number of drugs that will be covered in any therapeutic class in certain cases. Cost reduction initiatives and other provisions of this legislation could decrease the coverage and reimbursement that is provided for any approved products. While the Medicare Modernization Act applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, President Obama signed into law the Health Care Reform Law, a law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Effective October 1, 2010, the Health Care Reform Lawrevises the definition of "average manufacturer price" for reporting purposes, which could increase the amount of Medicaid drug rebates to states. Further, the new law imposes a significant annual fee on companies that manufacture or import branded prescription drug products. Substantial new provisions affecting compliance have also been enacted, which may affect the Corporation's business practices with health care practitioners. The Corporation will not know the full effects of the Health Care Reform Law until applicable federal and state agencies issue regulations or guidance under the new law. Although it is too early to determine the effect of the Health Care Reform Law, this law appears likely to continue the pressure on pharmaceutical pricing, especially under the Medicare program, and may also increase the Corporation's regulatory burdens and operating costs.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Health Care Reform Law. As a result, there have been delays in the implementation of, and action taken to repeal or replace, certain aspects of the Health Care Reform Law. The Corporation expects that the current Presidential Administration and U.S. Congress will likely continue to seek to modify, repeal, or otherwise invalidate all, or certain provisions of, the *Health Care Reform Law*. The Corporation cannot be sure whether legislative changes will be enacted, or whether the FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of the Corporation's product candidates, if any, may be.

With the enactment of the *Biologics Price Competition and Innovation Act of 2009* ("BPCIA"), as part of the Health Care Reform Law, an abbreviated pathway for the approval of biosimilar and interchangeable biological products was created. The new abbreviated regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an existing brand product. Under the BPCIA, an application for a biosimilar product cannot be submitted to the FDA until four years, or approved by the FDA until 12 years, after the original brand product identified as the reference product was approved under a BLA. The BPCIA is complex and is only beginning to be interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning is subject to uncertainty. While it is uncertain when any such processes may be fully adopted by the FDA, any such processes could have a material adverse effect on the future commercial prospects for the Corporation's biological products.

The Corporation believes that if any of its product candidates were to be approved as biological products under a BLA, such approved products should qualify for the four-year and 12-year periods of exclusivity. However, there is a risk that the United States Congress could amend the BPCIA to significantly shorten these exclusivity periods, or that the FDA will not consider the Corporation's product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the Corporation's reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

#### General Company-Related Risks

#### The Corporation's future success depends on its ability to retain its key executives and to attract, retain and motivate qualified personnel.

The Corporation is highly dependent on its executive officers. Although the Corporation has formal employment agreements with each of its executive officers, these agreements do not prevent the Corporation's executives from terminating their employment with the Corporation at any time. The loss of the services of any of these persons could impede the achievement of the Corporation's research, development and commercialization objectives.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to the Corporation's success. The Corporation may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. The Corporation also experiences competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, the Corporation relies on consultants and advisors, including scientific and clinical advisors, to assist it in formulating its research and development and commercialization strategy. The Corporation's consultants and advisors may be employed by employers other than the Corporation and may have commitments under consulting or advisory contracts with other entities that may limit their availability to the Corporation.

The Corporation may be unable to obtain scientific research and experimental development tax incentive credits.

The Corporation is eligible for scientific research and experimental development tax incentive credits in Canada. There is a risk that a Canadian federal or provincial governmental agency could conclude that: (i) some or all of the expenditures were not incurred on scientific research and experimental development activities, (ii) the rate applicable to such credit is different from the rate claimed by the Corporation, and (iii) the related entity does not meet specified criteria for refundable tax credits, and therefore the governmental agency could reduce or disallow claims for such credits, including refundable credits previously funded. Furthermore, if the Canadian taxation authorities reduce the tax credit either by reducing the rate of the credit or the eligibility of some research and development expenses in the future, our operating results will be materially adversely affected.

The Corporation expects to expand its development, regulatory, manufacturing and sales and marketing capabilities, and as a result, the Corporation may encounter difficulties in managing its growth, which could disrupt the Corporation's operations.

The Corporation expects to experience significant growth in the number of its employees and the scope of its operations, particularly in the areas of drug development, regulatory affairs, manufacturing and sales and marketing. To manage the Corporation's anticipated future growth, it must continue to implement and improve its managerial, operational and financial systems, expand its facilities and continue to recruit and train additional qualified personnel. Due to the Corporation's limited financial resources, the Corporation may not be able to effectively manage the expansion of its operations or recruit and train additional qualified personnel. The physical expansion of the Corporation's operations may lead to significant costs and may divert its management and business development resources. Any inability to manage growth could delay the execution of the Corporation's business plans or disrupt the Corporation's operations.

The Corporation may acquire businesses or products, or form strategic alliances, in the future, and the Corporation may not realize the benefits of such acquisitions.

The Corporation may acquire additional businesses or products, form strategic alliances or create joint ventures with third parties that the Corporation believes will complement or augment its existing business. If the Corporation acquires businesses with promising products or technologies, the Corporation may not be able to realize the benefit of acquiring such businesses if the Corporation is unable to successfully integrate them with its existing operations and company culture. The Corporation may encounter numerous difficulties in developing, manufacturing and marketing any new products resulting from a strategic alliance or acquisition that delay or prevent it from realizing their expected benefits or enhancing the Corporation's business. The Corporation cannot assure investors that, following any such acquisition, it will achieve the expected synergies to justify the transaction.

The Corporation has limited experience operating internationally, is subject to a number of risks associated with its international activities and operations, and may not be successful in its efforts to expand internationally.

The Corporation currently has very limited operations outside of Canada. In order to meet the Corporation's long-term goals, the Corporation would need to grow its international operations significantly. Consequently, the Corporation is and will continue to be subject to additional risks related to operating in foreign countries, including:

- the fact that the Corporation has limited experience operating its business internationally;
- local, economic and political conditions, including inflation, geopolitical events, such as war and terrorism, foreign currency fluctuations and exchange risks, which
  could result in increased or unpredictable operating expenses and reduced revenues and other obligations incident to doing business in, or with a company located in,
  another country;

- the Corporation's customers' ability to obtain reimbursement for any product candidate in foreign markets, and unexpected changes in reimbursement and pricing requirements, tariffs, trade barriers and regulatory requirements;
- different medical practices and customs in foreign countries affecting acceptance in the marketplace;
- longer lead times for shipping and longer accounts receivable collection times;
- the interpretation of contractual provisions governed by foreign laws in the event of a contract dispute;
- reduced protection of intellectual property rights in some foreign countries or the existence of additional potentially relevant third party intellectual property rights;
   and
- compliance with foreign laws, rules and regulations, including data privacy requirements, labor relations laws, tax laws, accounting requirements, anti-competition
  regulations, import, export and trade restrictions, anti-bribery/anti-corruption laws, regulations or rules, which could lead to actions by the Corporation or its
  licensees, distributors, manufacturers, other third parties who act on its behalf or with whom the Corporation does business in foreign countries or the Corporation's
  employees who are working abroad that could subject the Corporation to investigation or prosecution under such foreign laws.

As a passive foreign investment company ("PFIC") for United States federal income tax purposes, certain adverse tax rules may apply to U.S. Holders of the Common Shares.

Based on estimates of the composition of the Corporation's income and the value of its assets, the Corporation believes that it is a PFIC for United States federal income tax purposes for the 2017 taxable year and that it is likely to be a PFIC for the 2018 taxable year.

The Corporation will be classified as a PFIC for any taxable year for United States federal income tax purposes if either (i) 75% or more of its gross income in that taxable year is passive income or (ii) the average percentage of its assets by value in that taxable year which produce or are held for the production of passive income (which includes cash) is at least 50%.

PFIC status is determined annually and depends upon the composition of a company's income and assets and the market value of its stock from time to time. Therefore, there can be no assurance as to the Corporation's PFIC status for future taxable years. The value of the Corporation's assets will be based, in part, on the then market value of its Common Shares, which is subject to change.

If the Corporation is a PFIC for any taxable year during which a U.S. Holder (as defined under "Certain U.S. Federal Income Tax Considerations" in this prospectus) holds Common Shares, such U.S. Holders could be subject to adverse United States federal income tax consequences whether or not the Corporation continues to be a PFIC. For example, U.S. Holders may become subject to increased tax liabilities under United States federal income tax laws and regulations, and will become subject to burdensome reporting requirements. If the Corporation is a PFIC during a taxable year which a U.S. Holder holds Common Shares, such U.S. Holder may be able to make a "mark-to-market" election or a "qualified electing fund" election that could mitigate the adverse United States federal income tax consequences that would otherwise apply to such U.S. Holder. Although upon request of a U.S. Holder, the Corporation will provide the information necessary for a U.S. Holder to make the qualified electing fund election, no assurance can be given that such information will be available for any lower-tier PFIC that the Corporation does not control. See "Certain U.S. Federal Income Tax Considerations" for additional information.

U.S. Holders are urged to consult their own tax advisers as to the United State federal income tax consequences related to the Corporation's classification as a PFIC.

#### United States investors may not be able to obtain enforcement of civil liabilities against the Corporation.

The enforcement by investors of civil liabilities under the United States federal or state securities laws may be affected adversely by the fact that the Corporation is governed by the Canada Business Corporations Act, that the majority of the Corporation officers and directors are residents of Canada, and that all, or a substantial portion of their assets and a substantial portion of the Corporation assets, are located outside the United States. It may not be possible for investors to effect service of process within the United States on certain of its directors and officers or enforce judgments obtained in the United States courts against the Corporation or certain of the Corporation directors and officers based upon the civil liability provisions of United States federal securities laws or the securities laws of any state of the United States.

## As a foreign private issuer, the Corporation is subject to different U.S. securities laws and rules than a domestic U.S. issuer, which may limit the information publicly available to its U.S. shareholders.

The Corporation is a foreign private issuer under applicable U.S. federal securities laws and, therefore, is not required to comply with all of the periodic disclosure and current reporting requirements of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act") and related rules and regulations. As a result, the Corporation does not file the same reports that a U.S. domestic issuer would file with the United States Securities and Exchange Commission (the "SEC"), although it will be required to file with or furnish to the SEC the continuous disclosure documents that the Corporation is required to file in Canada under Canadian securities laws. In addition, the Corporation's officers, directors and principal shareholders are exempt from the reporting and "short swing" profit recovery provisions of Section 16 of the Exchange Act. Therefore, the Corporation's shareholders may not know on as timely a basis when its officers, directors and principal shareholders purchase or sell securities of IMV as the reporting periods under the corresponding Canadian insider reporting requirements are longer. In addition, as a foreign private issuer, the Corporation is exempt from the proxy rules under the Exchange Act.

#### The Corporation may lose its foreign private issuer status in the future, which could result in significant additional costs and expenses to the Corporation.

In order to maintain its current status as a foreign private issuer, a majority of the Corporation's common shares must be either directly or indirectly owned of record by non-residents of the United States unless the Corporation also satisfies one of the additional requirements necessary to preserve this status. The Corporation may in the future lose its foreign private issuer status if a majority of the common shares are owned of record in the United States and the Corporation fails to meet the additional requirements necessary to avoid loss of foreign private issuer status. The regulatory and compliance costs to the Corporation under U.S. federal securities laws as a U.S. domestic issuer may be significantly more than the costs the Corporation incorporation is not a foreign private issuer, it would not be eligible to use the MJDS or other foreign issuer forms and would be required to file periodic and current reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive than the forms available to a foreign private issuer. In addition, the Corporation may lose the ability to rely upon exemptions from NASDAQ corporate governance requirements that are available to foreign private issuers.

#### VI. DIVIDENDS

The Corporation has not declared or paid any dividends on its Common Shares to date. The payment of dividends in the future will be dependent on the Corporation's earnings, financial condition and such other factors as the Corporation's Board of Directors considers appropriate. However, the Corporation's current policy is to reinvest future earnings in order to finance its growth and the development of its business. As a result, the Corporation does not intend to pay dividends in the foreseeable future.

#### VII. DESCRIPTION OF CAPITAL STRUCTURE

The Corporation is authorized to issue an unlimited number of Common Shares, without nominal or par value of which, as at April 1, 2019, 50,594,260 Common Shares are issued and outstanding as fully-paid and non-assessable Common Shares. The holders of Common Shares are entitled to receive notice of, to attend and to vote at any meeting of the shareholders of the Corporation and each one Common Share shall carry the right to one vote. Subject to the prior rights of the holders of Preferred Shares (as defined hereinafter), the holders of Common Shares are entitled to receive dividends as and when declared by the Board of Directors of the Corporation. The holders of Common Shares have the right, subject to the rights, privileges, restrictions and conditions attaching to any other class of shares of the Corporation, to receive the remaining property of the Corporation upon dissolution, liquidation or winding-up thereof.

The Corporation is also authorized to issue an unlimited number of preferred shares (the "Preferred Shares") without nominal or per value in one or more series of which, as of the date hereof, none are issued and outstanding. The Board of Directors of the Corporation may determine, before issuance, the designation, rights, privileges and restrictions attached to each series of Preferred Shares provided that the Preferred Shares shall rank senior to the Common Shares.

## VIII. MARKET FOR SECURITIES

#### Trading Price and Volume

The Common Shares are currently listed and posted for trading on the TSX and NASDAQ and are traded under the symbol "IMV".

The following table provides the price ranges and trading volume of the Common Shares on the TSX for the periods indicated below:

	Price	Price Ranges <sup>(1)</sup>	
	High (C\$)	Low (C\$)	Total Cumulative Volume <sup>(1)</sup>
January 2018	C\$8.03	C\$5.98	1.531.635
February 2018	C\$6.98	C\$5.82	589,178
March 2018	C\$6.66	C\$5.92	361,870
April 2018	C\$7.10	C\$5.18	551,818
May 2018	C\$9.25	C\$6.11	1,439,532
June 2018	C\$9.49	C\$6.29	1,216,081
July 2018	C\$6.75	C\$6.29	642,241

	Price R	Price Ranges <sup>(1)</sup>		
	High (C\$)	Low (C\$)	Total Cumulative Volume <sup>(1)</sup>	
August 2018	C\$7.60	C\$6.10	385,334	
September 2018	C\$7.63	C\$6.63	475,502	
October 2018	C\$8.22	C\$6.66	1,120,784	
November 2018	C\$8.45	C\$6.81	863,903	
December 2018	C\$8.49	C\$6.46	906,574	

<sup>(1)</sup> On May 2, 2018, the Corporation filed articles of amendment to give effect to a consolidation of its Common Shares on the basis of 1 post-consolidation Common Share for each 3.2 preconsolidation Common Shares. The post-consolidation Common Shares began trading on TSX on May 10, 2018. Historical trading prices and volumes have been amended to reflect the 3.2 for 1 consolidation. Fractions have been rounded up or down to the nearest whole number and prices have been rounded up or down to the nearest cent.

The Common Shares began trading on NASDAQ on June 1, 2018. The following table provides the price ranges and trading volume of the Common Shares on NASDAQ for the periods indicated below:

	Pric	Price Ranges	
	High (US\$)	Low (US\$)	Total Cumulative Volume
June 2018	US\$7.21	US\$4.80	259,366
July 2018	US\$5.15	US\$4.50	128,051
August 2018	US\$5.85	US\$4.71	79,087
September 2018	US\$5.94	US\$5.16	61,475
October 2018	US\$6.00	US\$5.06	102,506
November 2018	US\$6.31	US\$5.16	187,590
December 2018	US\$7.07	US\$4.71	274,355

## **Prior Sales**

The only securities of IMV that are outstanding but not listed or quoted on a marketplace are stock options, compensation options and deferred stock units.

## Stock Options

During the year ended December 31, 2018, the Corporation issued 619,505 stock options, which have an exercise period of 5 years from that date of grant:

Date	Number	Exercise Price
January 16, 2018	116,067	\$7.04
January 22, 2018	78,125	\$7.04
March 21, 2018	390,625	\$6.40
April 1, 2018	4,688	\$6.40
November 26, 2018	30,000	\$7.39

Compensation Options

The Corporation issued on June 21, 2017, as consideration to the underwriters of the June 2017 Public Offering, 144,230 non-transferable compensation options exercisable at a price of \$4.22 per Common Share until June 21, 2019.

The Corporation issued on February 15, 2018, as consideration to the underwriters of the February 2018 Public Offering, 134,766 non-transferable compensation options exercisable at a price of \$6.53 per Common Share until February 15, 2020.

#### IX. DIRECTORS AND OFFICERS

#### Directors

As at April 1, 2019, as a group, the Corporation's directors and executive officers beneficially owned, directly or indirectly, or exercised control of over an aggregate of 2,828,646 Common Shares representing 5.59% of the issued and outstanding Common Shares as at such date. The information as to the number of Common Shares beneficially owned or over which control is exercised, not being within the knowledge of the Corporation, has been furnished by SEDI and confirmed with each director or executive officer, as the case may be, individually as at April 1, 2019.

The following table sets forth the name, province or state and country of residence of each director of the Corporation and states the respective positions and offices held with the Corporation, their principal occupations during the last five years and the periods during which each director has served as a director of the Corporation. Each director will hold office until the next annual meeting of shareholders or until his successor is duly elected, unless prior thereto the director resigns or the director's office becomes vacant by reason of death or other cause.

		Principal Occupation during Past Five	
Name and Municipality of Residence	Position Held with the Corporation	Years	Director Since
Andrew Sheldon(1)	Chairman of the Board and Director	Head of Medicago New Ventures and	April 2016
(Québec, Québec, Canada)		Board Chairman of Quebec International	_
(200000, 200000, 000000)		Former Chief Executive Officer of	
		Medicago Inc (Biotech company)	

Name and Municipality of Residence	Position Held with the Corporation	Principal Occupation during Past Five Years	Director Since
Julia P. Gregory(2)(3) (Scarborough, New York, United States)	Director	Chair and CEO of Isometry Advisors Inc. (Management and financial consultants) CEO of ContraFect Corporation (Biotech company)	June 2018
James Hall <sup>(3)</sup> (Toronto, Ontario, Canada)	Director	President of James Hall Advisors Inc. (advisory firm) Former Vice President of Callidus Capital Corporation (specialized asset-based lender to companies in Canada and the United States)	February 2010
Frederic Ors (Québec, Québec, Canada)	Director	Chief Executive Officer of IMV Inc. Former Chief Business Officer of IMV Inc. Former Vice President of Business development and Strategic Planning of Medicago Inc. (biotech company)	April 2016
Wayne Pisano(3) (4) (Asbury, New Jersey, United States)	Director	Former President and Chief Executive Officer of VaxInnate (pandemic and influenza vaccine company) and Former President and Chief Executive Officer of Sanofi Pasteur (pediatric and adult vaccine manufacturing company)	October 2011
Albert Scardino(2) (London, United Kingdom)	Director	Technology and Media investor and public affairs commentator	July 2010
Shermaine Tilley(2)(4) (Toronto, Ontario, Canada)	Director	Managing Partner of CTI Life Sciences Fund (venture capital fund)	June 2016
Markus Warmuth(4) (Boston, Massachusetts, United States	Director	Entrepreneur in residence Third Rock Ventures (venture fund) CEO of H3 Biomedicine	November 2018

Mr. Sheldon is a non-voting member of the Compensation Committee, Corporate Governance Committee and the Audit Committee. (1)

<sup>(2)</sup> Member of the Compensation Committee.

Member of the Audit Committee.

<sup>(3)</sup> (4) Member of the Corporate Governance Committee

#### Biographies

Andrew (Andy) Sheldon, Chairman of the Board and Director

Mr. Sheldon has thirty years of experience in the pharmaceutical industry and was named CEO of the Year by the Vaccine Industry Excellence awards at the World Vaccine Congress in April 2012. He is the head of Medicago New Ventures and was formerly President and Chief Executive Officer of Medicago Inc. Before joining Medicago Inc. in 2003, Mr. Sheldon served as Vice President, Sales and Marketing, of Shire Biologics and as General Manager of Rhône Merieux Canada. Mr. Sheldon is also the Board Chairman of Quebec International in the Quebec City region. Mr. Sheldon has a Bachelors degree in agricultural sciences from the Université Laval, Québec City, and a bachelor's of science degree with honors in biological sciences from the University of East Anglia, in Norwich, England.

#### Julia P. Gregory

Ms. Gregory is a seasoned biotechnology executive with a proven track record for successfully growing, capitalizing and repositioning private and public biotechnology companies. She is well-versed in corporate governance and SEC issues and has extensive experience in recruiting outstanding management teams. As a biotechnology executive, she has raised more than \$1.5 billion for biotechnology companies across all types of business cycles and structured creative strategic alliances and transactions for them with pharmaceutical companies including GlaxoSmithKline, Bristol-Myers Squibb Company, Takeda Pharmaceutical Company, Ltd., Genentech, Inc. (now Roche) and Human Genome Sciences (now GSK). Most recently, she was CEO and Board member of ContraFect (NASDAQ: CFRX), which focused on new biologics as an alternative to antibiotics. Prior to ContraFect, she was CEO and Board member of FivePrime Therapeutics (NASDAQ: FXRX), which discovered and developed innovative protein and antibody therapeutics in the fields of oncology and immunology. She was the EVP Corporate Development and Chief Financial Officer of Lexicon Pharmaceuticals, Inc. (NASDAQ: LXRX) during its \$220 million initial public offering and was involved in the creation of Lexicon's \$500 million private equity investment plan. In addition to her deep experience in the biopharmaceutical industry, Ms. Gregory has twenty years of investment banking experience, starting at Dillon, Read & Co., Inc. and subsequently at Punk, Ziegel & Company, where she served as the head of investment banking and head of its life sciences practice. Ms. Gregory has also served on the Board of Directors at The Global TB Alliance for Drug Development, Clinipace Worldwide, and the Institute for the Study of Aging, a private foundation for Alzheimers. She is currently the Executive Chair for Cavion, Inc. and a Director at Iconic Therapeutics, Cell Medica, Ltd, the Sosei Group Corporation and Biohaven Pharmaceutical Holding Company Ltd. (NYSE: BHVN). Ms. Gregory attained a Masters of B

#### James W. Hall, Director

Mr. Hall is an experienced, knowledgeable and versatile entrepreneur, business operator, corporate investor, director and advisor with expertise in finance (accounting/restructurings/special investigations), private equity, banking and media. He is currently President of James Hall Advisors Inc. – financial and management consultants - and was formerly Vice President of Callidus Capital Corporation (a stressed asset-based lender operating in Canada and the United States). Prior to Callidus, he served as Chairman and CEO of Journal Register Company (Philadelphia-based newspaper company), and was Senior Vice President and Chief Investment Officer of Working Ventures Canadian Fund Inc. from 1990 to 2002. Past corporate directorships include Indigo Books & Music Inc., Atomic Energy of Canada Limited, TerraVest Income Fund, General Donlee Income Fund and International Datacasting Corporation. A Chartered Professional Accountant, Mr. Hall is a graduate of the Richard Ivey School of Business at Western University in London, Ontario.

#### Frederic Ors, Chief Executive Officer and Director

Mr. Ors has served as our Chief Executive Officer since April 2016. He brings over 19 years of experience in the biopharmaceutical industry, having served in a number of management roles encompassing business development, intellectual property, strategic planning, pre-marketing and communication. Before joining IMV, Mr. Ors spent 14 years at Medicago Inc. serving in many roles of increasing responsibility and most recently as Vice President of Business development and Strategic Planning. He also has served as second Vice-Chair of the Vaccine Industry Committee of Biotech Canada for five years between 2012 and 2016. Prior to Medicago Inc., he was licensing manager at the University Paris VII-Denis Diderot, one of the largest science and medical university in France. He has a B.Sc. degree in Biology and a Master degree in Management from the University of Angers (France).

#### Wayne Pisano, Director

Mr. Pisano has more than 30 years of experience as a pharmaceutical industry executive. He has a depth of experience across the spectrum of commercial operations, public immunization policies and pipeline development. Mr. Pisano is a former president and CEO of Sanofi Pasteur, one of the largest vaccine companies in the world. He joined Sanofi Pasteur in 1997 and was promoted to President and CEO in 2007, the position he successfully held until his retirement in 2011. Post his retirement from Sanofi Pasteur, Mr. Pisano joined VaxInnate, a privately held biotech company, from January 2012 until November 2016 serving as president and CEO. Prior to joining Sanofi Pasteur, he spent 11 years with Novartis (formerly Sandoz). He has a bachelor's degree in biology from St. John Fisher College, New York and an MBA from the University of Dayton, Ohio. He has served as a Board director for AERAS a non-profit organization with a focus on TB vaccine development and is currently a board member of Oncolytics Biotech Inc, Provention Bio Inc. and Altimmune Inc.

#### Albert Scardino, Director

Mr. Scardino is a technology and media investor. He has extensive experience as a director of both for-profit and not-for-profit organizations, public and private, in the US and the UK. He was a correspondent, commentator and editor for The New York Times, The Guardian, The Independent, the BBC and Sky News. He has served as a communications director in political campaigns and government. He earned his bachelor's degree at Columbia University and his master's at the University of California, Berkeley.

#### Dr. Shermaine Tilley, Director

Dr. Tilley is a Managing Partner at CTI Life Sciences Fund, a Montreal-based venture capital fund investing across Canada as well as in the U.S. Prior to joining CTI Life Sciences Fund in 2006, Dr. Tilley was Senior VP at DRI Capital Inc. (formerly Drug Royalty Corporation), the world's first private equity firm doing royalty transactions in the biotech/pharma space. Before DRI Capital Inc., Dr. Tilley ran and managed a research laboratory, holding faculty positions at the NYU School of Medicine and Public Health Research Institute ("PHRI"), NY, and on the PHRI Board of Directors. Concomitantly with her tenure at NYU School of Medicine and PHRI, she consulted for the NIH Small Business Innovation Research ("SBIR") program in immunology and infectious disease for 10 years. Dr. Tilley holds a Ph.D. in biochemistry from the Johns Hopkins University School of Medicine, an MBA from the University of Toronto, and is a member of the CFA Society of Toronto. She currently sits on the boards of CellAegis Devices, Phemi and BIOTECanada.

#### Dr. Markus Warmuth

As a long-time advocate for industry collaboration and data-driven drug discovery, Dr. Warmuth brings over 20 years of immuno-oncology and precision medicine drug development expertise to IMV. He currently serves as an Entrepreneur in Residence at Third Rock Ventures, where he plays an integral role in the venture capital firm's formation of new anti-cancer biotech companies. Prior to his role at Third Rock, Dr. Warmuth spent seven years as the Chief Executive Officer of H3 Biomedicine, a biopharmaceutical company that specializes in the discovery and development of genomics-based precision oncology treatments. Dr. Warmuth has also previously served in multiple roles at the Novartis Institute for Biomedical Research (NIBR) and the Genomics Institute of the Novartis Research Foundation (GNF), including as the Director of Kinase Biology, Head of Oncology Pharmacology. He earned his MD from Ludwig Maximilian University in Munich, Germany.

#### Executive Officers

The following table sets forth the name, province or state and country of residence of the other non-director executive officers:

Name and Municipality of Residence	Position held with the Corporation	Principal Occupation during Past Five Years
Pierre Labbé	Chief Financial Officer	Vice President and Chief Financial Officer of
(Québec City, Québec, Canada)		Leddartech Inc.
		Vice President and Chief Financial Officer of the
		Québec Port Authority
Gabriela Rosu	Chief Medical Officer	Medical Science Liaison, Oncology for Janssen Inc.
(Vancouver, British Columbia, Canada)		Global Medical Advisor, Hematology for Novo Nordisk
		Health Care AG
		Medical Science Liaison, Oncology for Lundbeck
		Canada
Joseph Sullivan	Senior Vice President, Business Development	Executive Director, Merck & Company, Inc.
(Wyndmoor, Pennsylvania, United States of America)	_	

#### Pierre Labbé, CPA, CA, Chief Financial Officer

Prior to joining IMV, Mr. Labbé was Vice President and Chief Financial Officer of Leddartech Inc. (April 2015 to February 2017), Vice President and Chief Financial Officer of the Québec Port Authority (October 2013 to April 2015), and has experience in the life science sector, having served as Chief Financial Officer and Secretary of Medicago Inc. (2008-2013 and 2004-2007). Mr. Labbé is also a Director of Osisko Gold Royalties Ltd. Mr. Labbé holds a Bachelor's Degree in Business Administration and a license in accounting from Université Laval, Québec City. He is a member of Ordre des comptables professionnels agréés du Québec, the Chartered Professional Accountants of Canada and the Institute of Corporate Directors.

#### Gabriela Rosu, MD, Chief Medical Officer

Ms. Rosu has as a Master's Degree from the University of Medicine and Pharmacy Gr.T. Popa in Romania. Most recently Dr. Rosu was Medical Science Liaison, Oncology for Janssen Canada. Prior to this, she served as a Global Medical Advisor, Hematology for Novo Nordisk Health Care AG (from August 2013 to April 2016). From April 2011 to August 2013, Dr. Rosu was Medical Science Liaison, Oncology of Lundbeck Canada.

Joseph Sullivan, Senior Vice President, Business Development

Prior to joining IMV in January 2018, Mr. Sullivan worked at Merck & Company, Inc., launching new products and indications, evaluating business development opportunities, and forming external collaborations. Most recently, Mr. Sullivan led cross-functional efforts to identify, negotiate, and operationalize global vaccine partnerships to expand market access. Preceding this position, he led the New Vaccines Product Group, which was responsible for the commercial direction of new vaccine development, evaluation of Mr. Sullivan was an Associate in Venture Capital & Investment Banking with Allen & Company Inc. Mr. Sullivan holds an MBA from Cornell University and a BA from Hamilton College.

#### Shareholding, Cease Trade Orders, Bankruptcies, Penalties or Sanctions

Except as disclosed below and to the knowledge of the Corporation, none of the current executive officers or directors of the Corporation or shareholders holding a sufficient number of securities of the Corporation to affect materially the control thereof is, or within 10 years before the date hereof, has been:

- a. a director, chief executive officer or chief financial officer of any corporation (including the Corporation) that:
  - (i) was subject to an order that was issued while the proposed director was acting in the capacity as director, chief executive officer or chief financial officer, or
  - (ii) was subject to an order that was issued after the proposed director ceased to be a director, chief executive officer or chief financial officer and which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer.
- b. a director or executive officer of any corporation (including the Corporation) that, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets; or
- c. has become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or become subject to or instituted any proceedings, arrangement or compromises with creditors, or had a receiver, manager or trustee appointed to hold the assets of the proposed director.

For the purposes of (a) above, "order" means a cease trade order, an order similar to a cease trade order or an order that denied the relevant Corporation access to any exemption under securities legislation, in each case that was in effect for a period of more than 30 consecutive days.

Except as disclosed below and to the knowledge of the Corporation, none of the current executive officers or directors of the Corporation has been subject to:

a. any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

b. any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable security holder in deciding whether to vote for a proposed director.

Mr. James Hall was the Chairman and Chief Executive Officer of Journal Register Corporation ("JRC") on February 21, 2009 when JRC filed a voluntary petition for relief under the U.S. Bankruptcy Code (pre-negotiated joint Chapter 11 plan of reorganization). Mr. Hall left JRC in March 2009.

#### Conflicts of Interest

There are no existing or potential material conflicts of interest between the Corporation or its subsidiary and any director or officer of the Corporation or its subsidiary.

#### X. CORPORATE GOVERNANCE

The Board of Directors is committed to developing, implementing and monitoring good corporate governance practices, and providing full and complete disclosure of its systems of corporate governance. The following describes the Corporation's approach to corporate governance.

#### **Board of Directors**

The Board is responsible for the supervision of management and for approving the overall direction in a manner which is in the best interests of the Corporation. In order to provide guidance and advise, the Board participates fully in assessing and approving strategic plans and prospective decisions proposed by management. To ensure that the principal business risks that are borne by the Corporation are appropriately managed, the Board:

- receives periodic reports from management of its assessment and management of such risks;
- monitors financial and operating performance. This ongoing regular monitoring function often entails review and comment by the Board on various management reports; and
- monitors through the Audit Committee, internal accounting and control procedures, including those related to cyber security, and reviews detailed financial information contained in management reports and acts upon the recommendations of the Corporation's auditors.

As a practice, the Board approves significant corporate communications with shareholders. The Board currently consists of eight members. The Corporation has historically endeavoured to have a diverse Board with a sufficient number of directors to encourage a variety of opinions on matters which come before the Board, while at the same time limiting its membership to a number of directors that facilitates effective and efficient decision making. While there are no specific criteria for Board membership, the Corporation seeks to attract directors with a wealth of business knowledge and a diversity of business experience.

#### Board Functioning

The Board adopted a corporate governance policy which, among other things, sets out those matters, in addition to those required by statute, which must be brought by the Chief Executive Officer or other senior management to the Board for approval. The Corporate Governance Policy ensures that all major strategic decisions, including any change in our strategic direction and acquisitions or divestitures of a material nature, will be presented by management to the Board for approval. As part of its ongoing activity, the Board regularly receives and comments upon reports of management as to the performance of the Corporation's business and management's expectations and planned actions in respect thereto.

#### **Board Committees**

The Board has an Audit Committee, a Compensation Committee and a Corporate Governance Committee. Each committee has a formal mandate outlining its responsibilities and its obligations to report its recommendations and decisions to the Board.

#### Audit Committee

The primary function of the Audit Committee is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing: (i) the financial information that will be provided to the shareholders and others; (ii) the systems of internal controls which management and the Board of Directors have established; and (iii) the Corporation's audit and financial reporting process. The external auditors' ultimate responsibility is to the Board of Directors and the Committee, as representatives of the shareholders. The text of the Audit Committee Mandate is set forth in Schedule A hereto.

The Audit Committee is currently composed of Mr. James Hall (Chairman), Mr. Wayne Pisano and Ms. Julia P. Gregory, as well as Mr. Andrew Sheldon, as a non-voting member, all of whom are financially literate and independent directors within the meaning of National Instrument 52-110 – *Audit Committees*. The education and related experience of each current Audit Committee member is described below.

James Hall – Mr. Hall, a Chartered Professional Accountant, previously served as Chair of the audit committee of Atomic Energy of Canada Limited, International Datacasting Corporation, Terravest Income Fund and General Donlee Income Fund, and was a member of the audit committee of Journal Register Company and Indigo Books & Music Inc.

Wayne Pisano - Mr. Pisano holds an MBA and is the former Chief Executive Officer of VaxInnate and prior to that the Chief Executive Officer of Sanofi Pasteur.

Julia P. Gregory – Ms. Gregory has a MBA from The Wharton School of The University of Pennsylvania and is the former CEO of ContraFect (NASDAQ: CFRX) and prior to that she was CEO of FivePrime Therapeutics (NASDAQ: FXRX). She was the EVP Corporate Development and Chief Financial Officer of Lexicon Pharmaceuticals, Inc. (NASDAQ: LXRX). Ms. Gregory also has twenty years of investment banking experience.

Andrew Sheldon – Mr. Sheldon has thirty years of experience in the pharmaceutical industry and is the head of Medicago New Ventures and was formerly the President and Chief Executive Officer of Medicago Inc. since 2003. He was a member of Medicago's board of directors until September 18, 2013 and has served on several other boards.

#### Compensation Committee

The Committee's primary duties and responsibilities are to review and make recommendations to the Board in respect of:

• the recruitment, hiring, evaluation, determination of terms of employment and the job description of the CEO;

- the Corporation's compensation strategy, policies and guidelines, taking into account the proposals from the CEO, and to monitor their consistency with the Corporation's goals and strategies;
- the CEO's recommendations on the appointment and compensation of Executive Officers and other key employees of the Corporation;
- management incentive and perquisite plans and any non-standard remuneration plans;
- succession planning of the Corporation's senior management; and
- · Board compensation and training matters.

The Compensation Committee is currently composed of three independent board members: Dr. Shermaine Tilley (Chairman), Ms. Julia P. Gregory, Mr. Albert Scardino, as well as Mr. Andrew Sheldon, as a non-voting member. The education and related experience (as applicable) of each current member is described below:

Shermaine Tilley – Dr. Tilley is a Managing Partner at CTI Life Sciences Fund. Prior to joining CTI Life Sciences Fund in 2006, Dr. Tilley was Senior VP at DRI Capital Inc. (formerly Drug Royalty Corporation), the world's first private equity firm doing royalty transactions in the biotech/pharma space. Before DRI Capital Inc., Dr. Tilley ran and managed a research laboratory, holding faculty positions at the NYU School of Medicine and Public Health Research Institute ("PHRI"), NY, and on the PHRI Board of Directors.

Julia P. Gregory – Ms. Gregory has an MBA from The Wharton School of The University of Pennsylvania and is the former CEO of ContraFect (NASDAQ: CFRX) and prior to that she was CEO of FivePrime Therapeutics (NASDAQ: FXRX). She was the EVP Corporate Development and Chief Financial Officer of Lexicon Pharmaceuticals, Inc. (NASDAQ: LXRX). Ms. Gregory also has twenty years of investment banking experience.

Albert Scardino – Mr. Scardino has extensive experience as a director of both for-profit and not-for-profit organizations, public and private, in the United States and United Kingdom.

Andrew Sheldon – Mr. Sheldon has thirty years of experience in the pharmaceutical industry and is the head of Medicago New Ventures and was formerly the President and Chief Executive Officer of Medicago Inc. since 2003. He was a member of Medicago's board of directors until September 18, 2013 and has served on several other boards. As Chief Executive Officer of Medicago Inc., Mr. Sheldon is responsible for ensuring compensation levels are competitive and in line with the company's business strategy.

#### Corporate Governance Committee

The primary function of the Committee is to assist the Board of Directors in the exercise of certain duties regarding the corporate governance of the Corporation. Among others, the Committee develops policies regarding corporate governance for the Corporation, for internal governance as well as for the Corporation's external communications.

The Corporate Governance Committee is currently composed of Mr. Wayne Pisano (Chairman), Dr. Shermaine Tilley, Mr. Markus Warmuth as well as Mr. Andrew Sheldon, as a non-voting member. The education and related experience (as applicable) of each current member is described below:

Wayne Pisano – Mr. Pisano holds an MBA and is the former Chief Executive Officer of VaxInnate and prior to that the Chief Executive Officer of Sanofi Pasteur. He had direct responsibility in evaluating the compensation levels for other executive officers.

Shermaine Tilley – Dr. Tilley is a Managing Partner at CTI Life Sciences Fund. Prior to joining CTI Life Sciences Fund in 2006, Dr. Tilley was Senior VP at DRI Capital Inc. (formerly Drug Royalty Corporation), the world's first private equity firm doing royalty transactions in the biotech/pharma space. Before DRI Capital Inc., Dr. Tilley ran and managed a research laboratory, holding faculty positions at the NYU School of Medicine and Public Health Research Institute ("PHRI"), NY, and on the PHRI Board of Directors.

Markus Warmuth – Mr. Warmuth currently serves as an Entrepreneur in Residence at Third Rock Ventures, a venture capital firm. Prior to that, he spent seven years as the Chief Executive Officer of H3 Biomedicine, a biopharmaceutical company that specializes in the discovery and development of genomics-based precision oncology treatments. Mr. Warmuth earned his MD from Ludwig Maximilian University in Munich, Germany.

Andrew Sheldon – Mr. Sheldon has thirty years of experience in the pharmaceutical industry and is the head of Medicago New Ventures and was formerly the President and Chief Executive Officer of Medicago Inc. since 2003. He was a member of Medicago's board of directors until September 18, 2013 and has served on several other boards. As Chief Executive Officer of Medicago Inc., Mr. Sheldon was responsible for ensuring compensation levels are competitive and in line with the company's business strategy.

Committees are empowered to engage, or to request that management engage, outside advisors at the Corporation's expense. The Board would consider any such request by an individual member of the Board on its merits at the time it was made.

Orientation and Continuing Education

The Board does not have a formal orientation program for new directors, and does not have any formal continuing education for its members.

Ethical Business Conduct

The Board has a written code of business conduct for its directors, officers and employees.

#### Assessment

The Board, the Board Committees and the Directors are subject to an annual assessment. Each Director is required to complete a self-evaluation and an evaluation of the performance of the Board, the Board Committees and their respective chairpersons. These evaluations are then reviewed by the Compensation and Corporate Governance Committee, which presents its recommendations to the Board. The evaluation of the Compensation and Corporate Governance Committee and its Chairperson are reviewed by the Chairman of the Board who presents his recommendations to the Board.

#### Compensation

The Compensation and Corporate Governance Committee is responsible for determining appropriate compensation for directors in light of the nature of activities and size of the Corporation, and making recommendations to the Board of Directors in that respect.

#### External Auditor Service Fees

The following table summarizes the Audit, Audit Related, Tax Related and Other Fees (excluding expenses and taxes) billed by the Corporation's auditor, PricewaterhouseCoopers LLP to the Corporation and its subsidiary IMV Technologies Inc. for the two most recently completed fiscal years.

Fees	December 31, 2018	December 31, 2017
Audit Fees (1)	\$87,000	\$86,850
Audit Related Fees (2)	\$89,350	\$44,600
Tax Fees (3)	\$33,500	\$41,200
All Other Fees <sup>(4)</sup>	-	\$12,000
Total Fees	\$209,850	\$184,650

- (1) Audit Fees consist of the aggregate fees billed by the external auditor of the Corporation for audit services.
- (2) Audited Related Fees consist of the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the issuer's financial statements and are not reported under "Audit Fees" above and include the provision of comfort letters and consents, the consultation concerning financial accounting and reporting of specific issues and the review of documents filed with regulatory authorities.
- (3) Tax Fees include fees billed for tax compliance, tax advice and tax planning services, including the preparation of original tax returns and claims for refund; tax consultations, such as assistance and representation in connection with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from taxing authorities; tax planning services; and consultation and planning services.
- (4) All Other Fees include the aggregate fees billed for products and services provided by the auditors, other than the services reported above.

#### XI. LEGAL PROCEEDINGS AND REGULATORY ACTIONS

The Corporation is not a party to any legal proceeding, and its property is not and was not the subject of any material legal proceeding, during the year ended December 31, 2018. The Corporation is not aware of any legal proceeding outstanding, threatened or pending as of the date hereof by or against the Corporation.

The Corporation is not and was not subject to, during the year ended December 31, 2018: (i) penalties or sanctions imposed by a court relating to Canadian securities legislation or by a Canadian securities regulatory authority; (ii) any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision; and (iii) settlement agreements entered into with a court relating to Canadian securities legislation or with a Canadian securities regulatory authority.

#### XII. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

There are no material interests, direct or indirect, of directors, executive officers, any shareholder who beneficially owns, directly or indirectly, more than 10% of the outstanding Common Shares, or any known associates or affiliates of such persons, in any transaction within the last three years or in any proposed transaction which has materially affected or would materially affect the Corporation.

#### XIII. TRANSFER AGENT AND REGISTRAR

The registrar and transfer agent for the Common Shares is Computershare Investor Services Inc. and for the warrants issued under the 2014 Public Offering and the June 2016 Private Placement is Computershare Trust Company of Canada, at their principal offices located at 100 University Avenue, 9 th Floor, Toronto, Ontario, M5J 2Y1 and at 1500 Robert-Bourassa Boulevard, 7th Floor, Montréal, Québec, H3A 3S8.

#### XIV. MATERIAL CONTRACTS

The following are the material contracts, other than contracts entered into in the ordinary course of business, that the Corporation has entered into since January 1, 2018 or prior thereto but which are still in effect:

- (i) an underwriting agreement entered into among IMV, Echelon Wealth Partners Inc., National Bank Financial Inc. and Bloom Burton Securities Inc. dated as of January 30, 2018 in connection with the February 2018 Public Offering;
- (ii) a loan agreement between IMV and the Province of Nova Scotia dated as of July 26, 2013 pursuant to which IMV received a loan of \$5 million, available in four equal instalments to be used to fund a portion of working capital through 2016; and
- (iii) a license agreement between IMV and Merck KGaA (MRCG.DE) dated as of July 12, 2010.

A copy of these contracts can be found under the profile of the Corporation on SEDAR at www.sedar.com.

#### XV. INTERESTS OF EXPERTS

PricewaterhouseCoopers LLP, the auditor of the Corporation, is the only person, company or partnership which is named as having prepared or certified a statement, report or valuation described, included or referred to in a filing made by the Corporation during or relating to the Corporation's most recently completed financial year and whose profession or business gives authority to a statement, report or valuation made. The partners and associates of PricewaterhouseCoopers LLP are independent of the Corporation

#### XVI. ADDITIONAL INFORMATION

Additional information, including directors' and officers' remuneration and indebtedness, principal holders of our securities, options and to purchase securities and interests of insiders in material transactions, if any, is contained in the Management Information Circular of the Corporation dated April 1, 2019 prepared in connection with the Corporation's most recent annual shareholders' meeting and is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. Additional financial information, including the Corporation's audited financial statements and management's discussion and analysis of financial condition and results of operations, is available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. All information incorporated by reference in this Annual Information Form is or will within the prescribed delays be contained or included in one of the Corporation's continuous disclosure documents filed with the Canadian securities regulatory authorities, which may be viewed on SEDAR at www.sedar.com and with the SEC, which may be viewed on EDGAR at www.sec.gov.

All requests for the above-mentioned documents must be addressed to the Chief Financial Officer of IMV Inc., 130 Eileen Stubbs Avenue, Suite 19, Dartmouth, Nova Scotia, B3B 2C4, or by fax at (902) 492-0888.

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#### SCHEDULE A

## MANDATE OF THE AUDIT COMMITTEE

#### 1. PURPOSE

The primary function of the Audit Committee (the "Committee") is to assist the Board of Directors in fulfilling its oversight responsibilities by reviewing: (i) the financial information that will be provided to the shareholders and others; (ii) the systems of internal controls which management and the Board of Directors have established; and (iii) the Corporation's audit and financial reporting process. The external auditors' ultimate responsibility is to the Board of Directors and the Committee, as representatives of the shareholders.

These representatives have the ultimate authority to evaluate and, where appropriate, recommend replacement of the external auditors. The Committee will primarily fulfill these responsibilities by carrying out the activities enumerated in Section 5 of this Mandate of the Committee (the "Mandate"). The Committee will, at all times, be given full access to the Corporation's management and records and to the external auditors as necessary to carry out these responsibilities.

#### 2. INTERPRETATION

An "affiliate" of, or a person affiliated with, a specified person, means a person that directly, or indirectly through one or more intermediaries, controlled by, or is under common control with, the person specified, and includes, without limitation, (a) an Executive Officer of an affiliate; (b) a director who also is an employee of an affiliate; (c) a general partner of an affiliate; and (d) a managing member of an affiliate.

An "Audit Committee Financial Expert" means a person who has the following attributes: (a) an understanding of generally accepted accounting principles and financial statements; (b) the ability to assess the general application of such principles in connection with the accounting for estimates, accruals and reserves; (c) experience preparing, auditing, analyzing or evaluating financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Corporation's financial statements, or experience actively supervising one or more persons engaged in such activities; (d) an understanding of internal controls over financial reporting; and (e) an understanding of audit committee functions. A person shall have acquired such attributes through: (a) education and experience as a principal financial officer, principal accounting officer, ontroller, public accountant or auditor or experience in one or more positions that involve the performance of similar functions; (b) experience actively supervising a principal financial officer, principal accounting officer, controller, public accountant, auditor or person performing similar functions; (c) experience overseeing or assessing the performance of companies or public accountants with respect to the preparation, auditing or evaluation of financial statements; or (d) other relevant experience.

"Board of Directors" or "Board" means the Board of Directors of IMV Inc.

"Chairman" means the Chairman of the Committee.

"Committee" means the Audit Committee of IMV Inc.

- "Committees" means the Committee and the Compensation and Corporate Governance Committee.
- "control" (including the terms controlling, controlled by and under common control with) means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise.
- "Corporation" means collectively, IMV Inc. and any subsidiary, including, without limitation, ImmunoVaccine Technologies Inc.
- "Executive Officer" means the president, principal financial officer, principal accounting officer (or, if there is no such accounting officer, the controller), any vice-president in charge of a principal business unit, division or function (such as sales, administration or finance), any other officer who performs a policy-making function, or any other person who performs similar policy-making functions for the issuer.
- "Family Member" means a person's spouse, parents, children and siblings, whether by blood, marriage or adoption, or anyone residing in such person's home.
- "Financially Literate" means the ability to read and understand a set of fundamental financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the consolidated financial statements of the Corporation (including, without limitation, a balance sheet, income statement, and cash flow statement).
- "Independent Director" means a director who is not an Executive Officer or employee of the Corporation or any other individual who has a direct or indirect relationship with the Corporation, which would interfere with the exercise of an independent judgment regarding the best interests of the Corporation or in carrying out the responsibilities of a director. An individual is not an Independent Director if such individual:
- (a) is, or has been within the last three years, an employee or Executive Officer of the Corporation;
- (b) is a Family Member of an individual who is or has been, within the last three years, an Executive Officer of the Corporation;
  - (c) is or has been (or whose Family Member is or has been), within the last three years, an Executive Officer, a partner or an employee of a material service provider of the Corporation (including the external auditors);
  - (d) participated in the preparation of the financial statements of the Corporation at any time during the past three years;
  - (e) is or has been (or whose Family Member is or has been), within the last three years, an Executive Officer of another entity where at any time within the last three years any of the Executive Officer's of the Corporation served on the entity's Compensation Committee;

- (f) has a relationship with the Corporation under which he or she may directly or indirectly accept any consulting, advisory or other fees from the Corporation or a related entity, except for any compensation as a member of the Board or as a member of a Committee;
- (g) received (or whose Family Member received) more than C\$75,000 in compensation from the Corporation (excluding (A) fees as a director or Committee member, (B) compensation paid to a Family Member who is an employee (other than an Executive Officer) of the Corporation, or (C) benefits under a tax-qualified retirement plan or non-discretionary compensation) during any consecutive 12 month period within the last three years) during any consecutive 12 month period within the last three years;
- (h) is, or has a Family Member who is, a partner in, or a controlling shareholder or an Executive Officer of, any organization to which the Corporation made, or from which the Corporation received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenues for that year, or US\$200,000, whichever is more, other than the following: (i) payments arising solely from investments in the Corporation's securities; or (ii) payments under non-discretionary charitable contribution matching programs;
- (i) is a natural person who controls the Corporation; or
- (j) is an affiliate of the Corporation (or any subsidiary of the Corporation).

#### 3. COMPOSITION OF COMMITTEE AND COMMITTEE MEETINGS

- 3.1 The Committee shall be comprised of at least three Directors, all of which are Independent Directors. All members of the Committee shall be Financially Literate. The Committee shall also have at least one member who has past employment experience in finance or accounting, requisite professional certification in accounting, or any other comparable experience or background which results in the individual's financial sophistication, including being or having been a chief executive officer, chief financial officer or other senior officer with financial oversight responsibilities. Additionally, the Committee shall have at least one member who is an Audit Committee Financial Expert.
- 3.2 The Committee will meet on a quarterly basis and will hold special meetings as circumstances require. The timing of the meetings shall be determined by the Committee. At all Committee meetings a majority of the members shall constitute a quorum. The Board shall appoint the Chairman. If the Chairman is not present at a Committee meeting, the members present shall choose one of their number to act as Chairman for the purposes of this specific meeting.
- 3.3 Notice of each meeting shall be given to each Committee member and may but not required to be given to the other directors and to the Corporation's senior management. Unless they are expressly called to the meeting, the latter only receive the notice for information purposes.
- 3.4 The Committee may invite the persons it considers useful to invite, including the Corporation's senior management, to attend the meetings and participate in the discussions concerning the Committee's business.

- 3.5 The Committee members, whenever possible, shall take all necessary steps to attend Committee meetings and to prepare themselves with respect to the matters and documents to be discussed thereat.
- 3.6 The Committee will receive meeting agendas in advance, along with appropriate briefing material.
- 3.7 The Committee shall appoint a secretary. The secretary shall attend the meetings, during which he or she shall take minutes. The minutes shall be made available to the directors for consultation and are approved by the Board before being included in the Corporation's registers or records.
- 3.8 The Committee shall submit periodically a report to the Board on its activities, including the nature of its deliberations and the related recommendations.
- 3.9 The Committee, in the performance of its duties, may consult any relevant register or record of the Corporation.
- 3.10 The Committee members shall receive, in this capacity, the compensation that the Board establishes from time to time.

#### . COMMITTEE AUTHORITY AND RELATIONSHIP WITH EXTERNAL AUDITORS

- 4.1 The external auditors shall report directly to the Committee.
- 4.2 The Committee reports to the Board of Directors and has the authority:
  - a) to engage independent counsel and other advisors as it determines necessary to carry out its duties;
  - b) to set and pay the compensation for any advisors (including, without limitation, the external auditors and independent counsel) employed by the audit committee and for ordinary administrative expenses of the Committee that are necessary or appropriate in carrying out its duties;
  - c) resolve any disagreements between the Corporation's senior management team and the external auditors regarding financial reporting;
  - d) pre-approve all auditing and non-audit services;
  - e) seek any information it requires from the Corporation's employees, all of whom are directed to cooperate with the Committee's requests, or external parties; and
  - f) to communicate directly with the Corporation's senior management team, external auditors, and outside counsel, as necessary, and separately, as necessary.

#### 5. RESPONSIBILITIES AND DUTIES

5.1 To fulfill its responsibilities and duties, the Committee shall:

#### **Financial Statements**

- a) review the accounting principles, policies and practices followed by the Corporation in accounting for and reporting its financial results of operations;
- b) review the Corporation's audited annual consolidated financial statements and the unaudited quarterly financial statements, including complex or unusual transactions and highly judgmental areas, and recommend to the Board for approval prior to publicly disclosing this information. Also review and recommend to the Board for approval any accompanying related documents such as the Annual Information Form or equivalent filings and the Management's Discussion and Analysis prior to publicly disclosing this information;
- review the draft press releases regarding the annual and interim financial statements and recommend to the Board for approval prior to publicly disclosing this information;
- d) satisfy itself that adequate procedures are in place for the review of the Corporation's public disclosure of financial information extracted or derived from the Corporation's financial statements and periodically assess the adequacy of those procedures;

#### **Internal Control**

- e) consider the effectiveness of the Corporation's internal control system, including information technology security and control;
- understand the scope of external auditors' review of internal controls over financial reporting, and obtain reports on significant findings and recommendations, together with management's response;
- g) review the financial risk assessment and management policies followed by the Corporation in operating its business activities and the completeness and fairness of any disclosure thereof, including, without limitation, review of the use of derivative financial instruments by the Corporation;
- h) review and approve any management decision relating to any potential need for internal auditing, including whether this function should be outsourced and if such function is outsourced, approve the supplier of such service;
- i) establish procedures for (i) the receipt, retention and treatment of complaints received by the Corporation from employees regarding accounting, internal accounting controls, or auditing matters; and (ii) the confidential, anonymous submission by directors, officers and other employees of the Corporation of concerns regarding questionable accounting or auditing matters;

#### **External Audit**

 appoint, compensate and retain the external auditors in connection with preparing or issuing an auditor's report or with performing other audit, review or attestation services for the Corporation;

- k) oversee the work of the external auditors engaged for the purpose of preparing or issuing an auditor's report or performing other audit, review or attestation services for the Corporation, including the resolution of disagreements between management and the external auditors regarding financial reporting:
- obtain, on an annual, basis, a formal written statement from the external auditors delineating the relationship between the external auditors and the Corporation, actively engaging in a dialogue with the external auditors with respect to any disclosed relationships or services that may impact the objectivity and independence of the external auditors and for taking, or recommending that the full board take, appropriate action to oversee the independence of the external auditors under applicable securities laws and stock exchange rules;
- m) discuss with the external auditors their views about the quality of the implementation of International Financial Reporting Standards (or other generally accepted accounting principles used by the Corporation to report its financial statements), with a particular focus on the accounting estimates and judgments made by management and management's selection of accounting principles. Meet in private with appropriate members of management and separately with the external auditors on a regular basis to share perceptions on these with the external auditors and their views on the adequacy of the Corporation's financial personnel;
- n) review and provide direction regarding the scope of the annual audit, the audit plan, the access granted to the Corporation's records and the co-operation of management in any audit and review function;
- o) review the effectiveness of the independent audit effort, including approval of the fees charged in connection with the annual audit, any quarterly reviews and any permitted non-audit services being provided;
- p) assess the effectiveness of the working relationship of the external auditors with management;
- q) determine the nature of non-audit services the external auditors are prohibited from providing to the Corporation, and pre-approve all permitted non-audit services provided by the external auditors to the Corporation;
- r) if appropriate, terminate the appointment of the external auditors;
- s) prepare the report required to be prepared by the Committee pursuant to applicable securities laws for inclusion with the annual financial statements;
- t) at least annually, obtain and review an appropriate report by the external auditors describing: (i) the external auditors' internal quality-control procedures; (ii) any material issues raised by the most recent internal quality-control review or peer review of the external auditors, or any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the external auditors, and any steps taken to deal with such issues; and (iii) all relationships between the external auditors and the Corporation to enable the assessment of the external auditors;

#### Reporting Responsibility

- u) review and reassess annually the Mandate of the Committee for adequacy and recommend any changes to the Board;
- v) report to the Board on the major items covered at each Committee meeting and make recommendations to the Board and management concerning these matters. Annually report to the Board on the effectiveness of the Committee;
- w) perform any other activities consistent with this Mandate, the Corporation's bylaws and governing law as the Committee or the Board deems necessary or appropriate;

#### Compliance

- x) review the effectiveness of the system for monitoring compliance with laws and regulations and the results of management's investigation and follow-up, including disciplinary action of any instances of noncompliance;
  - v) review the findings of any examinations by regulatory agencies and any external auditors observations;
  - w) review the process for communicating the code of conduct to the Corporation's employees and for monitoring compliance therewith; and
  - x) obtain regular updates from management and Corporation's legal counsel regarding compliance matters.

Adopted by the	ne Board	on April (	5, 2010 an	d amended o	on March	10, 2016	and May	30, 20	018



Consolidated Financial Statements **December 31, 2018** 

March 21, 2019

## Management's Responsibility for Financial Reporting

The accompanying consolidated financial statements of IMV Inc. (the "Corporation", formerly "Immunovaccine Inc.") are the responsibility of management and have been approved by the Board of Directors. The consolidated financial statements have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. The consolidated financial statements include some amounts and assumptions based on management's best estimates which have been derived with careful judgment.

In fulfilling its responsibilities, management has developed and maintains a system of internal accounting controls. These controls are designed to ensure that the financial records are reliable for preparation of the consolidated financial statements. The Audit Committee of the Board of Directors reviewed and approved the Corporation's consolidated financial statements, and recommended their approval by the Board of Directors.

(signed) "Frederic Ors"

Chief Executive Officer

(signed) "Pierre Labbé" Chief Financial Officer



#### Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of IMV Inc.

#### **Opinion on the Financial Statements**

We have audited the accompanying consolidated statements of financial position of IMV Inc. (formerly Immunovaccine Inc.) and its subsidiaries (together, the Company) as of December 31, 2018 and 2017, and the related consolidated statements of loss and comprehensive loss, changes in equity and cash flows for the years then ended, including the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and their financial performance and their cash flows for the years then ended in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS).

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2018.

#### Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

(signed) "PricewaterhouseCoopers LLP"

## **Chartered Professional Accountants, Licensed Public Accountants**

Halifax, Nova Scotia, Canada March 21, 2019

We have served as the Company's auditor since 2003.

PricewaterhouseCoopers LLP
Cogswell Tower, 2000 Barrington Street, Suite 1101, Halifax NS B3J 3K1
T: +1 902 491 7400, F: +1 902 422 1166, www.pwc.com/ca

"PwC" refers to PricewaterhouseCoopers LLP, an Ontario limited liability partnership, which is a member firm of PricewaterhouseCoopers International Limited, each member firm of which is a separate legal entity.

Consolidated Statements of Financial Position

## As at December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

	2018 \$	2017 \$
Assets		
Current assets		
Cash and cash equivalents	14,895	14,909
Amounts receivable (note 5)	1,337	261
Prepaid expenses	2,699	838
Investment tax credits receivable	1,111	461
investment tax credits receivable		401
	20,042	16,469
Property and equipment (note 6)	2,883	563
	22,925	17,032
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities (note 7)	7,575	2,760
Amounts due to directors (note 10)	49	21
Current portion of long-term debt (note 11)	81	61
Current portion of lease obligation (note 8)	90	_
	7,795	2,842
Lease obligation (note 8)	1,308	_
	ŕ	
<b>Deferred share units</b> (note 9)	1,436	1,371
Long-term debt (note 11)	8,069	6,476
		-, , , -
	18,608	10,689
Equity	4,317	6,343
	22,925	17,032

## Commitments (note 18)

The accompanying notes form an integral part of these consolidated financial statements.

## Approved on behalf of the Board of Directors

(signed) "James W. Hall", Director

(signed) "Wayne Pisano", Director

# Consolidated Statements of Changes in Equity For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

	Share Capital \$ (note 12)	Contributed Surplus \$ (note 13)	Warrants \$ (note 14)	Deficit \$	Total \$
Balance, December 31, 2016	58,154	6,961	660	(58,792)	6,983
Net loss and comprehensive loss for the period Issuance of shares in public offering Share issuance costs Issuance of broker warrants Exercise of warrants Employee share options:	10,000 (1,197) - 1,891	- - - -	- - 208 (194)	(12,027) - - - - -	(12,027) 10,000 (1,197) 208 1,697
Value of services recognized	-	571	-	-	571
Exercise of options	1,265	(1,157)			108
Balance, December 31, 2017	70,113	6,375	674	(70,819)	6,343
Net loss and comprehensive loss for the period	_	_	_	(21,935)	(21,935)
Issuance of shares in public offering	14,375	-	-	_	14,375
Share issuance costs	(1,480)	-	-	-	(1,480)
Redemption of DSUs, net of applicable taxes	220	_	_	_	220
Issuance of broker warrants	-	_	332	_	332
Exercise of warrants	5,480	_	(591)	-	4,889
Employee share options:					
Value of services recognized	-	1,182	_	_	1,182
Exercise of options	1,444	(1,053)	_	_	391
Balance, December 31, 2018	90,152	6,504	415	(92,754)	4,317

The accompanying notes form an integral part of these consolidated financial statements.

Consolidated Statements of Loss and Comprehensive Loss

## For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

	2018 \$	2017 \$
Revenue		
Subcontract revenue	82	33
Interest revenue	401	189
	483	222
Expenses		
Research and development	12,852	5,938
General and administrative	7,241	5,202
Government assistance	(1,062)	(1,078)
Business development and investor relations	2,002	1,221
Accreted interest (note 11)	1,385	966
	22,418	12,249
Net loss and comprehensive loss for the year	(21,935)	(12,027)
Basic and diluted loss per share	(0.50)	(0.31)
Weighted-average shares outstanding	43,766,951	38,656,771

On May 2, 2018, the Corporation completed a share consolidation on the basis of one new common share for every 3.2 currently outstanding common shares. Per share amounts and numbers of outstanding common shares, stock options and deferred share units reflect the retrospective application of the share consolidation (see note 22).

The accompanying notes form an integral part of these consolidated financial statements.

# Consolidated Statements of Cash Flows For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

	2018 \$	2017 \$
Cash provided by (used in)		
Operating activities		
Net loss and comprehensive loss for the year	(21,935)	(12,027)
Charges to operations not involving cash	(21,755)	(12,027)
Depreciation of property and equipment	325	140
Stock-based compensation	1,182	571
Deferred share unit compensation	508	1,147
Interest on lease obligation	94	_
Accreted interest	1,385	966
Revaluation of long-term debt	_	(506)
Loss on disposal of assets	8	_
	(18,433)	(9,709)
Net change in non-cash working capital balances related to operations	(18,433)	(9,709)
(Increase) decrease in amounts receivable	(1,076)	8
Increase in prepaid expenses	(616)	(369)
(Increase) decrease in investment tax credits receivable	(650)	38
Increase in accounts payable and accrued liabilities	3,570	1,055
Increase (decrease) in amounts due to directors	28	(19)
	(17.177)	(9.006)
True de de de	(17,177)	(8,996)
Financing activities	14.055	10.000
Proceeds from issuance of share capital and warrants	14,375	10,000
Share and warrant issuance costs	(1,148)	(990)
Proceeds from the exercise of stock options	391	109
Proceeds from the exercise of warrants	4,889	1,698
Incentive contribution from lessor	896 300	_
Proceeds from long-term debt		_
Withholdings on redemption of DSUs	(223)	(72)
Repayment of long-term debt	(72) (74)	(72)
Repayment of lease obligation		
	19,334	10,745
Investing activities		
Acquisition of property and equipment	(2,185)	(387)
Proceeds from sale of assets	14	-
	(2,171)	(387)
Net change in cash and cash equivalents during the year	(14)	1,362
Cash and cash equivalents – Beginning of year	14,909	13,547
Cash and cash equivalents – End of year	14,895	14,909
Supplementary cash flow		
Interest received	401	189
The accompanying notes form an integral part of these consolidated financial statements.		

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 1 Nature of operations

IMV Inc. (the "Corporation", "IMV", formerly "Immunovaccine Inc.") is a clinical-stage biopharmaceutical company dedicated to making immunotherapy more effective, more broadly applicable, and more widely available to people facing cancer 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 and delivery of active ingredients into immune cells and lymph nodes. It enables the programming of immune cells in vivo, which are aimed at generating powerful new synthetic therapeutic capabilities. DPX no release MOA can be leveraged to generate "first-in-class" T cell therapies with the potential to be transformative in the treatment of cancer. The Corporation has research collaborations with companies and research organizations, including Merck, Incyte Corporation and Leidos Inc. in the U.S. The Corporation has licensed the delivery technology to Zoetis, formerly the animal health division of Pfizer, Inc., for the development of vaccines for livestock. The Corporation has one reportable and geographic segment. Incorporated under the Canada Business Corporations Act and domiciled in Dartmouth, Nova Scotia, the shares of the Corporation are listed on the Nasdaq Stock Market and the Toronto Stock Exchange under the symbol "IMV". On May 1, 2018, the Corporation changed its name from Immunovaccine Inc. to IMV Inc. The address of its principal place of business is 130 Eileen Stubbs, Suite 19, Dartmouth, Nova Scotia, Canada.

#### 2 Basis of presentation

The Corporation prepares its consolidated financial statements in accordance with Canadian generally accepted accounting principles as set out in the Chartered Professional Accountants of Canada Handbook – Accounting Part I ("CPA Canada Handbook"), which incorporates International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

These consolidated financial statements were approved by the Board of Directors on March 21, 2019.

#### 3 New standards and interpretations adopted January 1, 2018

#### IFRS 9, Financial Instruments

Effective January 1, 2018, the Corporation was required to adopt IFRS 9. IFRS 9 replaces the provisions of IAS 39, Financial instruments: recognition and measurement ("IAS 39") that relate to the recognition, classification, and measurement of financial assets and financial liabilities, derecognition of financial instruments and impairment of financial assets.

Prior to January 1, 2018, all of the Corporation's financial instruments were measured using the amortized cost model. At the date of adoption, the Corporation's financial assets consisted of amounts receivable from collaborative partners for shared clinical costs, and financial liabilities consisted of trade payables and long-term debt arrangements. There is no difference between the categorization of these financial assets and financial liabilities under IFRS 9 and IAS 39 and, accordingly, all such assets and liabilities continue to be measured using the amortized cost model.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 3 New standards and interpretations adopted January 1, 2018 (continued)

#### IFRS 9, Financial Instruments (continued)

The Corporation was required to revise its impairment methodology for financial assets under IFRS 9, and now applies the simplified approach to measuring the new concept of expected credit losses, which uses a lifetime expected loss allowance for all trade receivables. Management determined that the effect of applying this model to its financial assets is immaterial and, therefore, no adjustment has been made to the loss allowance as at January 1, 2018.

There was no impact on the January 1, 2018 statement of financial position as a result of the adoption of this standard.

#### IFRS 15, Revenue from contracts with customers

The Corporation was required to adopt IFRS 15 effective January 1, 2018. The modified retrospective method was applied for transition to this standard, under which the cumulative impact of initially applying the standard is recognized as an adjustment to the opening balance of retained earnings. The Corporation also elected to apply the practical expedient whereby contracts that were completed at the beginning of the earliest period presented need not be considered for restatement.

The Corporation currently generates revenue from providing formulation services to its collaborative partners. No adjustment to opening retained earnings was required as a result of the adoption of this standard based on management's analysis of the performance obligations related to existing contracts of the Corporation. Refer to note 4 for further details on the Corporation's revenue recognition policies.

#### IFRS 16, Leases

The Corporation also early adopted IFRS 16, Leases ("IFRS 16") effective January 1, 2018. IFRS 16 was applied using the modified retrospective approach, under which the cumulative effect of initial application is recognized in retained earnings at January 1, 2018. The details of the change in accounting policy are disclosed below.

Previously, at the inception of a contract, the Corporation determined whether an arrangement contains a lease under IAS 17. Under IFRS 16, the Corporation assesses whether a contract is or contains a lease based on the definition of a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Corporation assesses whether:

- the contract involves the use of an identified asset, specified either explicitly or implicitly, that is physically distinct, and usage represents substantially all of the capacity of the asset;
- the Corporation has the right to obtain substantially all of the economic benefits from use of the asset; and
- the Corporation has the right to direct use of the asset, which is evidenced by decision-making rights to direct how and for what purpose the asset is used.

The Corporation recognizes an asset and a lease liability at the lease commencement date.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

3 New standards and interpretations adopted January 1, 2018 (continued)

#### IFRS 16, Leases (continued)

The asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred, less any incentives received. The asset is subsequently depreciated using the declining balance method from the commencement date to the earlier of the end of the useful life of the asset or the end of the lease term. The estimated useful lives of leased assets are determined on the same basis as those of property and equipment. The carrying amount of the leased asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability, if any.

The lease liability is initially measured at the present value of future lease payments, discounted using the interest rate implicit in the lease, or, if that rate cannot be readily determined, the Corporation's incremental borrowing rate. Generally, the Corporation uses its incremental borrowing rate as the discount rate. The lease liability is subsequently measured at amortized cost using the effective interest method. It is remeasured if the Corporation changes its assessment of whether it will exercise a purchase, extension, or termination option. If the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the leased asset, or is recorded in the consolidated statement of loss and comprehensive loss if the carrying value of the leased asset is zero.

The Corporation has elected not to recognize assets and lease liabilities for short-term leases with a term of 12 months or less, and leases of low value assets.

The lease payments associated with these leases are recognized as an expense in the consolidated statement of loss and comprehensive loss over the lease term. Low value assets consist primarily of computers and IT equipment.

This policy is applied for contracts entered into, or changed, on or after January 1, 2018.

For contracts entered into before January 1, 2018, the Corporation determined whether the arrangement was or contained a lease based on the assessment of whether:

- fulfilment of the arrangement was dependent on the use of specific assets; and
- the arrangement conveyed a right to use the asset. An arrangement conveyed the right to use the asset if the Corporation had the ability to control physical access to the asset and how and for what purpose the asset was used.

Under IAS 17, leases that transferred substantially all the risks and rewards of ownership were classified as finance leases. When this was the case, the leased assets were measured initially at an amount equal to the lower of their fair value and the present value of the minimum lease payments. The Corporation did not have any leases that were classified as finance leases under IAS 17.

All other leases were classified as operating leases and were not recognized in the Corporation's statement of financial position. Payments made under operating leases were recognized in the consolidated statement of loss and comprehensive loss over the term of the lease.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 3 New standards and interpretations adopted January 1, 2018 (continued)

### Application expedients and impact on financial statements

On transition to IFRS 16, the Corporation elected to apply the practical expedient to grandfather the assessment of which transactions are leases. IFRS 16 was applied only to contracts that were previously identified as leases. Contracts that were not identified as leases under IAS 17 were not reassessed for whether there is a lease.

The Corporation used the following practical expedients when applying IFRS 16 to leases previously classified as operating leases under IAS 17:

- Applied a single discount rate to a portfolio of leases with similar characteristics;
- Applied the exemption not to recognize assets and lease liabilities for leases with less than 12 months of lease term remaining at the application date; and
- Used hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

On transition, the Corporation applied section C8(b)(ii) of the standard and recognized leased assets at an amount equal to the lease liability, adjusted for prepaid or accrued lease payments recognized before initial application, of which there were none.

As a result, \$87 of leased assets in property and equipment and \$87 of lease liabilities were recognized at January 1, 2018. When measuring lease liabilities, the Corporation discounted lease payments using its incremental borrowing rate at the date of adoption. The rate applied is 11%.

	Ψ
Operating lease commitment as at December 31, 2017 <sup>1</sup>	275
Recognition exemption for:	
Short-term leases	(131)
Leases of low value assets	(14)
Commitments attributable to non-lease components	(65)
Extension option reasonably certain to be recognized <sup>2</sup>	51
	116
Discounted using the incremental borrowing rate at January 1, 2018	(29)
Lease liability recognized at January 1, 2018	87

 $<sup>{\</sup>bf 1}\ {\bf Does}\ not\ include\ \$2,\!262\ related\ to\ new\ office\ space\ for\ which\ the\ lease\ commencement\ date\ was\ June\ 1,\ 2018.$ 

\$

<sup>2</sup> The Corporation has applied the transitional provision of IFRS 16 that allows the use of hindsight in determining the lease term if the contract contains an option to extend the lease.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 3 New standards and interpretations adopted January 1, 2018 (continued)

#### Application expedients and impact on financial statements(continued)

The leased assets and liabilities recognized are for the Corporation's office spaces that were previously classified as operating leases. These leases typically run for periods of five to ten years, and include an option to renew the lease for an additional period. When reasonably certain that the Corporation will exercise the extension option, the lease payments for the extension have been included in determining the value of the leased asset and liability shown above. Some leases also provide for additional rent payments that relate to property taxes levied on the lessor and operating expense payments made by the lessor; these amounts are generally determined annually and are expensed through the consolidated statement of loss and comprehensive loss.

#### 4 Significant accounting policies, judgments and estimation uncertainty

#### **Basis of measurement**

The consolidated financial statements have been prepared under the historical cost convention.

#### Consolidation

The financial statements of the Corporation consolidate the accounts of IMV Inc. and its subsidiary. All intercompany transactions, balances and unrealized gains and losses from intercompany transactions are eliminated on consolidation. There are no non-controlling interests, therefore, all loss and comprehensive loss is attributable to the shareholders of the Corporation.

#### Foreign currency translation

### i) Functional and presentation currency

Items included in the consolidated financial statements of the Corporation are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). The consolidated financial statements are presented in Canadian dollars, which is the Corporation's functional currency.

#### ii) Transactions and balances

Foreign currency translation of monetary assets and liabilities, denominated in currencies other than the Corporation's functional currency, are converted at the rate of exchange in effect at the consolidated statement of financial position date. Income and expense items are translated at the rate of exchange in effect at the transaction date. Translation gains or losses are included in determining income or loss for the year. Foreign exchange loss of \$139 of for the year ended December 31, 2018 (2017 - \$10 gain) is included in general and administrative expenses.

### Cash and cash equivalents

Cash and cash equivalents include cash on hand, balances with banks, and highly liquid temporary investments that are readily convertible to known amounts of cash.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

4 Significant accounting policies, judgments and estimation uncertainty (continued)

# Financial instruments

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

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

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

The Corporation has implemented the following classifications:

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

#### Impairment of financial assets

The Corporation applies the simplified method of the expected credit loss model required under IFRS 9. Under this method, the Corporation estimates a lifetime expected loss allowance for all receivables. Receivables are written off when there is no reasonable expectation of recovery.

If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows. The present value of the estimated future cash flows is discounted at the financial asset's original effective interest rate.

#### Property and equipment

Property and equipment are stated at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Corporation and the cost can be measured reliably. The carrying amount of a replaced asset is derecognized when replaced. Repairs and maintenance costs are charged to the consolidated statement of loss and comprehensive loss during the year in which they are incurred.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 4 Significant accounting policies, judgments and estimation uncertainty (continued)

#### Property and equipment (continued)

Depreciation of property and equipment is calculated using the declining-balance method at the following annual rates:

Computer equipment	30%
Computer software	100%
Furniture and fixtures	20%
Laboratory equipment	20%
Leasehold improvements and leased premises	straight-line

Residual values, method of depreciation and useful lives of the assets are reviewed annually and adjusted if appropriate.

Gains and losses on disposals of property and equipment are determined by comparing the proceeds with the carrying amount of the asset and are included as part of general and administrative expenses in the consolidated statement of loss and comprehensive loss.

Property and equipment and intangible assets are tested for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable. For the purpose of measuring recoverable amounts, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units or CGUs). The recoverable amount is the higher of an asset's fair value less the costs to sell, and value in use (being the present value of the expected future cash flows of the relevant asset or CGU).

An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount.

The Corporation evaluates impairment losses for potential reversals when events or circumstances warrant such consideration.

#### Income tax

Income tax is comprised of current and deferred income tax. Income tax is recognized in the consolidated statement of loss and comprehensive loss except to the extent that it relates to items recognized directly in equity, in which case the income tax is also recognized directly in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted, at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

In general, deferred income tax is recognized in respect of temporary differences including non-refundable investment tax credits, arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 4 Significant accounting policies, judgments and estimation uncertainty (continued)

#### Income tax (continued)

Deferred income tax is determined on a non-discounted basis using tax rates and laws that have been enacted or substantively enacted at the consolidated statement of financial position date and are expected to apply when the deferred income tax asset or liability is settled. Deferred income tax assets are recognized to the extent that it is probable that the assets can be recovered.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associates, except in the case of subsidiaries, where the timing of the reversal of the temporary difference is controlled by the Corporation and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are presented as non-current.

#### Research and development

All research costs are expensed in the period incurred. Development costs are expensed in the period incurred, unless they meet the criteria for capitalization, in which case, they are capitalized and then amortized over the useful life. Development costs are written off when there is no longer an expectation of future benefits.

### Revenue recognition

Revenues are recognized as the Corporation satisfies its performance obligations under the terms of the contract. Performance obligations are considered to be satisfied when the customer obtains control of the related asset. Current and expected future revenue streams include: (i) milestone payments generated upon entering into potential contractual partnerships and achieving development and sales milestones; (ii) future royalties generated from the eventual commercialization of the Corporation's products; and (iii) amounts generated for providing formulation and research support services related to existing licensing and research agreements with partners.

Revenue resulting from formulation services is recognized in the accounting period in which the formulation is delivered to the customer. Typically, the customer does not have control of the asset while services are being performed and, therefore, revenues are recognized at the time the Corporation has completed its obligation and the customer obtains control of the asset. Revenue resulting from research support services is recognized over time as the services are performed, as the customer benefits simultaneously from the service as the Corporation satisfies its performance obligation.

The Corporation expects to generate upfront payments, milestone and royalty revenues from future licenses for the Corporation's products. Upfront payments and milestones will be recognized as revenue when or as the underlying obligations are achieved and are not conditional on any further performance, which could be at a point in time or over time depending on the contractual terms. Royalty revenue will be recognized in the period in which the Corporation earns the royalty.

The Corporation does not generate licensing or royalty revenues at this time.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 4 Significant accounting policies, judgments and estimation uncertainty (continued)

### Share capital

Common shares are classified as equity. Incremental costs directly attributable to the issuance of shares are recognized as a deduction from share capital.

#### Loss per share

Basic loss per share ("LPS") is calculated by dividing the net loss for the year attributable to equity owners of the Corporation by the weighted average number of common shares outstanding during the year.

Diluted LPS is calculated by adjusting the weighted average number of common shares outstanding for dilutive instruments. The number of shares included with respect to options, warrants and similar instruments is computed using the treasury stock method. Diluted LPS is equal to the LPS as the Corporation is in a loss position and all securities, comprised of options and warrants, would be anti-dilutive.

# Stock-based compensation plan

The Corporation grants stock options to certain employees and non-employees. Starting January 1, 2018, stock options vest over three years (33 1/3% per year) and expire after five years. Each tranche in an award is considered a separate award with its own vesting period and grant date fair value. Fair value of each tranche is measured at the date of grant using the Black-Scholes option pricing model. Compensation expense is recognized over the tranche's vesting period by increasing contributed surplus based on the number of awards expected to vest. The number of awards expected to vest is reviewed at least annually, with any impact being recognized immediately.

A holder of an option may, rather than exercise such option, elect a cashless exercise of such option payable in common shares equaling the amount by which the value of an underlying share at that time exceeds the exercise price of such option or warrant to acquire such share.

# Deferred share unit plan

The Corporation grants deferred share units ("DSUs") to members of its Board of Directors, who are not employees or officers of the Corporation. All DSUs awarded vest immediately and cannot be redeemed until the holder is no longer a director of the Corporation. All services received in exchange for the grant of DSUs are measured at their fair values. The redemption value of a DSU will be based on the market value of the Corporation's common shares at the time of redemption. On an ongoing basis, the Corporation values its liability with respect to DSUs at the current market value of a corresponding number of common shares and records any increase or decrease in the DSU obligation. Compensation expense is recognized at each grant date in general and administrative expenses on the consolidated statement of loss and comprehensive loss.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 4 Significant accounting policies, judgments and estimation uncertainty (continued)

#### Government assistance

Government assistance consists of non-repayable government grants, from a number of government agencies and the difference between the fair value and the book value of repayable low-interest government loans, recorded initially at fair value. Government assistance is recorded in the period earned using the cost reduction method and is included in government assistance on the consolidated statement of loss and comprehensive loss. At December 31, 2018, \$7 (2017 - \$10) of government assistance is included in amounts receivable.

#### Research and development tax credits

Refundable investment tax credits relating to scientific research and experimental development expenditures are recorded in the accounts in the fiscal period in which the qualifying expenditures are incurred provided there is reasonable assurance that the tax credits will be realized. Refundable investment tax credits, in connection with research and development activities, are accounted for using the cost reduction method and included in government assistance on the statement of loss and comprehensive loss

Amounts recorded for refundable investment tax credits are calculated based on the expected eligibility and tax treatment of qualifying scientific research and experimental development expenditures recorded in the Corporation's consolidated financial statements.

#### Critical accounting estimates and judgments

The Corporation makes estimates and assumptions concerning the future that will, by definition, seldom equal actual results. The following are the estimates and judgments applied by management that most significantly affect the Corporation's consolidated financial statements.

The following estimates and judgments have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

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

Atlantic Innovation Fund ("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.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 4 Significant accounting policies, judgments and estimation uncertainty (continued)

#### Critical accounting estimates and judgments (continued)

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.

If the weighted average discount rate used in determining the initial fair value and the carrying value at each reporting date of all AIF loans, with repayment terms based on future revenue, had been determined to be higher by 10%, or lower by 10%, the carrying value of the long-term debt at December 31, 2018 would have been an estimated \$728 lower or \$1,036 higher, respectively. A 10% increase or decrease in the total forecasted revenue would not have a significant impact on the amount recorded for the loans. If the total forecasted revenue were reduced to \$nil, no amounts would be forecast to be repaid on the AIF loans, and the AIF loans payable at December 31, 2018 would be recorded at \$nil, which would be a reduction in the AIF loans payable of \$3,193. If the timing of the receipt of forecasted future revenue was delayed by two years, the carrying value of the long-term debt at December 31, 2018 would have been an estimated \$1,440 lower.

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.

(11)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 4 Significant accounting policies, judgments and estimation uncertainty (continued)

# Critical accounting estimates and judgments (continued)

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.

If the discount rate used for the Province loan had been determined to be higher or lower by 5% (resulting in discount rates of 16% or 6%, respectively), the carrying value of the long-term debt at December 31, 2018 would have been an estimated \$325 lower or \$353 higher, respectively. 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

# 5 Amounts receivable

	2018	2017
	\$	\$
Amounts due from government assistance and government loans	7	10
Sales tax receivable	557	151
Revenue from subcontracts	33	10
Other	740	90
	1,337	261
	·	(12)

(12)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 6 Property and equipment

	Computer equipment and software \$	Furniture and fixtures \$	Laboratory equipment \$	Leased Premises \$	Leasehold improve- ments	Total \$
Year ended December 31, 2017						
Opening net book value	43	17	256	_	_	316
Additions	73	15	282	-	17	387
Disposals						
Cost	(9)	-	-	-	-	(9)
Accumulated depreciation	9	_	_	-	_	9
Depreciation for the year	(50)	(5)	(79)	_	(6)	(140)
Closing net book value	66	27	459	-	11	563
At December 31, 2017						
Cost	205	85	1,166	_	17	1,473
Accumulated depreciation	(139)	(58)	(707)	-	(6)	(910)
Net book value	66	27	459	-	11	563
Year ended December 31, 2018						
Opening net book value	66	27	459	-	11	563
Additions	79	171	217	1,417	782	2,666
Disposals						
Cost	(9)	(61)	(37)	_	_	(107)
Accumulated depreciation	7	47	31	-	-	85
Depreciation for the year	(47)	(21)	(112)	(94)	(50)	(325)
Closing net book value	96	163	558	1,323	- 743	2,883
At December 31, 2018						
Cost	275	194	1,346	1,417	800	4,032
Accumulated depreciation	(179)	(31)	(788)	(94)	(57)	(1,149)
Net book value	96	163	558	1,323	743	2,883

# 7 Accounts payable and accrued liabilities

	2018 \$	2017 \$
Tue de marchiles	5 292	1 692
Trade payables	5,282	1,683
Accrued liabilities	2,275	1,057
Payroll taxes	18	20
	7,575	2,760

(13)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

### 8 Lease obligation

	Amount \$
Balance – December 31, 2017	-
Leases recognized upon transition to IFRS 16	87
Additions	1,291
Repayment of lease obligation	(74)
Accreted interest	94
Balance – December 31, 2018	1,398
Less: Current portion	(90)
Non-current portion	1,308

The Corporation recognizes a right-of-use asset and lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the liability, discounted at an incremental borrowing rate of 11%, adjusted for any payments made before the commencement date, plus any initial direct costs, less any lease incentives received. During the nine months ended December 31, 2018, the Corporation recognized \$1,417 (2017 - \$nil) in right-of-use assets in property, plant and equipment on the statements of financial position.

# 9 Deferred share units ("DSUs")

The maximum number of common shares which the Corporation is entitled to issue from Treasury in connection with the redemption of DSUs granted under the DSU Plan is 468,750 common shares. The number of DSUs disclosed below reflect the retrospective application of the share consolidation completed May 2, 2018 (see note 22).

DSU activity for the year ended December 31, 2018 and the year ended December 31, 2017 are as follows:

	December 31, 2018 Number	December 31, 2017 Number
Opening balance	186,330	101,563
Granted	97,072	84,767
Redeemed	(59,798)	-
Closing balance	223,604	186,330

At December 31, 2018, there were 223,604 (December 31, 2017 - 186,330) DSUs outstanding related to this Plan and the total carrying amount of the liability was \$1,436 (2017 - \$1,371). The compensation expense for the year ended December 31, 2018 was \$508 (2017 - \$325) with the amortization of the cost over the vesting period. Vested DSUs cannot be redeemed until the holder is no longer a member of the Board.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 9 Deferred share units ("DSUs") (continued)

The redemption value of a DSU equals the market value of an IMV Inc. common share at the time of redemption. On an ongoing basis, the Corporation values the DSU obligation at the current market value of a corresponding number of IMV Inc. common shares and records any increase or decrease in the DSU obligation as an expense on the consolidated statements of loss and comprehensive loss.

# 10 Amounts due to directors

During the year ended December 31, 2018, the Corporation incurred \$206 (2017 - \$163) of directors' fees and attendance fees earned by the members of the Board of Directors who are not employees or officers of the Corporation. At December 31, 2018, \$49 (2017 - \$21) was due to these individuals. These costs are included in general and administrative expenses in the consolidated statements of loss and comprehensive loss.

(15)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 11 Long-term debt

	2018 \$	2017 \$
Atlantic Canada Opportunities Agency ("ACOA") Atlantic Innovation Fund interest-free loan with a maximum contribution of \$3,786. Annual repayments, commencing December 1, 2008, are calculated as a percentage of gross revenue for the preceding fiscal year, at 2% when gross revenues are less than \$5,000 and 5% when gross revenues are greater than \$5,000. As at December 31, 2018, the amount drawn down on the loan, net of repayments, is \$3,744 (2017 - \$3,747).	1.202	758
10pay 110m3, 13 \$5,747 (2017 - \$5,747).	1,202	750
ACOA Atlantic Innovation Fund interest-free loan with a maximum contribution of \$3,000. Annual repayments, commencing December 1, 2011, are calculated as a percentage of gross revenue for the preceding fiscal year, at 2% when gross revenues are less than \$5,000 and 5% when gross revenues are greater than \$5,000. As at December 31, 2018, the amount drawn down on the loan is \$2,995 (2017 - \$2,997).	1,034	651
ACOA Business Development Program, interest-free loan with a maximum contribution of \$395, repayable in monthly payments beginning October 2015 of \$3 until October 2017 and \$6 until September 2022. As at December 31, 2018, the amount drawn down on the loan, net of repayments, is \$251 (2017 - \$318).	238	294
ACOA Atlantic Innovation Fund interest-free loan with a maximum contribution of \$2,944, annual repayments commencing September 1, 2014, are calculated as a percentage of gross revenue from specific product(s) for the preceding fiscal year, at 5% for the first 5 year period and 10%, thereafter. As at December 31, 2018, the amount drawn down on the loan is \$2,944 (2017 - \$2,944).	957	733
TNC 120-140 Eileen Stubbs Ltd. (the "Landlord") loan, with a maximum contribution of \$300,000, bearing interest a t 8% annum, is repayable in monthly payments beginning upon receipt of the final installment of the loan until May 31, 2028. The loan is made available in three equal installments based on the Corporation meeting certain milestones. As at December 31, 2018, the amount drawn down on the loan is \$300 (2017 - \$ nil).	300	-
Province of Nova Scotia "The Province" secured loan with a maximum contribution of \$5,000, interest bearing at a rate equal to the Province's cost of funds plus 1%, compounded semi-annually and payable monthly. The loan is made available in four equal installments based on the Corporation meeting certain milestones, and is repayable on the seventh anniversary date of the first disbursement. The Corporation and its subsidiary have provided a general security agreement granting a first security interest in favour of the Province of Nova Scotia in and to all the assets of the Corporation and its subsidiary, including the intellectual property. As at December 31, 2018, the		
amount drawn down on the loan is \$5,000 (2017 - \$5,000).	4,419	4,101
	8,150	6,537
Less: Current portion	81	61
	8,069	6,476
		(16)

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 11 Long-term debt (continued)

Total contributions received, less amounts that have been repaid as at December 31, 2018, is \$15,234 (2017 -\$15,007).

Certain ACOA loans and the Province loan require approval by ACOA or the Minister for the Province before the Corporation can pay management fees, bonuses, dividends or other distributions, or before there is any change of ownership of the Corporation. The Province loan requires the Corporation to obtain the written consent of the Province prior to the sale, disposal or abandonment of possession of the intellectual property of the Corporation or its subsidiary. If during the term of the Province loan, the head office, research and development facilities, or production facilities of the Corporation are moved from the Province, the Corporation is required to repay 40% of the outstanding principal of the loan.

In August 2017, the Corporation received a two-year extension of the maturity of the Province loan. The original maturity date of the loan was August 9, 2018 and is now August 9, 2020. The annual interest rate remains at the Province's cost of funds plus 1 per cent.

The Province loan requires certain early repayments if the Corporation's subsidiary, or the Corporation on a consolidated basis, has cash flow from operations in excess of \$1,500,000. The Province loan also requires repayment of the loan under certain circumstances, such as changes of control, sale or liquidation of the Corporation or the sale of substantially all of the assets of the Corporation.

The minimum annual principal repayments of long-term debt over the next five years, excluding the Atlantic Innovation Fund repayments for 2019 and beyond which are not determinable at this time, are as follows:

	\$	
Year ending December 31,2019	81	
2020	4,286	
2021	90	
2022	78	
2023	31	
	2018	2017
	\$	\$
Balance – Beginning of year	6,537	6,149
Borrowings, net of \$nil (2017 - \$nil) allocated to government assistance	300	_
Accreted interest	1,385	966
Revaluation of long-term debt	_	(506)
Repayment of debt	(72)	(72)
Balance – End of year	8,150	6,537
Less: Current portion	81	61
Non-current portion	8,069	6,476

The Corporation is in compliance with its debt covenants.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

### 12 Share capital

#### Authorized

Unlimited number of common shares and preferred shares, issuable in series, all without par value.

	Number of	
	common shares	Amount
		\$
Issued and outstanding		
Balance – December 31, 2016	36,817,328	58,154
Issued for cash consideration, net of issuance costs	2,403,846	8,803
Stock options exercised	316,538	1,265
Warrants exercised	782,229	1,891
Balance – December 31, 2017	40,319,941	70,113
Issued for cash, net of issuance costs	2,246,094	12,895
Stock options exercised	480,754	1,444
DSUs redeemed	29,713	220
Warrants exercised	2,029,899	5,480
Balance – December 31, 2018	45,106,401	90,152

As at December 30, 2018, a total of 1,890,539 shares (December 31, 2017 - 3,771,968) are reserved to meet outstanding stock options, warrants and deferred share units.

On February 15, 2018, the Corporation completed a bought deal public offering of 2,246,094 common shares at a price of \$6.40 per common share, for aggregate proceeds of \$14,375. Total costs associated with the offering were \$1,480, including cash costs for commissions of \$863, professional fees and regulatory costs of \$285, and 134,766 compensation warrants issued as commissions to the agents valued at \$332. Each compensation warrant entitles the holder to acquire one common share of the Corporation at an exercise price of \$6.53 for a period of 24 months, expiring on February 15, 2020.

On June 21, 2017, the Corporation completed a bought deal public offering of 2,403,846 common shares at a price of \$4.16 per common share, for aggregate proceeds of \$10,000. Total costs associated with the offering were \$1,197, including cash costs for commissions of \$600, professional fees and regulatory costs of \$391, and 144,231 compensation warrants issued as commissions to the agents valued at \$208. Each compensation warrant entitles the holder to acquire one common share of the Corporation at an exercise price of \$4.22 for a period of 24 months, expiring on June 21, 2019.

The per share amounts disclosed above reflect the retrospective application of the share consolidation completed May 2, 2018 (see note 22).

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Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 13 Contributed surplus

	Amount \$
Contributed surplus	
Balance – December 31, 2016	6,961
Share-based compensation – stock options vested	571
Warrants expired	_
Stock options exercised	(1,157)
Balance – December 31, 2017	6,375
Share-based compensation – stock options vested	1,182
Stock options exercised	(1,053)
Balance – December 31, 2018	6,504

### Stock options

The Board of Directors of the Corporation has established a stock option plan (the "Plan") under which options to acquire common shares of the Corporation are granted to directors, employees and other advisors of the Corporation. The maximum number of common shares issuable under the Plan shall not exceed 3,437,500, inclusive of all shares presently reserved for issuance pursuant to previously granted stock options. If any option expires or otherwise terminates for any reason without having been exercised in full, or if any option is exercised in whole or in part, the number of shares in respect of which option expired, terminated or was exercised shall again be available for the purposes of the Plan.

Stock options are granted with an exercise price determined by the Board of Directors, which is not less than the market price of the shares on the day preceding the award. The term of the option is determined by the Board of Directors, not to exceed ten years from the date of grant, however, the majority of options expire in five years. The vesting of the options is determined by the Board and beginning, January 1, 2018, is typically 33 1/3% every year after the date of grant.

In the event that the option holder should die while he or she is still a director, employee or other advisor of the Corporation, the expiry date shall be 12 months from the date of death of the option holder, not to exceed the original expiry date of the option. In the event that the option holder ceases to be a director, employee or other advisor of the Corporation other than by reason of death or termination, the expiry date of the option shall be the 90th day following the date the option holder ceases to be a director, employee or other advisor of the Corporation, not to exceed the original expiry date of the option.

The fair values of stock options are estimated using the Black-Scholes option pricing model. During the year ended December 31, 2018, 619,505 stock options (2017 - 266,813) with a weighted average exercise price of \$6.65 (2017 - \$2.40) and a term of five years (2017 - five years), were granted to employees and consultants. The expected volatility of these stock options was determined using historical volatility rates and the expected life was determined using the weighted average life of past options issued. The value of these stock options has been estimated at \$2,378 (2017 - \$425), which is a weighted average grant date value per option of \$3.84 (2017 - \$1.60), using the Black-Scholes valuation model and the following weighted average assumptions:

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 13 Contributed surplus (continued)

Stock options (continued)

	2018	2017
Risk-free interest rate	2.02%	2.70%
Expected volatility	77%	98%
Expected life (years)	4.2	4.4
Forfeiture rate	5%	4%

Option activity for the year ended December 31, 2018 and 2017 was as follows:

		2018		2017
		Weighted		Weighted
		average		average
	Number	exercise price	Number	exercise price
		\$		\$
Outstanding - Beginning of year	1,498,052	2.26	1,961,791	2.23
Granted	619,505	6.65	266,814	2.40
Exercised	$(626,875)^{1}$	2.18	$(627,256)^{1}$	2.21
Expired	(5,569)	1.80	(64,068)	2.19
Forfeited	(10,636)	4.92	(39,229)	2.37
Outstanding - End of year	1,474,477	4.12	1,498,052	2.26

<sup>1</sup> Of the 626,875 (2017 - 627,256) options exercised, 443,748 (2017 - 548,833) elected the cashless exercise, under which 297,626 shares (2017 - 238,130) were issued. These options would have otherwise been exercisable for proceeds of \$975 (2017 - \$1,227) on the exercise date.

The weighted average exercise price of options exercisable at December 31, 2018 is \$4.09 (2017 - \$2.25). The maximum number of common shares issuable under the Corporation's stock option plan shall not exceed 3,437,500, inclusive of all shares presently reserved for issuance pursuant to previously granted stock options.

At December 31, 2018, the following options were outstanding:

	Options outstanding				Options exercisable	
Exercise price range \$	Number	Weighted average exercise price \$	Weighted average remaining contractual life (years)	Number	Weighted average exercise price \$	Weighted average remaining contractual life (years)
1.98 - 2.29	285,939	2.08	2.16	285,939	2.08	2.16
2.30 - 2.38	259,377	2.37	1.48	259,377	2.37	1.48
2.39 - 3.01	310,125	2.50	2.63	310,125	2.50	2.63
3.02 - 6.72	400,625	6.36	4.17	5,312	3.20	0.25
6.73 - 7.39	218,411	7.09	4.17		-	_
	1,474,477	4.12	2.98	860,753	2.33	2.11 (20)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 14 Warrants

Warrant activity for the years ended December 31, 2018 and 2017 was as follows:

			2018			2017
		Weighted			Weighted	
		average			average	
		exercise			exercise	
	Number	price	Amount	Number	price	Amount
		\$	\$		\$	\$
Opening balance	2,087,598	2.46	674	2,725,596	2.27	660
Granted	134,766	6.53	332	144,231	4.22	208
Exercised	(2,029,905)	2.41	(591)	(782,229)	2.18	(194)
Closing balance	192,459		415	2,087,598		674

The fair values of warrants are estimated using the Black-Scholes option pricing model. The weighted average grant date value per warrant of warrants issued in 2018 was \$2.47 (2017 - \$1.44), determined using the Black-Scholes valuation model and the following weighted average assumptions:

	2018	2017
Risk-free interest rate	1.84%	2.70%
Expected volatility	68%	72%
Expected dividend yield	_	_
Expected life (years)	2	2
		(21)
		(21)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 15 Deferred income taxes

# a) Reconciliation of total tax recovery

The effective rate on the Corporation's loss before income tax differs from the expected amount that would arise using the statutory income tax rates. A reconciliation of the difference is as follows:

	2018 \$	2017 \$
Loss before income taxes	(21,935)	(12,027)
Income tax rate	30.0 %	31.0 %
	(6,581)	(3,728)
Effect on income taxes of:		
Non-deductible share-based compensation	507	533
Unrecognized deductible temporary difference and carry forward amounts and experimental development expenditures	6,040	3,184
Other non-deductible items	34	11
Income tax recovery	-	_

# b) Deferred income tax

The significant components of the Corporation's deferred income tax are as follows:

	2018	2017
	\$	\$
Deferred income tax liabilities:		
Intangibles	_	_
Deferred income tax assets:		
Non-capital losses		_
Net deferred income tax liability	_	_

The following reflects the balance of temporary differences for which no deferred income tax asset has been recognized:

	2018	2017
	\$	\$
Non-capital losses	63,230	43,719
Scientific research and experimental development expenditures	20,096	13,906
Non-refundable investment tax credits	3,832	2,801
Deductible share issuance costs	2,028	1,846
Long-term debt	7,612	6,243
Property and equipment	725	1,144

(22)

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

### 15 Deferred income taxes (continued)

# c) Non-capital losses

As at December 31, 2018, the Corporation had approximately \$63,230 in losses available to reduce future taxable income. The benefit of these losses has not been recorded in the accounts as realization is not considered probable. These losses may be claimed no later than:

	\$
For the year ending December 31, 2025	1,000
2026	1,100
2027	1,470
2028	1,770
2029	660
2030	2,640
2031	5,180
2032	4,110
2033	4,270
2034	3,400
2035	7,560
2036	5,100
2037	6,700
2038	18,270
	63,230

# d) Scientific research and experimental development expenditures

The Corporation has approximately \$20,096 of unclaimed scientific research and development expenditures, which may be carried forward indefinitely and used to reduce taxable income in future years. The potential income tax benefits associated with the unclaimed scientific research and experimental development expenditures have not been recognized in the accounts as realization is not considered probable.

# e) Non-refundable investment tax credits

The Corporation also has approximately \$3,832 in non-refundable federal investment tax credits which may be carried forward to reduce taxes payable. These tax credits will be fully expired by 2038. The benefit of these tax credits has not been recorded in the accounts as realization is not considered probable.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

### 16 Capital management

The Corporation views capital as the sum of its cash and cash equivalents, long-term debt and equity. The Corporations' objectives when managing capital is to safeguard its ability to continue as a going concern in order to provide an adequate return to shareholders and maintain a sufficient level of funds to finance its research and development activities, general and administrative expenses, working capital and overall capital expenditures, including those associated with patents and trademarks. To maintain or adjust the capital structure, the Corporation may attempt to issue new shares, issue new debt, acquire or dispose of assets, all of which are subject to market conditions and the terms of the underlying third party agreements. The Corporation is not subject to any regulatory capital requirements imposed.

	2018	2017
	\$	\$
Total long-term debt	8,150	6,537
Less: Cash and cash equivalents	(14,895)	(14,909)
Net debt	(6,745)	(8,372)
Equity	4,317	6,343
Total capital	(2,428)	(2,029)

The Corporation is in compliance with its debt covenants.

#### 17 Financial instruments

#### Fair value of financial instruments

Financial instruments are defined as a contractual right or obligation to receive or deliver cash on another financial asset.

The following table sets out the approximate fair values of financial instruments as at the consolidated statements of financial position date with relevant comparatives:

		2018		2017
	Carrying	Carrying		
	value	Fair value	value	Fair value
	\$	\$	\$	\$
Cash and cash equivalents	14,895	14,895	14,909	14,909
Amounts receivable	780	780	110	110
Accounts payable and accrued liabilities	7,557	7,557	2,741	2,741
Amounts due to directors	49	49	21	21
Long-term debt	8,150	8,150	6,537	6,537

Assets and liabilities, such as commodity taxes, that are not contractual and that arise as a result of statutory requirements imposed by governments, do not meet the definition of financial assets or financial liabilities and are, therefore, excluded from amounts receivable and accounts payable.

Notes to the Consolidated Financial Statements

#### For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 17 Financial instruments (continued)

#### Fair value of financial instruments (continued)

Fair value of items, which are short-term in nature, have been deemed to approximate their carrying value. The above noted fair values, presented for information only, reflect conditions that existed only at December 31, 2018, and do not necessarily reflect future value or amounts which the Corporation might receive if it were to sell some or all of its assets to a willing buyer in a free and open market.

The fair value of the long-term debt is estimated based on the expected interest rates for similar borrowings by the Corporation at the consolidated statements of financial position dates. At December 31, 2018, the fair value is estimated to be equal to the carrying amount.

### Risk management

The Corporation, through its financial assets and liabilities, has exposure to the following risks from its use of financial instruments: interest rate risk; credit risk; liquidity risk; and currency risk. Management is responsible for setting acceptable levels of risk and reviewing risk management activities as necessary.

### a) Interest rate risk

The Corporation has limited exposure to interest rate risk on its lending and borrowing activities. The Corporation has a significant loan in which the interest rate is dependent on the cost of funds from the lender plus 1%. This interest rate is fixed at the time that each loan disbursement is made, resulting in limited variability to the interest rate. The total amount drawn down on the loan as at December 31, 2018 is \$5,000 (2017 - \$5,000) and the Corporation is required to make interest payments in fiscal 2019 of \$148.

The Corporation has an interest-free loan that is repayable over 84 months, resulting in required principal debt payments in fiscal 2019 of \$67, and also has a loan which has a fixed interest rate of 8% per annum resulting in interest payments in 2019 of \$21. The remaining outstanding debt as at December 31, 2018 is interest-free, only becoming repayable when revenues are earned. The Corporation is required to make principal debt payments in fiscal 2019 of \$5.

#### b) Credit risk

Credit risk arises from cash and cash equivalents and amounts receivable. The Corporation invests excess cash in high-interest savings accounts or in highly liquid temporary investments of Schedule 1 Canadian Banks. The credit risk of cash and cash equivalents is limited because the counter-parties are banks with high credit ratings assigned by international credit rating agencies.

The total of amounts receivable disclosed in the consolidated statements of financial position as at December 31, 2018 of \$1,337 (2017 - \$261) is comprised mainly of current period advances due to the Corporation for government assistance programs and cost-recoveries from third party partners, as well as sales taxes recoverable. If required, the balance is shown net of allowances for bad debts, estimated by management based on prior experience and their assessment of the current economic environment. Historically, there have been no collection issues and the Corporation does not believe it is subject to any significant concentration of credit risk.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

#### 17 Financial instruments (continued)

### Risk management (continued)

# c) Liquidity risk

Liquidity risk represents the possibility that the Corporation may not be able to gather sufficient cash resources when required and under reasonable conditions to meet its financial obligations.

Since the Corporation's inception, operations have been financed through the sale of shares, issuance of debt, revenue and cost-recoveries from license agreements, interest income on funds available for investment, government assistance and income tax credits. The Corporation has incurred significant operating losses and negative cash flows from operations since inception and has an accumulated deficit of \$92,754 as at December 31, 2018.

While the Corporation has \$14,895 in cash and cash equivalents at December 31, 2018, it continues to have an ongoing need for substantial capital resources to research and develop, commercialize and manufacture its products and technologies. The Corporation is currently not yet receiving a significant ongoing revenue stream from its license agreements, nor can it be certain that it will receive significant revenue from these agreements before additional cash is required. As a result, there can be no assurance that the Corporation will have sufficient capital to fund its ongoing operations, and develop or commercialize any of its products without future financing.

The following table outlines the contractual maturities for long-term debt repayable based on a percentage of revenues for the Corporation's financial liabilities. The long-term debt is comprised of the contributions received described in note 11, less amounts that have been repaid as at December 31, 2018:

	Total	Year 1	Years 2 to 3	Years 4 to 5	After 5 years
	\$	\$	\$	\$	\$
Accounts payable and accrued liabilities	7,575	7,575	_	_	_
Amounts due to directors	49	49	_	_	_
Short term and low value leases	66	18	27	21	
Long-term leases	2,398	275	533	518	1,072
Long-term debt	15,612	264	5,324	142	9,882
	25,700	8,181	5,884	681	10,954

The above amounts include interest payments, where applicable.

### d) Currency risk

The Corporation incurs some revenue and expenses in U.S. dollars and, as such, is subject to fluctuations as a result of foreign exchange rate variation. The Corporation does not have in place any tools to manage its foreign exchange risk, as these U.S. dollars transactions are not significant to overall operations.

Foreign exchange loss of \$139 for the year ended December 31, 2018 (2017, foreign exchange gain - \$10) are included in general and administrative expenses. If the foreign exchange had been 1% higher/lower, with all other variables held constant, it would have had an immaterial impact on the foreign exchange gain/loss.

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

# 18 Commitments

The minimum annual payments under long-term lease agreements for office premises and equipment expiring over the next five years are as follows:

	<b>\$</b>
Year ending December 31, 2019	257
2020	253
2021	253
2022	251
2023	247

On July 12, 2010, the Corporation entered into a License Agreement with Merck KGaA to in-license EMD 640744, an investigational therapeutic Survivin-based cancer antigen designed to target multiple solid tumors and hematological malignancies. Should the Corporation's research using these antigens continue and prove successful through clinical trials and on to commercialization, the Corporation would be required to pay certain future milestones and royalty payments along the way. The likelihood and timing of these payments is not known at this time.

# 19 Related party transactions

During the year ended December 31, 2018, there were no related party transactions (2017 - \$nil).

# 20 Expenses by nature

	2018	2017
	\$	\$
Salaries, wages and benefits	5,945	4,025
Other research and development expenditures, including clinical costs	8,398	3,045
Professional and consulting fees	1,987	1,231
Travel	550	225
Office, rent and telecommunications	586	414
Insurance	444	81
Marketing, communications and investor relations	1,370	1,154
Depreciation	325	140
Stock-based compensation	1,182	571
Deferred share unit compensation	508	1,147
Other	800	329
Accreted interest	1,385	966
Research and development tax credits	(1,027)	(537)
Government assistance	(35)	(542)
	22,418	12,249

Notes to the Consolidated Financial Statements

# For the years ended December 31, 2018 and 2017

(Expressed in thousands of Canadian dollars except for per share amounts)

### 21 Compensation of key management

Key management includes the Corporation's Directors, the Chief Executive Officer, the Chief Financial Officer, and the Chief Medical Officer. Compensation awarded to key management is summarized as follows:

	2018	2017
	\$	\$
Salaries and other benefits	1,651	1,329
Stock-based compensation	2,121	792
	3,772	2,121

# 22 Share consolidation

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

# 23 Subsequent event

On March 6, 2019, the Corporation completed the March 2019 Public Offering, issuing an aggregate of 4,900,000 common shares at a price of \$5.45 per common share, raising gross proceeds of \$26.7 million. On March 11, 2019, the underwriters partially exercised their option to purchase common shares, resulting in the issuance of 504,855 common shares of the Corporation at a price of \$5.45 per share for additional gross proceeds of approximately \$2.75 million. As a result of the exercise of this option, the Corporation has raised total gross proceeds of approximately \$29.46 million before deducting the underwriting commissions and offering expenses, which are estimated to be \$2 million.

(28)



# Management's Report on Financial Position and Operating Results

For the year ended December 31, 2018

#### LETTER TO SHAREHOLDERS

Dear Fellow Shareholders,

IMV made significant advancements in 2018. Foundational changes, including shifting the name of the corporation to IMV and listing on Nasdaq, are enabling us to access to a larger pool of investors and allow us to better communicate our value proposition globally. However, the evolution of our clinical program is an even more important accomplishment: we entered into a collaboration with Merck across five tumor types; opted, based on DeCidE clinical data, to pursue DPX-Survivac as a monotherapy in ovarian cancer; and published studies clearly demarcating the T cell-activating novel mechanism of action of our DPX platform. With these milestones achieved, we are looking forward to a strong 2019 in which we will continue to advance our pipeline, drive value for investors, and support unmet patient needs.

IMV anticipates continued progress on several important milestones over the next year, which include:

- Topline data from the corporation-sponsored phase 2 monotherapy trial in ovarian cancer;
- Topline data from the combination phase 2 trial with Merck in diffuse large B-cell lymphoma (DLBCL); and
- Preliminary data from the phase 2 basket trial collaboration with Merck.

#### 2018 Highlights

#### Clinical Programs - DeCidE1/2

- Updated phase 1b data shared via an oral presentation at the 2018 ASCO Meeting and topline data from the first two phase 1b dosing cohorts highlighted at the 2018 ESMO-IO Meeting.
  - Based on these data, IMV opted to develop DPX-Survivac as a monotherapy in certain ovarian cancer patients defined by BTB (baseline tumor burden), an indication of tumour size.
  - · Additional analyses were conducted that correlated DPX-Survivac's novel MOA the level of T cell infiltration with clinical response.
- Met with the U.S. Food and Drug Administration (FDA) and submitted an updated DECIDE trial protocol. In addition, IMV discussed with the Agency the need for
  accelerated approvals in advanced ovarian cancer and received guidance on clinical design considerations for different lines of therapy and platinum-sensitive and
  resistant patients.

### Additional Clinical Highlights

- First clinical data obtained from the combination of DPX-Survivac and mCPA with Keytruda® (SPiReL trial), which came from an investigator-sponsored phase 2 trial in patients with persistent or recurrent/refractory DLBCL; data from the combination signaled significant anti-cancer activity in three of the first four evaluable patients as well as a tolerable safety profile.
- Announced a collaboration with Merck in a phase 2 basket trial evaluating the safety and efficacy of DPX-Survivac, low- dose cyclophosphamide, and Keytruda® (pembrolizumab) in patients with select advanced or recurrent solid tumors across five different indications: bladder, liver (hepatocellular carcinoma), ovarian, or non-small cell lung (NSCLC) cancers as well as tumors with the microsatellite instability high (MSI-H) biomarker.

# **R&D** Milestones

- Research published in the Journal of Biomedical Science demonstrated the association between IMV's proprietary immune-targeted delivery technology and enhanced efficacy in slowing tumor progression.
- New data presented at the 2018 AACR Meeting highlighted the novel MOA underscoring the Corporation's T cell-activating DPX technology and the potential for heightened anti-cancer activity of combination therapies based on IMV's proprietary delivery platform.

# **Operational Highlights:**

- Completion of two public offerings: In February 2018 and in March 2019 for a total of approximately \$43.9 million.
- Nasdaq listing and share consolidation: IMV's common shares commenced trading on the Nasdaq Stock Market LLC on June 1, 2018.
- Corporate name change: Because the MOA of DPX-based candidates signals a new class of immunotherapies that is differentiated from vaccines, IMV leadership changed the Corporation's name from Immunovaccine to IMV to better reflect the true potential of its therapeutic candidates.
- Addition of Julia P. Gregory and Dr. Markus Warmuth to the Corporation's Board of Directors: Ms. Gregory is a seasoned biotechnology executive, having served as Chief Executive Officer and of ContraFect Corporation and the immuno- oncology company Five Prime. Dr. Warmuth brings to the Board more than 20 years of drug discovery experience with a strong focus on targeted therapy and immuno-oncology programs.
- Expansion of management team: IMV named Joseph Sullivan as the Corporation's first Senior Vice-President, Business Development. Mr. Sullivan brings with him over 25 years of global pharmaceutical experience with Merck & Co. Inc. to IMV.
- Opening of new facility in Dartmouth, Nova Scotia: Nearly tripling the functional workspace, the new premises features upgraded facilities and equipment as well as increased laboratory size to support long-term growth.

We are still making great progress and are grateful for the continued support of our partner Merck, as well as our shareholders and our employees, and look forward to the opportunities throughout 2019, and beyond.

200

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, 2018 ("Fiscal 2018"), with information compared to the year ended December 31, 2017 ("Fiscal 2017"), 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, 2018 and December 31, 2017.

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 21, 2019, the date when the Board of Directors approved the Corporation's audited annual consolidated financial statements for the year ended December 31, 2018, 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 Canadian dollars.

Additional information regarding the business of the Corporation, including the Annual Information Form of the Corporation for the year ended December 31, 2018 (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 exploration of opportunities to maximize shareholder value as part of the ordinary course of its business through collaborations, strategic partnerships, and other transactions with third parties;
- The Corporation's plans for the research and development of certain product candidates;
- The Corporation's strategy for protecting its intellectual property;
- The Corporation's ability to identify licensable products or research suitable for licensing and commercialization;
- The Corporation's ability to obtain licences on commercially reasonable terms;
- The Corporation's plans for generating revenue;
- The Corporation's plans for future clinical trials; and
- The Corporation's hiring and retention of skilled staff.

Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could

cause actual results to differ materially from the results discussed in the forward-looking statements, including, but not limited to, the factors discussed in the AIF, under the heading "Risk Factors and Uncertainties." Although the forward-looking statements contained in this MD&A are based upon what management of the Corporation believes are reasonable assumptions, the Corporation cannot provide any assurance to investors that actual results will be consistent with these forward-looking statements and should not be unduly relied upon by investors.

Actual results, 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;
- The Corporation's ability to protect its intellectual property;
- The Corporation's ability to manufacture its products and to meet demand; and
- · Regulatory approvals.

These statements reflect management's current views and beliefs and are based on estimates, assumptions, and information currently available to, and considered reasonable by, management. The information contained herein is dated as of March 21, 2019, the date of the Board's approval of the Fiscal 2018 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 and other serious diseases. IMV is headquartered in Dartmouth, Nova Scotia and had 51 full time employees as at December 31, 2018. 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 and delivery of active ingredients into immune cells and lymph nodes. It enables the programming of immune cells *in vivo*, which are aimed at generating powerful new synthetic therapeutic capabilities. DPX norelease MOA can be leveraged to generate "first-in-class" T cell therapies with the potential to be transformative in the treatment of cancer.

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 and antibodies); and provides long term stability as well as low cost of goods. 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"). 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. It is comprised of five minimal MHC class I peptides to activate naïve T cells against survivin.

Survivin is a well characterized and recognized tumour associated antigen known to be expressed during fetal development and across most tumour 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 tumour lines used in the National Cancer Institute's cancer drug screening program and documented in the literature to be overexpressed in more than 20 indications.

Foremost, the Corporation's clinical strategy is to establish monotherapy activity of DPX-Survivac in order to increase value, de-risk clinical development, and to target late stage unmet medical needs for a shorter path to clinical demonstration and first regulatory approval. In addition we are evaluating DPX Survivac in combination with Merck's KEYTRUDA® checkpoint inhibitor in multiple oncology targets.

The Corporation is focusing on a fast path to market in ovarian and diffuse large B cell lymphoma ('DLBCL") cancers and on repeating its clinical demonstrations of activity in other indications.

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 with sum of base line target lesions per Response Evaluation Criteria in Solid Tumours ("Recist criteria") less than five centimeters;
- 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 tumours in bladder, liver (hepatocellular carcinoma), ovarian, or non-small-cell lung (NSCLC) cancers, as well as tumours shown to be positive for the microsatellite instability high (MSI-H) biomerker.

In infectious disease vaccine applications, the Corporation has completed a demonstration phase 1 clinical trial with a target against the respiratory syncytial virus ("RSV"). The Corporation also has a commercial licensing agreement with Zoetis for the development of two cattle vaccines and is also conducting several research and clinical collaborations, including a collaboration with the Dana-Farber Cancer Institute ("Dana-Farber") for Human Papillomavirus ("HPV") related cancers and with Leidos, Inc. ("Leidos") in the United States for the development of vaccine candidates for malaria and the Zika virus.

The common shares of the Corporation are listed on the Nasdaq Stock Market LLC and on the Toronto Stock Exchange 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. The Corporation's lead product candidate, DPX-Survivac, has demonstrated the ability to induce prolonged T cell activation leading to tumour regressions in advanced ovarian cancer and is currently being used in clinical trials as a monotherapy and in combination with Merck's KEYTRUDA® checkpoint inhibitor.

Foremost, the Corporation's clinical strategy is to establish monotherapy activity of DPX-Survivac in order to increase value, de-risk clinical development, and to target late stage unmet medical needs for a shorter path to clinical demonstration and first regulatory approval, and to establish strategic partnerships to support further development and commercialization. In addition, we are evaluating DPX Survivac in combination with Merck's KEYTRUDA® checkpoint inhibitor in multiple oncology targets.

The Corporation is focusing on a fast path to market in ovarian and diffuse large DLBCL cancers and on repeating its clinical demonstrations of activity in other 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 that the platform may allow for the development of enhanced vaccines for a wide range of infectious diseases by generating a stronger and more durable immune response than is possible 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 and delivery of active ingredients into immune cells and lymph nodes. IMV is exploiting this MOA to pioneer a new class of immunotherapies that represents a paradigm shift from current approaches. By not releasing the active ingredients at the site of injection, it bypasses the steps involved in conventional immune "native responses," such as vaccines, and enables access and programming of immune cells *in-vivo* to generate new "synthetic" therapeutic capabilities. The DPX no-release MOA can be leveraged to generate "first-in-class" T cell therapies with the potential to be transformative 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 tumour cells. DPX can induce prolonged, target-specific, and polyfunctional T cell activation, which are postulated to be required for effective tumour control.

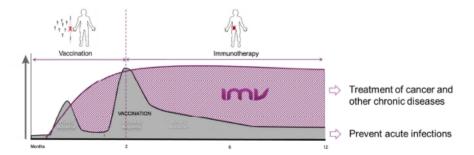


Figure 1: Illustrative representation of IMV's DPX new MOA

The DPX platform is based on active ingredients formulated in lipid nanoparticles and, after freeze drying, suspended directly into oil. DPX-based products are stored in the 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 of 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 it is comprised of five minimal MHC class I peptides to activate naïve T cells against survivin.

Survivin is a well characterized and recognized tumour associated antigen known to be expressed during fetal development and across most tumour 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 tumour 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.

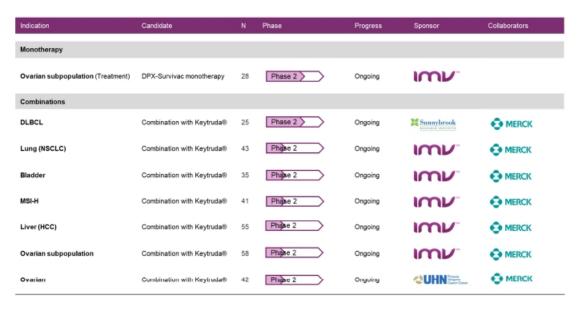
Cancer	Survivin %	
Ovarian	90	
Breast	90	
Melanoma	90	
Lung	53	
Colorectal	54	
Gastric	94	
Kidney	23-82	
Glioblastoma	80	
ALL	70	
CML	70	
MDS	90	
DLBCL	60	

Figure 2: 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 Trials**



### DPX- Survivac - Ongoing Clinical Trials

# **Monotherapy**

Ovarian subpopulation - DeCidE1 phase 2

The DeCidE1 (DPX-Survivac with low dose intermittent cyclophosphamide) phase 2 study is an open label safety and efficacy study for individuals with advanced platinum-sensitive and resistant ovarian cancer with sum of base line target lesions per Recist criteria less than five centimeters. Primary and secondary end points include:

- · Safety profile;
- Objective Response Rate (ORR) and Duration of Response (DOR) using Recist 1.1 criteria;
- · Induction of systemic survivin-specific T-cells in the blood; and
- Induction of T-cell infiltration into tumours.

The objective is to enroll up to 28 patients in this study.

In December, 2018, IMV met with the U.S. Food and Drug Administration (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 approvals 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.

Drug	Registrational Clinical Trials	Indication	Base for approval
Olaparib (Lynparza) Approved December 2014	Single arm, open label, Phase 2 (Study 42)	Germline BRCA mutation ≥3 prior lines of chemotherapy	N=137 ORR: 34% - platinum-resistant: 30% mDoR: 7.9 mo
Rubraca (Rucaparib) Breakthrough in April 2015 Approved December 2016	Single arm, open label, Phase 2 (Study 10 and ARIEL2)	Germline and/or somatic BRCA mutation ≥2 prior lines of chemotherapy	N=108 ORR: 42% platinum-resistant: 25% mDoR: 6.7 mo-9.2 mo

Figure 3: 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 objective response rate (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 tumour burden (BTB).

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 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 (Incyte's epacadostat, Merck's Keytruda, and Pfizer/Merck KGaA's Bavencio) are unlikely to proceed into registration trials based on the published results available:

#### KEYTRUDA **Epacadostat** BAVENCIO® (pembrolizumab) rejector 100 rec Kristeleit et Al ,Gynecologic Oncology 2017 ASCO 2018 Pfizer/Merck KGaA, Nov. 19, 2018: Avelumah Misses Primary Endpoints in Phase III Ovarian Cancer Trial – ORR 3.7% · No activity ORR 8% - longest duration of response reported in 376 patients 18.6 months 556 patients with platinum-resistant or -refractory ovarian cancer - up to 3 lines of systemic therapy Antitumor Activity: Confirmed Objective Response Rate Based on RECIST v1.1 per BICR Avelumab alone or in combination with pegylated liposomal doxorubicin (PLD), a type of chemotherapy, compared with PLD did not meet the prespecified primary endpoints of overall survival (OS) or progression-free survival (PFS) Cohorts A+B All-corners 8.0 (5.4 - 11.2) 37.2 (32.3 - 42.3) The ORR was 13.3% (95% CI, 8.8%-19.0%) for avelumab combined with PLD, 3.7% (95% CI, 1.5%-7.5%) for single-agent avelumab, and 4.2% (95% CI, 1.8%-8.1%) for PLD alone. Partial response n (%) 23 (6.1) Stable disease n (%) 215 (57.2) ponders (n)

Figure 4: Recurrent ovarian cancer immunotherapy competitive landscape

82(33+(18.6))

Duration of response, median months (range

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 FDA to finalize the design of a potential pivotal trial based on ORR and DOR.

IMV expects to provide a clinical update at ASCO and investigators are also planning to submit the study findings for scientific publication.

The Corporation's clinical strategy with this trial is to establish monotherapy activity 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 currently 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 are estimated at \$2,500,000 of which \$1,000,000 is expected to occur in 2019.

#### Combinations

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

This phase 2 study is a triple-combination immunotherapy in patients with measurable or recurrent diffuse large B-cell lymphoma led by Sunnybrook Research Institute. This investigator sponsored trial, announced initially in May 2017, is designed to evaluate the safety and efficacy of DPX-Survivac, Merck's pembrolizumab, and low-dose cyclophosphamide. Primary and secondary end points include:

- · Safety profile; and
- ORR and DOR using Recist 1.1 criteria.

The non-randomized, open label study is expected to enroll 25 evaluable participants at five centers in Canada.

Researchers conducting the investigator sponsored study are testing the novel immunotherapy combination in patients whose DLBCL expresses survivin, a tumour antigen highly expressed in 60 percent of DLBCL patients. DPX Survivac stimulates the immune system to produce T cell responses targeting survivin.

On November 8, 2017, the Corporation announced that Health Canada had granted Sunnybrook Research Institute regulatory clearance to begin recruiting patients. On March 28, 2018, the Corporation announced that the first patient had been treated.

On September 18, 2018, IMV announced details of the initial data from this clinical trial. The preliminary data included assessments of safety and clinical activity (based on modified Cheson criteria<sup>i</sup>) for the first four evaluable patients who have completed their first CT scan after the start of treatment. The data showed that:

- Two of the first four evaluable participants showed tumour regressions at the first on-treatment CT scan:
  - The first enrolled participant demonstrated a tumour regression of 48% at first on-treatment scan; and
  - The second participant demonstrated a partial response (PR) via a tumour regression of 66% at first on-treatment scan.
- Preliminary data from the third participant demonstrated stable disease.
- · The other participant had early disease progression less than two months following treatment initiation and was discontinued from the study.
- The combination therapy appears to demonstrate an acceptable safety profile, with no serious adverse events reported to date.

The Corporation expects to disclose topline results around the end of the second quarter of 2019 once provided by the investigator. The Corporation currently anticipates that, in addition to general clinical expenses, which are distributed amongst the

i Cheson, B.D.,, Pfistner, B., Juweid, M.E., Gascoyne, R.D., Specht, L., Horning, S.J. and Diehl, V. (2007). Revised Response Criteria for Malignant Lymphoma. Journal of Clinical Oncology, 25(5) DOI: 10.1200/JCO.2006.09.2403

various clinical projects, its share of the cost to complete this study will be approximately \$1,500,000, of which \$1,000,000 is expected to be spent in 2019.

Phase 2 basket trial in 5 indications with Merck

On September 11, 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, in combination with low dose cyclophosphamide, and Merck's anti-PD-1 therapy, KEYTRUDA® (pembrolizumab), in patients with select advanced or recurrent solid tumours.

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 tumours shown to be positive for the microsatellite instability high (MSI-H) biomarker. Investigators plan to enroll more than 200 patients across five indications at multiple medical centers in Canada and the United States.

The American Society of Clinical Oncology (ASCO) defines a basket clinical study as a trial that investigates the effects of a drug regimen in multiple tumour 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, low dose cyclophosphamide, and pembrolizumab in advanced recurrent cancers.

The Corporation expects to disclose preliminary data in the second half of 2019 and currently anticipates that, in addition to general clinical expenses, which are distributed amongst the various clinical projects, \$5,000,000 is estimated to be spent in 2019 with a total of \$12,600,000 for the safety lead-in for this trial.

Phase 2 clinical trial in ovarian cancer with Merck (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 will conduct the phase 2 non-randomized, open-label trial designed to evaluate the potential anti-tumour activity of the combination of pembrolizumab, DPX-Survivac, and low-dose cyclophosphamide. It is expected to enroll 42 subjects with advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer. The study's primary objective is to assess overall response rate. Secondary study objectives include progression free survival rate, overall survival rate, and potential side effects, over a five-year period. At this stage, the Corporation has no specific plan on the next steps after this trial as it will have to be assessed with its partner based on the clinical trial results.

The Corporation 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, expected to be spent in 2019, are estimated at \$400,000.

## Clinical Trial Development - Completed Trials

Phase 1b Clinical trial in ovarian cancer with Incyte Corporation ("Incyte")

In June 2015, the Corporation announced it had entered into a non-exclusive clinical trial collaboration with Incyte to evaluate the combination of DPX-Survivac with Incyte's investigational oral IDO1 inhibitor epacadostat. This trial was an open-label, phase 1b study to evaluate the safety, tolerability, and efficacy of the combination in platinum resistant or sensitive ovarian cancer patients who are at high risk of recurrence. All patients enrolled in the trial had recurrent ovarian cancer with evidence of progressive disease. The investigational new drug ("IND") application for the study was approved by the FDA and Health Canada in January 2016. The study was initiated on September 8, 2016 and the Corporation announced in March 2017 the first interim data analysis from this clinical study. Based on the interim analysis, the combination therapy appears to have an acceptable safety profile with a single grade 3 and single grade 4 event reported and no SAEs. At the time of the interim analysis, three of four patients exhibited stable disease, while a fourth patient progressed and exited the trial. In addition, researchers observed increased T cell activity in tumours in three of the four patients based on RNA sequencing and indications of early tumour shrinkage in the patient who has been in trial for the longest duration thus far (based on CT scan at day 140).

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

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

Investigators completed enrolment of 10 evaluable patients for the study's first dosing cohort, which consisted of 100 mg epacadostat twice daily (BID), DPX-Survivac, and low-dose cyclophosphamide.

In the first dosing cohort, investigators observed:

- A 30 percent overall response rate, with three out of 10 PRs;
- Two of the patients exhibiting PRs had completed one year of treatment with responses continuing at 12 and 14 months, respectively;
- Four patients (40 percent) had stable disease;
- Two of the patients exhibiting stable disease were still enrolled in the trial, with one of those patients showing a 21 percent tumour reduction; and
- A 70 percent disease control rate (defined as the total number of patients achieving complete response, partial response, and stable disease).

At the time of data cut-off, there were also preliminary data on the first three evaluable patients in the second dosing cohort evaluating the combination of 300 mg BID epacadostat, DPX-Survivac, and low-dose cyclophosphamide. From the first three evaluable patients, two showed stable disease, with one patient showing tumour regression of approximately 25 percent.

On April 24, 2018, the Corporation announced that it entered into an agreement with Incyte Corporation to expand the ongoing clinical trial collaboration. The Companies added a phase 2 component to their ongoing phase 1b combination study.

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

On November 20, 2018, the Corporation announced an amendment to its phase 1b/2 clinical trial evaluating the safety and efficacy of IMV's lead candidate, DPX-Survivac, in combination with either 100 mg or 300 mg of epacadostat in patients with recurrent ovarian cancer.

Review of new data from the phase 1b portion of that clinical trial demonstrate a high response rate and a durable clinical benefit in a subpopulation of patients with a clinical marker predictive of a response to DPX-Survivac and correlated to its novel MOA. New data include:

• Efficacy signals in the subpopulation of patients who received 100 mg dose epacadostat (n=5) included 100% tumour regressions and 100% disease control rate; and 60% of these patients (3/5) reached a best response of a partial response ("PR");

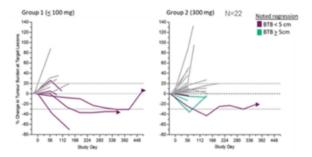


Figure 5: Phase 1b tumour regressions (ESMO-IO 2018)

• Long duration of clinical benefit observed in responders that lasted beyond treatment duration (1 year), median duration of 590 days, including one patient that has passed the two-year mark without disease progression, and prolonged tumour control observed in 3 out 4 PRs in that subpopulation.

	Previous Chemotherapy treatment Best response and PFS	P1b study Best response and PFS	Improvement over previous treatment
601	PR - 4.6 months (Topotecan)	PR - 22 months	+ 17.4 months
606	CR - 15.8 months (Platinum)	PR - 25 months ongoing	+ 9.2 months ongoing
614	SD - 10 months (Platinum)	PR - 16 months ongoing	+ 6 months ongoing
611	CR - 33 months (Platinum)	PR - 5 months (non-target lesion – PI decision)	na

Figure 6: Longer progression-free Survival (PFS) than previous chemotherapy treatment (ESMO 10 2018)

- Clinical benefit correlated to DPX-Survivac's MOA and the primary endpoints of survivin specific T cells in the blood and T cell infiltration into tumours; and
- The safety profile of DPX-Survivac is consistent with the profile observed in the Corporation's previously reported studies.

Based on 300 mg cohort results, IMV and Incyte have agreed to stop dosing patients with epacadostat. IMV will continue the phase 1b/2 trial as a monotherapy study evaluating DPX-Survivac in the recurrent ovarian cancer subpopulation. IMV will inform and work with investigators to appropriately modify the study in a manner consistent with the best interests of each patient.

IMV and Incyte will continue to explore the potential of additional combination studies.

On December 13, 2018, the Corporation announced that investigators shared new positive data from the Corporation's ongoing DeCidE1 (DPX-Survivac with low dose Cyclophosphamide and Epacadostat) clinical trial at the 2018 ESMO Immuno-Oncology Congress. The phase 1b/2 study was evaluating the safety and efficacy of the combination of IMV's lead candidate DPX-Survivac, low dose cyclophosphamide, and 100 mg or 300mg of Incyte's IDO1 enzyme inhibitor epacadostat in patients with advanced recurrent ovarian cancer.

## Key findings included:

- Evidence of a clinical marker based on Baseline Tumour Burden ("BTB"), a measure of tumour size predictive of patient response to DPX-Survivac:
  - 37.5% (12/32) of evaluable study subjects began treatment with a non-bulky disease defined as BTB < 5 cm; and</li>
  - 73% (8/11) of tumour regressions and 80% of clinical responses (4/5) observed in subset of patients with BTB < 5 cm.
- Responders showing prolonged duration of clinical benefits reaching up to more than two years, surpassing the progression- free interval from their previous chemotherapy treatment.

- Robust systemic survivin-specific T cell responses and evidence of survivin-specific T cells tumour infiltration correlated with clinical benefits:
  - o 100% of durable clinical responses correlated with T cell infiltration.
- · Epacadostat triggered inhibition of the conversion of tryptophan into kynurenine that was dose dependent; and
- Cohort demographics were balanced and the combination yielded a tolerable safety profile.

At the time of data cut-off, 53 patients were enrolled in the phase 1b clinical trial, including 14 from the 100 mg epacadostat dosing cohort and 39 from 300 mg epacadostat cohort. Based on 300 mg cohort results, IMV and Incyte agreed to stop dosing patients with epacadostat before completion of the study. Patients who completed at least one CT scan, as required per the trial protocol, were evaluable for response analysis.

71% of patients were evaluable for responses in the 100 mg cohort and 56% in the 300mg dose cohort. At time of data cut-off, 8 participants remained on treatment and were being evaluated for clinical responses.

Efficacy	Total target lesion size < 5 cm		Total target lesion size ≥ 5 cm			
Parameter	100 mg (N=5)	300 mg (N=7)	All (N=12) N (%)	100 mg (N=5)	300 mg (N=15)	All (N=20) N (%)
Regression	5 (100)	3 (42.9)	8 (66.7)	0 (0)	3 (20.0)	3 (15.0)
PR <sup>(1)</sup>	3 (60.0)	1 (14.3)	4 (33.3)	0 (0)	1 (6.7)	1 (5.0)
SD <sup>(2)</sup>	2 (40.0)	4 (57.1)	6 (50.0)	2 (40.0)	10 (66.7)	12 (60.0)
DCR <sup>(3)</sup>	5 (100)	5 (71.4)	10 (83.3)	2 (40.0)	11 (73.3)	13 (65.0)

(ii) Partial Response (PR) is defined as 230% decrease in sum of target lesions Stable Disease (SD) is defined as < 30% decrease and \$ 20% increase in sum of target turnor lesions (ii) Disease Control Rate (DCR) refers to the total number of patients achieving compiler response, partial response, and stable disease.

## 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 necepitopes 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 when provided by UConn Health.

#### DPX-E7

On April 17, 2017, the Corporation announced that the first study participant has been treated in a phase 1b/2 clinical study evaluating an investigational cancer target for HPV (E7) formulated in DPX and in combination with low-dose cyclophosphamide in patients with incurable oropharyngeal, cervical, and anal cancers related to HPV.

Dana-Farber is leading the DPX -E7 study through a \$1.5 million research grant from Stand Up To Cancer and the Farrah Fawcett Foundation to clinically evaluate collaborative translational research that addresses critical problems in HPV-related cancers. The Dana-Farber study is a single center, open label, non-randomized clinical trial that will investigate the safety and clinical efficacy in a total of 44 treated participants. Its primary objectives are to evaluate changes in CD8+ T cells in peripheral blood and tumour tissue, and to evaluate the safety in HLA-A2 positive patients with incurable HPV-related head and neck, cervical, or anal cancers. IMV has the option to produce the DPX -E7 vaccine if it proves successful in the clinical trials.

The Corporation expects to disclose results when provided by Dana-Farber.

## Other Applications

## Product Overview

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

## RSV

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

## Phase 1 clinical trial in RSV

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

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

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

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

On September 27, 2018, IMV announced results of ongoing research to further explore the novel MOA of its vaccine 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 vaccine. Researchers found that IMV's vaccine candidate yielded strong antigen-specific immune responses and a protective effect on disease pathology. The degree of protection was comparable between the two vaccine candidates.

In this study, researchers compared the effects of both the IMV and conventional RSV vaccine approaches among bovines with known RSV infections (the bovine animal model is considered an optimal model of RSV infection). Researchers administered one dose of DPX-bRSV to one cohort; the second received two doses of a subunit RSV bovine vaccine. Researchers measured immune response with an antibody titer test and assessed disease pathology with a lung lesion score and other clinical parameters (such as body temperature changes).

They found SH antibodies in 14 of the 15 subjects 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 vaccine-induced immune response against IMV's novel RSV target - the SH viral protein— with measures of disease protection.

Conventional RSV vaccine candidates 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 vaccine candidate's protective effect. IMV has exclusive worldwide licenses on applications that target the SH ectodomain antigen in RSV. The Corporation intends to explore opportunities to out-license this product to potential partners.

#### Malaria

In 2016, IMV Inc. was awarded a subcontract by Leidos, a health, national security, and infrastructure solutions Corporation, to evaluate IMV's DPX platform for the development of peptide-based malaria vaccine targets. The subcontract is funded through Leidos' prime contract from the USAID to provide vaccine evaluations in the preclinical, clinical, and field stages of malaria vaccine 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 vaccine 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 will conduct 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 cattle vaccines. 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 IMV-formulated vaccine candidates into late-stage testing.

## Licensing Agreements

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

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

## MARKET OVERVIEW

#### Cancer Immunotherapies

Cancer is considered one of the most widespread and prevalent diseases globally. According to Global Cancer Facts & Figures, 4th edition (released in 2018 by the American Cancer Society), it is predicted that new cancer cases will rise to 27.5 million and the number of cancer deaths to 16.3 million by 2040 simply due to the growth of the aging population. Conventional cancer treatment involves surgery to remove the tumour 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, tumours often develop resistance to chemotherapies, thus limiting their efficacy in preventing tumour 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 January 2017, the global immunotherapy drug market is projected to reach USD\$201.52 billion by 2021 from USD\$108.41 billion in 2016, growing at a compound annual growth rate ("CAGR") of 13.5% during the forecast period of 2016 to 2021. The major players operating in the immunotherapy 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 tumours 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 ipilumumab, 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-tumour immune responses that are crucial for tumour control. Monoclonal antibodies that target PD 1 and PD L1 have shown unusual efficacy in cancer patients, with a significant percentage of patients experiencing durable response to these therapies. Several of these compounds are in advanced clinical trials, with one compound, Merck's KEYTRUDA® (pembrolizumab), having received FDA approval in September of 2014 for advanced melanoma patients who have stopped responding to other therapies. Bristol Myers Squibb's compound nivolumab (Opdivo®) has also been approved in the United States and Japan. These therapies have recently been approved for use in other advanced cancers including bladder cancer, non-small cell lung cancer, Hodgkin's Lymphoma, squamous cell carcinoma of the head and neck and stomach cancer. In addition, KEYTRUDA® in particular has been approved for use in cancers with a specific molecular indication irrelevant of cancer type, having been approved in May for use to treat solid tumours 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 tumour types, including colorectal, breast, prostate, and thyroid cancers. Key opinion leaders in the field have indicated that the ideal combination, with checkpoint inhibitors, is likely to be a therapy that drives tumour specific immune responses. These include novel T cell-based therapies. These therapies fit well with checkpoint inhibition therapy because they simultaneously activate strong tumour-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 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 34 patents issued in 10 jurisdictions (United States, Europe, Canada, Australia, Japan, India, Israel, Singapore, China, and, separately. Hong Kong) and 47 pending patent applications in 9 jurisdictions. Taking into account the validations of the European patents, the Corporation's intellectual property portfolio includes 87 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

Key developments and achievements

The Corporation announced:

- On March 6, 2019, that it has completed a public offering of common shares of the Corporation. 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, that the underwriters have partially exercised their over- allotment option to purchase additional common shares, resulting in the issuance of an additional 504,855 common shares of the Corporation at a price of C\$5.45 per share for additional gross proceeds of approximately C\$2.75 million.
  - As a result of the exercise of this option, the Corporation has raised total gross proceeds of approximately C\$29.46 million before deducting the underwriting commissions and offering expenses. 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 tumours in bladder, liver (hepatocellular carcinoma), ovarian, or non-small-cell lung cancers, as well as tumours shown to be positive for the microsatellite instability high biomarker and for general corporate purposes.
- On January 30, 2019, 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 U.S. Food and Drug Administration (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 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.
- 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 objective response rate (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 tumour burden (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 counsel.

On December 13, 2018, investigators shared new positive data from IMV Inc.'s continuing DeCidE1 (DPX-Survivac with low-dose cyclophosphamide and
epacadostat) clinical trial at the 2018 ESMO Immuno-Oncology Congress. The phase 1b/2 study is evaluating the safety and efficacy of the combination of IMV's
lead candidate DPX-Survivac, low- dose cyclophosphamide, and 100 milligrams or 300 mg of Incyte's IDO1 enzyme inhibitor epacadostat in patients with advanced
recurrent ovarian cancer.

In a poster presentation, Dr. Oliver Dorigo, MD, PhD, associate professor of obstetrics and gynecology (oncology), Stanford University Medical Center, who served as the trial's lead investigator and author on the poster, shared topline safety results from 53 enrolled patients and efficacy data from the 32 participants evaluable for immune-related and clinical responses, as well as blood sample and tumour biopsy analyses.

## Key findings included:

- Evidence of a clinical marker based on baseline tumour burden (BTB), a measure of tumour size predictive of patient response to DPX-Survivac;
- o 37.5 pe cent (12/32) of evaluable study subjects began treatment with a non-bulky disease defined as BTB under five centimeters;
- 73 per cent (8/11) of tumour regressions and 80 percent of clinical responses (4/5) observed in subset of patients with BTB less than five centimeters;
- Responders thus far showing prolonged duration of clinical benefits reaching up to more than two years, surpassing the progression-free interval from their
  previous chemotherapy treatment;
- Robust systemic survivin-specific T-cell responses and evidence of survivin-specific T cells tumour infiltration correlated with clinical benefits;
- 100 per cent of durable clinical responses correlated with T-cell infiltration;
- · Epacadostat triggered inhibition of the conversion of tryptophan into kynurenine that was dose dependent; and
- · Cohort demographics were balanced and the combination yielded a tolerable safety profile.

At the time of data cut-off, 53 patients were enrolled in the phase 1b clinical trial, including 14 from the 100 mg epacadostat dosing cohort and 39 from 300 mg epacadostat cohort. Based on 300 mg cohort results, IMV and Incyte agreed to stop dosing patients with epacadostat before completion of the study. Patients who completed at least one CT scan, as required per the trial protocol, were evaluable for response analysis.

Seventy-one percent of patients were evaluable for responses in the 100 mg cohort and 56 percent in the 300 mg dose cohort. At time of data cut-off, eight participants remained on treatment and were being evaluated for clinical responses.

Efficacy				Total target lesion size ≥ 5 cm		
Parameter	100 mg (N=5)	300 mg (N=7)	All (N=12) N (%)	100 mg (N=5)	300 mg (N=15)	All (N=20) N (%)
Regression	5 (100)	3 (42.9)	8 (66.7)	0 (0)	3 (20.0)	3 (15.0)
PR <sup>(1)</sup>	3 (60.0)	1 (14.3)	4 (33.3)	0 (0)	1 (6.7)	1 (5.0)
SD <sup>(2)</sup>	2 (40.0)	4 (57.1)	6 (50.0)	2 (40.0)	10 (66.7)	12 (60.0)
DCR <sup>(3)</sup>	5 (100)	5 (71.4)	10 (83.3)	2 (40.0)	11 (73.3)	13 (65.0)

<sup>(</sup>ii) Partial Response (PR) is defined as 230% decrease in sum of target lesions Stable Disease (SD) is defined as < 30% decrease and < 20% increase in sum of target turnor lesions (iii) Disease Control Rate (DCR) refers to the total number of patients achieving complete response, partial response, and stable disease.

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Review of new data from the phase 1b portion of the clinical trial demonstrate a high response rate and a durable clinical benefit in a subpopulation of patients with a clinical marker predictive of a response to DPX-Survivac and correlated to its novel MOA. New data included:

- Efficacy signals in the subpopulation of patients who received 100 mg dose epacadostat (n = 5) included 100 percent tumour regressions and 100 percent disease control rate; and 60 percent of these patients (3/5) reached a best response of a partial response (PR);
- Long duration of clinical benefit observed in responders with a median duration of 590 days, including one patient that has passed the two-year mark without disease progression;
- Clinical benefit correlated to DPX-Survivac's MOA and clinical study primary end points: survivin-specific T cells in the blood and T cell infiltration into tumours; and
- The safety profile of DPX-Survivac is consistent with the profile observed in the Corporation's previously reported studies.

Based on 300 mg cohort results, IMV and Incyte have agreed to stop dosing patients with epacadostat. IMV will continue the phase 1b/2 trial as a monotherapy study evaluating DPX-Survivac in the recurrent ovarian cancer subpopulation. IMV will inform and work with investigators to appropriately modify the study in a manner consistent with the best interests of each patient.

IMV and Incyte will continue to explore the potential of additional combination studies.

- On November 6, 2018, the appointment of Dr. Markus Warmuth, MD, a seasoned biopharmaceutical executive, to its board of directors. Dr. Warmuth currently
  serves as an entrepreneur in residence at the life science venture capital firm Third Rock Ventures. He brings more than 20 years of drug discovery experience and
  scientific acumen, with a strong focus on developing targeted therapy and immuno-oncology programs, to his new role on IMV's board.
- On September 27, 2018, results of ongoing research to further explore the novel MOA of its RSV vaccine candidate. New data from a preclinical study highlighted the effects of two potential approaches to preventing RSV, comparing a single dose of the bovine version of DPX-RSV to a two-dose conventional investigational bovine RSV vaccine.
  - Researchers found that IMV's vaccine candidate yielded strong antigen-specific immune responses and a protective effect on disease pathology. The degree of protection was comparable between the two vaccine candidates.

In this study, researchers compared the effects of both the IMV and conventional RSV vaccine approaches among bovines with known RSV infections (the bovine animal model is considered an optimal model of RSV infection). Researchers administered one dose of DPX-bRSV to one cohort; the second received two doses of a subunit RSV bovine vaccine. Researchers measured immune response with an antibody titer test, and assessed disease pathology with a lung lesion score and other clinical parameters (such as body temperature changes).

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 vaccine-induced immune response against IMV's novel RSV target - the SH viral protein—with measures of disease protection.

• On September 18, 2018, details of the initial data from its ongoing investigator-sponsored phase 2 clinical trial in DLBCL. In the study, investigators are evaluating IMV's lead candidate, DPX-Survivac, in combination with low dose cyclophosphamide and Merck's checkpoint inhibitor Keytruda® (pembrolizumab), in patients with persistent or recurrent/refractory DLBCL.

The preliminary data included assessments of safety and clinical activity (based on modified Cheson criteria) for the first four evaluable patients who have completed their first CT scan after the start of treatment. The data showed that:

Two of the first four evaluable participants showed tumour regressions at the first on-treatment CT scan:

- The first enrolled participant demonstrated a tumour regression of 48% at the first on-treatment scan; and
- The second participant demonstrated a partial response (PR) via a tumour regression of 66% at the first on-treatment scan.
- Preliminary data from the third participant demonstrated stable disease;
- The other participant had early disease progression less than two months following treatment initiation and was discontinued from the study; and
- The combination therapy appears to demonstrate an acceptable safety profile, with no serious adverse events reported to date.
- <sup>1</sup> Cheson, B.D., Pfistner, B., Juweid, M.E., Gascoyne, R.D., Specht, L., Horning, S.J. and Diehl, V. (2007). Revised Response Criteria for Malignant Lymphoma. Journal of Clinical Oncology, 25(5) DOI: 10.1200/JCO.2006.09.2403
- On September 11, 2018, an expansion of its clinical program with a phase 2 basket trial in collaboration with Merck evaluating its lead candidate, DPX-Survivac, in combination with low-dose cyclophosphamide and Merck's anti-PD-1 therapy, Keytruda (pembrolizumab), in patients with select advanced or recurrent solid tumours across five indications.

The open-label, multicentre, phase 2 basket study will evaluate the safety and efficacy of the immunotherapeutic combination agents in patients with bladder, liver (hepatocellular carcinoma), ovarian or non-small-cell lung (NSCLC) cancers, as well as tumours shown to be positive for the microsatellite instability high (MSI-H) biomarker. Investigators plan to enroll more than 200 patients across five indications at multiple medical centres in Canada and the United States.

On August 9, 2018, IMV reached two important milestones in its continuing clinical trial collaboration with Incyte Corp. Investigators completed enrolment for both
phase 1b dosing cohorts and treated the first patient in the phase 2 component of the combination trial, which was evaluating the safety and efficacy of IMV's lead
candidate, DPX- Survivac, and low-dose cyclophosphamide with (and without) epacadostat in patients with advanced ovarian cancer.

Investigators completed enrolment in the phase 1b cohorts of the study, with a total of 50 patients across the two dosing groups. The phase 1b study focused on evaluating the safety and efficacy of combining DPX-Survivac, 100 milligrams or 300 milligrams of epacadostat, and low-dose cyclophosphamide in individuals with advanced, platinum-sensitive and resistant ovarian cancer.

- On June 7, 2018, that Julia P. Gregory joined the Corporation's Board of Directors. Ms. Gregory is a seasoned biotechnology executive with Chief Executive
  Officer, Chief Financial Officer, board, and investment banking experience. She recently served as Chief Executive Officer and board member of ContraFect
  Corporation, a public biotechnology Corporation developing innovative anti-infectives. She also served as the Chief Executive Officer and board member of the
  immuno-oncology Corporation Five Prime Therapeutics.
- On June 3, 2018, that investigators shared new positive data in an oral presentation for its DeCidE1 (DPX-Survivac with low dose Cyclophosphamide and
  Epacadostat) clinical study at the 2018 American Society for Clinical Oncology (ASCO) annual meeting. This data from the ongoing phase 1b/2 trial evaluated the
  safety and efficacy of the combination of IMV's lead candidate, DPX-Survivac, and low dose cyclophosphamide, with Incyte's IDO1 enzyme inhibitor epacadostat,
  in patients with advanced recurrent ovarian cancer.

At the time of data cut-off, 39 patients were enrolled (including 25 new participants in the 300mg cohort with 8 evaluable from day 56 first CT scan). Data from the first 18 evaluable patients across both dosing cohorts showed:

- 7 tumour regressions, including 4 Partial Responses (PR) reported so far (PR, defined as ≥30% decrease in tumour lesion size); and
- Study participants were generally tolerating treatments well, with no related SAEs reported.

Data from the first 8 evaluable participants in the 300mg epacadostat dosing cohort at first CT scan included:

- 6 patients demonstrated stable disease (SD) at day 56, with 4 of these SDs still on trial at data cut-off; and
- 2 patients with tumour regressions observed so far, including one PR with a tumour regression ongoing for more than 9 months.

Researchers also analyzed patient data to study the combination's MOA. They examined blood samples and tumour biopsies for the 10 evaluable patients treated in the first dosing cohort. This data showed:

- Survivin-specific T cell responses detected in 100% (10/10) of patients;
- Increase in T cell infiltration post treatment in 37% (3/8) of the analyzable tumour biopsies based on two complementary testing methodologies (RNA sequencing and immunohistochemistry);
- . 2 of the 3 patients with T cell infiltration showed PRs with significant and durable tumour regressions lasting more than one year; and
- The third patient with T cell infiltration exhibited Progressive Disease (PD) with evidence of down regulation of the major histocompatibility (MHC) presentation pathway and significant increases in suppressive markers, both indicative of mechanisms of resistance.
- On May 31, 2018, that its common shares have been approved for listing on the Nasdaq under the symbol "IMV." Trading commenced on, June 1, 2018 and the common shares concurrently ceased to be traded on OTCQX. The Corporation retained its listing on the Toronto Stock Exchange under the symbol "IMV."
- On May 3, 2018, that it applied to list its common shares on the Nasdaq Stock Market LLC ("Nasdaq"). In connection with the planned U.S. listing, and as previously authorized by its shareholders at more than 99%, the Corporation implemented a consolidation of its outstanding common shares, and changed the Corporation name to IMV Inc.

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

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

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

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

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

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

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

- On March 28, 2018, that the first patient was treated in IMV Inc.'s phase 2 study combining DPX-Survivac with low- dose cyclophosphamide administered with pembrolizumab in patients with persistent or recurrent/refractory DLBCL.
- On February 15, 2018, that it has closed the previously announced bought deal public offering (the "February 2018 Public Offering") of common shares of the Corporation (the "Common Shares"), including exercise of the over- allotment option in full, raising gross proceeds of \$14.375 million.
- On January 31, 2018, the publication of a preclinical study using magnetic resource imaging ("MRI") to follow cancer peptide uptake in tumour models, and to correlate this immune activation to the resulting anti-cancer T cell activity. The *Journal of Biomedical Science* study, titled "Unique Depot Formed by an Oil Based Vaccine Facilitates Active Antigen Uptake and Provides Effective Tumour Control," compared the MOA of IMV's platform for immunotherapeutic stimulation with other technologies.<sup>4</sup>

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

• On January 18, 2018, the appointment of Joseph Sullivan to the newly created role of Senior Vice President, Business Development, effective January 22, 2018. Mr. Sullivan would be responsible for providing strategic and operational leadership for the Corporation's business development efforts. This includes expanding late-stage candidate development and preparation for commercialization, as well as forging strategic commercial partnerships to support further advancement of the Corporation's clinical assets and platform.

## SELECTED FINANCIAL INFORMATION

	Year ended December 31, 2018	Year ended December 31, 2017	Year ended December 31, 2016 \$
Net loss and comprehensive loss for the period	21,935,000	12,027,000	8,896,000
Basic and diluted loss per share	0.50	0.31	0.28

	As at December 31, 2018	As at December 31, 2017	As at December 31, 2016
Cash and cash equivalents	14,895,000	14,909,000	13,547,000
Total assets	22,925,000	17,032,000	15,101,000
Long term debt	8,069,000	6,476,000	6,090,000

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

## RESULTS FOR THE YEAR ENDED DECEMBER 31, 2018, COMPARED TO THE YEAR ENDED DECEMBER 31, 2017

	Year ended December 31, 2018	Year ended December 31, 2017
Revenue	(483,000)	(222,000)
Research and development	12,852,000	5,938,000
General and administrative	7,241,000	5,202,000
Government assistance	(1,062,000)	(1,078,000)
Business development and investor relations	2,002,000	1,221,000
Accreted interest	1,385,000	966,000
Net loss and comprehensive loss for the period	21,935,000	12,027,000

## Revenue

Revenue increased by \$261,000 in 2018 in comparison with 2017. Interest revenue increased by \$212,000 in 2018 which is attributed to higher cash balances since the beginning of 2018. The remainder of the increase since the beginning of 2018, is attributable to an increase in subcontract revenue.

## Operating expenses

Overall operating expenses increased by \$10,169,000 to \$22,418,000 during Fiscal 2018 compared to Fiscal 2017. Explanations of the nature of costs incurred, along with explanations for those changes in costs are discussed below:

## Research and development expenses

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

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

Research and development expenses consist of the following:

	Year Ended December 31, 2018	Year Ended December 31, 2017
General R&D expenses	2,230,000	1,070,000
DPX-Survivac preclinical and clinical expenses	6,769,000	2,312,000
Salaries and benefits	3,340,000	2,255,000
Stock-based compensation	399,000	185,000
Depreciation of equipment and amortization of intangible	114,000	83,000
Total	12,852,000	5,938,000

The increase in general R&D expenses from \$1,060,000 in 2017 to \$2,230,000 in 2018 is mainly attributable to a \$356,000 increase in regulatory consulting, a \$349,000 increase in services and consulting, a \$215,000 increase in raw materials and supplies, a \$147,000 increase in R&D travel, and a \$30,000 increase in professional development.

The increase of \$4,457,000 in 2018 in DPX-Survivac preclinical and clinical expenses is mainly attributable to increased clinical activity including: higher enrollment in the phase 1b/2 Incyte trial in ovarian cancer compared with 2017(\$627,000 increase); milestone payments for phase 2 study in DLBCL (\$605,000 increase); and expenses related to the initiation of the basket trial (\$1,800,000 increase). The increase is also attributable to manufacturing activities to support the increased clinical activity including purchasing of raw materials and contract manufacturing organization costs (\$1,500,000 increase).

The increase in R&D salaries in 2018 is mainly attributable to the hiring of eleven new R&D positions (two at a Director level).

General and administrative expenses

G&A expenses consist of the following:

	Year Ended December 31, 2018	Year Ended December 31, 2017 \$
General and administrative expenses, excluding salaries	4,055,000	2,159,000
Salaries and benefits	1,865,000	1,453,000
Stock-based and deferred share unit compensation	1,110,000	1,533,000
Depreciation of furniture, leaseholds and equipment	211,000	57,000
Total	7,241,000	5,202,000

For Fiscal 2018, G&A expenses, excluding salaries, increased by \$1,896,000. This is mainly explained by the various non-recurring expenses of \$477,000 related to the Nasdaq listing and \$142,000 attributable to the relocation to a new facility. The increase is also attributable to an increase in general corporate legal expenses of \$90,000 as a result of the share consolidation, filing of a shelf prospectus and increased US counsel involvement following the NASDAQ listing; an increase of \$379,000 in insurance premium following the NASDAQ listing; increase in consulting and professional fees of \$134,000 related mainly to benchmarking and recruiting; an increase of \$171,000 in rent, lease interest accretion and utilities related to the new facility; an increase of \$149,000 in foreign exchange loss; an increase of \$108,000 in regulatory fees; a \$71,000 increase in the use of various subscription services; a \$68,000 increase in travel due to hiring additional remote employees; and a \$42,000 increase in Directors fees following the NASDAQ listing.

Salaries and benefits increased by \$412,000 in 2018 due to an overall increase in compensation for the senior executive team and the hiring of three new G&A positions.

The decrease in stock-based and deferred share unit compensation in 2018 is explained by a decrease in the fair value of DSUs compared with 2017 and two redemptions of DSUs, partly offset by an increase of \$216,000 in stock-based compensation.

#### Government assistance

Government assistance consists of the following:

	Year Ended December 31, 2018 \$	Year Ended December 31, 2017
Investment tax credits ("ITC")	1,027,000	537,000
Government loans and assistance	35,000	542,000
Total	1,062,000	1,079,000

The increase in investment tax credit in 2018 is explained by the increase in R&D salaries and raw materials as well as increased clinical trial activity being performed in Canada. The decrease in government loans and assistance is explained by a \$507,000 revaluation of the low-interest bearing government loan from the Province of Nova Scotia upon the receipt of the two-year extension in Q3 2017.

Business development and investor relations expenses

The Corporation's business development and investor relations activities increased by \$781,000 during 2018 to a total of \$2,002,000. This variation is mainly explained by a \$461,000 and \$180,000 increase in salary and benefits and stock-based compensation, respectively, relating to the hiring of a Senior Vice President, Business Development in January 2018 and a Senior Director of Investor Relations and Communications in November 2018.

Accreted Interest

Accreted interest relates entirely to the valuation of low-interest bearing government loans which are repayable based on a percentage of future gross revenue and is comparable to 2018.

#### Net loss and comprehensive loss

The net loss and comprehensive loss was \$21,935,000 or \$0.50 per basic and diluted share compared to \$12,027,000 or \$0.31 per basic and diluted share for the year ended December 31, 2017.

## CASH FLOWS, LIQUIDITY AND CAPITAL RESOURCES

At December 31, 2018, the Corporation had cash and cash equivalents of \$14,895,000 and working capital of \$12,247,000, compared to \$14,909,000 and \$13,627,000, respectively as at December 31, 2017.

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

During 2018, \$17,177,000 was used in operating activities. This included the reported net loss of \$21,935,000 prior to being decreased 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 \$1,256,000 as a result of changes in working capital balances.

Sources of cash included: \$14,375,000 raised through financing activities less cash issuance costs of \$1,148,000; and \$5,280,000 through the exercise of stock options and warrants. The Corporation received \$896,000 in incentive contributions from its lessor and borrowed \$300,000 from its lessor to fund leasehold improvements at the new facility in Dartmouth. The Corporation used \$146,000 to repay long-term debt and lease obligations during the period and \$223,000 to pay taxes related to DSU redemptions.

During the year ended December 31, 2018, the Corporation purchased equipment and leasehold improvements for ongoing research and operating activities for an aggregate amount of \$2,185,000. The Corporation raised \$14,000 in proceeds from the sale of used furniture and equipment at its former Halifax facility.

The Corporation aims to maintain adequate cash and cash resources to support planned activities which include: the phase 1b/2 combination trial with DPX-Survivac; the two phase 2 investigator-sponsored combination trials with DPX-Survivac and Merck's checkpoint inhibitor, pembrolizumab in ovarian cancer and DLBCL; the basket trial in 5 indications with DPX-Survivac and Merck's checkpoint inhibitor, pembrolizumab; and other research and development activities, business development efforts, administration costs, and intellectual property maintenance and expansion.

At December 31, 2018, the Corporation had approximately \$17.3 million of existing and identified potential sources of cash including:

- cash and equivalents of \$14.9 million; and
- amounts receivable and investment tax credits receivable of \$2.4 million.

For the year ended December 31, 2018, the Corporation's "cash burn rate" (defined as net loss for the period adjusted for operations not involving cash - interest on lease obligation, depreciation, accretion of long-term debt, stock-based compensation and DSU compensation) was \$18.4 million. Based on the current business plan and depending on the timing of certain clinical expenses, the Corporation forecasts the cash burn rate to be between \$5 million to \$6 million per quarter for 2019, as it continues to execute its clinical plan.

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

Management believes that its cash resources of \$14.9 million, its additional potential cash resources of \$2.4 million as at December 31, 2018 and the cash resources coming from the \$29.6 million financing completed in March 2019 will be sufficient to fund operations for the next twelve months while maintaining adequate working capital well into 2020. The Corporation continually reassesses the adequacy of its cash resources, evaluating existing clinical trials, research projects and/or potential collaboration opportunities, to determine when and how much additional funding is required.

## JUNE 2017 EQUITY OFFERING AND USE OF PROCEEDS

On June 21, 2017, the Corporation completed a public offering, issuing 7,692,308 common shares common shares pre-consolidation (2,403,846 post-consolidation) at a price of \$1.30 per share pre-consolidation (\$4.16 post-consolidation) for aggregate proceeds of \$10,000,000. The Corporation intends to use the net proceeds of this offering for the research and development and clinical advancement of its cancer and infectious disease vaccine candidates and for working capital and general corporate purposes. The table below provides the amount used to date and any variances (except for working capital and general corporate purposes).

Intended Use of Proceeds	Estimated amount	Amount	Variances
	\$	to date	
		\$	
phase 2 clinical trial in DLBCL with Merck	2,400,000	1,122,000	No variances anticipated
phase 1 clinical trial for multiple indications	4,200,000	1,800,000	No variances anticipated

## FEBRUARY 2018 EQUITY OFFERING AND USE OF PROCEEDS

On February 15, 2018, the Corporation completed a public offering, issuing 7,187,500 common shares pre-consolidation (2,246,094 post-consolidation) at a price of \$2.00 per share pre-consolidation (\$6.40 post-consolidation) for aggregate proceeds of \$14,375,000. The Corporation intends to use the net proceeds of this offering to continue to advance the Corporation's pipeline and conduct a phase 1 basket trial in up to five indications to be identified, for research and development, working capital, and for general corporate purposes. The table below provides the amount used to date and any variances (except for working capital and general corporate purposes).

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

# SUMMARY OF QUARTERLY RESULTS

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

Quarter Ended In	Total Revenue \$	Total Expenses \$	Loss \$	Basic and Diluted Loss Per Share \$
Q4 - December 31, 2018	133,000	7,818,000	(7,685,000)	(0.17)
Q3 - September 30, 2018	125,000	6,112,000	(5,987,000)	(0.14)
<i>Q2</i> – June 30, 2018	129,000	5,325,000	(5,196,000)	(0.12)
Q1 – March 31, 2018	96,000	3,163,000	(3,067,000)	(0.07)
Q4 - December 31, 2017	66,000	4,997,000	(4,931,000)	(0.13)
Q3 - September 30, 2017	53,000	2,175,000	(2,122,000)	(0.06)
Q2 – June 30, 2017	36,000	2,641,000	(2,605,000)	(0.06)
Q1 – March 31, 2017	34,000	2,403,000	(2,369,000)	(0.06)

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

## Results for the three months ended December 31, 2018 ("Q4 Fiscal 2018"), compared to the three months ended December 31, 2017 ("Q4 Fiscal 2017").

	Q4 Fiscal 2018	Q4 Fiscal 2017
	\$	\$
Revenue	(133,000)	(75,000)
Research and development	4,471,000	2,305,000
General and administrative	2,347,000	2,370,000
Government assistance	(194,000)	(75,000)
Business development and investor relations	614,000	259,000
Accreted interest	580,000	147,000
Net loss and comprehensive loss for the period	7,685,000	4,931,000

## Revenue

Revenue is composed of interest revenue and subcontract revenue and is comparable with 2017.

## Operating expenses

Overall operating expenses increased by \$2,812,000 (56%) to \$7,818,000 during Q4 Fiscal 2018 compared to Q4 Fiscal 2017. Explanations for these changes in costs are discussed below:

## R&D expenses

The Corporation's R&D efforts and related expenses for Q4 Fiscal 2018 included costs surrounding the Corporation's clinical trials of DPX-Survivac, namely the phase 1b/2 clinical trial collaboration with Incyte in ovarian cancer, phase 2 clinical trial collaboration with Merck in ovarian cancer, phase 2 clinical trial collaboration with Merck in DLBCL, basket trial start-up costs and costs related to the Corporation's ongoing R&D activities associated with the investigation, and analysis and evaluation of other potential product candidates and technologies.

Research and development expenses consist of the following:

	Q4 Fiscal 2018	Q4 Fiscal 2017
	\$	\$
General research and development expenses	616,000	327,000
DPX-Survivac preclinical and clinical expenses	2,602,000	1,124,000
Salaries and benefits	1,110,000	795,000
Stock-based compensation	108,000	23,000
Depreciation of equipment and amortization of intangible	35,000	27,000
Total	4,471,000	2,296,000

The increase in general R&D expenses from \$327,000 in Q4 Fiscal 2017 to \$616,000 in Q4 Fiscal 2017 is attributable mainly to a \$175,000 increase in raw materials and supplies as well as a \$130,000 increase in regulatory consulting.

The increase of \$1,478,000 in DPX-Survivac preclinical and clinical expenses in Q4 Fiscal 2018 is mainly related to \$1,169,000 of expenditures incurred to initiate the basket trial and a \$365,000 increase in DPX-Survivac manufacturing activities compared with Q4 Fiscal 2017.

The increase in R&D salaries of \$315,000 in Q4 Fiscal 2018 is attributable to a \$175,000 increase in raw materials and supplies and a \$130,000 increase in regulatory consulting.

General and administrative expenses

G&A expenses consist of the following:

	Q4 Fiscal 2018	Q4 Fiscal 2017
	\$	\$
General and administrative expenses, excluding salaries	1,275,000	959,000
Salaries and benefits	701,000	609,000
Stock-based compensation	287,000	782,000
Depreciation of equipment	84,000	20,000
Total	2,347,000	2,370,000

G&A expenses, excluding salaries, increased by \$316,000 in Q4 Fiscal 2018 mainly due to a \$158,000 increase in insurance premiums following the NASDAQ listing, a \$144,000 increase in foreign exchange loss, a \$78,000 increase in rent and utilities following the relocation to the new Dartmouth facility, a \$55,000 increase in IT and subscription services, and a \$38,000 increase in Directors fees offset by a \$159,000 decrease in legal fees compared to Q4 Fiscal 2017.

Salaries and benefits increased by \$92,000 in Q4 Fiscal 2018 due to new positions created in 2018 as well as an overall increase in compensation for the senior executive team compared with the prior year.

The decrease in stock-based compensation in Q4 Fiscal 2018 is mainly attributable to a decrease in the value of DSUs. An amount of \$148,000 (2017 - \$89,000) represents the value of the DSUs issued during the three months ended December 31, 2018 as part of the compensation for the non-executive members of the Board of Directors, and the remaining decrease represents the variation in fair value of outstanding DSUs (including a redemption of DSUs) during Q4 Fiscal 2018, partly offset by a \$156,000 increase in stock-based compensation.

The increase in depreciation in Q4 Fiscal 2018 is attributable to new furniture, leasehold improvements and equipment following the relocation as well as depreciation of leased assets following the transition to IFRS 16.

#### Government assistance

Government assistance consists of the following:

	Q4 Fiscal 2018	Q4 Fiscal 2017
	\$	\$
Investment tax credits ("ITC")	(191,000)	(65,000)
Government loans and assistance	(3,000)	(10,000)
Total	(194,900)	(75,000)

The increase in investment tax credit in Q4 2018 is explained by the increase in R&D salaries as well as increased clinical trial activity being performed in Canada.

## Business development and investor relations expenses

The Corporation's business development and investor relations activities increased in Q4 Fiscal 2018 by \$355,000, compared to Q4 Fiscal 2017, to a total of \$614,000. This variation is mainly explained by a \$184,000 and \$54,000 increase in salary and benefits and stock-based compensation, respectively, relating to the hiring of a Senior Vice President, Business Development in January 2018 and a Senior Director of Investor Relations and Communications in November 2018. The remainder of the increase is attributable to higher investor relations travel and activities during Q4 2018 compared with Q4 2017.

## Accreted Interest

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

## Net loss and comprehensive loss

The net loss and comprehensive loss was \$7,685,000 or \$0.17 per basic and diluted share for Q4 Fiscal 2018, which is \$2,763,000 higher than the net loss and comprehensive loss of \$4,922,000 or \$0.13 per basic and diluted share for Q4 Fiscal 2017.

## **OUTLOOK FOR 2019**

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

Milestones	Projected dates
Phase 2 monotherapy results in Ovarian - ASCO	June 2019
Phase 1/1b monotherapy long term follow-up - ASCO	June 2019
Phase 2 clinical results with Merck Keytruda in DLBCL - ICML	June 2019
Preliminary clinical results Basket trial in 5 indications	H2 2019
Potential registration trial in Ovarian and/or DLBCL for FDA accelerated/breakthrough designation	H2 2019

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

## CONTRACTUAL OBLIGATIONS

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

Contractual	Payments Due by Period				
Obligations	Total	Less than 1	1 - 3 years	4 - 5 years	After 5
		year			years
Accounts payable and accrued liabilities	7,575,000	7,575,000	=	-	=
Amounts due to directors	49,000	49,000	-	-	-
Short term and low value leases	66,000	18,000	27,000	21,000	-
Long-term leases	2,398,000	275,000	533,000	518,000	1,072,000
Long-term debt	15,612,000	264,000	5,324,000	142,000	9,882,000
ГОТАL	25,700,000	8,181,000	5,884,000	681,000	10,954,000

## OFF-BALANCE SHEET ARRANGEMENTS

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

## **OUTSTANDING SECURITIES**

As of March 21, 2019, the number of issued and outstanding common shares was 50,594,260 and a total of 2,008,057 stock options, warrants, and deferred share units were outstanding.

# SUBSEQUENT EVENT TO DECEMBER 31, 2018 (As described in Note 23 of the financial statements)

On March 6, 2019, the Corporation completed the March 2019 Public Offering, issuing an aggregate of 4,900,000 common shares were issued at a price of \$5.45 per common share, raising gross proceeds of \$26.7 million and on March 11, 2019, announced that the underwriters partially exercised their option to purchase additional common shares, resulting in the issuance of an additional 504,855 common shares of the Corporation at a price of \$5.45 per share for additional gross proceeds of approximately \$2.75 million. As a result of the exercise of this option, the Corporation has raised total gross proceeds of approximately \$29.46 million

before deducting the underwriting commissions and offering expenses. 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 basket trial in patients with select advanced or recurrent solid tumours in bladder, liver (hepatocellular carcinoma), ovarian or non-small-cell lung cancers, as well as tumours shown to be positive for the microsatellite instability high biomarker and for general corporate purposes.

## RISKS AND UNCERTAINTIES

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

There are important risks which management believes could impact the Corporation's business. For information on risks and uncertainties, please also refer to the "Risk Factors" section of our most recent AIF filed on SEDAR at www.sedar.com 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, 2018 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, 2018 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 the presentation of government assistance now presented as a separate item in the consolidated statements of loss and comprehensive loss and the interest revenue now presented as part of the revenue. Certain comparative figures have been reclassified to conform the presentation adopted in the current year for government assistance and interest revenue.

The significant accounting policies of IMV are detailed in the notes to the audited consolidated financial statements for the year ended December 31, 2018 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.

Critical judgements in applying the Corporation's accounting policies are detailed in the audited annual consolidated financial statements for the year ended December 31, 2018 filed on SEDAR www.sedar.com and included in the registration statement on Form 40-F filed on EDGAR at www.sec.gov/edgar.

#### 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

A description of the financial instruments, their fair value and risk management is included in the Corporation's audited annual consolidated financial statements for the year ended December 31, 2018 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) Pierre Labbé

(Signed) Frédéric Ors Frédéric Ors

Pierre Labbé Chief Executive Officer Chief Financial Officer

March 21, 2019

# CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Frederic Ors, certify that:
- 1. I have reviewed this annual report on Form 40-F of IMV Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect the company's ability to record, process, summarize, and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 1, 2019

/s/ Frederic Ors Name: Frederic Ors

Title: Chief Executive Officer (principal executive officer)

# CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Pierre Labbé, certify that:
- 1. I have reviewed this annual report on Form 40-F of IMV Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, and cash flows of the company as of, and for, the periods presented in this report;
- 4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the company and have:
- (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
- 5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonably likely to adversely affect the company's ability to record, process, summarize, and report financial information; and
- (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 1, 2019

/s/ Pierre Labbé
Pierre Labbé
Chief Financial Officer
(principal financial officer)

# CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned, as the Chief Executive Officer of IMV Inc. certifies that, to the best of his knowledge and belief, the annual report on Form 40-F for the fiscal year ended December 31, 2018, which accompanies this certification, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and the information contained in the annual report on Form 40-F for the fiscal year ended December 31, 2018 fairly presents, in all material respects, the financial condition and results of operations IMV Inc. at the dates and for the periods indicated. The foregoing certification is made pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350) and shall not be relied upon for any other purpose. The undersigned expressly disclaims any obligation to update the foregoing certification except as required by law.

Date: April 1, 2019

/s/ Frederic Ors Frederic Ors Chief Executive Officer (principal executive officer)

# CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

The undersigned, as the Chief Financial Officer of IMV Inc. certifies that, to the best of his knowledge and belief, the annual report on Form 40-F for the fiscal year ended December 31, 2018, which accompanies this certification, fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and the information contained in the annual report on Form 40-F for the fiscal year ended December 31, 2018 fairly presents, in all material respects, the financial condition and results of operations IMV Inc. at the dates and for the periods indicated. The foregoing certification is made pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350) and shall not be relied upon for any other purpose. The undersigned expressly disclaims any obligation to update the foregoing certification except as required by law.

Date: April 1, 2019

/s/ Pierre Labbé Pierre Labbé Chief Financial Officer (principal financial officer)

## CONSENT OF REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Annual Report on Form 40-F of our report dated March 21, 2019, with respect to the consolidated financial statements of IMV Inc. as at and for the years ended December 31, 2018 and 2017, which appears in Exhibit 99.2 to this Annual Report on Form 40-F of IMV Inc.

We also consent to the incorporation by reference in the Registration Statements on Form F-10 (No. 333-225326), as amended, and Form S-8 (No. 333-225363) of IMV Inc. of our report dated March 21, 2019 referred to above. We also consent to reference to us under the heading "Interests of Experts," which appears in the Annual Information Form included in Exhibit 99.1, which is incorporated by reference in this Annual Report on Form 40-F, which is incorporated by reference in such Registration Statements.

/s/PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants Halifax, Nova Scotia, Canada

April 1, 2019