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IMV Announces Selection of a Vaccine Candidate Against COVID-19 to Advance Into Human Clinical Studies

Majority of 23 peptide epitopes selected by IMV demonstrated robust antibody responses in an animal model after first and second dose in DPX formulation without any additional adjuvant

DPX-COVID-19 to utilize multi-target approach, to optimize immune response against virus' weaknesses, enhance efficacy at preventing infection and reduce potential for immune escape

Phase 1 clinical study of DPX-COVID-19 is scheduled during summer 2020

DARTMOUTH, Nova Scotia--(BUSINESS WIRE)-- IMV Inc. (Nasdaq: IMV; TSX: IMV), a clinical-stage biopharmaceutical company pioneering a novel class of cancer immunotherapies and vaccines against infectious diseases, today announced positive preclinical results demonstrating robust immunogenic and antibody responses from the majority of peptide epitopes. Based on these data, the Company has selected multiple peptide epitopes to be formulated within its DPX platform to form a vaccine candidate against the novel coronavirus, DPX-COVID-19.

"These preclinical data are highly encouraging, showing that peptides formulated within the DPX platform have induced early and strong immunogenic response in an animal model. Notably, the antibody responses observed were equivalent or superior to levels achieved with DPX-RSV, which delivered a robust and sustained immune response in a Phase 1 study," said Marianne Stanford, Ph.D., Vice President Research and Development at IMV. "Based on these results, our team has down selected a combination of peptides that have demonstrated immunogenicity and target several areas of the virus mechanism of entry in a non-overlapping fashion. DPX-COVID-19 is designed to focus the immune response on the weaknesses for the virus, to potentially increase its efficacy at preventing the infection and to efficiently inhibit virus entry into cells, thereby reducing the potential for immune escape, even in case of a mutation."

"These results reflect the promise and versatility of our DPX platform technology, which has enabled our team to develop a new targeted vaccine candidate just two months after launching into development. Moreover, as we have shown across our clinical studies to date, our unique, targeted approach has elicited favorable results in sensitive populations, including older adult and immunocompromised patients who are most susceptible to this virus," said Frederic Ors, President and CEO at IMV. "We are working closely with our collaborators to advance DPX-COVID-19 with urgency and remain on track to launch a Phase 1 clinical study in summer 2020."

IMV and its collaborators have rapidly advanced a DPX-based vaccine for COVID-19, since announcing plans in March. The Company used sequences of the virus and immunoinformatics to predict and identify several hundred epitopes, of which 23 were selected for validation in preclinical studies based on their biological relevance to the virus and potential to generate neutralizing antibodies against SARS-CoV-2. Preclinical studies have been ongoing since the beginning of April, with the goal to validate and down select the most promising peptide candidates targeting weaknesses of the virus.

In preclinical animal models, IMV evaluated all 23 peptides formulated within the DPX platform. The majority of peptide epitopes tested generated targeted antibody responses after the first and second dose, without requiring an adjuvant. Based on these results, IMV has selected an optimal combination of peptides based on the best antibody responses for each of the key mechanisms for attachment, fusion and entry of SARS-CoV-2 into human cells. The antibody responses observed were equivalent or superior to a DPX-based peptide epitope vaccine (DPX-RSV) used as a reference to evaluate the level of immunogenicity in these preclinical studies. DPX-RSV is a vaccine candidate against respiratory syncytial virus (RSV), another RNA respiratory virus, and has demonstrated high functional antibody titers (up to 100-fold increase over placebo maintained for at least 421 days[1]) in a Phase 1 clinical study in older adults (age 50-64).

Further vaccination-challenge preclinical assays in animal models are currently performed and IMV intends to publish results of preclinical studies in a peer-reviewed scientific journal in the coming weeks.

In April, IMV conducted a pre-Clinical Trial Application (CTA) meeting with Health Canada and is finalizing a design for a Phase 1 clinical study of DPX-COVID-19. The randomized, placebo-controlled study is expected to enroll approximately 84 healthy subjects in two age strata and to assess two different doses of DPX-COVID-19. The Company is on track to initiate this study in the summer of 2020.

About DPX-COVID-19

DPX-COVID-19 is IMV's vaccine candidate against the novel strain of coronavirus that is causing the current pandemic. It is a DPX-based formulation of multiple peptides of the SARS-CoV-2 that generated early and strong immune responses during the preclinical assays in animal models. A first-in-human Phase 1 clinical study is scheduled to initiate during summer 2020. Fully synthetic, DPX-COVID-19 has the potential for fast and large-scale manufacturing to supply a significant number of doses rapidly compared to more conventional vaccines. For more information, visit www.imv-inc.com

About IMV

IMV 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 cancer-targeted immunotherapies and vaccines based on the Company's proprietary drug delivery platform. This patented technology leverages a novel mechanism of action that enables the programming of immune cells *in vivo,* which are aimed at generating powerful new synthetic therapeutic capabilities. IMV's lead candidate, DPX-Survivac, is a T cell-activating immunotherapy that combines the utility of the platform with a target: survivin. IMV is

currently assessing DPX-Survivac as a monotherapy in advanced ovarian cancer, as well as a combination therapy in multiple clinical studies with Merck. IMV is also developing a DPX-based vaccine to fight against COVID-19. Visit www.imv-inc.com and connect with us on Twitter and LinkedIn.

Cautionary Language Regarding Forward-Looking Statements

This press release contains forward-looking information under applicable securities law. All information that addresses activities or developments that we expect to occur in the future is forward-looking information. Forward-looking statements are based on the estimates and opinions of management on the date the statements are made. In the press release, such forward-looking statements include, but are not limited to, statements regarding the Company's progress in developing a DPX-based vaccine candidate against COVID-19, the Company's belief that the DPX-based platform creates the opportunity for production of a COVID-19 vaccine, the Company's belief in the potential efficacy of its DPX-based vaccine against COVID-19, the potential benefits of a DPX-based vaccine against COVID-19 as compared to other potential vaccines, the anticipated timing of the Company's preclinical assays, studies and clinical trials and the release of any results therefrom related to its DPX-based vaccine against COVID-19 and the expected impact of COVID-19 on the Company's other clinical studies and trials and its operations generally. Such statements should not be regarded as a representation that any of the plans will be achieved. Actual results may differ materially from those set forth in this press release due to risks and uncertainties affecting the Company and its products.

The Company assumes no responsibility to update forward-looking statements in this press release except as required by law. These forward-looking statements involve known and unknown risks and uncertainties and those risks and uncertainties include, but are not limited to, the Company's ability to develop a DPX-based vaccine candidate against the COVID-19 through the successful and timely completion of preclinical assays, studies and clinical trials, the receipt of all regulatory approvals by the Company to commence and then continue clinical studies and trials, and, if successful, the commercialization of its proposed vaccine candidate related to COVID-19, the Company's ability to raise sufficient capital, including potentially through grant awards available in Canada, to fund such clinical studies and trials and the production of any COVID-19 vaccine, the ultimate applicability of any third-party research and studies in related coronavirus and SARS studies and sequencing, the Company's ability to enter into agreements with the proposed lead investigators to assist in the clinical development on its vaccine candidate related to COVID-19, the Company's ability to collaborate with governmental authorities with respect to such clinical development, the coverage and applicability of the Company's intellectual property rights to any vaccine candidate related to COVID-19, the ability of the Company to manufacture any vaccine candidate related to COVID-19 rapidly and at scale, the ability for the Company to accurately assess and anticipate the impact of COVID-19 on the Company's other clinical studies and trials and operations generally and other risks detailed from time to time in the Company's ongoing filings and in its annual information form filed with the Canadian regulatory authorities on SEDAR as www.sedar.com and with the United States Securities and Exchange Commission on EDGAR at www.sec.gov/edgar. Investors are cautioned not to rely on these forward-looking statements and are encouraged to read the Company's continuous disclosure documents which are available on SEDAR and on EDGAR.

[1] https://pubmed.ncbi.nlm.nih.gov/29617814/

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Investor Relations

Marc Jasmin, Senior Director, Investor Relations, IMV
O: (902) 492-1819 ext : 1042
M: (514) 617-9481 E: mjasmin@imv-inc.com

Josh Rappaport, Director, Stern IR
O: (212) 362-1200
E: josh.rappaport@sternir.com

Media

Delphine Davan, Director of Communications, IMV
O: (902) 492-1819
E: ddavan@imv-inc.com

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