Media Release

FOR IMMEDIATE RELEASE

Immunovaccine Announces Dosing of First Patient in Phase 1b Clinical Trial for DPX-Survivac in Combination with Incyte's IDO1 Enzyme Inhibitor Epacadostat

Trial is Evaluating Safety and Immunogenicity of Triple Combination Therapy in Patients with Recurrent Ovarian Cancer

Halifax, Nova Scotia; September 8, 2016 – Immunovaccine Inc. ("Immunovaccine" or the "Company") (TSX: IMV; OTCQX: IMMVF), a clinical stage vaccine and immunotherapy company, today announced that the first patient with recurrent ovarian cancer has been treated in a Phase 1b clinical study of Immunovaccine's novel T cell activating therapy, DPX-Survivac, in combination with epacadostat and low-dose cyclophosphamide. This triple combination study is the result of a collaboration between Immunovaccine and Incyte Corporation (Nasdaq: INCY) to assess the safety and effectiveness of DPX-Survivac, along with Incyte's investigational oral indoleamine 2,3-dioxygenase 1 (IDO1) enzyme inhibitor, epacadostat, and low-dose cyclophosphamide in patients with recurrent ovarian cancer who have measurable disease.

"Treating the first patient in this study is another important milestone for our DPX-Survivac immuno-oncology program," said Frederic Ors, Immunovaccine's Chief Executive Officer. "Prior studies showed that DPX-Survivac with low dose oral cyclophosphamide is well tolerated and can induce a strong immune response, and epacadostat is a clinically advanced immunotherapy that also has demonstrated promising activity in clinical trials in combination with checkpoint inhibitors. We believe that our collaboration with Incyte will help us continue to progress this program and hopefully pave the way to developing new therapies for the high unmet medical need in ovarian cancer."

The Phase 1b clinical trial is a single arm, open label, safety and effectiveness study that plans to enroll up to 32 participants at up to six sites in the U.S. and Canada. Its primary objective is to assess the safety and immunogenicity (the ability to produce an immune response) of the treatment, and to determine changes in the immune cell infiltration into tumors. Secondary objectives include objective response rate, duration of response and time to progression.

"We believe that combining immune-targeted therapies has great potential to lead to new and potentially better therapeutic options for patients with ovarian

and other cancers," said Steven Stein, M.D., Incyte's Chief Medical Officer. "This study provides us with the opportunity to investigate the use of epacadostat alongside Immunovaccine's DPX-Survivac therapy and we look forward to evaluating its results."

DPX-Survivac and epacadostat both target pathways that have been linked to cancer progression, namely survivin and IDO1. High levels of survivin and IDO1 are found in a broad range of cancers, including ovarian cancer, and each has been shown to correlate with poor patient outcomes. DPX-Survivac is designed to activate the T cells of the immune system to recognize survivin-expressing cancer cells. Epacadostat is designed to inhibit IDO1-mediated immune suppression in the tumor microenvironment. Low dose oral cyclophosphamide has been shown to enhance the immune responses induced by DPX-Survivac. The study is based on the hypothesis that co-administering these immunotherapies may lead to enhanced anti-tumor effects by both activating the immune system to recognize the cancer while simultaneously lessening the suppression of this immune response.

Patients interested in enrolling in this trial can find more information via clinicaltrials.gov.

This collaboration with Incyte to evaluate DPX-Survivac and epacadostat in patients with recurrent ovarian cancer is a major component of Immunovaccine's growing immuno-oncology program. The Company recently announced positive topline results from a completed Phase 1/1b trial program evaluating PDX-Survivac in patients with ovarian cancer, as well as encouraging initial Phase 2 data with DPX-Survivac in patients with diffuse large B cell lymphoma (DLBCL). Immunovaccine plans to evaluate DPX-Survivac in combination with other best-in-class immune agents as well as explore the synergies it has seen with checkpoint inhibitors, such as anti-PD-1 agents.

About Ovarian Cancer
According to the American Cancer Society (ACS)[i], ovarian cancer ranks fifth in cancer deaths among women, accounting for more deaths than any other cancer of the female reproductive system. Often diagnosed in its advanced stages, about 21,290 women received a new diagnosis of ovarian cancer in 2015; approximately 14,180 women would die from the disease, according to ACS estimates.

Ovarian cancer has a significant impact globally as well. The World Cancer Research Fund[ii] reports that ovarian cancer is the seventh most common cancer in women worldwide (18 most common cancer overall), with 239,000 new cases diagnosed in 2012.

About DPX-Survivac
DPX-Survivac consists of survivin-based peptide antigens formulated in the

DepoVax™ adjuvanting platform. The National Cancer Institute (NCI) has recognized survivin as a promising tumor-associated antigen (TAA) because of its therapeutic potential and its cancer specificity. Survivin is broadly over-expressed in multiple cancer types in addition to ovarian cancer, including breast, colon and lung cancers. Survivin plays an essential role in antagonizing cell death, supporting tumor-associated angiogenesis, and promoting resistance to anti-cancer therapies. Survivin is also a prognostic factor for many cancers and it is found in a higher percentage of tumors than other TAA's.

The DPX-Survivac vaccine is thought to work by eliciting a cytotoxic T-cell immune response against cells presenting survivin peptides. This targeted therapy attempts to use the immune system to search actively and specifically for tumor cells and destroy them. Survivin-specific T-cells have been shown to target and kill survivin-expressing cancer cells while sparing normal cells.

DPX-Survivac has been granted Fast Track designation by the FDA as maintenance therapy in individuals with advanced ovarian, fallopian tube, and peritoneal cancer who have no measureable disease following surgery and front-line platinum/taxane chemotherapy to improve their progression-free survival.

About DepoVax™
DepoVax™ is a patented formulation that provides controlled and prolonged exposure of antigens plus adjuvant to the immune system, resulting in a strong, specific and sustained immune response with the potential for single-dose effectiveness. The DepoVax™ platform is flexible and can be used with a broad range of target antigens for preventative or therapeutic applications. The technology is designed to be commercially scalable, with the potential for years of shelf life stability.

About Epacadostat (INCB24360)
Indoleamine 2,3-dioxygenase 1 (IDO1) is a key immunosuppressive enzyme that modulates the anti-tumor immune response by promoting regulatory T cell generation and blocking effector T cell activation, thereby facilitating tumor growth by allowing cancer cells to avoid immune surveillance. Epacadostat is a first-in-class, highly potent and selective oral inhibitor of the IDO1 enzyme that reverses tumor-associated immune suppression and restores effective anti-tumor immune responses. In single-arm studies, the combination of epacadostat and immune checkpoint inhibitors has shown proof-of-concept in patients with unresectable or metastatic melanoma. In these studies, epacadostat combined with the CTLA-4 inhibitor ipilimumab or the PD-1 inhibitor pembrolizumab improved response rates compared with studies of the immune checkpoint inhibitors alone. A Phase 3 study, ECHO-301, evaluating the combination of epacadostat with the anti-PD-1 antibody pembrolizumab for the first-line treatment of patients with advanced or metastatic melanoma is underway. Ongoing Phase 1 and Phase 2 studies are also investigating epacadostat in

combination with PD-1 and PD-L1 inhibitors in a variety of other cancer histologies.

About Incyte
Incyte Corporation is a Wilmington, Delaware-based biopharmaceutical company focused on the discovery, development and commercialization of proprietary therapeutics. For additional information on Incyte, please visit the Company's website at www.incyte.com.

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About Immunovaccine
Immunovaccine Inc. develops cancer immunotherapies and infectious disease vaccines based on the Company's DepoVax™ platform, a patented formulation that provides controlled and prolonged exposure of antigens and adjuvant to the immune system. Immunovaccine has advanced two T cell activation therapies for cancer through Phase 1 human clinical trials and is currently conducting a Phase 2 study with its lead cancer vaccine therapy, DPX-Survivac, in recurrent lymphoma. DPX-Survivac is expected to enter additional Phase 2 clinical studies in ovarian cancer and glioblastoma (brain cancer). The Company is also advancing an infectious disease pipeline including innovative vaccines for respiratory syncytial virus (RSV) and anthrax.

Connect at www.imvaccine.com

Forward-looking Statement
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. However, they 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 affecting the Company, including access to capital, the successful completion of clinical trials and receipt of all regulatory approvals and the matters discussed under "Risk Factors and Uncertainties" in Immunovaccine's Annual Information Form filed on March 29, 2016. Immunovaccine Inc. assumes no responsibility to update forward-looking statements in this press release except as required by law.

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[i] What Are the Key Statistics about Ovarian Cancer?" *Cancer.org*. The American Cancer Society, 12 Mar. 2015. Web. Accessed 29 Dec. 2015.

[ii] "Ovarian Cancer Statistics." *Cancer Facts and Figures – Data on Specific Cancers*. World Cancer Research Fund International. Web. Accessed 29 Dec. 2015.