IMUNON Invited to Present Translational Data in Supporting Remarkable Phase 2 Ovarian Cancer Survival Results at ESMO Gynaecological Cancers Congress 2025

May 27, 2025

Presentation at ESMO will follow oral 2025 ASCO Annual Meeting presentation highlighting unprecedented survival data from Phase 2 OVATION 2 Study of IMNN-001

Simultaneously publication in leading peer-reviewed journal Gynecologic Oncology details IMNN-001's outstanding safety and efficacy across multiple analyses and subgroups

Treatment with IMNN-001 could represent new promise for estimated 40,000 women newly diagnosed with advanced ovarian cancer yearly in EU and 300,000 globally

LAWRENCEVILLE, N.J., May 27, 2025 (GLOBE NEWSWIRE) -- IMUNON, Inc. (NASDAQ: IMNN), a clinical-stage company in Phase 3 development of its DNA-mediated immunotherapy, today announced that an abstract highlighting IMNN-001 data based on an immune biomarker analysis from the Phase 2 OVATION 2 Study in women with newly diagnosed advanced ovarian cancer was accepted for poster presentation at the European Society for Medical Oncology (ESMO) Gynaecological Cancers Congress 2025, being held June 19-21, 2025 in Vienna, Austria. The abstract, titled "Immune biomarker analysis of the OVATION-2 trial, a randomized Phase I/II study of IL-12 gene therapy IMNN-001 in combination with Neo/Adjuvant Chemotherapy (NACT) in newly-diagnosed advanced Epithelial Ovarian Cancer (EOC)," will be presented by Premal H. Thaker, M.D., Interim Chief of Gynecologic Oncology, David & Lynn Mutch Distinguished Professor of Obstetrics & Gynecology, Director of Gynecologic Oncology Clinical Research at Washington University School of Medicine, OVATION 2 Study Chair and Study Chair of the Phase 3 OVATION 3 trial.

IMUNON also recently announced that new positive data from the OVATION 2 Study will be highlighted in an oral presentation at the 2025 American Society of Clinical Oncology (ASCO) Annual Meeting and simultaneously published in the peer-reviewed journal *Gynecologic Oncology*. Results include continuous clinically significant improvement in the IMNN-001 treatment group, with median 13-month and 3-month increases in overall and progression-free survival, respectively.

IMNN-001, based on IMUNON's proprietary TheraPlas® technology platform, is an interleukin-12 (IL-12) DNA plasmid vector encased in a nanoparticle delivery system, enabling cell transfection followed by persistent, local production and secretion of the IL-12 protein in the tumor microenvironment. IL-12 is a powerful pluripotent cytokine known for inducing strong anti-cancer immunity by promoting T-lymphocyte and natural killer cell proliferation while inhibiting tumor-mediated immune suppression. IMNN-001 is the first and only IL-12 immunotherapy to achieve a clinically effective response including overall survival benefit in frontline treatment in patients with advanced (stage III/IV) ovarian cancer.

"We are very pleased to be invited to present OVATION 2 biomarker analysis data at ESMO's Gynaecological Cancers Congress, especially in light of the remarkable IMNN-001 survival data that we reported from the study, which are being presented at the ASCO Annual Meeting and in the journal *Gynecologic Oncology*," said Stacy Lindborg, Ph.D., president and chief executive officer of IMUNON. "It is highly encouraging to see the global scientific community's strong interest in our promising and novel IMNN-001 immunotherapy including enthusiasm from leading researchers from the European Union and Latin America in participating in our pivotal Phase 3 trial. There is a significant opportunity to improve the standard of care for thousands of women diagnosed with advanced ovarian cancer, and we look forward to advancing this program in our Phase 3 trial and positioning IMNN-001 for regulatory review in the European Union and markets around the world."

The pivotal Phase 3 OVATION 3 Study of IMNN-001 will include women with newly diagnosed advanced ovarian cancer (stage IIIC or IV) who are eligible for neoadjuvant and adjuvant chemotherapy (N/ACT) (the ITT population), with a sub-group of HRD+ women including those with BRCA1 or BRCA2 mutations. Study participants will be randomized 1:1 to receive either IMNN-001 plus standard of care N/ACT or standard of care N/ACT alone. The primary endpoint of the study is overall survival, and secondary endpoints are surgical response score, chemotherapy response score, clinical response and time to second-line treatment. The study will also assess several exploratory endpoints. IMUNON recently initiated the first two sites for the OVATION 3 Study.

About the Phase 2 OVATION 2 Study

OVATION 2 evaluated the dosing, safety, efficacy and biological activity of intraperitoneal administration of IMNN-001 in combination with neoadjuvant and adjuvant chemotherapy (N/ACT) of paclitaxel and carboplatin in patients newly diagnosed with advanced epithelial ovarian, fallopian tube or primary peritoneal cancer. Treatment in the neoadjuvant period is designed to shrink the tumors as much as possible for optimal surgical removal after three cycles of chemotherapy. Following N/ACT, patients undergo interval debulking surgery, followed by three additional cycles of adjuvant chemotherapy to treat any residual tumor. This open-label study enrolled 112 patients who were randomized 1:1 and evaluated for safety and efficacy to compare N/ACT plus IMNN-001 versus standard-of-care N/ACT. In accordance with the study protocol, patients randomized to the IMNN-001 treatment arm could receive up to 17 weekly doses of 100 mg/m^2 in addition to N/ACT. As a Phase 2 study, OVATION 2 was not powered for statistical significance. Additional endpoints included objective response rate, chemotherapy response score and surgical response.

About IMNN-001 Immunotherapy

Designed using IMUNON's proprietary TheraPlas® platform technology, IMNN-001 is an IL-12 DNA plasmid vector encased in a nanoparticle delivery system that enables cell transfection followed by persistent, local secretion of the IL-12 protein. IL-12 is one of the most active cytokines for the induction of potent anticancer immunity acting through the induction of T-lymphocyte and natural killer cell proliferation. IMUNON previously reported positive safety and encouraging Phase 1 results with IMNN-001 administered as monotherapy or as combination therapy in patients with advanced peritoneally metastasized primary or recurrent ovarian cancer and completed a Phase 1b dose-escalation trial (the OVATION 1 Study) of IMNN-001 in

combination with carboplatin and paclitaxel in patients with newly diagnosed ovarian cancer. IMUNON previously reported positive results from the recently completed Phase 2 OVATION 2 Study, which assessed IMNN-001 (100 mg/m^2 administered intraperitoneally weekly) plus neoadjuvant and adjuvant chemotherapy (N/ACT) of paclitaxel and carboplatin compared to standard-of-care N/ACT alone in 112 patients with newly diagnosed advanced ovarian cancer.

About Epithelial Ovarian Cancer

Epithelial ovarian cancer is the sixth deadliest malignancy among women in the U.S. There are approximately 20,000 new cases of ovarian cancer every year and approximately 70% are diagnosed in advanced Stage III/IV. Epithelial ovarian cancer is characterized by dissemination of tumors in the peritoneal cavity with a high risk of recurrence (75%, Stage III/IV) after surgery and chemotherapy. Since the five-year survival rates of patients with Stage III/IV disease at diagnosis are poor (41% and 20%, respectively), there remains a need for a therapy that not only reduces the recurrence rate but also improves overall survival. The peritoneal cavity of advanced ovarian cancer patients contains the primary tumor environment and is an attractive target for a regional approach to immune modulation.

About IMUNON

IMUNON is a clinical-stage biotechnology company focused on advancing a portfolio of innovative treatments that harness the body's natural mechanisms to generate safe, effective and durable responses across a broad array of human diseases, constituting a differentiating approach from conventional therapies. IMUNON is developing its non-viral DNA technology across its modalities. The first modality, TheraPlas®, is developed for the gene-based delivery of cytokines and other therapeutic proteins in the treatment of solid tumors where an immunological approach is deemed promising. The second modality, PlaCCine®, is developed for the gene delivery of viral antigens that can elicit a strong immunological response.

The Company's lead clinical program, IMNN-001, is a DNA-based immunotherapy for the localized treatment of advanced ovarian cancer that has completed multiple clinical trials including one Phase 2 clinical trial (OVATION 2). IMNN-001 works by instructing the body to produce safe and durable levels of powerful cancer-fighting molecules, such as interleukin-12 and interferon gamma, at the tumor site. Additionally, the Company has completed dosing in a first-in-human study of its COVID-19 booster vaccine (IMNN-101). The Company will continue to leverage these modalities and to advance, either directly or through partnership, the technological frontier of plasmid DNA to better serve patients with difficult-to-treat conditions. For more information, please visit **www.imunon.com**.

Forward-Looking Statements

IMUNON wishes to inform readers that forward-looking statements in this news release are made pursuant to the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including, but not limited to, statements regarding the timing and enrollment of the Company's clinical trials, the potential of any therapies developed by the Company to fulfill unmet medical needs, the market potential for the Company's products, if approved, the potential efficacy and safety profile of our product candidates, and the Company's plans and expectations with respect to its development programs more generally, are forward-looking statements. We generally identify forward-looking statements by using words such as "may," "will," "expect," "plan," "anticipate," "estimate," "intend" and similar expressions (as well as other words or expressions referencing future events, conditions or circumstances). Readers are cautioned that such forward-looking statements involve risks and uncertainties including, without limitation, uncertainties relating to unforeseen changes in the course of research and development activities and in clinical trials, including the fact that interim results are not necessarily indicative of final results; the uncertainties of and difficulties in analyzing interim clinical data; the significant expense, time and risk of failure in conducting clinical trials; the need for IMUNON to evaluate its future development plans; possible actions by customers, suppliers, competitors or regulatory authorities; and other risks detailed from time to time in IMUNON's filings with the Securities and Exchange Commission. IMUNON assumes no obligation, except to the extent required by law, to update or supplement forward-looking statements that become untrue because of subsequent events, new information or otherwise.

Contacts:

Media	**Investors**
Jenna Urban	Peter Vozzo
CG life	ICR Healthcare
212-253-8881	443-213-0505
jurban@cglife.com	peter.vozzo@icrhealthcare.com

Source: Imunon, Inc.