

OVATION-3: A RANDOMIZED PHASE III TRIAL EVALUATING THE SAFETY AND EFFICACY OF INTRAPERITONEAL IL-12 GENE THERAPY ADMINISTERED IN COMBINATION WITH STANDARD NEOADJUVANT AND ADJUVANT CHEMOTHERAPY IN NEWLY DIAGNOSED PATIENTS WITH ADVANCED EPITHELIAL OVARIAN CANCER

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INTRODUCTION

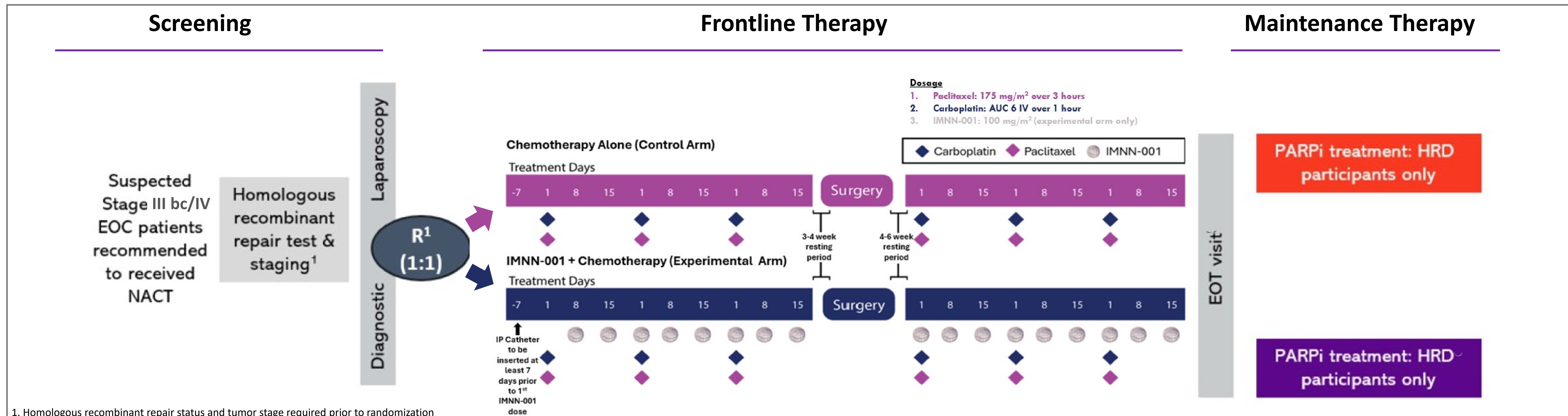
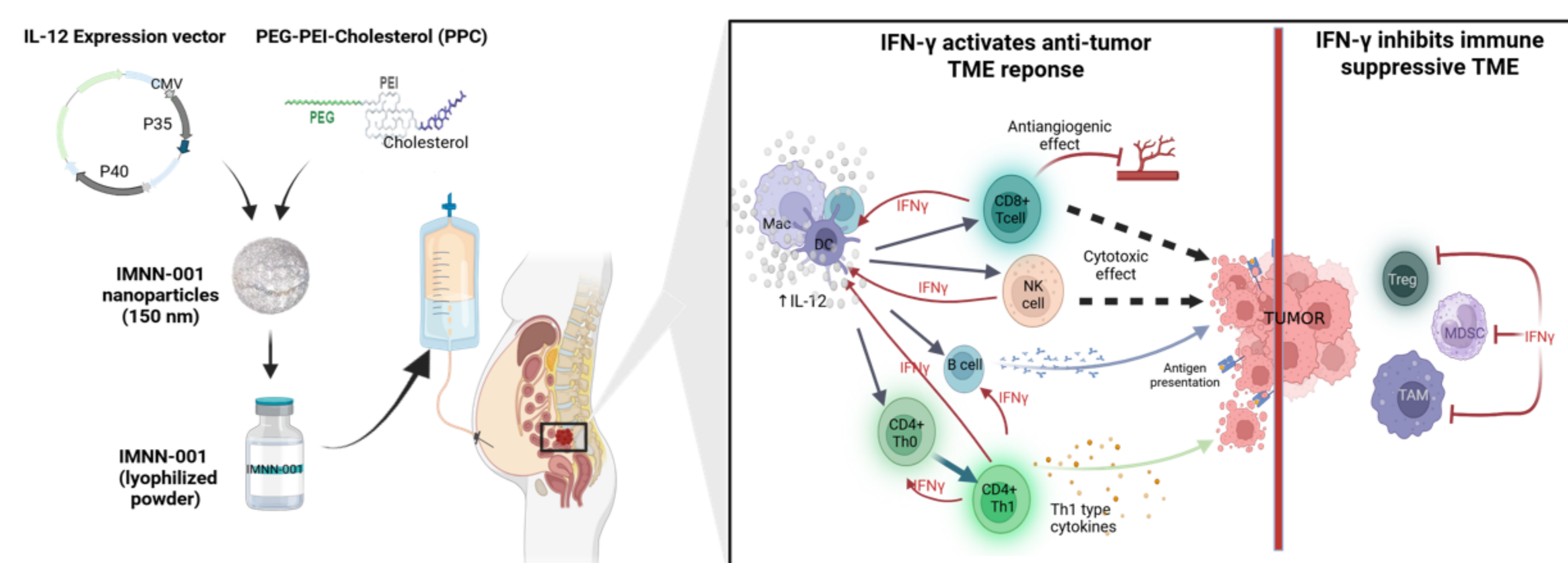
- IMNN-001, an **IL-12 DNA-gene therapy nanoparticle** that showed a favorable benefit/risk ratio when administered intraperitoneally (IP) in combination with Neo and Adjuvant IV chemotherapy (N/ACT) in women with advanced Epithelial Ovarian Cancer (EOC).¹⁻²
- In the **OVATION-2 randomized phase 2 study (NCT03393884), IMNN-001+SoC N/ACT demonstrated a clinically meaningful numerical OS benefit of 13 months (mo) vs N/ACT alone (40.5 vs 27.6 mo; HR 0.70)**. In the PARPi-treated subgroup of patients, OS HR was 0.42 (NE vs 37.1mo). Local delivery of IL-12 with IMNN-001 was safe, with no serious immune-related adverse events. Most common IMNN-001 adverse reactions were abdominal pain and pyrexia.³
- OVATION-3 Phase 3 trial is designed to confirm the OS benefit and safety of IMNN-001+SoC N/ACT for advanced EOC patients.**

OVATION PHASE III STUDY (NCT 06915025)

- N=500 to enroll in US and EU sites.
- PRIMARY ENDPOINT:** OS (>95% statistical power)
- SECONDARY ENDPOINTS** include Chemotherapy Response Score, Surgical Response Score and ORR
- EXPLORATORY ENDPOINTS** include IMNN-001's local and systemic immune effects, QoL and ctDNA analysis

IMNN-001 DELIVERY AND MECHANISM OF ACTION

- IMNN-001, comprised of a plasmid expressing the p35 and p45 subunits of hIL-12 encased in a synthetic lipopolymer delivery system composed of a polyethylenimine (PE) backbone covalently linked to polyethylene glycol (PEG) and cholesterol, is delivered intraperitoneally in the clinic.⁴
- The expression of hIL-12 by cells in the tumor microenvironment (TME) through its downstream mediators (IFN- γ and other cytokines) activates the innate and adaptive immune systems and inhibits immune suppressive cells, turning the TME from cold to hot and providing anti-tumor activity.^{2,5,6}



ELIGIBILITY (selected criteria)

- Female, ≥ 18 years old, ECOG 0-2.
- Histologically confirmed diagnosis of high-grade non-mucinous epithelial ovarian (serous, endometrioid, carcinosarcoma, mixed epithelial pathologies), fallopian tube, or peritoneal cancer Stage IIIB/C or IV (FIGO) with no prior treatment for this disease.
- Eligible to receive neoadjuvant chemotherapy but no intent to receive bevacizumab.
- Confirmed biomarker tumor status (HRD vs. HRP).
- WCHBP must have a negative serum pregnancy test before initiation of therapy and practice an effective form of contraception. No breastfeeding allowed.
- Adequate bone marrow, renal, hepatic function, and neuropathy grade ≤ 1 .
- No active infection or uncontrolled illness & no active hepatitis or HIV (undetectable viral load).
- No prior treatment with IMNN-001 or requiring systemic immunosuppressive therapy (i.e., steroid use not related to chemotherapy administration).
- No bowel obstruction, sub-occlusive mesenteric disease, abdominal or gastrointestinal fistula, gastrointestinal perforation, or intra-abdominal abscess.
- No uncontrolled hypersensitivity to treatment drugs or their excipients.
- No in treatment for active autoimmune disease.
- No prior radiotherapy to any portion of the abdominal cavity or pelvis. Or any prior chemotherapy for any abdominal or pelvic tumor.
- No history of CNS disease.
- No interference with the placement of the IP catheter for study drug administration.

REFERENCES

- Thaker et al., *Future Oncol*, 2019
- Thaker et al., *Clin Cancer Res*, 2021
- Thaker et al., *Gynecol Oncol*, 2025
- Anwer et al., *Gene Ther*, 2009
- Geils et al., *J. Gene Med*, 2024
- Thaker et al., Poster: AACR Advances in OC research meeting 2025

Interested in participating?

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OVATION-3 is currently enrolling in the US

