

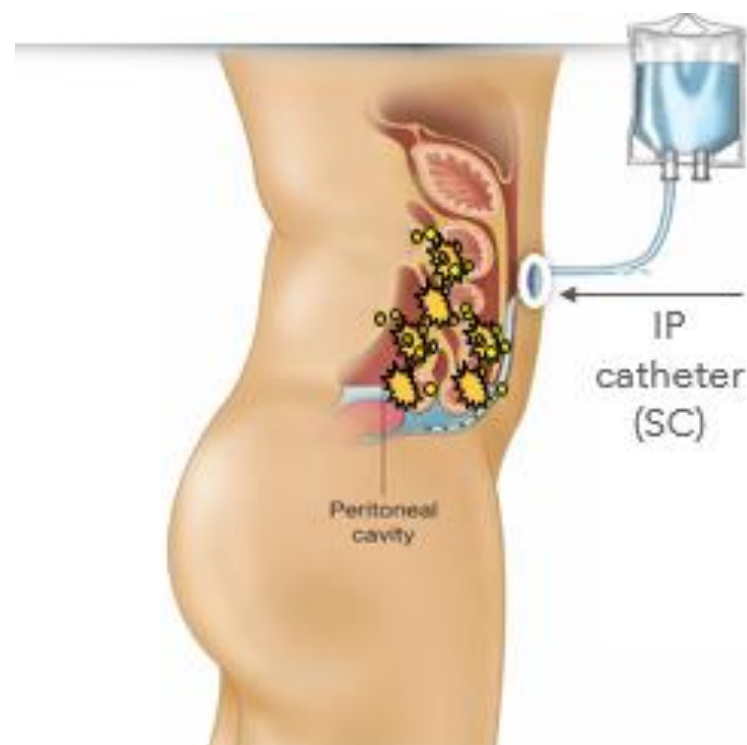
# A Phase I/II Study Evaluating Intraperitoneal GEN-1 in Combination with Neoadjuvant Chemotherapy in Patients with Newly Diagnosed Advanced Epithelial Ovarian Cancer (EOC)

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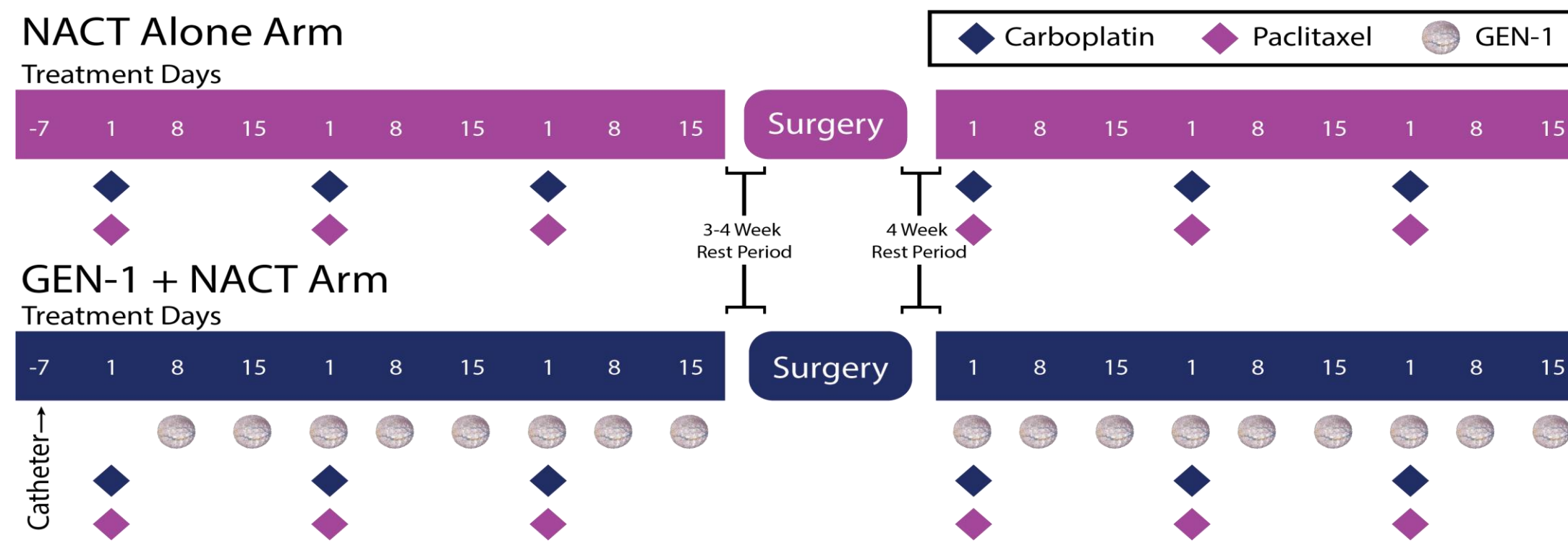
## GEN-1 BACKGROUND

GEN-1 is an IL-12 plasma vector encased in a nanoparticle delivery system. The encasement enables cell transfection followed by persistent, local secretion of IL-12 at therapeutic levels, providing efficacy by recruiting an anti-cancer immune response. This delivery system is designed for local administration which avoids the toxicities associated with systemic recombinant IL-12. GEN-1 is administered through a subcutaneously implanted intraperitoneal (IP) catheter.



## STUDY DESIGN AND METHODS

- Up to 130 patients with newly diagnosed stage IIIC or IV EOC will be randomized 1:1 to receive NACT plus GEN-1 or NACT alone.
- Subjects on both treatment arms will receive a total of six cycles of carboplatin AUC 6 with paclitaxel 175 mg/m<sup>2</sup> every 21 days. Three cycles occur prior to interval debulking surgery (IDS) then another three cycles follow IDS.
- Subject randomized to the GEN-1 + NACT treatment arm will receive 8 weekly GEN-1 IP infusions at a dose of 100 mg/m<sup>2</sup> starting at Cycle 1 Day 8. Following IDS, an additional 9 weekly GEN-1 IP infusions at a dose of 100 mg/m<sup>2</sup> will be administered.



## TRANSLATIONAL DATA

- Immunohistochemistry analysis to determine the biological activity of GEN-1 on tumor tissue will be evaluated in a subgroup of patients in the control arm (NACT alone) and experimental arm (NACT + GEN-1) at the initial biopsy/laparoscopy and at IDS. Tumor tissue will be analyzed for frequency of CD8+, FoxP3, IDO-1, PD-1, and PDL-1.
- A subgroup of patients from both treatment arms will have blood and peritoneal fluid/washings collected before and after treatment to quantify levels of IFN-γ.
- All consenting subjects will have blood collected prior to Cycle 1 Day 1 for a gene expression and immune repertoire.

## CURRENT STUDY STATUS

- PHASE I**
- Completed in Q2 2020
  - Data Safety Monitoring Board confirmed no dose limiting toxicities were found & 100 mg/m<sup>2</sup> is the recommended Phase II dose
  - Reduced target enrollment to 110
- PHASE II**
- Ongoing, actively recruiting eligible subjects across 25 sites throughout the US and Canada
  - 1/3 of subject recruitment has been completed
  - PFS endpoint results anticipated in Q1 2023
  - OS endpoint results anticipated in 3Q 2024 (corrected)

## KEY ELIGIBILITY CRITERIA

INCLUSION CRITERIA	EXCLUSION CRITERIA
<input checked="" type="checkbox"/> Histological diagnosis of epithelial ovarian, fallopian tube, or primary peritoneal carcinoma	<input checked="" type="checkbox"/> Prior GEN-1 treatment
<input checked="" type="checkbox"/> FIGO staging of III or IV	<input checked="" type="checkbox"/> History of allergic reaction to compounds (or similar compounds) used in study
<input checked="" type="checkbox"/> Adequate bone marrow, renal, hepatic, and neurological function	<input checked="" type="checkbox"/> Corticosteroids within 2 weeks prior to study or ongoing immunosuppressive therapy required
<input checked="" type="checkbox"/> Free of active infection 4 weeks prior to study entry	<input checked="" type="checkbox"/> Other malignancies
<input checked="" type="checkbox"/> Free of hormonal therapy directed at the tumor (1 week prior to study entry)	<input checked="" type="checkbox"/> Hepatitis
<input checked="" type="checkbox"/> Performance status score of 0, 1, or 2 based on ECOG criteria	<input checked="" type="checkbox"/> Prior chemotherapy or radiotherapy to the abdominal cavity or pelvis
	<input checked="" type="checkbox"/> Central nervous system disease within 6 months prior to study

## ENDPOINTS

- PRIMARY**
- Safety & Phase II dose
  - Progression Free Survival
- SECONDARY**
- Overall Survival
  - Objective Response Rate
  - Pathological Response
  - Serological Response (CA-125)

All subjects are being evaluated for safety

## CONTACT INFORMATION AND DISCLOSURES

Trial in Progress Poster ID: 11024  
 NCT03393884 on <https://www.clinicaltrials.gov/>  
 For questions, please contact Lauren Musso at [lmusso@celsion.com](mailto:lmusso@celsion.com)  
 K. Anwer, N. Borys, and L. Musso are employees of Celsion Corporation. P.H. Thaker is a consultant for Celsion Corporation.  
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