TPS5627 Poster Session

A phase 3, open-label, randomized study of rinatabart sesutecan (Rina-S) vs investigator's choice (IC) of chemotherapy in patients with platinum-resistant ovarian cancer (PROC).

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Background: Ovarian cancer (OC) is the fifth leading cause of cancer-related death among women in the United States, with 12,730 estimated deaths in 2025. In patients (pts) with advanced OC, 70% experience recurrence and many develop platinum-resistant OC (PROC) after standard platinum-based treatment. Rinatabart sesutecan (Rina-S) is an antibody-drug conjugate targeting folate receptor alpha (FRα) with a novel hydrophilic protease-cleavable linker and exatecan, a topoisomerase I inhibitor. In cohort B1 of a phase 1/2 trial (NCT05579366), Rina-S 120 mg/m² every 3 weeks (Q3W) showed encouraging anti-tumor activity with a 50% objective response rate (ORR; 95% CI, 26-74), including 1 complete response, and was well tolerated in a heavily pretreated OC population, with >90% having PROC. Responses were observed regardless of FRα expression status. Here we report the design of an open-label, randomized, phase 3 study (NCT06619236) to investigate Rina-S vs IC chemotherapy in pts with PROC. **Methods:** This phase 3 study will enroll ~530 pts with platinum-resistant, high-grade serous or endometrioid epithelial OC, primary peritoneal cancer, or fallopian tube cancer regardless of FRα expression status (Table). Pts will be randomized 1:1 to receive Rina-S 120 mg/m² IV Q3W or IC chemotherapy (paclitaxel, topotecan, pegylated liposomal doxorubicin, or gemcitabine). Primary endpoint is progression-free survival. Secondary endpoints include overall survival, ORR, duration of response, CA-125 response, adverse events, and time to second disease progression. Additional endpoints include QTc changes and overall change from baseline and time to deterioration in Global Health Status/Quality of Life, and patient-reported outcomes. Follow-up visits will occur every 12 weeks for up to ~1 year after the treatment period. Clinical trial information: NCT06619236. Research Sponsor: Genmab A/S.

Key study criteria.

Inclusion Criteria	Exclusion Criteria
High-grade serous or endometrioid epithelial OC, primary peritoneal cancer, or fallopian tube cancer	Primary platinum-refractory disease, defined as OC that did not respond to a first-line platinum-containing regimen
Received 1 to 4 prior lines of therapy, including:	OC that progressed ≤91 days after last dose of a first-line platinum-containing regimen
Platinum chemotherapy	History of another malignancy ≤3 years or evidence of residual disease
Bevacizumab	Known active central nervous system metastases or carcinomatous meningitis
PARP inhibitor (if applicable)	
MIRV (if eligible)	
Platinum-resistant disease defined as:	
Pts who received ≥4 cycles of first-line platinum-based therapy who had a response and then progressed 91-183 days after last dose	
Pts who received 2 to 4 lines of platinum-based therapy and have progressed <183 days after last dose	

MIRV, mirvetuximab soravtansine; PARP, poly-ADP ribose polymerase.