Abstract GLORIOSA: A randomized, open-label, phase 3 study of mirvetuximab TPS5622 soravtansine with bevacizumab vs. bevacizumab as maintenance in platinumsensitive ovarian, fallopian tube or primary peritoneal cancer

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BACKGROUND	MIRV Mechanism of Action
 Epithelial ovarian cancer, primary peritoneal cancer, and fallopian tube cancer (together referred to as EOC) are a leading cause of death from gynecologic cancers worldwide¹ Mirvetuximab soravtansine (MIRV), an antibody-drug conjugate (ADC), received accelerated FDA approval in November 2022 for the 	• MIRV is an ADC with an FR α -binding antibody, cleavable linker, and a maytansinoid DM4 payload, a potent tubulin-targeting agent ¹²
treatment of adult patients with folate receptor alpha (FR α)-positive, platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer who have received 1 to 3 prior systemic treatment regimens ²	
 FRα, also known as folate receptor 1 (FOLR1), has limited expression on normal tissues but is elevated in most ovarian cancers, which makes it an attractive target for the development of novel therapies³⁻⁵ 	FRα binding arms Binding and
 MIRV treatment has demonstrated clinically meaningful antitumor activity in patients with platinum-resistant ovarian cancer (PROC) regardless of the number of prior lines of therapy or PARPi use^{6,7} 	FRα - Cell death
 SORAYA (phase 2, single-arm trial): Investigator-assessed objective response rate (ORR) was 32.4% (95% CI, 23.6%-42.2%), including 5 complete responses (CRs), and median duration of response (DOR) was 6.9 months⁷ 	
– MIRASOL (phase 3 randomized, confirmatory trial): The primary endpoint of progression-free survival (PFS) was met with MIRV vs investigator's choice of chemotherapy (median, 5.62 vs 3.98 mo; HR 0.65; P<0.0001). MIRV also demonstrated a statistically significant improvement in overall survival (IOSI median, 16.46 vs 12.75 mo; HR 0.67; P=0.0046). These results are reported in	DM4: Potent tubulin

- significant improvement in overall survival ([US] median, 16.46 vs 12.75 mo; HK U.67; P=U.0046).* These results are reported in the ASCO 2023 late-breaking abstract #LBA5507⁹
- In the FORWARD II trial among patients with recurrent platinum-sensitive ovarian cancer (rPSOC), combination therapy with MIRV + bevacizumab conferred an ORR of 48% (95% CI, 30%-67%), including 3 CRs and a median DOR of 12.7 months¹⁰
- The GLORIOSA trial will evaluate maintenance therapy with MIRV + bevacizumab vs. bevacizumab in patients with FR α -high rPSOC who demonstrated CR, partial response (PR), or stable disease (SD) following 2L triplet therapy¹¹





FR α detected by IHC with PS2+ intensity among \ge 75% of viable tumor cells

- Prior PARPi required if positive for BRCA mutation
- 1 prior platinum treatment
- Relapsed after 1L platinum-based chemotherapy
- Platinum-sensitive disease (PFI >6 months)
- Appropriate for, currently be on, or have completed 2L platinum-based triplet therapy
- Received 4-8 cycles of 2L platinum-based triplet therapy, which included ≥3 cycles of bevacizumab in combination with platinum-based chemotherapy^{b,c}
- CR, PR, or SD after prior treatment with platinum-based doublet + bevacizumab
- Randomized no later than 8 weeks from the last dose of platinum-based triplet therapy in second line
- Stabilized or recovered (Grade 1 or baseline) from all prior therapy-related toxicities (except alopecia) and not had any major surgeries for at least 4 weeks prior to the first dose of maintenance therapy
- Adequate hematologic, liver, and kidney functions

^aList of inclusion criteria is not comprehensive of all criteria. ^bIf the number of cycles received is <6 due to toxicity, this must be documented, and toxicity assessed as unlikely related to bevacizumab. ^cIn the case of interval secondary cytoreductive surgery, patients are permitted to receive only 2 cycles of bevacizumab in combination with the last 3 cycles of 2L platinum-based triplet therapy. In the case of primary cytoreductive surgery before 2L platinum-based triplet therapy, patients must have no less than 3 cycles of bevacizumab in combination with platinum-based chemotherapy after their surgery and before randomization.

Exclusion Criteria^{11,a}

- Endometrioid, clear cell, mucinous, or sarcomatous histology, mixed tumors containing any of the above histologies, or low-grade/borderline ovarian tumor
- >1 line of prior chemotherapy^b
- PD while on or following platinum-based triplet therapy
- Active or chronic corneal disorders, history of corneal transplantation, or active ocular conditions requiring ongoing treatment/monitoring
- >Grade 1 peripheral neuropathy per CTCAE
- History of bowel obstruction related to underlying disease within 6 months before the start of maintenance study treatment
- Prior treatment with MIRV or other FR α -targeting agents

^aList of exclusion criteria is not comprehensive of all criteria. ^bNeoadjuvant ± adjuvant therapies are considered 1 line of therapy. Maintenance therapy will be considered part of the preceding line of therapy.

GLORIOSA Trial Status

Additional Information

Primary Efficacy Endpoint¹¹

Investigator-assessed PFS, defined as the time from date of randomization until investigator-assessed progressive disease or death

Key Secondary Endpoint¹¹

OS, defined as the time from randomization to death

Other Secondary Endpoints^{11,13}

- Evaluation of AEs according to the National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) version 5.0
- PFS2, defined as the time from date of randomization until second disease progression or death
- ORR, which includes best response for CR or PR
- DOR, defined as patients who achieved best overall response of CR or PR upon completion of triplet therapy
- DFS, defined as patients who have no measurable disease per RECIST v1.1 at randomization
- BICR sensitivity analyses of efficacy endpoints (ORR, DOR, DFS) will also be performed
- CA-125 response, determined using the Gynecologic Cancer Intergroup Criteria
- Patient-reported outcome health-related quality of life of disease-related symptoms using the NCCN-FACT Ovarian Symptom Index (NFOSI-18) DRS-P (disease-related symptom subscale-physical) questionnaire

Statistical Assumptions¹³

Anticipated enrollment: N=418, providing 90% power to detect a hazard ratio of 0.7

Abbreviations: 2L, second-line; AEs, adverse events; ADC, antibody-drug conjugate; AdjBW, adjusted body weight; AIBW, adjusted ideal body weight; Avg, average; BICR, blinded independent central review; BRCA, breast cancer gene; CA-125, cancer antigen 125; CR, complete response; CTCAE, Common Terminology Criteria for Adverse Events; DAR, drug to antibody ratio; DFS, disease-free survival; DOR, duration of response; DRS-P, disease-related symptom subscale-physical; ECOG, Eastern Cooperative Oncology Group; ENGOT, The European Network of Gynaecological Oncological Trial groups; EOC, epithelial ovarian cancer; FOLR1, folate receptor 1; FRα, folate receptor alpha; GOG, Gynecologic Oncology Group; IBW, ideal body weight; MIRV, mirvetuximab soravtansine; NFOSI-18, NCCN-FACT Ovarian Symptom Index 18; ORR, objective response rate; PARPi, poly (adenosine diphosphate [ADP]-ribose) polymerase inhibitor; PD, progressive disease; PFI, platinum-free interval; PFS, progression-free survival; PFS2, progression-free survival 2; PR, partial response; PS2+, positive staining 2+; Q3W, three times per week; RECIST v1.1, Response Evaluation Criteria in Solid Tumors version 1.1; rPSOC, recurrent platinum-sensitive ovarian cancer; SD, stable disease Acknowledgements: Studies described here were sponsored by ImmunoGen, Inc. The authors would like to especially thank the patients who consented to be included in these trials, as well as their families. Editorial assistance and writing support in the preparation of this poster were provided by PRECISIONscientia, funded by ImmunoGen, Inc. References: 1. González-Martín A et al. N Engl J Med. 2019;381:2391-2402. 2. Elahere. Prescribing Information. Immunogen, Inc.; 2022. 3. Crane LMA, et al. Cell Oncol (Dordr). 2012;35(1):9-18. 4. Kalli KR, et al. Gynecol Oncol. 2008;108(3):619-626. 5. Chen Y-L, et al. Mol Oncol. 2012;6(3):360-369. 6. Matulonis UA, et al. Presented at: SGO 2022 Annual Meeting on Women's Cancer; March 18-21, 2022; Phoenix, AZ. 7. Matulonis UA, et al. J Clin Oncol. 2023;41(13):2436-2445. 8. News release. ImmunoGen, Inc.; May 3, 2023. Accessed May 5, 2023. https://investor.immunogen.com/news-releases/news-releasedetails/elaherer-demonstrates-overall-survival-benefit-phase-3-mirasol 9. Moore KN, et al. Presented at: 2023 American Society of Clinical Oncology Annual Meeting. June 2-6, 2023. Chicago, IL. 10. Gilbert L et al. Gynecol Oncol. (Appendix A) 2023;170:241-247. 11. Clinical Trials.gov identifier: NCT05445778. Updated May 9, 2023. Accessed May 9, 2023. https://clinicaltrials.gov/ct2/show/NCT05445778 12. Ab O et al. Mol Cancer Ther. 2015;14:1605-13. 13. Data on file. ImmunoGen, Inc. 14. ENGOT Groups. Accessed May 2, 2023. https://engot.esgo.org/ 15. GOG partners. The GOG Foundation. Accessed May 2, 2023. https://www.gog.org/

Overall Status and Enrollment^{11,13}

• This is a global study that is currently open and enrolling

Trial Tracking Information^{11,14,15}

ClinicalTrials.gov ID: NCT05445778 ENGOT.ESGO.org ID: ENGOT-ov76

GOG.org ID: GOG-3078

This trial will be performed according to the principles of the Joint ENGOT and GOG Foundation requirements for trials with industry partners. A model C design

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ENGOT GOG

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will be utilized.

