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Objectives:

Low-grade serous ovarian cancer (LGSOC) is a rare, clinically distinct cancer broadly driven by RAS/MAPK pathway alterations. There are no treatment options specifically approved for LGSOC. Avutometinib is a first-inclass oral RAF/MEK clamp that potently inhibits MEK kinase activity and induces a dominant negative RAF-MEK complex, preventing phosphorylation of MEK by ARAF, BRAF, and CRAF. Defactinib is a selective inhibitor of focal adhesion kinase (FAK), a signaling target that has been shown to mediate resistance to multiple anticancer agents. Avutometinib + defactinib demonstrated a 45% objective response rate (ORR; 13/29, 95% CI: 26–64%) and tumor shrinkage in 86% (25/29) of patients in Part A of ENGOT-OV60/GOG-3052/RAMP 201 (RAMP 201; NCT04625270). These findings were consistent with earlier data (FRAME; NCT03875820) that led to an FDA breakthrough therapy designation for avutometinib + defactinib in recurrent LGSOC. **Methods:**

This planned subgroup analysis of RAMP 201 (April 6, 2023 data cutoff) was performed to assess the efficacy (Part A; confirmed ORR, blinded independent central review; n=29) and safety (all treated patients; n=81) of avutometinib + defactinib in the context of 1) lines of prior systemic therapy (LoT; 1-3, ≥ 4) and 2) best response to most recent prior treatment in the metastatic/recurrent setting (partial response/complete response [PR/CR], no PR/CR; investigator-assessed). Patients who experienced stable disease (SD) and patients who previously received a MEK inhibitor (MEKi) were further characterized.

Results:

Similar ORRs were observed among patients treated with 1–3 (5/11; 45.5%) and \geq 4 (8/18; 44.4%) LoT. Prior to

enrollment in RAMP 201, 23/29 patients presented in the metastatic/recurrent setting, with 2/23 (8.7%) patients having a response to their last LoT; avutometinib + defactinib yielded a 43.5% (10/23) ORR in this subgroup. At the time of data cutoff, 13/29 patients receiving avutometinib + defactinib had the best response of SD, with 10/13 SD patients achieving tumor shrinkage and 6 achieving \geq 15% tumor regression. For these patients, the median time from the last LoT was 1.84 months, with the majority (9/13) having received chemotherapy or hormonal therapy as their last LoT. The best response to the last LoT could be determined for 8/13 patients, with 5/8 having the best response of progressive disease (PD). Four of the 29 efficacy-evaluable patients had previously received MEKi (2 as last LoT), with 3 discontinuing due to disease progression and 1 due to an unknown cause. The best response to prior MEKi therapy included 1 SD, 1 PD, and 2 unknown. Treatment with avutometinib + defactinib in 3/4 patients who previously received MEKi achieved confirmed PRs. The safety profiles of avutometinib + defactinib were similar in the 1–3 and \geq 4 LoT subgroups and were consistent with previously reported safety data. The majority of treatment-related adverse events (TRAEs) were mild to moderate, manageable/reversible.

Conclusions:

In RAMP 201 Part A, avutometinib + defactinib achieved high response rates in heavily pre-treated recurrent LGSOC, regardless of the previous line of therapy. Notably, tumor regression was observed in the majority of patients, including those with stable disease or progressive disease with the last line of therapy, including previous MEKi.

None - Scientific Plenary

UPLIFT (ENGOT-OV67/GOG-3048): Results from the phase II trial of upifitamab rilsodotin (UpRi; XMT-1536), a NaPi2bdirected dolaflexin antibody-drug conjugate in platinum-resistant ovarian cancer

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Objectives:

Effective and well-tolerated treatments for platinum-resistant ovarian cancer (PROC) remain an unmet medical need; standard of care single-agent chemotherapy has limited efficacy, with response rates of ~12%. Upifitamab rilsodotin (UpRi) is a dolaflexin, high drug-to-antibody ratio antibody-drug conjugate (ADC) targeting NaPi2b, a sodium-dependent phosphate transporter broadly expressed in high-grade serous epithelial ovarian cancer, with limited expression in normal tissues. UPLIFT was a single-arm phase II trial evaluating the efficacy and safety of UpRi in PROC.

Methods:

UPLIFT enrolled patients with up to 4 prior lines of therapy; patients were dosed at 36mg/m² Q4W. Patients enrolled regardless of