Mirvetuximab soravtansine-gynx beneficial for FRα-positive ovarian cancer, finds phase 3 trial

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For patients with high folate receptor α (FRα)-positive ovarian cancer, a first-in-class antibody-drug conjugate targeting FRα, mirvetuximab

soravtansine-gynx (MIRV), shows a significant benefit over chemotherapy, according to a study published in the Dec. 7 issue of the *New England Journal of Medicine*.

Kathleen N. Moore, M.D., from the Stephenson Cancer Center Section of Gynecologic Oncology at the University of Oklahoma Health Sciences Center in Oklahoma City, and colleagues conducted a phase 3 trial to compare the efficacy and safety of MIRV to the investigator's choice of chemotherapy for treatment of platinum-resistant, high-grade serous ovarian cancer. Participants who had previously received one to three lines of therapy and had high FRα tumor expression were randomly assigned to receive MIRV or chemotherapy (paclitaxel, pegylated liposomal doxorubicin, or topotecan; 227 and 226 patients, respectively).

The researchers found that median progression-free survival was 5.62 and 3.98 months with MIRV and chemotherapy, respectively. An objective response occurred in 42.3 and 15.9 percent of participants in the MIRV and chemotherapy groups, respectively (odds ratio, 3.81). Significantly longer overall survival was seen with MIRV than chemotherapy (median, 16.46 versus 12.75 months; hazard ratio for death, 0.67). Fewer adverse events of grade 3 or higher, serious adverse events of any grade, and events leading to discontinuation occurred with MIRV than chemotherapy during the treatment period.

"Platinum-resistant ovarian cancer is a lethal disease with few efficacious, targeted treatments," the authors write. "MIRV appears to be capable of inducing responses and improving survival in patients with this disease."

The study was funded by ImmunoGen, which is developing MIRV.

More information: Kathleen N. Moore et al, Mirvetuximab

Soravtansine in FRα-Positive, Platinum-Resistant Ovarian Cancer, *New England Journal of Medicine* (2023). DOI: 10.1056/NEJMoa2309169