



ELAHERE® Shows Overall and Progression-Free Survival Benefit Regardless of Prior PARPi Exposure or Prior Lines of Therapy in FRα-Positive Platinum-Resistant Ovarian Cancer

September 28, 2023

Data Further Position ELAHERE to Become the New Standard of Care for Patients with FRα-Positive Platinum-Resistant Ovarian Cancer

Findings to be Highlighted in Oral Presentation at ESGO Annual Congress

WALTHAM, Mass.--(BUSINESS WIRE)--Sep. 28, 2023-- [ImmunoGen Inc.](#) (Nasdaq: IMGN), a leader in the expanding field of antibody-drug conjugates (ADCs) for the treatment of cancer, today announced findings from two subset analyses of the Phase 3 confirmatory MIRASOL trial (GOG 3045/ENGOT OV-55) evaluating the safety and efficacy of ELAHERE® (mirvetuximab soravtansine-gynx) compared to chemotherapy in patients with folate receptor alpha (FRα)-positive platinum-resistant ovarian cancer (PROC). The findings will be presented by Dr. Toon Van Gorp in an oral presentation today at the 24th Congress of the European Society of Gynaecological Oncology (ESGO) in Istanbul, Turkey.

“Consistent with the strong topline MIRASOL data where superiority was seen across all efficacy endpoints, these subset analyses show that the improvements in progression-free survival, objective response rates, and overall survival demonstrated in the overall study population are also observed regardless of the number of prior lines of therapy,” said Toon Van Gorp, Professor of Gynaecological Oncology at the University of Leuven. “Importantly, the benefit seen with ELAHERE in patients treated with a prior PARP inhibitor is particularly encouraging, as it has been shown that PARP inhibitors have a potential negative impact on the efficacy of subsequent chemotherapies. These new data being presented at ESGO, including a consistent safety and tolerability profile, provide valuable insights for physicians into ELAHERE’s broad and meaningful benefit compared to chemotherapy and further position ELAHERE to become the new standard of care for patients with FRα-positive PROC.”

MIRASOL is a randomized Phase 3 trial of ELAHERE versus investigator's choice (IC) of single-agent chemotherapy (weekly paclitaxel, pegylated liposomal doxorubicin (PLD), or topotecan). MIRASOL enrolled 453 patients with PROC, whose tumors express high levels of FRα using what is now the Ventana FOLR1-2.1 assay, and who have been treated with one to three prior regimens. Patients were stratified by number of prior lines of therapy (14% had one prior line of therapy, 40% had two prior lines of therapy, and 46% had three prior lines of therapy) and by IC chemotherapy, with paclitaxel as the most commonly chosen (41%), followed by PLD (36%) and topotecan (23%). 62% of patients received prior bevacizumab; 55% received a prior PARP inhibitor. The primary endpoint of this trial is progression-free survival (PFS) by investigator assessment. Key secondary endpoints include objective response rate (ORR), overall survival (OS), and patient-reported outcomes (PROs).

EFFICACY OF MIRVETUXIMAB SORAVTANSINE IN FOLATE RECEPTOR ALPHA HIGH, PLATINUM-RESISTANT OVARIAN CANCER BY TYPE AND NUMBER OF PRIOR TREATMENT REGIMENS: AN EXPLORATORY ANALYSIS

Lead Author: Toon Van Gorp, MD

Date/Time: Thursday, September 28, 2023, 2:00-2:35pm TRT / 7:00-7:35am ET

Abstract: #1015 and #1056

In addition to the top-line MIRASOL data previously disclosed and subsequently presented at the 2023 American Society of Clinical Oncology (ASCO) Annual Meeting, the following new data are being presented at ESGO:

- ELAHERE demonstrated clinically meaningful improvement in PFS and ORR by investigator assessment and in OS compared to IC chemotherapy, regardless of prior PARPi exposure.
 - In patients with prior PARPi (n=251), PFS hazard ratio (HR) was 0.58 (95% CI: 0.43, 0.78; p= 0.0002); in the PARPi-naïve subset (n=191), PFS HR was 0.74 (95% CI: 0.54, 1.03, p =0.0685).
 - In patients with prior PARPi, ORR in the ELAHERE arm was 45% (95% CI: 36%, 54%), including 7 CRs, compared to 17% (95% CI: 11%, 25%), with no CRs, in the IC chemotherapy arm (p<0.0001); in the PARPi-naïve subset, ORR in the ELAHERE arm was 40% (95% CI: 30%, 51%), including 5 CRs, compared to 14% (95% CI: 8%, 23%), with no CRs, in the IC chemotherapy arm (p<0.0001).
 - In patients with prior PARPi, OS HR was 0.48 (95% CI: 0.33, 0.71; p= 0.0002); in the PARPi-naïve subset, OS HR was 0.90 (95% CI: 0.590, 1.38, p =0.6319).
- ELAHERE demonstrated clinically meaningful improvements in PFS and ORR by investigator assessment and in OS compared to IC chemotherapy, regardless of prior lines of therapy (PLOT).
 - In patients with 1 or 2 PLOT (n=245), the PFS HR was 0.61 (95% CI: 0.45, 0.81; p=0.0007); in patients with 3 PLOT (n=208), PFS HR was 0.71 (95% CI: 0.52, 0.98; p=0.0362).
 - In patients with 1 or 2 PLOT, ORR in the ELAHERE arm was 46% (95% CI: 37%, 55%), including 10 complete responses (CRs), compared to 15% (95% CI: 9%, 22%), with no CRs, in the IC chemotherapy arm (p<0.0001); in patients with 3 PLOT, ORR in the ELAHERE arm was 38% (95% CI: 29%, 48%), including 2 CRs, compared to 18% (95% CI: 11%, 26%), with no CRs, in the IC chemotherapy arm (p=0.0009).
 - In patients with 1 or 2 PLOT, OS HR was 0.66 (95% CI: 0.45, 0.98; p=0.0375); in patients with 3 PLOT, OS HR was 0.65 (95% CI: 0.43, 0.96; p=0.0308).
- ELAHERE demonstrated a tolerable safety profile compared to IC chemotherapy consisting predominantly of low-grade

ocular and gastrointestinal events.

- o In all patients, the frequency of grade 3+ treatment-emergent adverse events (TEAEs) was 42% with ELAHERE and 54% with IC chemotherapy; the frequency of serious adverse events (SAEs) was 24% with ELAHERE and 33% with IC chemotherapy; and the frequency of discontinuations due to a TEAE was 9% with ELAHERE and 16% with IC chemotherapy.

"Given ELAHERE is a potentially transformative option for those with platinum-resistant ovarian cancer, it will be important for clinicians to understand the consistency across these subset analyses from MIRASOL as they make treatment decisions with their patients," said Michael Vasconcelles, MD, ImmunoGen's Executive Vice President, Research, Development, and Medical Affairs. "Looking forward, we are excited to submit our MAA and sBLA to the EMA and FDA, respectively, before year end while continuing to advance our broader development program as we prioritize delivering ELAHERE to eligible patients in need."

In November 2022, the US Food and Drug Administration (FDA) granted accelerated approval for ELAHERE for the treatment of adult patients with FRα-positive, platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer who have received one to three prior systemic treatment regimens based on ORR and duration of response data from the pivotal SORAYA trial.

Additional information can be found at www.congress.esgo.org.

ABOUT OVARIAN CANCER

Ovarian cancer is the leading cause of death from gynecological cancers in the US. Each year, roughly 20,000 patients are diagnosed, and 13,000 patients will die. Most patients present with late-stage disease and will typically undergo surgery followed by platinum-based chemotherapy. Unfortunately, the majority of patients eventually develop platinum-resistant disease, which is difficult to treat. In this setting, standard of care single-agent chemotherapies are associated with low response rates, short durations of response, and significant toxicities.

ABOUT ELAHERE

ELAHERE (mirvetuximab soravtansine-gynx) is a first-in-class ADC comprising a folate receptor alpha-binding antibody, cleavable linker, and the maytansinoid payload DM4, a potent tubulin inhibitor designed to kill the targeted cancer cells.

Indication and Usage

ELAHERE® is indicated for the treatment of adult patients with folate receptor-alpha (FRα) positive, platinum-resistant epithelial ovarian, fallopian tube, or primary peritoneal cancer, who have received one to three prior systemic treatment regimens. Select patients for therapy based on an FDA-approved test.

This indication is approved under accelerated approval based on tumor response rate and durability of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial.

Important Safety Information

BOXED WARNING: OCULAR TOXICITY

- ELAHERE can cause severe ocular toxicities, including visual impairment, keratopathy, dry eye, photophobia, eye pain, and uveitis.
- Conduct an ophthalmic exam including visual acuity and slit lamp exam prior to initiation of ELAHERE, every other cycle for the first 8 cycles, and as clinically indicated.
- Administer prophylactic artificial tears and ophthalmic topical steroids.
- Withhold ELAHERE for ocular toxicities until improvement and resume at the same or reduced dose.
- Discontinue ELAHERE for Grade 4 ocular toxicities.

WARNINGS and PRECAUTIONS

Ocular Disorders

ELAHERE can cause severe ocular adverse reactions, including visual impairment, keratopathy (corneal disorders), dry eye, photophobia, eye pain, and uveitis.

Ocular adverse reactions occurred in 61% of patients with ovarian cancer treated with ELAHERE. Nine percent (9%) of patients experienced Grade 3 ocular adverse reactions, including visual impairment, keratopathy/keratitis (corneal disorders), dry eye, photophobia, and eye pain; and one patient (0.2%) experienced Grade 4 keratopathy. The most common (≥5%) ocular adverse reactions were visual impairment (49%), keratopathy (36%), dry eye (26%), cataract (15%), photophobia (13%), and eye pain (12%).

The median time to onset for first ocular adverse reaction was 1.2 months (range: 0.03 to 12.9). Of the patients who experienced ocular events, 49% had complete resolution and 39% had partial improvement (defined as a decrease in severity by one or more grades from the worst grade) at last follow up. Ocular adverse reactions led to permanent discontinuation of ELAHERE in 0.6% of patients.

Premedication and use of lubricating and ophthalmic topical steroids eye drops during treatment with ELAHERE are recommended. Advise patients to avoid use of contact lenses during treatment with ELAHERE unless directed by a healthcare provider.

Refer patients to an eye care professional for an ophthalmic exam including visual acuity and slit lamp exam prior to treatment initiation, every other cycle for the first 8 cycles, and as clinically indicated. Promptly refer patients to an eye care professional for any new or worsening ocular signs and symptoms.

Monitor for ocular toxicity and withhold, reduce, or permanently discontinue ELAHERE based on severity and persistence of ocular adverse reactions.

Pneumonitis

Severe, life-threatening, or fatal interstitial lung disease, including pneumonitis, can occur in patients treated with ELAHERE. Pneumonitis occurred in 10% of patients treated with ELAHERE, including 0.8% with Grade 3 events, and 1 patient (0.2%) with a Grade 4 event. One patient (0.2%) died due to respiratory failure in the setting of pneumonitis and lung metastases.

Monitor patients for pulmonary signs and symptoms of pneumonitis. Infectious, neoplastic, and other causes for symptoms should be excluded through appropriate investigations.

Withhold ELAHERE for patients who develop persistent or recurrent Grade 2 pneumonitis until symptoms resolve to \leq Grade 1 and consider dose reduction. Permanently discontinue ELAHERE in all patients with Grade 3 or 4 pneumonitis. Patients who are asymptomatic may continue dosing of ELAHERE with close monitoring.

Peripheral Neuropathy (PN)

PN occurred in 36% of patients with ovarian cancer treated with ELAHERE across clinical trials; 2% of patients experienced Grade 3 PN. PN adverse reactions included peripheral neuropathy (19%), peripheral sensory neuropathy (9%), paraesthesia (6%), neurotoxicity (3%), hypoaesthesia (2%), peripheral motor neuropathy (1%), neuralgia (0.4%), polyneuropathy (0.2%) and oral hypoesthesia (0.2%).

Monitor patients for signs and symptoms of neuropathy. For patients experiencing new or worsening PN, withhold dosage, dose reduce, or permanently discontinue ELAHERE based on the severity of PN.

Embryo-Fetal Toxicity

Based on its mechanism of action, ELAHERE can cause embryo-fetal harm when administered to a pregnant woman because it contains a genotoxic compound (DM4) and affects actively dividing cells.

Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment with ELAHERE and for 7 months after the last dose.

ADVERSE REACTIONS

Serious adverse reactions occurred in 31% of patients. The most common ($\geq 2\%$) serious adverse reactions were intestinal obstruction (8%), ascites (4%), infection (3%), and pleural effusion (3%). Fatal adverse reactions occurred in 2% of patients, including small intestinal obstruction (1%) and pneumonitis (1%).

Permanent discontinuation of ELAHERE due to adverse reactions occurred in 11% of patients. The most common ($\geq 2\%$) adverse reactions leading to permanent discontinuation were intestinal obstruction (2%) and thrombocytopenia (2%). One patient (0.9%) permanently discontinued ELAHERE due to visual impairment (unilateral decrease to BCVA $< 20/200$ that resolved to baseline after discontinuation).

Dosage delays of ELAHERE due to an adverse reaction occurred in 39% of patients. Adverse reactions which required dosage delays in $\geq 3\%$ of patients included visual impairment (15%), keratopathy (11%), neutropenia (6%), dry eye (5%), cataracts (3%) and increased gamma-glutamyltransferase (3%).

Dose reductions of ELAHERE due to an adverse reaction occurred in 20% of patients. Adverse reactions which required dose reductions in $\geq 3\%$ of patients included visual impairment (9%) and keratopathy (7%).

The most common ($\geq 20\%$) adverse reactions, including laboratory abnormalities, were vision impairment, fatigue, increased aspartate aminotransferase, nausea, increased alanine aminotransferase, keratopathy, abdominal pain, decreased lymphocytes, peripheral neuropathy, diarrhea, decreased albumin, constipation, increased alkaline phosphatase, dry eye, decreased magnesium, decreased leukocytes, decreased neutrophils, and decreased hemoglobin.

DRUG INTERACTIONS

Strong CYP3A4 Inhibitors

DM4 is a CYP3A4 substrate. Concomitant use of ELAHERE with strong CYP3A4 inhibitors may increase unconjugated DM4 exposure, which may increase the risk of ELAHERE adverse reactions. Closely monitor patients for adverse reactions with ELAHERE when used concomitantly with strong CYP3A4 inhibitors.

USE IN SPECIAL POPULATIONS

Lactation

Advise women not to breastfeed during treatment with ELAHERE and for at least 1 month after the last dose.

Pediatric Use

Safety and effectiveness of ELAHERE have not been established in pediatric patients.

Hepatic Impairment

Avoid use of ELAHERE in patients with moderate or severe hepatic impairment (total bilirubin > 1.5 ULN).

[Please see full Prescribing Information, including Boxed Warning for ELAHERE.](#)

ABOUT IMMUNOGEN

ImmunoGen is developing the next generation of antibody-drug conjugates (ADCs) to improve outcomes for cancer patients. By generating targeted therapies with enhanced anti-tumor activity and favorable tolerability profiles, we aim to disrupt the progression of cancer and offer our patients more good days. We call this our commitment to TARGET A BETTER NOW™.

Learn more about who we are, what we do, and how we do it at www.immunogen.com.

ELAHERE® is a trademark of ImmunoGen, Inc.

FORWARD-LOOKING STATEMENTS

This press release includes forward-looking statements. These statements include, but are not limited to, ImmunoGen's expectations related to the potential of ELAHERE to become the new standard of care for patients with FRα-positive platinum-resistant ovarian cancer and to serve as a transformative option for platinum-resistant ovarian cancer patients; and the timing and outcome of the submissions of a Marketing Authorization Application in Europe and a supplemental Biologics License Application in the US. Various factors could cause ImmunoGen's actual results to differ materially from those discussed or implied in the forward-looking statements, and you are cautioned not to place undue reliance on these forward-looking statements, which are current only as of the date of this release. Factors that could cause future results to differ materially from such expectations include, but are not limited to: the successful execution of the collaboration with Takeda and their development and commercialization efforts; the timing and outcome of the Company's clinical development processes; the difficulties inherent in the development of novel pharmaceuticals, including uncertainties as to the timing, expense, and results of clinical trials and regulatory processes; the timing and outcome of anticipated interactions with regulatory authorities; the risk that the Company may not be able to obtain adequate price and reimbursement for any approved products, including the potential for delays or additional difficulties for ELAHERE in light of the FDA granting accelerated approval; risks and uncertainties associated with the scale and duration of the COVID-19 pandemic and the resulting impact on ImmunoGen's industry and business; and other factors as set forth in the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2023, the Company's Quarterly Reports on Form 10-Q filed with the Securities and Exchange Commission on April 28, 2023 and July 31, 2023, and other reports filed with the Securities and Exchange Commission. The forward-looking statements in this press release speak only as of the date of this press release. ImmunoGen undertakes no obligation to update any forward-looking statement, whether as a result of new information, future developments, or otherwise, except as may be required by applicable law.

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INVESTOR RELATIONS

ImmunoGen
Anabel Chan
781-895-0600
anabel.chan@immunogen.com

MEDIA

ImmunoGen
Courtney O'Konek
781-895-0600
courtney.okonek@immunogen.com

OR

FTI Consulting
Robert Stanislaro
212-850-5657
robert.stanislaro@fticonsulting.com

Source: ImmunoGen Inc.