HemaSphere

EHA EUROPEAN HEMATOLOGY ASSOCIATION

PB2022 EXPLORING ALTERNATIVE DOSING REGIMENS OF SINGLE-AGENT BELANTAMAB MAFODOTIN ON SAFETY AND EFFICACY IN PATIENTS WITH RELAPSED OR REFRACTORY MULTIPLE MYELOMA: DREAMM-14

Topic: 14. Myeloma and other monoclonal gammopathies - Clinical

Malin Hultcrantz[1], David Kleinman[2], Pavandeep Ghataorhe[3], Astrid Mckeown[3], Wei He[4], Thomas Ling[3], Roxanne C. Jewell[5], Julie Byrne[6], Laurie Eliason[6], Emma Scott[6], Joanna Opalinska[6]

[1] Memorial Sloan Kettering Cancer Center, New York, United States;[2] University of Rochester, Rochester, NY, United States;[3] GlaxoSmithKline, London, United Kingdom;[4] GlaxoSmithKline, Cambridge, MA, United States;[5] GlaxoSmithKline, Research Triangle Park, NC, United States;[6] GlaxoSmithKline, Upper Providence, PA, United States

Background: Belantamab mafodotin (belamaf: BLENREP) is a first-in-class, monomethyl auristatin F (MMAF)-containing, B-cell maturation antigen (BCMA)-directed antibody–drug conjugate (ADC). In the DREAMM-2 study, belamaf showed deep responses with a manageable safety profile in patients with relapsed/refractory multiple myeloma (RRMM). At 13 months of follow-up, the median duration of response was 11 months and overall survival was 13.7 months at the 2.5 mg/kg Q3W dose.

Corneal events are common and expected with belamaf and other MMAF-containing ADCs. In DREAMM-2, corneal events were managed with dose modifications. Clinical responses were observed even with prolonged dose holds, suggesting alternative dosing regimens may lower corneal event rates without compromising efficacy.

Aims: The DREAMM-14 study (NCT05064358) will investigate if an improved benefit/risk profile of single-agent belamaf can be achieved by modifying the dose, schedule, or both, relative to the approved dosing regimen (2.5 mg/kg Q3W).

Methods: This Phase II, randomized, open-label study will include adults with RRMM who had ≥3 prior lines of therapy (LOT), including an anti-CD38 monoclonal antibody, an immunomodulatory agent, and a proteasome inhibitor. Patients with corneal epithelial disease (except nonconfluent superficial punctate keratitis) or with prior exposure to BCMA-targeted therapies, or ADCs will be excluded.

Patients will be randomized into Arms A–D (n=40 each) and Arm E (n=20) in parallel and stratified by the International Staging System (I vs II vs III) and prior LOT (3 vs ≥4). Belamaf will be administered as follows—Arm A: 2.5 mg/kg Q3W; Arm B: 1.9 mg/kg Q3W; Arm C: 2.5 mg/kg Q6W; Arm D: 1.9 mg/kg Q6W; Arm E: 1.9 mg/kg Q6W with dose modifications based on oncology staff assessment of ocular symptoms (patient-reported symptoms using the Ocular Surface Disease Index), and visual acuity (Snellen chart or equivalent) in addition to corneal findings assessed by an eye care specialist. Patients in all Arms will have response assessments, safety assessments, and ophthalmic exams performed by an eye care specialist Q3W regardless of dosing schedule. Ocular event-related dose modifications (except in Arm E) will be guided by a modified Keratopathy and Visual Acuity scale.

The primary endpoint will be incidence of ocular events. Key secondary endpoints include ocular safety and tolerability, overall safety and tolerability, pharmacokinetics, and efficacy outcomes. Follow-up for progression-free survival will be Q3W until progressive disease, start of new anticancer therapy, withdrawal of consent, end of study, or death.

Results: N/A

Summary/Conclusion: First patient first visit is currently targeted for 04Mar22.