AN ONGOING PHASE I STUDY SHOWS CLINICALLY MEANINGFUL ACTIVITY AND MANAGEABLE SAFETY OF CEVOSTAMAB MONOTHERAPY IN PATIENTS WITH HEAVILY PRE-TREATED RELAPSED/REFRACTORY MULTIPLE MYELOMA (RRMM) [ENCORE]

Facon, Thierry¹; Trudel, Suzanne²; Cohen, Adam D.³; Krishnan, Amrita⁴; Fonseca, Rafael⁵; Spencer, Andrew⁶; Berdeja, Jesus G.⁷; Lesokhin, Alexander⁸; Forsberg, Peter⁹; Laubach, Jacob¹⁰; Costa, Luciano J.¹¹; Rodriguez-Otero, Paula¹²; Kaedbey, Rayan¹³; Richter, Joshua¹⁴; Mateos, María-Victoria¹⁵; Thomas, Sheeba K.¹⁶; Wong, Chihunt¹⁷; Li, Mengsong¹⁷; Choeurng, Voleak¹⁷; Vaze, Anjali¹⁷; Samineni, Divya¹⁷; Sumiyoshi, Teiko¹⁷; Cooper, James¹⁷; Harrison, Simon J.¹⁸

¹Lille University Hospital, Lille, France, ²Princess Margaret Cancer Centre and University of Toronto, Toronto, ON, Canada, ³Abramson Cancer Center and University of Pennsylvania, Philadelphia, PA, USA, ⁴City of Hope, Duarte, CA, USA, ⁵Mayo Clinic in Arizona, Phoenix, AZ, USA, ⁶Alfred Health-Monash University, Melbourne, VIC, Australia, ⁷Sarah Cannon Research Institute, Nashville, TN, USA, ⁸Memorial Sloan Kettering Cancer Center, New York, NY, USA, ⁹University of Colorado School of Medicine, Aurora, CO, USA, ¹⁰Dana-Farber Cancer Institute, Boston, MA, USA, ¹¹O'Neal Comprehensive Cancer Center, University of Alabama at Birmingham, Birmingham, AL, USA, ¹²Clínica Universidad de Navarra, Pamplona, Spain, ¹³Jewish General Hospital, McGill University, Montreal, QC, Canada, ¹⁴Tisch Cancer Institute, Icahn School of Medicine at Mount Sinai, New York, NY, USA, ¹⁵Instituto de Investigación Biomédica de Salamanca (IBSAL), Hospital Universitario de Salamanca, Salamanca, Spain, ¹⁶The University of Texas MD Anderson Cancer Center, Houston, TX, USA, ¹⁷Genentech, Inc., South San Francisco, CA, USA, ¹⁸Peter MacCallum Cancer Centre, Sir Peter MacCallum Department of Oncology, Melbourne University, and The Royal Melbourne Hospital, Melbourne, VIC, Australia

Background: Cevostamab (an FcRH5xCD3 bispecific antibody [BsAb]) facilitates T cell-directed killing of myeloma cells. We present updated safety and efficacy data from the ongoing Phase I study (NCT03275103) of cevostamab monotherapy in patients with heavily pre-treated RRMM.

Methods: Cevostamab (intravenous infusion) is administered in 21-day cycles. Single step-up cohorts receive a step dose (0.05–3.6mg) on Cycle (C) 1 Day (D) 1 and the target dose (0.15–198mg) on C1D8. Double-step up cohorts receive step doses on C1D1 (0.3–1.2mg) and C1D8 (3.6mg), and the target dose (60–160mg) on C1D15. In subsequent cycles the target dose is given on D1 for a total of 17 cycles, unless progressive disease/unacceptable toxicity occurs.

Results: At data cut-off (18 May 2021), 160 patients had been enrolled. Median number of prior lines of therapy was 6 (range: 2–18); 85.0% of patients were triple-class refractory, and 17.5% had received ≥ 1 prior CAR-T, 8.1% ≥ 1 prior BsAb, 16.9% ≥ 1 prior antibody—drug conjugate (ADC), and 33.8% ≥ 1 prior anti-BCMA agent.

The most common adverse event was cytokine release syndrome (CRS; 80.0%). Most CRS events occurred in C1 (87.2%), were low-grade (Grade 1: 42.5%; Grade 2: 36.3%; Grade 3: 1.3%), and resolved within 48 hours (83.4%).

158 patients were efficacy evaluable. Data suggested a target dose-dependent increase in clinical efficacy, thus two dose-expansion cohorts were opened (160mg and 90mg); overall response rate (ORR) was higher at 160mg (54.5% versus 36.7%, respectively). Among all responders, the estimated median duration of response was 15.6 months (95% CI 6.4, 21.6), with a median follow-up of 8.1 months.

Conclusions: Cevostamab monotherapy shows meaningful activity in patients with heavily pretreated RRMM. Durable responses are observed, with target dose-dependent increases in ORR but no increase in CRS rate.