P899 REAL-WORLD ASSESSMENT OF TREATMENT PATTERNS AND OUTCOMES IN PATIENTS WITH LENALIDOMIDE-REFRACTORY RELAPSED/REFRACTORY MULTIPLE MYELOMA FROM THE OPTUM DATABASE

Topic: 14. Myeloma and other monoclonal gammopathies - Clinical

Binod Dhakal1, Hermann Einsele2, Ravi Potluri3, Jordan Schecter4, William Deraedt5, Nikoletta Lendvai6, Ana Slaughter6, Carolina Lonardi7, Sandhya Nair8, Jianming He8, Nedra Joseph9, Patricia Cost8, Satish Valluri8, Fevzi Yalniz10, Lida Pacaud10, Kwee Yong11

1 Medical College of Wisconsin, Milwaukee, United States; 2 Universitätsklinikum Würzburg, Medizinische Klinik und Poliklinik II, Wuerzburg, Germany; 3 SmartAnalyst Inc, New York, United States; 4 Janssen R&D, Raritan, United States; 5 Janssen Pharmaceutica NV, Beerse, Belgium; 6 Cilag GmbH International, Zug, Switzerland; 7 Janssen, Buenos Aires, Argentina; 8 Janssen Global Services, LLC, Raritan, United States; 9 Janssen Scientific Affairs, LLC, Horsham, United States; 10 Legend Biotech USA, Piscataway, United States; 11 University College London Cancer Institute, London, United Kingdom

Background: New treatment combinations using proteasome inhibitors (PIs), immunomodulatory drugs (IMiDs), and anti-CD38 monoclonal antibodies have significantly improved survival outcomes in patients with multiple myeloma (MM). However, for patients who relapse and/or become refractory after exposure to PIs and IMiDs, selecting the next regimen remains a challenge. There are limited data characterizing treatments and outcomes in this difficult-to-treat population.

Aims: To characterize treatment patterns and outcomes in difficult-to-treat patients with MM, stratified by their number of prior lines of therapy (PL).

Methods: Data were derived from the Optum deidentified US claims and electronic health record (EHR) database. Patients with MM (index diagnosis in or after Jan 2011) were selected if they received 1-3 PL, including with a PI and an IMiD, and were refractory to lenalidomide. Subsequent treatments beginning in or after Jan 2016 were included to focus on contemporary therapies. Time zero (T0) was the date when the first subsequent therapy started after patient met inclusion criteria. Patient characteristics were assessed at T0. Time-to-event analyses were estimated using the Kaplan-Meier method (starting at T0) for overall survival (OS) and time to next treatment (TTNT). The log-rank test for trend was applied to compare Kaplan-Meier curves for OS by line of therapy.

Results: The database included a total of 13,615 (claims) and 22,626 (EHR) patients with an index diagnosis of MM and ≥ 1 line of therapy. 1,028 (claims) and 1,416 (EHR) patients met inclusion criteria. Median age was 72 (claims) and 68 (EHR) years; 53.4% (claims) and 52.1% (EHR) were male. 12.2% (claims) and 4.9% (EHR) of patients received stem cell transplant prior to T0. Patients in both cohorts had significant comorbidities with mean Charlson Comorbidity Index 3.9 (claims) and 3.2 (EHR). Hypertension and renal failure were among the most prominent comorbidities. The most common subsequent treatment regimens based on hierarchy were daratumumab (22.1% claims; 17.4% EHR), carfilzomib (10.6% claims; 18.4% EHR), and pomalidomide based (12.3% claims; 8.7% EHR). Daratumumab/pomalidomide/dexamethasone was the most frequently used regimen (5.4% claims; 3.8% EHR). For claims data, median OS (months) was 36.7 (95% CI: 31.7-41.2). Median OS was not reached (42.3-NE) for patients with 1 PL (n=546), was 26.2 (21.7-35.7) for patients with 2 PL (n=380) and was 12.1 (7.6-25.0) for patients with 3 PL (n=102). Median TTNT (months) was 5.3 (4.9-5.9) overall, including 4.6 (4.3-5.1) for patients with 1 PL, 6.4 (5.3-7.6) for patients with 2 PL, and 6.0 (4.9-9.4) for patients with 3 PL. For EHR data, median OS was 34.0 (28.2-42.8), with median OS of 46.9 (42.8-NE) for patients with 1 PL (n=587), 28.2 (23.8-41.7) for patients with 2 PL (n=584), and 20.8 (14.9-29.8) for patients with 3 PL (n=245). Median TTNT was 5.8 (5.1-6.5) overall, with values of 5.1 (4.7-6.5) for patients with 1 PL, 6.2 (5.3-7.6) for patients with 2 PL, and 5.8 (4.4-8.2) for patients with 3 PL.

Image:
Summary/Conclusion: PI-exposed, lenalidomide-refractory patients with 1-3 PL were treated with various regimens. These patients have poor OS and progress quickly through current therapies, suggesting poor progression-free survival. OS is reduced with each successive line of therapy. This analysis highlights the need for new effective regimens for this patient population.