P1736 CHARACTERISTICS, HEALTHCARE UTILIZATION, AND COSTS ASSOCIATED WITH INOTUZUMAB OZOGAMICIN, BLINATUMOMAB, OR OTHER AGENTS FOR THE TREATMENT OF RELAPSED/REFRACTORY ACUTE LYMPHOBLASTIC LEUKEMIA

Topic: 35. Quality of life, palliative care, ethics and health economics

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Background: Adults with relapsed/refractory (R/R) B-cell precursor ALL treated with inotuzumab ozogamicin (ino, anti-CD22 monoclonal antibody [mAb]) and blinatumomab (blin, CD19-directed CD3 T-cell engager mAb) showed improved clinical outcomes over chemotherapy in the INO-VATE and TOWER trials, respectively. Although both novel agents are in use in the United States (US), data on healthcare resource utilization (HCRU) and costs in the real-world among patients receiving these treatments is limited.

Aims: This study identified such data, alongside patient characteristics, for Medicare beneficiaries with R/R ALL initiating ino, blin, or other agents (chemotherapeutic, tyrosine kinase inhibitor [TKI], or mAb).

Methods: A retrospective study was conducted utilizing Medicare enrollment and claims data. Patients were eligible for the study if they were diagnosed with R/R ALL between January 1, 2017 and June 30, 2019 and initiated ino, blin, or other agents at/after diagnosis (first observed treatment = index date). Claims for blin were identifiable in the inpatient and outpatient settings. Claims for ino/other agents were only visible in outpatient and pharmacy settings so patients were identified from there; the proportion of these who had received inpatient administration prior to outpatient was unknown. The B- and T-cell status was not captured. Patients receiving T-ALL therapy (nelarabine) were excluded. Data analyzed included characteristics and HCRU during 6 months prior to treatment initiation (pre-index) and HCRU and costs per patient per month (PPPM; costs in 2021 USD) during the variable follow-up period (≥3 months until death, disenrollment, or study end).

Results: 2,306 initiated an ALL treatment in the study period. This accounted for less than 15% of Medicare beneficiaries with R/R ALL (15,586). 1,329 patients qualified for inclusion in the study: 55 (4%) received ino, 209 (16%) blin (73% initiated blin during hospital stay), and 1,065 (80%) other agents. The mean age was 62 among the ino and blin cohorts and 66 for the other agents group; a larger proportion of the ino cohort qualified for Medicare with non-age-related factors (disability) than those initiating blin or other agents. Treatment groups were comparable by sex and race. The ino cohort had higher prevalence of congestive heart, pulmonary, and renal diseases (35%, 31%, 38%) than blin (19%, 25%, 19%) and other agents (23%, 30%, 21%), respectively; diabetes prevalence was lower for ino than for blin and other agents (20%, 34%, 36%, respectively).

There was variability in exposure to chemotherapies over the 6-month pre-index period: 76% of both the ino and blin cohorts, and 66% of the other agents cohort, were hospitalized for any reason. Duration of follow-up varied by cohort: 8.0 months for ino, 12.8 months for blin, and months for 17.8 other agents, during which blin patients had higher PPPM rates of all-cause and disease-related hospital stays, longer stays (9.3 days blin, 6.0 ino, 3.9 other agents), and higher mean (SD) total cost of care: $65,437 ($155,664) blin, $55,995 ($36,688) ino, and $17,520 ($22,720) other agents.

Summary/Conclusion: Around 20% of patients who received an active treatment for their R/R ALL received a novel CD-targeted therapy. There were differences between treatment cohorts with respect to comorbidities. Mean costs

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PPPM during the follow-up period from the date of identified treatment administration were highest for patients receiving blin; costs for patients receiving ino were 14% lower than blin, whilst other agents were 73% lower than blin.