P1738 A SEER-MEDICARE ANALYSIS OF THE ECONOMIC BURDEN AMONG ELDERLY PATIENTS WITH ACUTE MYELOID LEUKEMIA TREATED WITH HYPMETHYLATING AGENTS

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

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Background: The economic burden of relapse among Medicare patients with newly diagnosed acute myeloid leukemia (AML) is high, with >50% receiving ≥1 cycle of a hypomethylating agent (HMA) (Tabah A, et al. Blood 2020:136(suppl1):45).

Aims: To assess healthcare resource utilization (HCRU) and costs associated with AML phases among elderly patients who received only HMA monotherapy during induction, and then achieved remission.

Methods: A retrospective analysis of Medicare claims, parts A, B, and D (2007–2016), and cancer diagnoses (2007–2015) in the Surveillance, Epidemiology, and End Results-Medicare database was conducted. Eligible patients had an AML diagnosis, were ≥65 years of age at diagnosis date, had initiated only HMA in the outpatient (OP) setting during the first induction cycle post-diagnosis, and had evidence of remission post-initiation of induction therapy. Patients with another blood malignancy, who had received hematopoietic stem cell transplantation, or were enrolled in a clinical trial were excluded.

The induction therapy period was from first HMA initiation post-diagnosis (index date) to end of the cycle during which remission occurred. The baseline period was the 6-month period prior to index date. The post-relapse phase ended at the earliest relapse or end of follow-up (ie, death, end of eligibility or of available data [Dec 31, 2016]). The post-relapse phase was from the date of first AML relapse after remission to the end of follow-up.

Baseline patient characteristics were summarized descriptively. HCRU and costs (adjusted to 2019 US dollars) associated with induction and post-remission therapy were assessed during a treatment cycle. Average per-patient monthly (PPM) HCRU and costs were reported for the induction, post-remission, and post-relapse phases.

Results: A total of 71 patients (azacitidine: n=31; decitabine: n=40) were included. Median age at AML diagnosis was 78.8 years, 50.7% of patients were male, and 85.9% were White. The mean ± standard deviation (median) time from index date to the end of follow-up was 16.0 ± 12.3 (14.0) months. Mean number of total treatment days was 181.3 and 153.0 for the induction and post-remission phases, respectively. A total of 63.4% of patients (n=45) received post-remission therapy. Among all patients, 43.7% relapsed and 85.9% had died by the end of follow-up. During the induction, post-remission, and post-relapse phases, 91.5%, 77.8%, and 77.4% of patients received a blood transfusion, respectively. OP visits were the most common visits across all phases, with 95.6% of patients having ≥1 visit during post-remission therapy and 83.9% during the post-relapse phase. The proportion of patients with inpatient (IP) visits was highest in the post-relapse phase, with 77.4% having ≥1 visit. Mean PPM healthcare costs were highest for the post-relapse phase, followed by post-remission therapy, and induction (Table). Costs in the OP setting were the greatest contributor to induction costs (48.9%), while costs in the IP setting drove costs in the post-remission therapy (56.2%) and post-relapse (72.8%) phases.

Image:
Summary/Conclusion: The economic burden of AML treated with HMA was highest in the post-relapse phase, approximately 1.7 and 1.6 times the PPM costs during the induction and post-remission therapy phases, respectively. In addition, IP costs made up nearly two-thirds of total PPM costs in the post-relapse phase, up from approximately 44% and 56% of the induction and post-remission therapy phases, respectively. Treatment options extending the post-remission phase would reduce the high economic burden associated with AML relapse.