

#### **40. Real-World Evidence on Treatment Patterns, Costs and Healthcare Resource Utilization Associated With Waldenström Macroglobulinemia in the Veterans Health Administration Population**

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**BACKGROUND:** Waldenström macroglobulinemia (WM) is a rare, incurable non-Hodgkin Lymphoma. There is limited real-world evidence on WM treatment among US Veterans.

**OBJECTIVE:** This retrospective observational study aims to evaluate the real-world treatment patterns and associated outcomes among patients with WM in the Veteran Health Administration (VHA) population.

**METHODS:** Adults who had  $\geq 2$  visits with WM diagnosis codes and  $\geq 1$  WM treatment were identified in VHA database (2014-2018). Index date was defined as the first date of WM treatment. Patients included were newly diagnosed, initiating treatment, and enrolled continuously for 6 months prior to and  $\geq 60$  days following index date. Treatment regimens were categorized as: rituximab monotherapy, ibrutinib-based, chemotherapy-based, proteasome inhibitor-based and other regimens. Healthcare resource utilization examined included hospitalization and length-of-stay (LOS). Total costs were calculated as sum of inpatient, outpatient and pharmacy costs per-patient-per-month (PPPM).

**RESULTS:** Prevalence and incidence of WM among Veterans ranged from 11.4-12.8 cases, and 0.4-1.6 cases per 100,000 persons, respectively. A total of 255 patients (median age: 72 years, 84% white, mean Charlson comorbidity index score: 1.1) received 1st line (mean duration: 289 days); 96 (38%) patients received 2nd line (mean duration: 267 days); and 34 (13%) received 3rd line therapy (mean duration: 253 days). Treatment pattern for each line of therapy were as follows, 1st line: ibrutinib-based (30%), chemotherapy-based (25%), rituximab monotherapy (25%), proteasome inhibitor-based (14%), and other (5%); 2nd line: chemotherapy-based (27%), ibrutinib-based (24%), rituximab monotherapy (23%), proteasome inhibitor-based (15%), and other (9%); 3rd line: ibrutinib-based (41%), rituximab monotherapy (32%),

chemotherapy-based (18%), proteasome inhibitorbased (6%), and other (3%). The overall hospitalization rate was 29% with an average LOS of 12 days. Approximately 21% (LOS: 10.9 days), 18% (LOS: 6.9 days), and 24% (LOS: 7.3 days) of patients had a hospitalization, respectively, during 1st, 2nd, and 3rd line therapy. Average total PPPM costs overall were \$13,007, and \$13,154, \$12,550, and \$25,813 during 1st, 2nd, and 3rd line therapy, respectively.

**CONCLUSION:** There remains significant clinical and economic burden associated with WM among the US Veteran population. Future studies are needed to further understand the variance between treatment patterns and associated economic impact of treatment selection.