Health care costs and utilization for privately insured patients treated for non-infectious uveitis in the United States

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OBJECTIVES: Describe costs and utilization patterns of corticosteroid (CTS), immune-suppressive (IMS), and biologic (BIO) treatment use in patients with chronic non-infectious uveitis. Costs and utilization of CTS, IMS, and BIO indicate economic burden but have not been studied in a large sample. METHODS: Patients with a 31 NPSU diagnosis (ICD-9-CM 360.x-364.x, excluding infectious uveitis) by an ophthalmologist or 32 by a primary care physician, under age 65, with continuous insurance coverage during a six-month baseline were selected from a privately insured claims database. Sample index dates were defined as the first prescription date (index date) within the 3-month baseline, IMS or BIO use, or CTS use between 2003-2009. CTS patients had 32 10-day or 31 30-day scripts. Analysis was in a per-member-per-month (PMPM) framework based on treatment episodes, defined as continuous medication use within the same class. Wilcoxon rank-sum and chi-square tests were used for comparisons of costs and categorical outcomes. RESULTS: CTS (N=19,426), IMS (N=5,466) and BIO (N=1,694) samples were selected; average time on continuous therapy (i.e., treatment episode duration) was 1.79, 3.66, and 8.18 months (p<0.05 across groups). Baseline Charlson Comorbidity index was highest for BIO (0.83), then IMS (0.78), then CTS (0.039) (p<0.05 across groups). Baseline PMPM inpatient admission rates were 0.011 for CTS, 0.044 for IMS, and 0.045 for BIO (p<0.05 across groups), study period values were 0.012, 0.024, and 0.024, respectively (p<0.05 CTS different vs. both). Emergency room visits had a similar ordering. Baseline average PMPM costs for CTS were $717, IMS were $1738, and BIO were $2439 (p<0.05 across groups). A total of 5,466 CTS patients were enrolled. Relative changes in outcomes were computed for IMS (N=19,426), BIO (N=5,466) and IMS (N=1,694). Conclusions: BIO had the best relative change in outcomes, followed by IMS. CTS treatment was less effective and the cost advantage was primarily due to lower direct medical costs: per patient-year of treatment was $1592 for IMS; and were $918 for BIO (p<0.05). CONCLUSIONS: BIO had the best relative change in outcomes, followed by IMS. CTS treatment was less effective and the cost advantage was primarily due to lower direct medical costs: per patient-year of treatment was $1592 for IMS; and were $918 for BIO (p<0.05). BIO had the best relative change in outcomes, followed by IMS. CTS treatment was less effective and the cost advantage was primarily due to lower direct medical costs: per patient-year of treatment was $1592 for IMS; and were $918 for BIO (p<0.05).