HEALTH CARE COSTS AND UTILIZATION FOR PRIVATELY INSURED PATIENTS TREATED FOR NON-INFECTIONOUS UVEITIS IN THE UNITED STATES

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OBJECTIVES: Describe costs and utilization patterns of corticosteroid (CTS), immunomodulatory (IM), and biologic (BI) treatment use in patients with chronic non-infectious uveitis. Costs and utilization of CTS, IM, and BI indicate economic burden but have not been studied in a large sample. METHODS: Patients with a diagnosis of non-NSU 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 (N=80.7 million). Sample index dates were defined as the first prescription for any of CTS, IM, or BI 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 episotes, 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), IM (N=5,466) and BI (N=1,694) samples were selected; average time on continuous therapy (i.e., treatment episode duration) was 1.79, 3.6, and 8.18 months (p<0.05 across groups). Baseline Charlson Comorbidity index was highest for BI (0.83), then IM (0.78), then CTS (0.039) (p<0.05 across groups). Baseline PMPM inpatient admission rates were 0.021 for CTS, 0.044 for IM, and 0.045 for BI (p<0.05 across groups); study period values were 0.02, 0.048, 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, IM were $173, and BI were $439 (p<0.05 across groups). Baseline PMPM emergency room costs per CTS for IM, were $159 for IM, and were $198 for BI (p<0.05 across groups). CONCLUSIONS: BI had the best relative change in cost, followed by IM. There could be underuse of these products relative to CTS.

PSS8

PRODUCTIVITY LOSSES ASSOCIATED WITH VISION IMPAIRMENT IN CANADA

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OBJECTIVES: In Canada, visual impairment is highly prevalent and is associated with a substantial socioeconomic impact on patients, and especially on caregivers. The objective of this study was to explore the current evidence on productivity losses associated with vision impairment, such as caregiver support, and to estimate productivity losses and cost of vision impairment. METHODS: A literature search was conducted in Medline and Embase databases using the keywords “visual acuity,” “vision loss,” “burden,” and “socioeconomic.” Utilities were calculated by regression formula under various measures, including EQ-5D and NEI-VEF-25. Indirect cost was estimated by GDP per capita multiplied by the mean number of hours requiring help per year reported in the studies was multiplied by the average number of hours lost at work and the productivity weight. All cost were adjusted according to 2010 price index.

RESULTS: Of the 417 eligible patients, 1,694) samples were selected; average time on continuous therapy (i.e., treatment episode duration) was 1.79, 3.6, and 8.18 months (p<0.05 across groups). Admission rates were 0.021 for CTS, 0.044 for IM, and 0.045 for BI (p<0.05 across groups). Therapy continuation or switch was evaluated at week 24. Effectiveness measures were visual acuity gains in 50% of the patients, and 100% of the patients with VAG ≥15 letters; % of patient withdrawals due to adverse events (AEs) and average utility score gain. Resource use of direct medical costs was identified from expert review and evaluated according to the Unitary Costs List published by the IMSS. Sensitivity analysis was performed using a bootstrap technique. RESULTS: Ranibizumab was the highest cost-effective combination with a substantial socioeconomic impact on patients, and especially on caregivers.

CONCLUSIONS: For patients with nAMD, treatment with Ranibizumab is an effective and cost-saving option compared with Verteporfin PDT, allowing savings of up to US$532 per patient-year which represents 9.3% of the total cost. Results are representative with previous analysis.

PSS11

ECONOMIC ANALYSIS OF ETANERCEPT AS CONTINUOUS OR PAUSED THERAPY IN MILD TO SEVERE PSORIASIS FROM A PRIVATE PERSPECTIVE IN BRAZIL

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OBJECTIVES: Biologic treatment after systemic drugs fail in psoriasis is indicated for obtaining clinical response. Etanercept effectiveness is not lost in retreatment regimens, which allows continuous or paused therapeutic schemes. The inclusion of etanercept in the private health care system practice represents a breakthrough to psoriasis treatment in Brazil. This study aims to perform cost-effectiveness and cost-consequences analysis of biological alternatives for moderate to severe psoriasis in Brazil, from a private payer’s perspective.

METHODS: A decision-tree model simulates psoriasis evolution after treatment with etanercept paused (50mg twice a week for 12 weeks, followed by 25mg twice a week; 12-week treatment cycle and 12-week interruption), adalimumab (80mg at first week, followed by 40mg in the second week, and then 40mg every two weeks) or infliximab (5mg/kg at weeks 0, 2 and 6 and then every 8 weeks) and their associated costs in a 96-week time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were PASI 75 success rate and quality adjusted life years (QALY) gained. Costs included biologicals, medical follow-up and adverse events management, collected from Brazil private official databases (values represented 2010 USD). Probabilistic sensitivity analyses were performed thorough Monte Carlo simulation. A 5% discount rate was applied for costs and benefits. RESULTS: Etanercept [51.3%, 1.5360], adalimumab [50.5%, 1.5339] and infliximab [37.2%, 1.5001]; Treatment costs were 90,644,USD 110,663USD and 121,697USD, respectively. Etanercept paused represented the least costly in all comparisons: 90,644USD, 110,663USD and 121,697USD. In etanercept paused vs infliximab curves showed etanercept paused was the most cost-effective biological.

CONCLUSIONS: In this analysis, etanercept presented the greatest effectiveness in paused therapeutic scheme. Due to its lower costs, etanercept showed to be cost-saving regarding biologic costs and QALY’s gained over other biological treatments in psoriasis management at Brazil private healthcare system.

PSS12

ECONOMIC ANALYSIS OF ETANERCEPT AS CONTINUOUS OR PAUSED THERAPY IN MILD TO MODERATE TO SEVERE PSORIASIS FROM A PUBLIC PERSPECTIVE IN VENEZUELA

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OBJECTIVES: Biologic treatment after systemic drugs fail in psoriasis is indicated for obtaining clinical response, what could avoid associated comorbidities. Regarding biological drugs approved for psoriasis, etanercept effectiveness is not lost in
retreatment regimens, which allows continuous or paused therapeutic schemes. This study aims to perform cost-effectiveness and cost-utility analyses of biologic alternatives for moderate to severe psoriasis in Argentina, from a payer's perspective. A decision tree model was used to simulate etanercept continuous (50mg twice a week for 12 weeks, followed by 25mg twice a week) or paused (12-week treatment cycle and 12-week interruption), adalimumab (80mg at first week, followed by 40mg in the second week, then 40mg every 2 weeks), infliximab (5mg/kg at weeks 0, 2, and 6, then every 8 weeks) or ustekinumab (45mg in weeks 0 and 4, then 45mg every 12 weeks) and their associated costs in a 96-week time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were PASI 75 success rate and quality adjusted life years (QALY) gained. Costs included biologicals, medical follow-up and adverse events management from Argentina official databases (values represented 2010 USD). Probabilistic sensitivity analyses were performed through Monte Carlo simulation. A 5% discount rate was applied for costs and benefits. RESULTS: Effectiveness resulted in [PASI 75, QALY] etanercept [51.3%, 1.5360], adalimumab [50.5%, 1.5339] and infliximab [37.2%, 1.5164]. Treatment costs [continuous, paused] were [16,741USD, 15,692USD], [17,846USD, 19,742USD], [35,685USD, 33,980USD] and [27,569USD, 26,922USD], respectively. Etanercept represented the least costly in all comparisons. Acceptability curves showed etanercept in continuous and paused schemes as the most cost-effective biologic. CONCLUSIONS: In this analysis, due to its lower costs and favorable effectiveness profile, etanercept showed to be cost-saving in both continuous and paused treatment schemes regarding PASI 75 success rate and QALY’s gained.

PSS15
ECONOMIC ANALYSIS OF ETANERCEPT AS CONTINUOUS ORPaused Therapy in Moderate to Severe Psoriasis from a Public Perspective in Colombia
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