**PSY17**

**COST-EFFECTIVENESS AND BUDGET IMPACT ANALYSIS OF OROS HYDOMORPHONE IN PATIENTS WITH CHRONIC CANCER PAIN FROM THE PUBLIC PAYER PERSPECTIVE IN BRAZIL**

**OBJECTIVES:** To conduct cost-effectiveness and budget impact analysis (BIA) of OROS hydromorphone versus CR morphine and CR oxycodone for moderate/severe chronic pain in the public payer perspective in Brazil.

**METHODS:** A decision tree followed by a Markov Model with a 12 month time horizon was developed with data from the Phase III trial Hanna 2008. The achievement of mild pain (worst pain scores < 4) was considered as outcome. Only direct medical costs were considered and unit costs were obtained from Brazilian official lists. For the BIA, 10% of currently used CR morphine daily doses was substituted for equivalent OROS hydromorphone doses. The same rational was adopted for CR oxycodone comparison. Univariate deterministic sensitivity analyses showed that the resulted remained consistent through model parameter variations. RESULTS: OROS hydromorphone showed 1.66 additional months in mild pain per patient per year when compared to both CR morphine and CR oxycodone. Annual treatment costs were 2,401 BRL, 1,256 BRL and 3,114 BRL per patient per year, for OROS hydromorphone, CR morphine and CR oxycodone respectively. The incremental cost-effectiveness ratio was 689 BRL per additional month in mild pain per patient per year, when OROS hydromorphone was compared to CR morphine. Versus CR oxycodone, OROS hydromorphone was more effective with fewer costs, being cost saving (ICER = 1,634 BRL). BIA results showed that the substitution of 10% of current utilization of CR morphine for OROS hydromorphone and CR oxycodone respectively would result in a budgetary impact of 118,722 BRL and 347,295 BRL, respectively. CONCLUSIONS: OROS hydromorphone is cost saving when compared to CR oxycodone and is more cost-effective than CR oxycodone when both are compared to the reference of chronic cancer pain treatment with CR morphine, with a lower budgetary impact.

**PSY38**

**COST-EFFECTIVENESS OF GOLIMUMAB IN ANKYLOSING SPONDYLITIS FROM THE UK PAYER PERSPECTIVE**

**Objectives:** Golimumab is a novel TNF-α inhibitor for treatment of patients with severe active ankylosing spondylitis (AS). This study evaluated the cost-effectiveness of golimumab and its appropriate comparators in the treatment of AS from UK National Health Service (NHS) and 社会 perspective. METHODS: A Markov model with an initial decision tree was developed to simulate the progression of a hypothetical cohort of active AS patients for 20 years. The primary outcome measure was quality-adjusted life-years (QALYs) estimated using Bath Ankylosing Spondilytis Functional Index (BASFI). The primary comparator was conventional TNF-α inhibitors, whereas the primary response measure was ≥50% improvement in Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) at 12 weeks. Direct costs including medication costs and AS management costs were included. Golimumab was compared with conventional treatment and other TNF-α inhibitors. Costs and outcomes were discounted at 3.5%. RESULTS: Annual TNF-α inhibitor costs were substantially lower than conventional treatment and comparable to each other on BASDAI response. The incremental cost-effectiveness ratio (ICER) for golimumab was £15,353 per QALY compared to conventional treatment. The probability of golimumab being cost-effective at a threshold of £30,000/QALY was 92%. Compared to etanercept and adalimumab, golimumab generated marginally more QALYs at marginally more costs.

**Conclusions:** Golimumab may be considered as a cost-effective treatment alternative for patients with AS. With comparable costs and efficacy to other TNF-α inhibitors, golimumab’s position in the treatment pathway is likely to be driven by patient and physician choice.

**PSY39**

**REAL-WORLD COST-EFFECTIVENESS OF BORTEOZUM IN RELAPSED OR REFRACTORY MULTIPLE MYELOMA IN THE NETHERLANDS**

**Objectives:** The Dutch reimbursement policy for expensive inpatient medicines requires outcomes research after four years of temporary reimbursement. Based on a retrospective study, we explored the cost-effectiveness of bortezomib for relapsed/refractory multiple myeloma in Dutch daily practice. METHODS: Detailed clinical data from a real-world cohort of 72 patients treated with bortezomib and 67 patients never treated with bortezomib were collected from medical records. Validity of the incremental cost-effectiveness was assessed by comparing baseline prognosis between bortezomib and non-bortezomib patients. Clinical effectiveness was evaluated by comparing Kaplan-Meier survival estimates. Costs of resource use from a hospital perspective were based on patient-level data. RESULTS: Prognostic factors for bortezomib patients were significantly different compared to non-bortezomib patients. Incremental analyses for bortezomib versus non-bortezomib patients were therefore not performed. Total mean costs and median survival from start of relapsed/refractory treatment for bortezomib patients were €84,042 and 33.2 months. Bortezomib accounted for 21% of total costs among these patients. For non-bortezomib patients, total mean costs and median survival from start of relapsed/refractory treatment were €54,029 and 21.6 months. The proportion of patients still in follow-up at the end of the data collection was slightly higher in bortezomib versus non-bortezomib patients (51% vs. 46%). Total mean costs for bortezomib patients did not differ significantly when excluding patients still in follow-up. For non-bortezomib patients, total mean costs differed significantly when excluding patients still in follow-up, mainly due to high costs of lenalidomide treatment, stem cell transplants and inpatient hospital stays. CONCLUSIONS: Our real-world data challenged the assessment of the incremental cost-effectiveness of bortezomib versus other treatments in the indication of relapsed/refractory multiple myeloma. It was possible to estimate the cost and effects for bortezomib patients in daily practice to determine the real-world value. Data synthesis incorporating effectiveness for the relevant comparator might facilitate estimation of a valid ICER.

**PSY40**

**COST-EFFECTIVENESS OF PREGABALIN VERSUS USUAL CARE IN REFRACTORY OUT-PATIENTS WITH NEUROPATHY PAIN FOLLOWED IN PRIMARY CARE SETTINGS**

**Objectives:** Estimate the cost-effectiveness of Pregabalin (PGB) versus Usual Care (UC) for patients with refractory neuropathic pain followed in primary care settings. METHODS: Data extracted from a 12-week non-interventional prospective study conducted to ascertain the cost of NeP were used. PGB naïve patients treated with UC or PGB, matched by age (>5 years), sex and pain intensity (±5 ps), refractory (≥80%McGill) to previous treatment during the prior 6 months, were selected in a 1:1 ratio. Patients could switch to PGB (monotherapy/add-on) or to UC (non-narcotics, opiates, antidepressants and/or anticonvulsants). Time horizon was 12 weeks. Effectiveness was quality-adjusted life years (QUALY) gain. Perspectives of the National Health Service (NHS) and 社会 (2006) were included, and expressed as an incremental cost-effectiveness ratio (ICER) Bootstraping techniques (10,000 re-samples) were used to obtain the probabilistic ICER, its 95% percentile confidence interval (CI) and the cost-effectiveness acceptability curve. RESULTS: A total of 160 patient-pairs were extracted. Compared with UC, PGB was associated with significantly higher QUALY gain; 0.0374 ± 0.0367 vs. 0.0224 ± 0.0313 (P < 0.001). Notably, although drug costs were higher for PGB (€251 ± 123 vs. €104 ± 121, P < 0.001), its QUALY gain did not incur a higher overall total cost (€529 ± 438 vs. €560 ± 672; p = 0.682). In fact, the ICER was dominant for total and health care costs with ICs respectively, dominant-€27,686, and dominant-€5,508. ICER for drug costs was €10,672/QUALY (dominant-€19,858). The 99% of the re-samples were below the threshold of €30,000/QUALY. CONCLUSIONS: Views of the community medical setting, pregabalin is highly cost-effective in the treatment of refractory NeP patients. The high indirect costs and increased health care costs associated with the treatment of refractory patients, which offset higher cost of pregabalin, highlight the economic burden of the condition on society.

**PSY41**

**COST-EFFECTIVENESS OF BIOLOGICS IN PSORIASIS IN TWO LATIN AMERICAN COUNTRIES—COMPARISON WITH THE EUROPEAN EXPERIENCE**

**Objectives:** To evaluate cost-effectiveness of biologics used in patients with psoriasis in Colombia and Peru. METHODS: We estimated direct costs of etanercept, adalimumab, ustekinumab and infliximab based on their labels for first/induction year and second/maintenance year (EUR1 = €1 = $1.25).RESULTS: We considered two induction schemes: 50 mg weekly 52 weeks-D1 and 100 mg 12 weeks-D2. Effectiveness was evaluated as 75% reduction in Psoriasis Area and Severity Index-PASI 75— from meta-analysis presented by Hawkins et al. in the 14th International ISPOR: infliximab = 80%; ustekinumab = 69%; adalimumab = 59%; etanercept-D2 = 52%; etanercept-D1 = 39%. Infliximab and ustekinumab effectiveness were not significantly different. However, both were significantly superior to etanercept (D1 and D2). RESULTS: In Colombia, Ustekinumab was dominant, €29,002 in 2 years getting cost savings of €438,731; €7,411 vs. adalimumab; €8,119 vs. etanercept-D2 and €25,340 vs. infliximab, with higher or same effectiveness than the other biologics used in that country. In Peru, all the options were more effective and more costly than the standard of care (etanercept-D1). The ICER per patient with PASI 75 of etanercept-D2, adalimumab, ustekinumab and infliximab, compared to etanercept-D1 were €21,654, €19,860, €13,036 and €29,008, respectively. Then, the efficiency frontier was formed by etanercept-D1, ustekinumab and infliximab. Given evidence shows the last two products do not have effectiveness significant differences, ustekinumab became the dominant alternative.