utilization, lower QoL and greater work impairment. Additional research is warranted to further characterize the impact of cost and reimbursement on patient outcomes.

PSY25

HEALTH CARE RESOURCE UTILIZATION (HRU) AND COSTS ASSOCIATED WITH FLARES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) IN A MEDICAID POPULATION IN THE UNITED STATES

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OBJECTIVES: Limited data exist on the economic impact of SLE flares. This study estimated HRU and costs of SLE flares in a U.S. Medicaid population. **METHODS:** SLE Patients ≥18 years old were extracted from a large Medicaid database 2002-2009. Index date was the date of the first SLE diagnosis. All patients were continuously enrolled for ≥6 months before and ≥12 months after index date and followed until the earliest of inpatient death, end of enrollment, or end of study. Mild, moderate, and severe flares were identified in the follow-up period. Costs attributable to flares were measured during 30 days following a flare. If a flare of higher severity occurred within 30 days, the length was limited to the period up to the start of the new flare. **RESULTS:** 14,262 patients met the study criteria and 97% experienced at least one flare during an average follow-up of 39 months (3,540 had severe, 9,597 had moderate, and 669 had mild flares as their most severe flares). Mean costs per flare were $11,716, $562 and $129 for severe, moderate, and mild flares, respectively. Patients with ≥1 severe flares during follow-up had 1.7 inpatient (IP) admissions, 3.5 emergency room (ER) visits, and 16.0 outpatient (OP) visits with a total medical cost of $49,754per year. Patients with ≥1 moderate flares but no severe flares had 0.9 IP admissions, 2.4 ER visits, and 12.8 OP visits with a cost of $21,941. Patients with only mild flares had the least HRU of 1.0 IP admission, 1.5 ER visits, and 7.5 OP visits with a cost of $17,574. Patients with severe and moderate but no mild flares and patients with severe flares only incurred the highest annual cost ($66,412 and $74,491, respectively). **CONCLUSIONS:** Flares occurred in almost all SLE patients and were associated with a significant economic burden.

PSY26

COSTS AND OUTCOMES OF PATIENTS WITH HAEMOPHILIA A (HA) AND FACTOR VIII INHIBITORS TREATMENT: THE IMMUNE TOLERANCE AND ECONOMICS RETROSPECTIVE REGISTRY (ITER) RESULTS

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OBJECTIVES: Immune tolerance induction (ITI) is generally accepted as first choice treatment to eradicate inhibitors in hemophilia A patients. Little is known about the outcomes and cost consequences of this treatment option. **METHODS:** The Immune Tolerance and Economics Retrospective (ITER) study is an observational, retrospective, multicentre, multinational study aiming to estimate cost of treatment in hemophilia A patients, undergoing ITI. Data on hemostatic treatment given in the following time periods were collected: up to 12 months before the diagnosis of Inhibitors, between Inhibitors diagnosis and ITI start, during ITI, and 12 months after the end of ITI. Costs of treatment were calculated in the perspective of the third party payer and expressed as mean €/patient-month. **RESULTS:** Seventy-one valid patients, with median age at ITI start=3.8 (0.4-41) years, were enrolled. Before ITI the median Inhibitors peak titre was 18.5 (0.80-704) BU. ITI was applied for a mean of 1.85 (0.1-14.0) years and was successful in 84.5% pts. Before Inhibitors diagnosis, patients cost was 670.2 €/patient-month. Cost was 3,188€/patient-month between the Inhibitors diagnosis and ITI start (92.1% for bypassing agents), and 60,078€ during ITI (76.8% for ITI, 19.4% for extra FVIII treatment, 3.8% for extra treatment with bypassing agents). The mean cost after ITI was 13,211€/patient-month. **CONCLUSIONS:** ITI applied on patients with the characteristics of those involved in the ITER study is successful in 84% of them at a mean cost of 60,000€/patient-month during ITI, plus 13,000€/patient-month through 1 year later. Further research is encouraged to value long term benefits and costs attributable to ITI versus other treatment options, in order to identify the most efficient treatment for the patients and for the health care system.

PSY27

COST EFFECTIVENESS OF TREATMENT WITH ETANERCEPT OR USTEKINUMAB FOR MODERATE TO SEVERE PSORIASIS

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OBJECTIVES: Limited information is available on the cost effectiveness of newer biologic agents for treatment of psoriasis. The objective of this study is, from a United States societal perspective, to compare the cost-effectiveness of etanercept and ustekinumab therapy in patients with moderate-to-severe psoriasis based on head-to-head clinical trial information. **METHODS:** A Markov model was constructed to simulate the incremental cost per quality-adjusted life year gained. Costs were estimated from the societal perspective in the United States over a time horizon of five years. All cost and effectiveness estimates were obtained from the relevant literature. An annual discount rate of 3% was applied to costs and quality-adjusted life years. All costs were adjusted to 2011 US dollars. One-way and threshold sensitivity analyses assessed the robustness of model results. **RESULTS:** In the base case, over a 5-year time horizon, ustekinumab 45 mg was dominant versus etanercept 50 mg. The base case incremental cost-effectiveness ratio (ICER) comparing ustekinumab 90 mg with etanercept 50 mg averaged $267,761 per QALY gained. The ICER comparing ustekinumab 90 mg with ustekinumab 45 mg averaged $915,179 per QALY gained. ICERs were quite sensitive to unit prices for ustekinumab and etanercept. **CONCLUSIONS:** Given the limitations of the available data, ustekinumab 45 mg was dominant over etanercept 50 mg for a five-year time horizon, whereas ustekinumab 90 mg was more costly and marginally more effective than etanercept 50 mg. Ustekinumab 90 mg would not be considered cost effective using a US willingness-to-pay threshold of $120,000-150,000 per QALY.

PSY28

COST-EFFECTIVENESS ANALYSIS OF CELECOXIB IN THE TREATMENT OF CHRONIC PAIN IN PATIENTS WITH OSTEOARTHRITIS OR RHEUMATOID ARTHRITIS VERSUS THE USE OF ETORICOXIB OR LUMIRACOXIB IN MEXICO

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OBJECTIVES: Patients with chronic pain due to osteoarthritis (OA) or rheumatoid arthritis (RA) do not often obtain adequate relief or experience unacceptable side effects due their pain-control treatments. The objective of this study was to perform a cost-effectiveness analysis comparing celecoxib, etoricoxib and lumiracoxib in the treatment of chronic pain in patients with OA and RA, from the Mexican Social Security Institute (IMSS) perspective. **METHODS:** A decision-tree model (12-weeks time horizon) was used to compare pain reduction and direct medical costs associated to competing alternatives. A systematic literature review was performed to identify the pain reduction (reported through visual analogue scales) and adverse events (AE) incidence rate associated. Comparators were: celecoxib 200mg/day, etoricoxib 90mg/day and lumiracoxib 100mg/day for patients with OA and RA. A meta-analysis with selected publications (n=10) was performed. Resource utilization was extracted from clinical practice guidelines and unit costs were retrieved from IMSS official sources. Probabilistic sensitivity analysis was performed. Acceptability curves were developed. **RESULTS:** Pain reductions vs. placebo were: celecoxib 14.18% (CI95% 10.48-17.87, $p<0.00001$); etoricoxib 12.70% (7.67-17.73, $p<0.00001$) and lumiracoxib 9.47% (7.17-11.77, $p<0.00001$). Differences between celecoxib and lumiracoxib was meaningful ($p<0.05$). The odds ratios of AE incidence vs. placebo were: 1.06 (0.77-1.46, $p=0.37$); 1.09 (0.87-1.36, $p=0.73$) and 1.44 (0.88-2.34, $p=0.14$), respectively. The expected medical costs (2011 US$) were: $197.93 (±$9.52); $221.54 (±$7.06) and $306.65 (±$12.86), respectively. The cost of management of AE contributed with $101.28, $95.00 and $146.17 of the overall expected costs, respectively. In regards to etoricoxib (basecase), celecoxib showed to be a cost-saving strategy with a cost-effective proportion of 76.7% (74.1%-79.3%); while lumiracoxib was the less effective and more costly strategy. **CONCLUSIONS:** At IMSS, celecoxib patients who suffer OA or RA would reach a higher incremental reduction in pain intensity at 12 weeks reducing overall costs in comparison to etoricoxib.

PSY29

LIFETIME IMPACT ON BLEEDING EPISODES AND HOSPITALIZATION OF ON-DEMAND TREATMENT OPTIONS IN FRENCH HEMOPHILIA PATIENTS WITH INHIBITORS

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OBJECTIVES: In the French setting, uncontrolled bleeding episodes in hemophilia patients with inhibitors require emergency/inpatient care. The impact of on-demand (OD) treatment of bleeding episodes remain rarely quantified in France. **METHODS:** We modeled the lifetime number of bleeding episodes and hospitalizations associated with recombinant activated Factor VIIa (rFVIIa) and plasma-derived activated prothrombin complex concentrate (pd-aPCC) to investigate the impact of faster bleeding resolution of a new bypassing agent (BA) by applying hypothetical adjustments to the performance of rFVIIa. The exploratory semi-Markov model assumed a French payer perspective and simulated treatment of 2-year old male hemophilia patients with high-responding inhibitors. Model inputs were obtained from published international studies and French government sources. Comparisons of the current BAs pertaining to dosing and base-case efficacy rates were obtained from a Bayesian meta-analysis pooling available estimates. Model outcomes included the rate of hospitalization due to uncontrolled bleeds and number of minor/major bleed over lifetime. Sensitivity analyses were performed to test robustness of the model. **RESULTS:** rFVIIa required 4% fewer hospitalizations for bleed treatment than pd-aPCC, as well as a reduction in lifetime bleeds. rFVIIa resulted in 667 minor bleeds over the patient's lifetime compared with 673 in patients treated with pd-aPCC. When adopting potential improvements for a hypothetical new BA, faster bleed resolution that results in fewer rebleeds reduces hospitalizations by 13% in the rFVIIa arm compared to base case. **CONCLUSIONS:** Additional research is needed to understand how increased bleed control and faster resolution of bleeds in French inhibitor patients translate into a reduction in other health resources utilization such as emergency visits to hemophilia treatment centers and indirect costs including missed school/productivity loss which can improve the quality of life of patients and caregivers.

PSY30

COST UTILITY ANALYSIS OF THE PROFILAXIS VERSUS ON-DEMAND TREATMENT WITH RECOMBINANT FACTOR IX FOR THE TREATMENT OF HEMOPHILIA B IN MEXICO

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