istration of patients, the management of adverse events and the cost of medication. A 3.5% discount rate was used for the case of all outcomes. Monte Carlo simulation was employed to construct the 95% uncertainty intervals (UI) and to compute cost-effectiveness acceptability curve. RESULTS: The mean total QALYs estimate in the Len/Dex arm was 2.95 (95%UI: 2.75-3.14) and 2.20 (95%UI: 1.99-2.40) in the case of bortezomib, an incremental gain of 0.75 (95%UI: 0.47-1.02) QALYs. The mean total therapy cost was estimated at €76,782 (95%UI: 75,689-€77,927) and 46.380€ (95%UI: 45,719€-47,000€) for Len/Dex and Bortezomib, respectively. For both comparators, total therapy cost is mainly attributed to medication. The cost per life year gained was estimated at €35,081 (95%UI: €19,357-€73,180) and the cost per QALY gained at €42,012 (95%UI: 29,445-64,217). The probability for Len/Dex to be a cost-effective therapy option at a threshold three times the per capital income (€60,000 per QALY), was higher than 95%. Results remained constant under several one-way sensitivity analyses. CONCLUSIONS: Therefore therapy with combination of Len/Dex appears to be a cost-effective choice compared with Bortezomib alone for multiple myeloma patients in Greece.

## ECONOMIC EVALUATION OF PEGVISOMANT FOR ACTIVE ACROMEGALY PATIENTS WHO FAILED AVAILABLE THERAPIES IN BRAZIL - PUBLIC HEALTH CARE SYSTEM PERSPECTIVE

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OBJECTIVES: Currently in Brazil, acromegaly patients who fail having biochemical control with somatostatine analogues face an unmet need. This research aims to assess the economic impact of introducing pegvisomant to treat patients under the public health care system perspective. METHODS: An economic model considering patients treated with Pegvisomant (PtwP) and patients without biochemical control (PWoC) was developed by using the available literature and Brazilian public databases to evaluate the frequency of the following outcomes: Life years gained (LY), quality adjusted life years gained (QALYs), cases of diabetes mellitus (DM), high blood pressure (HBP), myocardial infarctions (MI), joint replacement surgeries (JR) and number of life years without DM, HBP or MI (YWoDHM). The model was composed by a decision tree portion to evaluate "JR" or "no JR" heath states, from which one-year Markov cycles were initiated considering the following health states: No morbidity; DM; HBP; MI; HBP+DM; DM+MI; HBP+MI; HBP+DM+MI; death. Probability inputs would either follow general population data to estimate biochemical control or active acromegaly data to depict treatment failure. The time horizon was defined as 37 years, lifetime for PWoC since diagnose. Probabilistic sensitivity analysis was performed by Monte Carlo simulation using 10.000 iterations. 5% discount rates were applied to costs and benefits. Values were represented in 2010 USD. RESULTS: The values for PtwP versus PWoC were: 152.382 versus 143.935 for LY; 116.201 versus 87.227 for QALYs; 2.738 versus 6.141 for DM cases; 5.247 versus 7.244 for HBP cases; 753 versus 778 for MI cases; 67 versus 327 for JR cases and 219.319 versus149.896 for YWoDHM. ICERs for LY and QALYs were USD305.078,60 and USD89.068,00, respectively. CONCLUSIONS: Pegvisomant has an important role in reducing premature deaths and morbidities such as DM, HBP, JR and MI to the PWoC under the public heath perspective in Brazil. Real world data is necessary to identify underlying costs for the studied population.

# A UK BASED COST-EFFECTIVENESS ANALYSIS OF DASATINIB (SPRYCEL) 100MG DAILY COMPARED TO IMATINIB (GLIVEC) 600/800MG DAILY AS THERAPY FOR IMATINIB FAILING CHRONIC MYELOID LEUKEMIA (CML)

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OBJECTIVES: CML is a malignant orphan disease of the blood and bone marrow. Imatinib 400mg (up to 800mg with inadequate responses) daily is currently recommended for treatment of newly diagnosed patients or after failure with interferon- $\alpha$ . Dasatinib 100 mg daily has been shown to offer significant clinical efficacy in patients failing imatinib. Its cost-effectiveness compared to imatinib 600/800 mg has not been assessed in this patient group. METHODS: A partitioned survival/ costing model was developed to estimate the lifetime costs and benefits associated  $\,$ with dasatinib and imatinib from a UK health service perspective using a lifetime horizon and monthly cycles. Prognosis was assigned for dasatinib and imatinib patients to each of five initial best clinical response categories at 12 months. Response category specific survival was based on long-term data from IRIS clinical trial and response rates from a phase III randomized study. Utility and resource use data were taken from recent UK based studies and all unit/drug costs were taken from appropriate national databases and discounted at 3.5%per annum. Probabilistic and deterministic sensitivity analyses were conducted to estimate the confidence around the results. Outcomes are reported via incremental cost-effectiveness ratios (ICERs); benefit is expressed as quality adjusted life years (QALYs). RESULTS: Compared to imatinib, dasatinib offered an additional 3.53 QALYs but incurred £90,800 of additional costs. The ICER was therefore £25,700/QALY gained. At a threshold of £30,000/QALY gained, dasatinib had a 98.1% probability of being cost-effective. Deterministic analysis showed that the model was sensitive to changes in 12 month response probabilities and drug costs. The model was robust to changes in adverse event rates/ costs, and to utility estimates. CONCLUSIONS: Dasatinib has been shown to be clinically superior to imatinib in CML patients who have failed imatinib treatment and is a cost-effective alternative to imatinib dose escalation in this patient group

A UK BASED COST-EFFECTIVENESS ANALYSIS OF DASATINIB (SPRYCEL) 100MG DAILY COMPARED TO IMATINIB (GLIVEC) 400MG DAILY IN NEWLY DIAGNOSED PATIENTS WITH CHRONIC MYELOID LEUKEMIA (CML)

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OBJECTIVES: CML is a malignant blood disease. Imatinib 400mg daily is currently recommended in newly diagnosed CML patients. Compared to imatinib, dasatinib 100mg daily has been shown to offer significant improvements in clinical efficacy but its cost-effectiveness compared to imatinib has not been assessed in this patient group. METHODS: A partitioned survival/costing model was developed to estimate the lifetime costs and benefits associated with dasatinib and imatinib for a UK health service perspective using a lifetime horizon and monthly cycles, Individuals could switch from first to second line treatment at 3, 12 or 18 months for reasons of inadequate clinical response and monthly for all other reasons. Response category specific survival was based on long-term data from IRIS clinical trial and response rates from a recent network-meta-analysis. Utility and resource use data were taken from UK based studies and all unit/drug costs were taken from national databases and discounted at 3.5% per annum. Probabilistic and deterministic sensitivity analyses were conducted to estimate the confidence around the results. Outcomes are reported via incremental cost-effectiveness ratios (ICERs), benefit is expressed as quality adjusted life years (QALYs). RESULTS: Compared to imatinib, dasatinib offered an additional 0.71 QALYs (95% CI -0.15, 1.68) but incurred £17,646 of additional costs (95% CI -£24,259, £57,947). The ICER was therefore £24,922/QALY gained. At a threshold of £30,000/QALY gained, dasatinib had a 62.6% probability of being cost-effective. Deterministic analysis showed that the model was sensitive to changes in the 12-month response probabilities and drug costs. When trial observed dose intensities were used, the ICER was £13.400/OALY gained. The model was robust to changes in adverse event rates/ costs, and utility estimates. CONCLUSIONS: Dasatinib has been shown to be clinically superior to imatinib in newly diagnosed CML patients and is a cost-effective alternative to imatinib in this patient group.

SYSTEMIC DISORDERS/CONDITIONS - Patient-Reported Outcomes & Patient **Preference Studies** 

### PSY39

### DOSING AND REFILL COMPLIANCE IN ANKYLOSING SPONDYLITIS PATIENTS TREATED WITH GOLIMUMAB

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OBJECTIVES: This study reports dosing and refill compliance observed in golimumab (GLM)-treated ankylosing spondylitis (AS) patients. METHODS: This retrospective analysis assessed GLM use in a dult AS patients with  ${\ge}2$  GLM prescriptions between April 24, 2009 and December 31, 2010; ≥ 1 AS diagnosis during the study period; continuous activity in the Source® LX database (≥6 months before; ≥6 months after the index GLM prescription); and a 28-31 day GLM supply. Refill compliance was defined as  $\pm$  1 week of the expected 28-31 day (d) interval. The percent of compliant GLM refill intervals and the percent of patients demonstrating refill compliance at the 6th GLM dose were assessed. Data were summarized with descriptive statistics. RESULTS: A total of 99 AS patients and 559 GLM refill intervals were studied. The sample was 53% male; mean age of 44 years with 72% bioexperienced. A 50 mg GLM dose occurred in 99% of all fills. The mean  $\pm$  SD refill interval for the population was 35.1±21.0 d with a median of 30 d. The refill interval of bio-experienced patients (34.8±18.7 d; median 30 d) was similar to bio-naïve patients (35.8 $\pm$ 25.8 d; median 31 d). Refill compliance was observed in 79% of all intervals. Refill compliance at the 6th GLM dose was achieved by 83% of patients overall. CONCLUSIONS: In this retrospective administrative claims analysis, 99% of GLM doses were 50 mg with approximately once monthly refill intervals. Overall refill compliance was observed in nearly 80% of all GLM refills and in greater than 80% of AS patients at the sixth GLM dose. Median refill interval and refill compliance appeared similar in bio-experienced and bio-naïve subgroups. Further study of these trends using additional data sources are desired to substantiate these preliminary findings.

## ARE NEUROPATHIC PAIN (NP) TREATMENT BENEFITS REFLECTED IN THE SELF ASSESSMENT OF TREATMENT (SAT) OUESTIONNAIRE?

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OBJECTIVES: To understand how patients perceived the relevance and ease of understanding of the questions included in SAT questionnaire to reflect key patient-reported outcomes of NP treatments and to provide recommendations modifications based on patient clinician interviews. METHODS: Semi-structured interviews were conducted with clinicians and NP patients to inform on treatment attributes and pain impacts. Patients were debriefed on the SAT, a 5-item scale evaluating pain, activity level, quality of life (QL) and satisfaction with treatment (recommend treatment and undergo treatment again). SAT has a recall period reflecting back to initiation of treatment. The qualitative analysis software AT-LAS.ti 5.0 was used to analyze patient transcripts. Changes to SAT underwent debriefings. RESULTS: Three NP clinicians and 44 patients (20 painful diabetic neu-