were analyzed for each DMT line. The greatest cost-savings would have been in MHRA categories 2 (40%) and 3 (44%). The greatest cost-savings would have been in MHRA categories 2 (£34,267,393 to £44,191,174). Conclusions: The model is able to incorporate country-specific pathways for ESRD-associated patients, such as hemodialysis (HD), peritoneal dialysis (PD), transplant and conservative therapy, together with their different costs and mortality rates. The model was able to retrospectively calculate the ICERs and to perform a cost-effectiveness analysis. Results: The results showed that toposant is estimated to postpone the time to ESRD by a mean of around 3.7 years and increase life expectancy by a mean of 1.1 years. It is predicted that a larger number of ESRD events and deaths could be avoided among treated patients vs non-treated patients (e.g. 346 ESRD events avoided, and 68 deaths for ESRD avoided at 15 years). In addition, the cumulative cost per patient treated who reaches ESRD, compared to non-treated patient, generates savings in the medium to long term (e.g. at 15 years, £16.6 million saved for HD and £2.0 million saved for PD). Conclusions: The use of JINARC in ADPKD patients permits not only a slowing down in the worsening of the disease, but also an increase in life expectancy and the achievement of a considerable decrease in direct and indirect health costs in the medium to long-term.

PN37

REAL-WORLD ASSESSMENT OF RELAPSE, MEDICAL COSTS AND PERSISTENCY OF MULTIPLE SCLEROSIS PATIENTS TREATED WITH SUBCUTANEOUS INTERFERON β-1A

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OBJECTIVES: To describe relationships among persistency with subcutaneous interferon β-1a (scIFN-1a), relapse timing relative to discontinuation, and medical costs in patients with multiple sclerosis (MS). METHODS: Patients (aged 18-63 years) with RRMS who received scIFN-1a (max 360x 4000x mg/week) and had scIFN-1a claim index months of continuous eligibility before and 24 months after index were identified in the IMS Pharametrics Plus™ database. Discontinuation was defined as a ≥90 day gap in current IFN-1a treatment from the last post-index inpatient stay, emergency room (ER) visit or MS outpatient visit with a corticosteroid claim ≥7 days. Relapse was categorized as before or after scIFN-1a discontinuation. Medical costs [excluding disease-modifying drug (DMD) costs] per day (US$) pre or post discontinuation of scIFN-1a were presented. Costs were evaluated with general linear regression models using gap, time of first relapse and the interaction as predictors. Prior costs, age, gender and time until relapse were evaluated as covariates. RESULTS: 1450 MS patients met the study criteria; 29.6% had a relapse and 50% (n=770) discontinued scIFN-1a during the follow-up period. Patients discontinuing scIFN-1a averaged 250 (SD=182) days of treatment and 33.1% relapsed, while those who did not discontinue averaged 726 (SD=15) days of treatment and 25.2% relapsed (p=0.001). Non-DMD medical costs day was lowest for patients with no gap and no relapse ($24.71/day). Patients who discontinued scIFN-1a and had their first relapse after discontinuation, had non-DMD medical costs of $39.04/day prior to discontinuation, and $52.28/day after discontinuation. Patients with no gap and a relapse while scIFN-1a was available had lower non-DMD costs ($38.88/day), than patients with a gap in scIFN-1a that experienced a relapse while on treatment ($72.37/day). Models suggest that costs differ depending on gap status and timing of the discontinuation. Conclusions: These results suggest the value of maintaining scIFN-1a treatment.

PN38

ANALYSIS OF EXPENDiture IN MULTIPLE SCLEROSIS DISEASE MODIFYING THERAPIES EVOLUTION BETWEEN 2004-2014 IN SPAIN

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OBJECTIVES: To analyze factors of recent evolution of Multiple Sclerosis (MS) Disease Modifying Therapies (DMT) budgets in Spain between 2004 and 2014. METHODS: A structure of DMT expenditure was provided by IMS Health. For each DMT line: first line: subcutaneous and intramuscular interferon (IFN) β-1a, subcutaneous IFN β-1b and glatiramer acetate injection. Second line: natalizumab and fingolimod) were calculated monthly and annually evolution of a number of patients, billing, drug cost per patient and cost per year of treatment. Two periods: 2004-2007 and 2007-2014 (start marketing second lines DMT)-2014 period were analyzed for each DMT line. RESULTS: During 2004-2014 DMT expenditure increased from 115.5M to 353.8M; due to a greater number of patients 165% (10.27% annual growth per year) and a further growth of annual cost per patient. 15.82% (1.48% annual growth per year). In December 2014 second lines correspond to a 35.6% of DMT expenditure. Annual cost per patient in second line represents 53% over cost treated patient and 82% greater than first line DMT cost per year. If year 2007 is omitted from analysis (Only 68 second line treatments and 1.44M of associated expense) and is analyzed 2008-2014 period, second-line DMT represent 61% of new treatments causing a 78% increase in DMT expenditure. In 2014 second line DMT participation reaches 86% of new regimes causing the 91.23% of increase DMT expenditure. Conclusions: The growing incorporation of new DMT lines may lead to approximately 2.76% per year increase of new patients. Annual growth slows down to 1.48% per year with annual growth per year). Are components to consider in the pharmacetical budget management.

PN39

ADAPTING THE ADPKD OUTCOMES MODEL TO PREDICT COST CONSEQUENCE IN ITALIAN PATIENTS WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE (ADPKD) AFFECTED PATIENTS TREATED WITH JINARC

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OBJECTIVES: This study aimed to adapt the ADPKD Outcomes Model in order to estimate cost-effectiveness in Italian patients with autosomal dominant polycystic kidney disease (ADPKD) affected patients treated with JINARC as compared to non-treated patients in Italy. METHODS: Utilizing the structure of the ADPKD Outcomes Model adapted to the Italian context, the analysis has considered the budget management. Results: A total of 166,914 patients with ADPKD were performed from both the National Health Service and social perspectives. The ADPKD Outcomes Model is based on a series of annual simulations at the individual patient level that allows estimation of the incremental cost of autosomal dominant polycystic kidney disease (ADPKD) affected patients treated with JINARC as compared to non-treated patients in Italy. Conclusions: The use of JINARC in ADPKD patients permits not only a slowing down in the worsening of the disease, but also an increase in life expectancy and the achievement of a considerable decrease in direct and indirect health costs in the medium to long-term.