simulate RA evolution after treatment with etanercept (basecase treatment), adalimumab or infliximab as first-line therapies and their associated costs over a 12-month time horizon. Therapy continuation or switch was evaluated at week 24. Effectiveness measures were ACR70 response and quality adjusted life years (QALYs) gained. Direct medical costs included biologics, concomitant drugs, medical follow-up and adverse events management. Clinical response was extracted from published literature, while costs were collected from Brazilian public official databases. Probabilistic sensitivity analyses were performed through Monte Carlo simulation second-order approach. RESULTS: In base case analysis estimated effectiveness resulted in [ACR70, QALY]: etanercept [31.3%, 0.79]; adalimumab [26.6%, 0.77] and infliximab [12.8%, 0.73]. Expected mean costs per patient were 23,065USD, 24,869USD and 25,853USD, respectively. In cost-effectiveness and cost-utility analysis, etanercept was the less costly and the most effective alternative being cost-saving in all comparisons: 2789USD less than infliximab (most costly alternative), but their high cost represents a challenge for decision makers. Curvability analysis was used to determine the cost and the effectiveness of adding TCZ to conventional treatment for sJIA in Mexico. METHODS: We designed two decision models to compare TCZ versus placebo. In each model, two time horizons were analyzed: 12 weeks and one year. Target population consists of patients (2-19 years) with active sJIA and inadequate response to NSAIDS and corticosteroids. The dosing scheme for TCZ was based on body weight: 8 mg/kg for patients ≥ 12 kg and 12 mg/kg for patients < 12 kg. The analysis was performed under the perspective of the public health care system in Mexico. Tocilizumab acquisition cost, infusion fees and standard management of sJIA according to level of response were evaluated. Efficacy was defined in terms of the American College of Rheumatology Pediatric response criteria. Resource use and unit costs were gathered from local sources; efficacy was derived from two phase 3 clinical trials; increase in mortality and utility scores associated with level of response was based on literature. All costs are expressed in 2011 euros (€).

RESULTS: A notably higher proportion of patients achieved an ACRPedi70 response with TCZ in both children with the possibility of maintaining methotrexate (71% vs. 8%) and in those without that alternative (75% vs. 13%). The incremental cost per QALY gained for etanercept versus adalimumab and infliximab, for moderate to severe rheumatoid arthritis treatment from a public payer perspective in Brazil. METHODS: A decision-tree model was developed to simulate RA evolution after treatment with etanercept (basecase treatment), adalimumab and infliximab. The alternative was considered the same across all models. During base-case, the incremental cost per Quality-Adjusted Life Year (QALY) gained with TCZ ranged from 10,636€ to 10,681€. The gross domestic product per capita in Mexico during 2010 was estimated at 7048€. Results were robust to variation in these parameters. CONCLUSIONS: TCZ is a cost-effective option to treat sJIA in Mexico.

PMS40

ECONOMIC EVALUATION OF ETANERCEPT IN RHEUMATOID ARTHRITIS FROM THE PUBLIC PAYER PERSPECTIVE IN BRAZIL

Fernandes RA1, Takemoto MLS2, Tolentino ACM2, Takemoto MMM2, Santos PML2, Moraes AN2

1ANLOVA - Knowledge Translation, Rio de Janeiro, Brazil, 2Fizer, Inc., New York, NY, USA

OBJECTIVES: Rheumatoid Arthritis (RA) leads to significant impact on management costs and patient’s quality of life. In Brazil, costs associated to RA patient’s care are 6.6-fold higher than general population, with greater resources consumption. Biologic treatment after two disease-modifying antirheumatic drugs fail is an alternative, but their high costs represents a challenge for decision makers. Currently, adalimumab, etanercept and infliximab are provided by the Brazilian public health care system. This study aims to compare etanercept versus adalimumab and infliximab, for moderate to severe rheumatoid arthritis treatment from a public payer perspective in Brazil. METHODS: A decision-tree model was developed to simulate RA evolution after treatment with etanercept (basecase treatment), adalimumab and infliximab. The dosing scheme for TCZ was estimated from published literature, while costs were collected from Brazilian public official databases. Probabilistic sensitivity analyses were performed through Monte Carlo simulation second-order approach. RESULTS: In base case analysis, 31.4%, 18.2% and 12.9% patients met ACR70 response for etanercept, adalimumab and infliximab. Annual costs per ACR70 responder were 147,147USD, 264,097USD and 327,632USD, respectively. Etanercept represented the less costly per ACR70 responder and the most effective alternative in all comparisons: 116,950USD and 180,485USD less than adalimumab and infliximab, respectively; 13.2% and 15.8% more patients met ACR70 response versus adalimumab and infliximab. Conclusions: Etanercept exhibited incremental clinical effectiveness at a lower cost per ACR70 responders when compared to adalimumab and infliximab, from the Brazilian public health care system.

PMS41

ASSESSING THE COST EFFECTIVENESS OF BROADENING ACCESS TO IDOXYCICLANE FOR THE PREVENTION OF OSTEOPOROTIC FRACTURE IN AUSTRALIA

Tilden D1, Jackson D2, Tsy-Tee K2, Van Bavel J2

1Therma Consulting Pty Ltd, Pyrmont, NSW, Australia, 2School of Public Health, North Western sydney Area Health Service (NWAS), Sydney, Australia

OBJECTIVES: Alendronate is subsidised in Australia for patients with a prior fracture or those aged ≥ 70 with a bone mineral density (BMD) T-score of ≤ -3.0. The objective of the analysis was to assess the cost-effectiveness of broadening access to alendronate to individuals aged ≥ 70 with BMD T-score ≤ -2.5. METHODS: A cost-effectiveness analysis was conducted using a microsimulation model of a Markov process. The comparator was ‘no alendronate’ until such time that the individual became eligible for treatment due to a fracture or to BMD T-score reaching -3. The model simulates patients through six health states of a Markov process with the health states defined by treatment status (not eligible, on treatment, discontinued treatment) and fracture status (with or without history of fracture).