after initiating treatment that triggered treatment switching to subsequent therapies
upon failure. Results: 1,147 patients treated with ACR high efficacy biologic therapy followed by conventional DMARD therapy versus a less efficacious biologic therapy followed by a CD-MARD. Scenario 2 compared two multiple biologic treatment sequences with a difference in efficacy between the first biologic in each sequence of 0.15. Methods: CD-MARD and a combination of bDMARDs and conventional therapies were assumed to have an incremental cost-effectiveness ratio of 1.5€/QALY with 2.0% discounting rate and 6-month cycle. Results: In scenario 1, a 0.6% higher efficacy in terms of ACR20 was accompanied by 1.5 QALYs gained, 1.5 costs avoided, 1.6 years of quality-adjusted survival, and an incremental cost-effectiveness ratio (ICER) of €2,261/QALY gained. In scenario 2, the incremental cost-effectiveness ratio was €5,312/QALY. Conclusions: Switching to a combination of bDMARDs and conventional therapies over a period of three months was found to be a cost-effective intervention. Use of these data may impact clinical decision making and the reimbursement strategies of payers.

PMS36
COST-EFFECTIVENESS OF ROUTINE TESTING FOR HLA-B*5801 IN PORTUGUESE ADULT PATIENTS NEWLY DIAGNOSED WITH GOUT IN PORTUGUESE NHS HOSPITALS

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OBJECTIVES: Routine testing for HLA-B*5801 in European patients has been proposed before allopurinol treatment aiming to reduce the incidence of Stevens-Johnson syndrome/toxic epidermal necrolysis (SJS/TEN) and to avoid adverse reactions. Sensitivity analysis results showed that base-case results were advantageous option if its maximum price would equal 6,370€ per QALY gained. However, it may be an expensive strategy for countries that patients with the lowest risk for SJS/TEN develop.

PMS37
COST-EFFECTIVENESS OF TREATMENT SEQUENCES WITH DIFFERENT BIOLOGIC THERAPIES FOLLOWED BY A CDMARD IN TREATING PATIENTS WITH RHEUMATOID ARTHRITIS IN KAZAKHSTAN

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OBJECTIVES: The purpose of present study was to evaluate the cost-effectiveness of treatment sequences with different biologic therapies followed by a CDMARD in the treatment of adult patients with active rheumatoid arthritis (RA) from the perspective of Ministry of Health (MoH) over a patient lifetime horizon in Kazakhstan. METHODS: A decision analytic model was conducted in MS-Excel to estimate efforts and direct costs of methotrexate (MTX) combination with TCZ or IFX followed by a MTX MTX-adjunctive therapy (AD) and an incremental total cost of 42, 401.03€, resulting in an ICER of 34, 194.38€ per SJS/TEN reaction avoided. Sensitivity analysis results showed that base-case scenarios are very sensitive to variations in the baseline odds ratio of gene–disease association, cost of genotyping, and cost of treatment with genotyping and without genotyping. Conclusions: Widespread use of HLA-B*5801 genotyping in Portuguese hospitals is not cost-effective at the current unit price of 45.30€ as it leads to a substantial increase in expenditure compared to usual care. However, it may be an advantageous option if its maximum price would equal 6,370€.

PMS38
COST-EFFECTIVENESS OF CERTOLIZUMAB PEGOL IN THE TREATMENT OF ACTIVE RHEUMATOID ARTHRITIS, AXIAL SPONDYLOARTHRITIS, AND PSORARTHRITIS IN ROMANIA

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OBJECTIVES: To evaluate the cost-effectiveness of certolizumab pegol (CZP) versus conventional anti-rheumatic drugs (CAD) in the treatment of adult patients with active rheumatoid arthritis (RA), axial spondyloarthritides (axSpA) and psoriatic arthritis (PsA). Methods: Decision analytic models (Markov structure) were developed for each condition, following the EULAR, ASAS and NICE guidelines. Clinical efficacy data, disease history and resource use data came from published economic evaluation studies. Outcomes were estimated from EQ-5D data assessed in CZP pivotal clinical trials. Published 2013 unit costs were taken from national sources/expert opinion. A willingness-to-pay threshold of 3xGDP/capita (7860€/QALY) was considered. Base-case analysis was conducted from the payer perspective, with lifetime horizon and a 3% discounting rate and 6-month cycles. Results: Patients on CZP had higher drug costs than traditional NSAIDs (€9 193 vs €4,384) and total clinical trial costs (€52 000 versus €40 018). CZP dominates ADA (QALY gain of 0.226; total costs lower by 108 694RON) and is considered to be an effective therapy, but marginally more costly versus ETA (QALY gain of 0.059; total costs lower by 93 379RON) and is not cost-effective when compared to comparators. Conclusions: CZP is a cost-effective treatment compared to currently available SC anti-TNFs for the treatment of RA, axSpA and PsA in Romania.
PM44
THE COST-EFFECTIVENESS OF BIOLGIC DMARDs IN PATIENTS WITH SEVERE OR MODERATE TO SEVERE RHEUMATOID ARTHRITIS AFTER CONVENTIONAL DMARDs.
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OBJECTIVES: To estimate the cost-effectiveness of biologic disease modifying anti-rheumatic drugs (bDMARDs) in patients with severe or mild-to-severe active rheumatoid arthritis from a UK NHS perspective, as part of an ongoing National Institute of Health and Care Excellence (NICE) appraisal. METHODS: Systematic review and economic evaluation modeling suggests that celecoxib may be considered as a cost-effective alternative vs. tNSAIDs in the treatment of osteoarthritis in daily practice in the Spanish NHS.

PM45
THE COST-EFFECTIVENESS OF USE OF BARRIERD® IN LUMBAR DISCECTOMY SURGERY IN TURKEY.
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OBJECTIVES: While widely perceived as a successful procedure, discetomy surgery has a high failure rate over time. The overall risk of recurrent disc herniation varies between 2-18% in reported literature. The BarrierD® anular closure device was designed as an adjunct to lumbar limited microsurgery to block large anular defects while maintaining as much native nucleus within the disc space. Patients that were considered for an initial surgery were to have a minimum posterior disc height of 5mm, and an intra-operatively measured anular defect between 5mm and 12mm wide. The aim of this study was determined as to assess the cost effectiveness of the use of BarrierD® anular penetration in a group of patients in Turkey. METHODS: A simple decision analysis model was used to assess the cost effectiveness of the use of BarrierD®. The primary clinical endpoint was determined as the number of prevented reherniations. The number of reherniations was extracted from the literature. RESULTS: The use of BarrierD® was made between using and not using the BarrierD®. The results of the cost effectiveness analysis, the incremental number of prevented reherniations was 68 with BarrierD® and incremental cost was 139,343 TL. The ICER was within the limits of the threshold recommended by the World Health Organization with 27,136 TL. CONCLUSIONS: Use of BarrierD® in lumbar discetomy surgery is a cost-effective treatment option in Turkey.

PM46
ECONOMIC EVALUATION OF OSTEOSPOROSIS SCREENING AND TREATMENT IN ELDERLY JAPANESE WOMEN.
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OBJECTIVES: The objective of this study was to assess the cost-effectiveness of osteoporosis screening and treatment with alendronate in the Japanese women aged 50-74 years without a fragility fracture history. METHODS: A Markov model with ten health states (no event, seven types of post-fracture, bedridden, and death) was developed to predict lifetime costs and quality-adjusted life years (QALY) of screening and treatment strategy, comparing with no screening; in the screening arm, 1,000 hypothetical cohort experienced a bone mineral density (BMD) testing with dual energy x-ray absorptiometry (DXA) and received five years of alendronate therapy if the patient was at least 70 kg. RESULTS: Life-time cost of $1,486 per person and conferred an additional 0.029 QALY, resulting in an incremental cost-effectiveness of $51,195 per QALY gained. For those aged 75-79, ICER was estimated at $23,577 and $17,442 per QALY, respectively. Probabilistic sensitivity analysis showed that in women aged 65-69,70-74 and 75-79 years, screening strategy was cost-effective in 48.9%, 59.8%, and 57.9% of the simulations, respectively, if society is willing to pay $50,000 per QALY. CONCLUSIONS: Osteoporosis screening and treatment would be cost-effective in the Japanese women aged ≥70 years.

PM47
PHARMACOECONOMIC EVALUATION OF TREATMENT WITH TOCILIZUMAB IN RUSSIAN CHILDREN WITH SYSTEMIC JUVENILE IDIOPATHIC ARTHRITIS.
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OBJECTIVES: To evaluate the use of tocilizumab in Russian patients with systemic juvenile idiopathic arthritis (SJIA) in terms of cost-effectiveness and impact on social and economic burden of the disease. METHODS: The model was based on TENDER clinical study (De Benedetti F et al., 2012). First, a pharmacoeconomic cost utility analysis was performed using a standard technique. RESULTS: The efficacy of tocilizumab was compared with placebo. The analysis included direct medical costs in two comparable groups (1st and 2nd). The number of rehospitalizations was decreased by 18%. The efficiency of tocilizumab was evaluated according to ACR criteria. After that, the number of rehospitalizations was compared with placebo and the standard treatment. CONCLUSIONS: The number of rehospitalizations was lower than the standard group, the quality of life was better, and the costs were lower than the standard treatment. The model was expanded to the real-world setting. The use of tocilizumab in SJIA is justified by better cost efficiency and reduced social and economic losses of state budget connected with the burden of the disease.

PM48
ECONOMIC EVALUATION OF ETANERCEPT IN THE TREATMENT OF RHEUMATOID ARTHRITIS IN PORTUGAL.
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OBJECTIVES: The present study aims to estimate the cost-effectiveness of etanercept compared to golimumab in the treatment of patients with Rheumatoid Arthritis (RA) in Portugal. METHODS: A model was adapted to assess the cost-effectiveness of etanercept in the treatment of RA. We performed a comparison of the combination of etanercept + methotrexate and golimumab + methotrexate. Dosage of etanercept was 50mg on a weekly basis, whereas for golimumab it was 50mg once a month. The model is an individual simulation model and takes a lifetime perspective. Outcomes are expressed in QALYs, using the HAQ score.