PMS40

COST-EFFECTIVENESS ANALYSIS OF ANNUAL DOSE OF ZOLEDRONIC ACID VERSUS ORALLY ADMINISTERED BISPHOSPHONATES IN PREVENTION OF OSTEOPOROTIC FRACTURES IN CZECH POST-MENOPAUSAL WOMEN

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OBJECTIVES: Poor compliance with oral bisphosphonates leads to increased risk of vertebral and hip fractures in post-menopausal osteoporotic patients. Annual dose of Zoledronic acid significantly decreased risk of fractures as compared to placebo. The objective of this study was to evaluate a long-term cost-utility of the two strategies. **METHODS:** Markov model was constructed and first-order microsimulation was run in order to compare long term health-economic impact of treatments with Zoledronic acid and oral bisphosphonates in Czech patients. Rather than clinical efficacy, the model considered real-life effectiveness of both treatments associated with medication compliance. **RESULTS:** Compared to oral bisphosphonates the treatment with Zoledronic acid showed systematically improved effectiveness expressed as QALY gained throughout the life expectancy. The incremental cost-effectiveness of the Zoledronic acid is for 50 years of age below €25,708 per QALY gained and decreases sharply for patients above 65 years, resulting in distinctly improved incremental cost-effectiveness ratio below €6442 per QALY gained. **CONCLUSIONS:** From the age 65 on, patients should be preferentially treated with Zoledronic acid rather than oral bisphosphonates.

PMS41

COST-EFFECTIVENESS OF CELECOXIB COMPARED TO CONVENTIONAL NSAIDS AND NSAID+PPI COMBINATION THERAPY IN RHEUMATOID ARTHRITIS

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OBJECTIVES: However, DMARDs are in the first choice in the treatment of rheumathoid arthritis (RA), several patients still take NSAIDs, although, these drugs may cause serious gastro intestinal (GI) side-effects under continuous use. COX2 inhibitors supposed to have a better GI side-effect profile. The aim of our study was to evaluate the cost-effectiveness of the selective COX2 inhibitor, celecoxib compared to conventional NSAIDs and NSAID+PPI combination therapy. **METHODS:** A decision tree model was developed, for one year, to simulate cohorts within the three arms (celecoxib, NSAIDs, NSAID+PPI). Medical costs, the costs of the side-effects (GI, cardio-vascular (CV) events) and QALYs were calculated to gain ICER. One-way deterministic sensitivity analyses were applied (tornado diagrams). Evaluations were made from a third party payer's perspective. **RESULTS:** The results show that both NSAID+PPI (ICER: €14,287/QALY) and celecoxib (ICER: €59,486/QALY) offers extra health gain for extra money compared to NSAIDs. NSAID+PPI seems to be the cost effective choice compared to NSAID mono therapy. Celecoxib was dominated by NSAID+PPI combination therapy. According to the sensitivity analyses QALYs had the highest influence on ICER. **CONCLUSIONS:** The selective COX2 inhibitor celecoxib seems to be an adequate choice only for a limited group of patients with specific conditions such as drug allergy or serious GI risk with no CV risk, possibly with further PPI co-therapy.

PMS42

COST-UTILITY EVALUATION OF THE TREATMENT OF PATIENTS WITH OSTEOARTHRITIS WITH INSAPONIFICATES OF AVOCADO AND SOY (PIASCLEDINE®)

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OBJECTIVES: To determine the most cost-util alternative in the chronic treatment of Osteoarthritis **METHODS:** A study of cost-utility was performed that used as source of information for efficacy a systematic review of the literature and as source of costs a microcosting was done of each of the states of health of the outcomes expected with chronic treatment. The quality of life was validated by a panel of experts. As analytical tool, a Markov model was used. The alternatives in competence were non-steroid anti-inflammatories and inhibitors of COX-2, as well as Piascledine. As state of health, hemorrhage of the upper digestive tube, acute myocardial infarction, vascular cerebral event and nephropathy were considered. The perspective of the study was the public health services, in this case the Instituto Mexicano del Seguro Social (IMSS); The analysis was performed with a temporal horizon of 10 years, with a 3% discounting rate for costs and effectiveness. The sensitivity analysis was one-way, two-way and probabilistic **RESULTS:** Piascledine is the alternative that offers more years of life adjusted for quality of life (17.03 QALYs), insofar as the AINE's offer 14.17 QALY's and the Cox-2 13.96 QALY's. The cost per QALY, is lower with Piascledine ($333 USD) in comparison with AINE's and Cox-2 $3397.00 USD and $2841.00 respectively. Piascledine is dominant over AINE's and Cox-2. Piascledine offers more net economic benefits and net health benefits independently of willingness to pay. **CONCLUSIONS:** Piascledine is a dominant treatment in the chronic treatment of osteosrthritis versus AINEs and COX-2.

PMS71

A COST-EFFECTIVENESS ASSESSMENT OF ABATACEPT FOR THE TREATMENT OF RHEUMATOID ARTHRITIS IN HUNGARY

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OBJECTIVES: The selective T cell co-stimulation modulator abatacept was approved by EMEA in 2007 for the treatment of moderate to severe active RA patients with an insufficient response or intolerance to disease-modifying anti-rheumatic drugs (DMARDs), including at least one tumor necrosis factor-alpha antagonist (anti-TNF). The objective of this study was to assess the cost-effectiveness of abatacept in RA patients with an inadequate response to anti-TNFs in the Hungarian setting. **METHODS:** An individual state transition simulation cost-utility model based on disease progression expressed in Health Assessment Questionnaire (HAQ) disability index score change was developed to enrol patients corresponding to the patients of the ATTAIN clinical trial. This cost-utility analysis was conducted using a societal perspective, including all costs (direct and indirect) related to RA. We also present results from the perspective of Hungarian health insurance, where RA-related direct costs are the most relevant. In this cost-utility assessment, abatacept was compared to methotrexate (MTX), the most prescribed DMARDs. Current treatment patterns showing that patients with an insufficient response or intolerance to a first anti-TNF agent are switched to a subsequent anti-TNF agent, abatacept was also compared to cycled anti-TNFs based on data from the British Society of Rheumatology Biologics Registry. The model was populated with Hungarian cost, utility and epidemiological