PM35
ECONOMIC EVALUATION OF CHONDROITIN SULFATE AND NON-STEROIDAL ANTIINFLAMMATORY DRUGS FOR THE TREATMENT OF OSTEOARTHRITIS
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OBJECTIVES: Non-steroidal anti-inflammatory drugs (NSAIDs) increase vascular and gastrointestinal risks. These risks have not been described with chondroitin sulphate (CS). This study aims to evaluate the economic impact of osteoarthritis (OA) treatment with CS versus NSAIDs for the Public Healthcare System in Catalonia (Spain).
METHODS: An economic model was developed to estimate the health and economic impact due to the prevention of the musculoskeletal adverse events (GIAE) and coronary ischemic events (CIE) associated with NSAIDs. The estimated population with knee and hands OA was calculated from the Spanish population official data (age ≥ 20 years) and a population-based study. The drug utilization study in patients with OA. The annual probabilities of suffering GIAE and CIE with CS and NSAIDs were obtained from a systematic review of medical literature. The analysis was performed using a Markov model (sub-VECTRA). Direct healthcare costs (€ 2015) included drug acquisition, GIAE and CIE management. Other adverse events associated with NSAIDs with economic impact (renal failure, ischemic stroke, liver failure) were not considered in the model.
RESULTS: Sensitivity analyses of the extreme values of all variables were undertaken. RESULTS: It is estimated that each year 300,000 and 72,000 OA patients are treated with CS and NSAIDs, respectively, in Catalonia with a cost of 11 and 4 million euros. Because 72,000 OA patients are treated with CS instead of NSAIDs, 19,222 mild-moderate and 649 severe episodes of NSAID-related GIAE (scenario 1) and 2,645 mild-moderate and 49 severe episodes of NSAID-related CIE (scenario 2) will be avoided. The annual savings by avoiding GIAE and CIE episodes is estimated at 6.2 million euros and €493,000, respectively. Sensitivity analyses confirmed the robustness of the results. CONCLUSIONS: OA treatment with chondroitin sulphate could reduce the health care costs for the Public Healthcare System due to the decreased rate of gastrointestinal and cardiovascular adverse events compared with NSAIDs.

PM36
EXTENDED-RELEASE OXICODONE HYDROCHLORIDE (OXYCONTIN®) FOR PAIN MANAGEMENT IN PATIENTS UNDERGOING ARTHROPLASTY: A COST ANALYSIS FROM THE BRAZILIAN PUBLIC AND PRIVATE HEALTHCARE SYSTEMS PERSPECTIVES
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OBJECTIVES: Arthroplasty is a common condition which can result in loss of quality of life and significant financial burden. This study aims to evaluate extended-release oxycodone versus morphine in an “if necessary” regime in the management of pain post-arthroplasty, from the Brazilian public and private healthcare systems perspectives. METHODS: A decision model was developed to analyze two scenarios. In both, patients in group 1 received extended-release oxycodone and immediate-release opioid and, in scenario 2, immediate-release opioid and placebo. Efficacy data were obtained from Bee et al., 2005 (scenario 1) and Cheville et al., 2001 (scenario 2). Direct costs were obtained from official prices lists. In scenario 1, time horizon was related to a 3-week treatment period and, in scenario 2, determined by the hospitalization period. Discount rates were not applied. Univariate sensitivity analysis was performed to evaluate different hospital categories. RESULTS: Total costs from the public perspective were €1,486 RRL and €1,520 BRL per patient treated in scenario 1, and €3,298 BRL and €3,591 BRL per patient treated in scenario 2, in all three scenario categories. All the cost results were lower in scenario 2. From the private perspective, total costs in scenario 1 were €3,132 BRL and €3,457 BRL per patient treated and €7,179 BRL and €8,181 BRL per patient treated in scenario 2, in all three groups, respectively. In the univariate sensitivity analysis, all evaluated scenarios remained consistent and favorable to the use of extended-release oxycodone. CONCLUSIONS: The inclusion of extended-release oxycodone can result in reduction of hospitalization costs, which could lead to resource savings for the payer.

PM37
THE COST BURDEN OF MONOCLONAL ANTIBODY THERAPY IN AN ATHENS GREECE TERTIARY HOSPITAL. A SEVEN YEAR COST COMPARISON ANALYSIS
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OBJECTIVES: To evaluate the cost burden of monoclonal antibodies in an Athens/Greece tertiary hospital in a seven year cost comparison analysis and to compare results to other in-patent drug categories.
METHODS: In this study (2008-2014) monoclonal antibodies (Mabs) consumption in Evangelismos hospital (550 beds) was analysed. Mabs consumption/cost in hematology, oncology, rheumatology, gastroenterology, ophthalmology and neurology departments was especially studied. The pharmacy system of the hospital, which has been in operation for more than a decade, enables calculation of total Mabs cost for all study periods, in which Mabs cost is compared (2011-2014) to total drug cost per department, total in-patient drug cost, in-patient antibiotics cost and anti-HIV drug cost. The cost saving of Central Cytostatic Drug Preparation Unit operation for the year 2014 was extensively performed in collaboration with the hospital accounting department. RESULTS: Analysis of drug expenses from EPISER study, population official data (age ≥ 20 years) and a population-based study that treating patients with tocilizumab IV yields sufficient savings to initiate more patients in treatment with tocilizumab in 1L monotherapy and to achieve low disease activity or remission with greater probability and less resources. CONCLUSIONS: Choosing tocilizumab instead of adalimumab as a 1L monotherapy treatment for the public healthcare system in Greece can be a cost-saving option, with increased significance in the current economic environment of restricted healthcare resources and significant budget constraints.

PM38
ECONOMIC EVALUATION OF TOCILIZUMAB MONOTHERAPY VS ADALIMUMAB MONOTHERAPY IN PATIENTS WITH RHENARTITIS IN ITALY
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OBJECTIVES: In a randomized, double blind, controlled phase IV trial (ADACTA®), Tocilizumab (TCZ) demonstrated superiority vs Adalimumab (ADA) in monotherapy, reducing signs and symptoms of rheumatoid arthritis (RA) in patients by Week 24 when compared or for the first time in the same trial. The aim of this analysis was to evaluate the cost per response and the cost per disease remission of TCZ vs ADA in an RA monotherapy setting from the Italian Hospital perspective. METHODS: Total undiscounted mean per-patient-€ cost of tocilizumab (54.0mg/QW) monotherapy were compared, using efficacy results from ADACTA trial, in terms of cost per response (American College of Rheumatology-ACR20=50-70) and cost per remission for both Disease-Activity-Score (DAS28<2.6) and Clinical-Disease-Score(CDAI<2.8). The treatment costs considered (drug acquisition, administration and monitoring), obtained from published sources. Drug acquisition cost was derived from the ex-factory price. Drug administration cost for TCZ-IV (only) was based on the cost for nursing and medical staff required for each infusion; monitoring visits and tests were considered as one per month for TCZ-IV and one every three months for ADA-SC. The analysis was conducted from the Hospital perspective and the time horizon was 24 weeks. RESULTS: Compared with ADA, TCZ resulted in a lower treatment and diagnostic cost per response and the cost per response was lower with TCZ than with ADA: ACR20: -10,494.5 € and -12,533.4 ACR50: -14,652.2 € vs -22,721.4 ACR70: +20,989.1 € and +34,589.3 € respectively. The cost per remission was €7,096.4 vs €58,666.6 for DAS28<2.6 and €39,606.6 vs €66,575.2 for CDAI<2.8 for TCZ vs ADA respectively. CONCLUSIONS: According to this analysis, in Italy TCZ monotherapy can be considered as an efficient strategy compared to ADA for treating RA patients intolerant to MTX or for whom MTX is inappropriate. Mabry P, Dikranian A, Alten R, Pavelka K, Klearman M, Musselman D, Agarwal S, Green J, Kavanagh A; ADACTA Study Investigators. Tocilizumab monotherapy versus adalimumab monotherapy for treatment of rheumatoid arthritis (ADACTA®): a randomised, double-blind, controlled phase 4 trial. Lancet 2013;381(9877):1541-50.

PM39
ECONOMIC BURDEN OF CONTROLLED GOUT, UNCONTROLLED GOUT, AND GOUT EXACERBATED BY COMMON COMORBIDITIES: RESULTS FROM THE 2012-2013 NATIONAL HEALTH AND WELLNESS SURVEY
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OBJECTIVES: Gout is a urate crystal deposition disease caused by chronic high serum uric acid (sUA) levels (i.e., hyperuricemia), resulting in painful flares and tophi. Treatment guidelines recommend maintenance of sUA levels <6 mg/dL, however, sUA often remains elevated because of lack of, or inadequate response to therapy. Our goal was to understand the relationship between gout control and economic burden and to explore the impact of comorbidities. METHODS: Data from 2012 and 2013 US National Health and Wellness Survey (NHWS), a representative, cross-sectional, national health survey (2012, n=71,157, 2013, n=75,000) of which 3729 individuals self-reported a gout diagnosis (n=344 controlled [sUA ≤6 mg/dL, and no flares in past year], n=2215 uncontrolled [sUA>6 or ≥1 ≥1 flare], and n=1170 unknown). Estimated total cost was calculated by adding direct cost (e.g., resource use) and indirect cost (e.g., work productivity loss). Those with gout + comorbidities (e.g., cardiovascular disease [CVD]) and their relationship with total cost were also examined. Multivariable generalized linear models were used to control for demographic and clinical characteristics to assess the unique burden or costs. RESULTS: Adjusted models indicate that those with controlled gout do not statistically differ from non-gout subjects. Those with uncontrolled gout reported significantly higher total direct costs and costs than those with controlled gout. Among those with higher total cost than controlled gout, the difference was not significant. Similar patterns were observed for gout control and comorbidities. Those with uncontrolled gout + comorbidity (diabetes or CVD) reported higher total costs than those without gout or their comorbidity. Those with severe comorbidities did not differ statistically for the controlled gout + comorbidity versus those without gout or comorbidity. CONCLUSIONS: Uncontrolled gout results in higher total costs than for non-gout patients. Controlled gout patients have lesser burden—core to non-gout subjects. Total cost for uncontrolled gout may be further exacerbated by comorbidities.