**PMS35**

**ECONOMIC EVALUATION OF CHONDROITIN SULFATE AND NON-STEROIDAL ANTI-INFLAMMATORY 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 osteoarthri

**Methods:** An economic model was developed to estimate the health economic impact of ethical CS and its avoidance of the prevention of triarticular adverse events (GIAE) and coronary ischemic events (CIIE) associated with NSAIDs. The estimated population with knee and hands OA was calculated from the Spanish national self-assessment official data (age ≥ 20 years) and a population-based CS utilization study in patients with OA. The annual probabilities of suffering GIAE and CIIE with CS and NSAIDs were obtained from a systematic review of medical literature, published meta-analysis and previous economical study with NSAIDs. The estimated population with knee and hands OA was calculated in Catalonia (Spain).

**Conclusions:** Taking chondroitin sulphate instead of a NSAID as monotherapy is likely to be a cost-saving option, with increased significance in the current economic environment of restricted healthcare resources and significant budget constraints.

**PMS36**

**EXTENDED-RELEASE OXYCODONE 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:** Osteoarthritis is a condition that 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 BRL and $1,520 BRL per patient treated in scenario 1, and $3,299 BRL and $3,591 BRL per patient treated in scenario 2, in groups 1 and 2, respectively. The costs from the private perspective, total costs in scenario 1 were $3,132 BRL and $3,457 BRL per patient treated and $7,197 BRL and $8,181 BRL per patient treated in scenario 2, in groups 1 and 2, 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 would lead to resource savings for the payer.

**PMS37**

**THE COST BURDEN OF MONOCLONAL ANTIBODY THERAPY IN AN ATHENS GREECE TERTIARY HOSPITAL. A SEVEN YEAR COST COMPARISON ANALYSIS**

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**Objective:** 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-patient drug categories. **METHODS:** In this study (2008-2014) monoclonal antibodies (MAbs) consumption in Evagelismos hospital (550 beds) was assessed. MAbs consumption/cost in hematology, oncology, rheumatology, gastroenterology, ophthalmology and neurology departments was especially studied. The pharmacoeconomic analysis was performed in 2014, 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. **RESULTS:** Sensitivity analyzes confirmed the robustness of the results. **Conclusions:** Pain after arthroplasty is a common condition which can result in loss of quality of life and significant financial burden. This study aims 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. TCZ-IV (intra-venous-8mg/kg monthly) and ADA-SC (sub-cutaneous-40mg/Q2W) 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 ≤3.2). The cost per response was lower with TCZ than with ADA: ACR20: $20,494.5 and $12,533, 4ACR50: $14,652.2 vs $22,271, 4ACR70: $20,989.1 and $34,589.3 respectively. The cost per remission was $17,096.4 vs $58,666.5 for DAS28<2.6 and $39,656.8 vs $66,575.2 for CDAI ≤2.8 for TCZ vs ADA respectively. **CONCLUSIONS:** 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. TCZ-IV versus ADA-SC monotherapy was considered, 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 ≤3.2).

**References:**


**PMS39**

**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 were collected in 2012 and 2013 US National Health and Wellness Survey (NHWS), a representative, cross-sectional, national general 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 and/or ≥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 disease characteristics to assess the unique burden of comorbidities. **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 cost burden and costs than those with controlled gout. Although uncontrolled gout total cost burden compared to controlled gout, the difference was not significant. Similarly, 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, respectively. Those with gout + comorbidities reported a significantly higher total cost burden compared to 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—close to non-gout subjects. Total cost for uncontrolled gout may be further exacerbated by comorbidities.
OBJECTIVES: To investigate the per retention rate under ustekinumab (UST) rela-
tive to infliximab (INF) in first line treatment of psoriatic arthritis (PsA). Materia-
ls and Methods: 10 year Markov model was con-
structed with UST and INF as first line biologic therapies and a two-step re-
tersiharing strategy consisting of adalimumab (ADA) as the second line biologic for both treat-
ment arms and non-biologic supportive care of oral methotrexate 15mg/week (BT) if the patient fails ADA. Transition probabilities were obtained from PSOLAR, an obser-
ational longitudinal study studying the safety of biologics in PSO and PsA, by fit-
ing a 10 year, 2-state Markov model for patients treated with BT. The total costs were investigated, including drugs and ancillary diagnostic tests.

RESULTS: Over a 10 year horizon, INF-ADA-BT was associated with a higher cost and a lower amount of biologic retention years per patient and a potential savings of € 29370 per patient with ustekinumab as first-line biologic treatment. However, these results were sensitive to changes in biologic drug prices and by extension, the market share of biologics. An increased traction rate and osteoporosis related costs were associated with higher patient satisfaction levels as well as response and safety. According to our model, initiating biologic therapy with ustekinumab is cost saving compared to the current choice biologic, infliximab. However, further research has to be initiated to quantify the relationship between increased patient retention and additional gain in treatment response and safety.

PMS43

PATIENT CHARACTERISTICS AND DISEASE BURDEN OF OSTEOARTHRITIS IN POST MENOPAUSAL WOMEN AT INCREASED RISK OF FRAGURCE IN GERMANY

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OBJECTIVES: This study investigated the characteristics of the female osteoarthrosis population with increased fracture risk as defined by German guidelines and evaluated the imminent (1-year) risk for fracture and the associated burden. METHODS: A total of 5941 patients were included, with 121,333 total annual medical number of 864,960 PYFLW were estimated from work for all forms of exit from work. The mean PYLL and PYFLW inactivity ratios were 13% and 25%, respectively. CONCLUSIONS: We observed a high level of accumu-
late fracture risk caused by RD patients. Further research has to be otherwise at the amount of working life still to be lost from the current early retirees due to RD will almost equal those already gone, meaning that health policies should target not only job retention measures but also return-to-work ones.

PMS44

COST OF EARLY RETIREMENT CAUSED BY RHEUMATIC DISEASES IN PORTUGAL

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METHODS: We aimed to estimate indirect costs of early retirement caused by RD as FR during 1 year. METHODS: We used individual level data from the national, cross-
sectional, population-based EpiReumaPt study (Sep2011-Dec2013). 10,661 inhabi-
tants were randomly surveyed in order to capture and characterize all cases of RD with and without RD. The Portuguese population of women of 15 years old or more was used for this study. RD may underlie early retirement even when RD is not self-reported to be its cause, since we also found an independent association between RD and early retirement. RESULTS: Among 74,974 WO, 39,969 (53.3%) were identified as being at IR. The mean age (SD in the IR and non-IR group was 75.2 (9.5) and 70.1 (10.1) years, respectively. Approximately half of the IR patients received osteoporosis medica-
tion (43% bisphosphonate, 2.7% stronitum, 0.9% denosumab, 1.5% raloxifen, 0.3% teriparatide). Estimated osteoporotic fracture occurrence was substantially higher in IR than in non-IR. It is 9.647 vs 122 fracture events (IR vs non-IR patients). IR confirmed a higher ratio compared to non-IR patients (14.8% vs 6.5%). Mean (SD) and median (IQR) annual osteoporosis-related costs (medication, hospitalization, outpatient treat-
ment) were 1,405€ (3,195€) and 435€ (622€ IQR), respectively, for IR patients and 660€ (1,106€) and 225€ (234€) for non-IR patients. Consequently, half of the osteoporosis population met increased risk definition criteria. A note-
worthy proportion of these patients are at imminent risk for fracture based on the observed fracture events over a 12 months’ follow up. Despite being responsible for a disproportionately large disease burden and related health care costs less than half of the IR patients received medication for their osteoporosis.