perspective. **RESULTS:** The difference in cost per response between the alternatives was in favor of tocilizumab in all three scenarios examined. In more detail, the savings generated by the use of tocilizumab associated with achieving ACR 70 for a 68kg (mean weight) patient were €12,529, €9,657 and €8,810 from the hospital, health system and society's perspective, respectively. Similarly, the savings regarding DAS 28≤ 3.2 were €14,838, €13,041 and €12,506 for each perspective respectively. In the third scenario (DAS 28< 2.6) the difference in cost per response between tocilizumab and adalimumab was €-32,811 from the hospital's, €-30,522 from the health system's and €-29,831 from the society's perspective. Results indicate 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 for the RA treatment could be proven to be a cost-saving option, with increased significance in the current economic environment of restricted healthcare resources and significant budget constraints.

PMS35

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 of ethical CS prescription due to the avoidance of gastrointestinal adverse events (GIAE) and coronary ischemic events (CIE) associated with NSAIDs. The estimated population with knee and hands OA was calculated from EPISER study, population official data (age ≥ 20 years) and a population-based 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, published meta-analysis and previous economical study (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. Deterministic 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 NSAIDs and CS, 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 and 39 CIE episodes would be avoided annually. The annual savings by avoiding GIAE and CIE episodes is estimated at 6.2 million euros and €493,000, respectively. Sensitivity analyzes 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.

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: 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 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. Regarding group 2, in scenario 1, patients received immediate-release opioid and, in scenario 2, immediate-release opioid and placebo. Efficacy data were obtained from Beer 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. 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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OBJECTIVES: To assess the cost 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 Evaggelismos hospital (931-beds) was assessed. MAbs consumption/cost in hematology, oncology, rheumatology, gastroenterology, ophthalmology and neurology departments was especially studied. The pharmacoeconomic evaluation was performed using a direct cost comparison analysis, in which MAbs cost is compared (2011-2014) to total drug cost per department, total in-patent drug cost, in-patent antibiotics cost and anti-HIV drug cost. The cost saving of Central Cytostatic Drug Preparation Unit operation for the year 2014 was especially studied. The analysis was performed in Euros (€) and drug cost was based on average hospital prices in Greece (official price lists). **RESULTS:** Data analysis revealed that MAbs relative cost showed an augmentative trend throughout the study period (from 12.6%, 2008 to 13.45%, 2014). MAbs cost for all studied clinics, with the exception of ophthalmology and hematology departments, showed minor decline. In-patent antibiotics and anti-HIV drugs represented a substantial and ongoing category of cost burden prescribed drugs (from 6.18%, 2011 to 9.98%, 2014 and from 13.04%, 2011 to 21.44%, 2014 respectively). **CONCLUSIONS:** From 2008 to 2012, though a substantial reduce of hospital pharmaceutical expenditure was obtained, due to memorandum obligations, an increase in MAbs consumption was detected (from 12.6% to 13.45%of total drug cost).The average hospital prices for all drugs were reduced for the same period. The total cost saving is mainly due both to generics and off-patent drugs use and drugs' price negotiations supported with an obligated by the Ministry of Health 5% and 6.5 % rebate for in-patent drugs.

PMS38

ECONOMIC EVALUATION OF TOCILIZUMAB MONOTHERAPY VS ADALIMUMAB MONOTHERAPY IN PATIENTS WITH RHEUMATOID ARTHRITIS 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 whom methotrexate (MTX) is not tolerated or for whom it is inappropriate.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:** TCZ-IV (intra-venous-8mg/kg monthly) and ADA-SC (subcutaneous-40mgQ2W) 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-Activity-Index (CDAI≤2.8). Treatment costs were considered (drug acquisition, administration and monitoring), obtained from published sources. Drug acquisition cost was derived from the ex-factory price. Drug administration cost (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 dominant (more effective and less costly). The cost per response was lower with TCZ than with ADA: ACR20: €10,494.5 and €12,533.4;ACR50: €14,452.2 vs €22,271.5;ACR70: €20,989.1 and €34,589.3 respectively. The cost per remission was €17,096.4 vs €58,966.6 for DAS28<2.6 and €39,659.6 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. *Gabay C,Emery P,van Vollenhoven R,Dikranian A,Alten R,Pavelka K,Klearman M,Musselman D,Agarwal S,Green J,Kavanaugh 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

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 are from the combined 2012 and 2013 US National Health and Wellness Survey (NHWS), a representative, cross-sectional 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 health characteristics to assess unique burden of uncontrolled gout. **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 annualized costs than non-gout subjects. Although uncontrolled gout had 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 respective comorbidity. There was no statistical difference for those with 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—closer to non-gout subjects. Total cost for uncontrolled gout may be further exacerbated by comorbidities.