RA diagnoses were most prevalent in the Marmara region (38%), followed by Aegean (20%), Central Anatolia (21%), and Mediterranean (15%). Nearly 40% of RA patients had 11-year cardiovascular, diabetic, respiratory, or allergic comorbid condition prior to diagnosis. 5% of patients were hospitalized and 42% had at least one outpatient visit during the pre-index period. Most patients were prescribed non-COX inhibitors (78%) and immunosuppressants (71%), and 11% of patients were modifying anti-rheumatic drugs (DMARDs). Few patients (1%) had surgery prior to diagnosis. The total annual cost (a2,386) was comprised of mainly pharmacy (a1,747), followed by outpatient (a360), and inpatient costs (a252), and an average copy of 27a. Prior comorbid conditions including diabetes, respiratory disease as well as hospitalization, glucocorticoid and DMARD use significantly contributed to annual health care costs, unlike gender and age.

CONCLUSIONS: Annual costs of RA patients are significantly lower in Turkey relative to other countries in Europe, yet, pharmaceutical expenditures cover a significant portion of the overall cost. Comparative effectiveness studies are needed to further decrease pharmaceutical expenditures for RA treatment.

PMS25
STRUCTURE DIRECT COST OF CARE POTIENTS TREATED FOR SEVERE RHEUMATOID ARTHRITIS IN FRANCE
Fagnani F1, Laurendeau C2, Fauret B1, Joubert JM3, Cukierman G3, Gourmelen J4

OBJECTIVES: To examine the resource utilization and direct costs of care associated with use of biologic agents therapy among prevalent rheumatoid arthritis (RA) patients based on retrospective health care claims data. The database (EGB) is a 1/97 representative sample of the national claim database covering the whole French population.

METHODS: RA patients were identified as adults (age >18) benefiting from full coverage (ALD eligibility criteria) for RA (ICD-10 M05-06) on January 1, 2009 and still alive on December 31st, 2010. Biologics treated patients (BTP) were defined as RA patients with ≥1 claim for biologics in 2010. All health expenses were assessed from the payor’s perspective. A log-linear generalised model used was to adjust the costs in comparing BTP versus patients not treated by biologics (BNP).

RESULTS: A total of 1,234 RA patients were identified of whom 199 (16.0%) were treated with biologics (BTP) including TNF inhibitors in 85% of cases. In comparison, patients not treated by BTP (BNP) showed the proportion of male patients (24.1% vs 24.1% p = 0.99) nor the time since registration for RA coverage (8.5 versus 9.0 years p = 0.33) were significantly different but BTP patients were significantly younger 55.2 years ± 12.9 versus 64.1 years ± 14.5 (p = 0.0001). The mean annual extra cost of patients on biologics was in the range 11,000 € - 12,000 €.

CONCLUSIONS: When compared to similar data prior to the era of biologics, the structure of medical expenses in RA patients has shifted from in-patient care towards drugs.

PMS26
ASSESSMENT OF THE BURDEN OF RHEUMATOID ARTHRITIS IN FRANCE: ANALYSIS OF A NATIONAL REPRESENTATIVE CLAIM DATABASE
Fagnani F1, Laurendeau C2, Fauret B1, Joubert JM3, De chalas T4, Gourmelen J

OBJECTIVES: To examine the resource utilization and direct costs of care prevalent rheumatoid arthritis (RA) patients using retrospective health care claims data. METHODS: The EGB is a national representative 1/97 sample of individuals covered by the French Health Insurance. Individuals presenting with RA (ICD-10 codes: M05, M06) were identified in the French Health Insurance database (H11005, H11006). The proportion of male patients (24.1% ± 24.1% p = 0.99) nor the time since registration for RA coverage (8.5 versus 9.0 years p = 0.33) were significantly different but BTP patients were significantly younger 55.2 years ± 12.9 versus 64.1 years ± 14.5 (p = 0.0001). The mean annual extra cost of patients on biologics was in the range 11,000 € - 12,000 €.

CONCLUSIONS: When compared to similar data prior to the era of biologics, the structure of medical expenses in RA patients has shifted from in-patient care towards drugs.

PMS24
DIRECT AND PRODUCTIVITY COSTS OF RHEUMATOID ARTHRITIS IN THE SLOVAK REPUBLIC – COST-OF-IILLNESS STUDY
Doležal T, Klimes J, Vokcela M

OBJECTIVES: International pharmacoeconomic studies suggest Health Assessment Questionnaire (HAQ) as an important predictor of evaluation both direct and productivity costs of rheumatoid arthritis (RA). Costs are supposed to increase with increasing HAQ value. Therefore, we calculated direct (from health insurance perspective) and productivity costs for five groups of patients according to their HAQ (Θ=0.6, 0.6-1.1, 1-1.6, 2-2.1, ≥2.1) to confirm this assumption also in the Slovak Republic.

METHODS: This calculation was based on a retrospective cross-sectional study. We included 119 patients with rheumatoid arthritis, aged 18-84 years in whom working status was defined as employed, disabled, and full-time disabled. We used prevalence-based cost-of-illness method type bottom-up, retrospectively reviewing individual patient’s medical record. For calculation of productivity costs we excluded patients older than 63 years of age (retirement pensioners). We used fictitious costs approach (FCF) with defined friction period of 130 workdays, based on patients’ absenteeism due to RA. Productivity of part-time-disabled and full-time disabled patients were assumed to be deteriorated by 50% and 70%, respectively, based on the Slovak law on pension insurance. The height of average monthly income in year 2010, €679 was used as denominator. Costs were expressed as mean values for patient with RA (€10,192, H11005, H11006). Average patient’s age was 49.5 years, average time from diagnosis was 12.3 years with mean HAQ score 1.4 and mean DAS28 5.0. Mean annual direct medical costs, for each HAQ-group, were €516, €648, €943, €1676, and €1466, respectively. Mean annual indirect cost was associated with the disability status of patients (€422, €110, €157, €2109, and €2030, respectively).

CONCLUSIONS: Direct and productivity costs for patients with rheumatoid arthritis are closely related to the height of HAQ score. Total (direct and productivity) annual mean costs were €5276.
main contributors to this extra cost were pharmaceuticals (+1,687; 50.2%) and in-patient care (+903; 26.5%). The proportion of patients with other co-morbidities leading to higher treatment coverage was not significantly different in the RA group versus control (39.4% versus 41.8%; p = 0.134) although Hypertension (7.8% versus 6.7% p = 0.44) was significantly more frequent. Differences for Ischemic Heart Disease (3.0% versus 2.5%) and Depression (1.9% versus 1.4%) were positive but did not reach statistical significance. CONCLUSIONS: The economic burden of RA in France to the health care system is significant and apparently not associated to the presence of severe co-morbidity as identified in this database.

PMS27
THE METHOD FOR REVERSING ANTICOAGULATION AFFECTS TREATMENT COSTS AND MAY DECREASE MORTALITY AMONG HIP FRACTURE PATIENTS USING WARFARIN
Achle N1, Purmonen T1, Kokki I2
1Oy Medfiles Ltd, Kuopio, Finland, 2Kuopio University Hospital, Kuopio, Finland
OBJECTIVES: In Finland there is a population of 5.4 million. These elderly patients (average 80y) almost always require surgery. Among elderly, 14% are using warfarin, and the anticoagulation effect should be reversed prior to surgery. The four approaches commonly used are: cessation of warfarin therapy, administration of vitamin-K, Fresh Frozen Plasma (FFP) or Pro-thrombin Complex Concentrate (PCC). These approaches have different onset times and thus, the choice of the method used influences the delay before the surgery can safely be performed. Delay of the operation increases the number of preoperative hospital days, and is associated with increased mortality. PCC acts as an anabolic hormone and immediately improves clinical situation. The four approaches were compared in terms of the delay to surgery estimated to be 1 year for PCC and the other methods for 1 month prior to surgery. The four approaches were compared with the base case scenario. CONCLUSIONS: The four approaches have different onset times and thus, the choice of the method used influences the delay before the surgery can safely be performed. Delay of the operation increases the number of preoperative hospital days, and is associated with increased mortality. PCC acts as an anabolic hormone and immediately improves clinical situation. The four approaches were compared in terms of the delay to surgery estimated to be 1 year for PCC and the other methods for 1 month prior to surgery. The four approaches were compared with the base case scenario.

PMS28
COST-BENEFIT-ANALYSIS OF THROMBOPROPHYLAXIS WITH RIVAROXABAN w/wo delay, respectively.

PMS30
PHARMACOECONOMIC EVALUATION OF TOCILIZUMAB MONOTHERAPY VERSUS ADALIMUMAB MONOTHERAPY IN REDUCING DISEASE ACTIVITY IN PATIENTS WITH RHEUMATOID ARTHRITIS
Navarro sarabia F1, Blanco F2, Alvarez-Garcia J3, Garcia Mejidade J4, Fedova J5, Ruiz-beato E6
1H. Universitario Virgen Macarena, Sevilla, Andalucia, Spain, 2NBIC-Hospital Universitario A Coruna, A Coruna, Galicia, Spain, 3Hospital General La Princesa, H. Ntra Sra La Esperanza, Santiago de Compostela, Galicia, Spain, 4Hospital Universitario La Fe, Valencia, Valencia, Spain, 5Rheuma Farma, S.A., Madrid, Spain
OBJECTIVES: ADACTA trial (Gabay C et al EULAR June 2012) showed that tocil-izumab (TCZ) monotherapy was more effective and more economical than adalimumab (ADA) monotherapy in reducing signs and symptoms of adult rheumatoid arthritis (RA) patients who were either intolerant to methotrexate (MTX) or for whom continued MTX treatment was inappropriate. The aim of the current study was to develop a cost-effective-ness analysis of TCZ vs. ADA in MTX-intolerant/contraindicated patients. METHODS: Economic evaluation based on ADACTA study was conducted to esti-mate the incremental cost-effectiveness ratio (ICER) of TCZ vs. ADA. Time horizon was 24 weeks. Patient’s response in the model was measured through ACR re-sponse (ACR20/ACR50/ACR70) and DAS28 remission. Results were presented as incremental cost of TCZ vs. ADA per response. The analysis was conducted from the perspective of the Spanish National Health System, considering drug costs. Unitary costs (€, 2012) were obtained from a Spanish database. Simple univariate sensitivity analyses were performed. RESULTS: ACR20 response rates were achieved in 65% and 49.4% in the TCZ and ADA group respectively (p = 0.01). ACR50 response rates were achieved in 47.2% and 27.8% in TCZ and ADA group (p < 0.01) and ACR70 response rates in 32.5% and 17.9% in TCZ and ADA group (p = 0.01) respectively. DAS28 Remission was achieved in 39.9% and 10.5% in TCZ and ADA group (p < 0.0001). Treatment with TCZ provided better results in cost per response than ADA over 24 weeks in terms of ACR response (ACR20 8,105 and 11,553, ACR50 11,162 and 20,382, ACR70 15,965 and 31,705) and DAS 28 remission (13,509 and 31,705) and DAS remission 8,105 and 15,965 respectively. TCZ was dominant over ADA in ACR response and DAS remission. Sensitivity analysis confirmed the results. CONCLUSIONS: The results of this analysis suggest that TCZ monotherapy repre-sents an efficient and cost-effective strategy vs. ADA in Spain, for treating RA patients who are MTX intolerant/contraindicated.

PMS31
ECONOMIC EVALUATION OF ADALIMUMAB VERSUS OTHER BIOLOGIC TREATMENTS FOR MODERATE TO SEVERE PSORIASIS ARTHRITIS IN ITALY
Marcellusi A1, Bansback N2, Rao S3, Cifaldi M4, Cotto I5, Giannantoni P6, Russo S7, Menzini F3
1University of Rome, Rome, Italy, 2Centre for Health Evaluation and Outcome Sciences, Vancouver, BC, Canada, 3Abbott Laboratories, Abbott Park, IL, USA, 4University of Rome , Rome, Italy
OBJECTIVES: The introduction of new biologic treatments has therefore dramati-cally changed the therapeutic management of PsA. The objective of this study was to determine the cost-effectiveness of biologic drugs for patients with moderate to severe psoriatic arthritis (PsA) in Italy. METHODS: A Markov model was developed to simulate the incremental cost-effectiveness ratio (ICER) of TCZ vs. ADA. Time horizon was 24 weeks. Patient’s response in the model was measured through ACR response (ACR20/ACR50/ACR70) and DAS28 remission. Results were presented as incremental cost of TCZ vs. ADA per response. The analysis was conducted from the perspective of the Spanish National Health System, considering drug costs. Unitary costs (€, 2012) were obtained from a Spanish database. Simple univariate sensitivity analyses were performed. RESULTS: ACR20 response rates were achieved in 65% and 49.4% in the TCZ and ADA group respectively (p = 0.01). ACR50 response rates were achieved in 47.2% and 27.8% in TCZ and ADA group (p < 0.01) and ACR70 response rates in 32.5% and 17.9% in TCZ and ADA group (p = 0.01) respectively. DAS28 Remission was achieved in 39.9% and 10.5% in TCZ and ADA group (p < 0.0001). Treatment with TCZ provided better results in cost per response than ADA over 24 weeks in terms of ACR response (ACR20 8,105 and 11,553, ACR50 11,162 and 20,382, ACR70 15,965 and 31,705) and DAS 28 remission (13,509 and 31,705) and DAS remission 8,105 and 15,965 respectively. TCZ was dominant over ADA in ACR response and DAS remission. Sensitivity analysis confirmed the results. CONCLUSIONS: The results of this analysis suggest that TCZ monotherapy repre-sents an efficient and cost-effective strategy vs. ADA in Spain, for treating RA patients who are MTX intolerant/contraindicated.

PMS29
COST EFFECTIVENESS OF ADALIMUMAB VERSUS GOLIMUMAB AND PLACEBO IN ANKYLOSING SPONDYLITIS IN ITALY
Marcellusi A1, Botteman M2, Rao S3, Cifaldi M4, Solem CT5, Cotto I6, Giannantoni P6, Menzini F3
1University of Rome, Rome, Italy, 2Pharmacist North America, LLC, Bethesda, MD, USA, 3Abbott Laboratories, Abbott Park, IL, USA, 4Pharmacist International, Bethesda, MD, USA
OBJECTIVES: Ankylosing spondylitis (AS) is an inflammatory disease of unknown cause. The study evaluated the cost effectiveness of adalimumab vs. placebo, golim-umbab vs. placebo, and adalimumab vs golimumab in patients with active AS from the Italian payer perspective. METHODS: A cohort Markov model was devel-oped to estimate over a time horizon of 40 years and QALYs associated with adalimumab or golimumab, when used according to existing treatment guidelines.

The analysis was based on data from two Phase III studies of adalimumab and golimumab (active AS combined A3LA, A3LA, and A3LA, and GIAS, respectively). Using the treatment for all respondents and non-responders at week 12. In the base case model, response was defined using the ASAS 20 criterion. A univariate and probabilistic sensitivity analyses was performed to assess the robustness of the results. RESULTS: In the base case adali-mumab therapy was cost-contouned to 116 to 112 QALYs gained and total net cost (adalimumab vs. placebo) of € 43,617 per patient resulting in an ICER of €3,704/QALY. The analysis performed between golimumab vs placebo led to ICER of €39,149/QALY gained. Comparing adalimumab to golimumab resulted in 0.12 additional QALY’s and €27,000/QALY gained and is therefore considered dominant. These results were sensitive to whether the proportion of responders were adjusted for age or non-responder imputation between trials and the proportion of patients who weighed over 100 kg and would therefore receive a higher dose of adalimumab or golimumab were adjusted to be more equal. The results favored adalimumab when indirect costs were included. CONCLUSIONS: From the Italian payer and societal (in sensitivity analysis) perspec-tives, treatment of AS with adalimumab is cost saving and more effective compared to golimumab, and thus is dominant versus golimumab, when used according to the general treatment guidelines.