half-yearly or yearly) (78%) versus oral (daily, weekly, or monthly) drugs (35%). The lowest compliance was observed with daily (24%) and monthly (34%) drugs. Less frequently administered drugs (except yearly) had the highest compliance with quarterly drugs having 63% and half-yearly drugs 70%. **CONCLUSIONS:** This analysis shows that persistence and compliance to osteoporosis treatment is very low in postmenopausal women in Hungary. However, higher persistence and better compliance was observed for injectable, less frequently administered drugs, which may lead to better outcomes.

PMS74

VALIDATION OF THE FRENCH TRANSLATED VERSION OF THE OSTEOPOROSIS SPECIFIC MORISKY MEDICATION ADHERENCE SCALE (OS-MMAS) IN FRANCE

Feudjo Tepie M[1], Kempf C[2], Letierce A[3], Ferreira I[4], Kalouche-Khalil L[5], Roddam A[1], Guillemin F[6]

[1]*Amgen Ltd., Uxbridge, UK,* [2]*Cegedim Strategic Data, Boulogne-Billancourt, Île-de-France, France,* [3]*Cegedim strategic Data, Boulogne-Billancourt, France,* [4]*Amgen, Cambridge, Cambridge, UK,* [5]*Amgen, ZUG, Switzerland,* [6]*University of Lorraine, Nancy, France*

OBJECTIVES: The OS-MMAS is a disease-specific 8 item self-reported measure of adherence for osteoporosis patients. This study evaluated the measurement properties of its French translated version. **METHODS:** A cohort of women aged 55 or older, with post-menopausal osteoporosis (PMO) residing in France and treated with daily or weekly oral bisphosphonates (OBPs) were selected based on their historical data from the French Longitudinal Patient Database; following their visit to one of the participating practices. Eligible patients were given an OS-MMAS questionnaire for completion at home. Internal consistency was evaluated using the Cronbach's coefficient and construct validity using confirmatory one factor analysis (CFA). Convergence validity was assessed using agreement between patients' medication procession ratio (MPR) and their total score from OS-MMAS. To assess reproducibility, a subset of respondents received a second questionnaire approximately 3 months later. Reproducibility was tested using the intra-class correlation (ICC). **RESULTS:** From a network of 1200 French general practices, 117 participated; 687 eligible women visited these practices during the period 20-Jul-2012 to 31-Dec-2012. Of these women, 218 (mean 73.2 years; SD= 8.1) completed ≥1 OS-MMAS. The 6 and 12 month MPR was less than 80% for 25.7% patients and 59.1% patients, respectively. Cronbach's alpha coefficient was 0.76 and varied between 0.71 and 0.79 with the deletion of one item. The Chi-Square test of association between MPR (<80%, >80%) and OS-MMAS scores (<6; 6-8; 8+) was statistically significant at 6 months (p= 0.025), but not at 12 months (p-value= 0.059). CFA reported a standardized root mean square residual of 0.06. The ICC on 70 patients was 0.24 with 95% confidence interval [0.01-0.45]. **CONCLUSIONS:** This study demonstrated acceptable agreement between classification of patient's adherence to OBPs assessed using French translated OS-MMAS and that using historical 6 months MPR; but also indicated that the construct of the OS-MMAS could be improved.

PMS75

CHANGE OF BURDEN OF DISEASE IN GERMAN RHEUMATOID ARTHRITIS PATIENTS SINCE THE UPTAKE OF TNF-INHIBITORS: A LITERATURE REVIEW OF GERMAN REAL LIFE DATA

Wolff M[1], Kleine H[2], Wittig B[2], Mentrup S[2]

[1]*AbbVie Deutschland GmbH & Co. KG, Ludwigshafen, Germany,* [2]*AbbVie Deutschland GmbH & Co. KG, Wiesbaden, Germany*

OBJECTIVES: To obtain a comprehensive overview of the impact of TNF-inhibitors on the components of the burden of Rheumatoid Arthritis (RA) in Germany. **METHODS:** A systematic literature research in EMBASE, Medline, grey literature including rheumatology congress abstracts (ACR, EULAR, DGRh), German RA registry homepages, and the Information System of the Federal Health Monitoring (2002-2012) was performed. Published data on the effect of TNF-inhibitors on mortality, morbidity, and health care resource utilization (HCRU) was included. **RESULTS:** Overall, 15 partially overlapping full-text articles (0 mortality, 12 morbidity, 5 HCRU), 6 additional unique abstracts excluding encore publications (1 mortality, 4 morbidity, 1 HCRU) and two other sources (1 morbidity, 1 HCRU) were included in the final review. Reviewed literature reported an association of TNF-inhibitor use with a 35% lower mortality rate (HR=0.65; p=0.0004) compared to synthetic disease modifying antirheumatic drugs (DMARDs). Disease severity based on symptoms decreased over time in Germany: the chances of reaching DAS28 remission (OR=1.97; 95%-CI: [1.20-3.21]) and functional remission (OR=2.21; 95%-CI: [1.06-4.63]) were doubled, the odds of functional independence were quadrupled (OR=4.09; 95%-CI: [1.80-9.29]) with TNF-inhibitor treatment. All SF-36 domains and fatigue scores increased significantly after treatment initiation. TNF-inhibitor treatment is associated with fewer limitations in daily activities (OR=0.77; 95%-CI: [0.65-0.90] and less perseverant limitations (OR=0.82; 95%-CI: [0.68-0.98]. Standardized disability pension ratios in patients with biologics use decreased over time from 12.5 (2001–2003) to 3.4 (2010-2011). Frequency and average duration of hospitalization have fallen from 2001 (19% of patients hospitalized with average duration of 19 days) to 2011 (12%, 12 days). No HRCU data was available for the outpatient sector or surgery. **CONCLUSIONS:** Based on available German data, treatment with TNF-inhibitors is associated with lower mortality, increasing likelihood to reach clinical remission, better symptom control, functional status, work ability and quality of life.

PMS76

PREDICTING EQ-5D UTILITY SCORES FROM SF-36 SCORES IN PATIENTS WITH RHEUMATOID ARTHRITIS IN JAPAN

Moriwaki K[1], Ito S[2], Kobayashi D[2], Noto S[1], Yanagisawa S[3], Toujou T[1], Murasawa A[2]

[1]*Niigata University of Health and Welfare, Niigata, Japan,* [2]*Niigata Rheumatic Center, Shibata, Japan,* [3]*Faculty of Pharmaceutical Sciences, Himeji Dokkyo University, Himeji, Japan*

OBJECTIVES: To develop a mapping model for estimating EuroQol 5D (EQ-5D) utility values from Short Form 36 (SF-36) scores in Japanese patients with rheumatoid arthritis (RA), with or without clinical characteristics. **METHODS:** Linear regression models were applied to a cross-sectional data set of 112 patients with RA collected from a regional hospital in Niigata prefecture, Japan. Four model specifications were estimated, where EQ-5D was regressed on 1) eight SF-36 scores; 2) as per 1) plus squared and pair-wise interaction terms, 3) as per 1) plus clinical characteristics; and 4) as per 3) plus squared and pair-wise interaction terms, respectively. Model 2 and 4 were developed by using stepwise regression analyses. Model goodness of fit was examined by using Akaike information criterion (AIC), R2, and adjusted R2. Predictive performance was evaluated by using root mean square error (RMSE). **RESULTS:** Model 1 with eight SF-36 scores explained more than 59% of the variation in EQ-5D utility values. The best-performing model based on goodness of fit and predictive performance was model 4 (AIC=□-200.4, R^2=0.767, adjusted R^2=0.709, RMSE=0.090). The model included four SF-36 scores (GH, MH, PF, and RP), five squared terms, twelve pair-wise interaction terms, and log transformed simplified disease activity index (SDAI). Also model 2, which included no clinical characteristics, had similar predictive ability (AIC=□-195.0, R^2=0.764, adjusted R^2=0.699, RMSE=0.093). **CONCLUSIONS:** EQ-5D utility values can be predicted from SF-36 scores and SDAI with Japanese patients with RA. The mapping model can be applied to SF-36 datasets to produce utility scores for economic evaluation of RA treatments from the perspective of Japan health care system.

PMS77

HEALTH-STATE UTILITIES IN MEASURING HEALTH-RELATED QUALITY OF LIFE AMONG PATIENTS WITH RHEUMATOID ARTHRITIS IN TAIWAN

Tang CH[1], Hsu PN[2], Hsu JY[1], Fang CH[3]

[1]*Taipei Medical University, Taipei, Taiwan,* [2]*National Taiwan University, Taipei, Taiwan,* [3]*Pfizer, New Taipei City, Taiwan*

OBJECTIVES: Rheumatoid arthritis is (RA) associated with numerous comorbidities that have major impacts on patients' quality of life. The purpose of this study is of twofold, first, to measure the health related utilities on patients with RA using time trade-off (TTO) and EQ-5D and to examine how these different measures were related to a disease specific measure, Health Assessment Questionnaire (HAQ) and disability level of RA. Second, to investigate absenteeism and presenteeism using Work Productivity and Activity Impairment Questionnaire for Patients with RA (WPAI-RA). **METHODS:** Face-to-face patient interviews on patients with mild RA (DAS <3.2), moderate RA (3.2<=DAS<5.1) and severe RA (DAS>=5.1) have been carried out since June 2013 at rheumatology outpatient clinics at four hospitals located in northern, central and southern Taiwan, and will be continued until the desired sample size of 120 is attained. Health state utilities were elicited using time trade-off (TTO), visual analogue scale (VAS) and EQ-5D. Productivity losses and activity limitation were measured by WPAI-RA. The mean value of the total HAQ score is the mean of the scores for the eight categories: dressing, rising, eating, walking, hygiene, reach, grip and usual activities. **RESULTS:** Based upon the preliminary sample collected, the mean age was 54.5 years, mean history of disease was 8.16 years, and 77% were female in the study patients. The mean health utility was 0.87 (EQ-5D), 0.72 (VAS) and 0.75 (TTO). The mean value of the total HAQ score is 0.83. Employed patients reported 10% reduced work productivity in the previous week, as well as 21.0% reduced productivity in daily activities (all patients). **CONCLUSIONS:** EQ-5D and VAS are consistent measures for HAQ and have high potentials for use in assessing the well-being of the patients with RA in Taiwan. Productivity losses associated with absenteeism and presenteeism are substantial.

PMS78

PATIENT PREFERENCE FOR ORAL VERSUS INJECTABLE AND INTRAVENOUS METHODS OF TREATMENT FOR RHEUMATOID ARTHRITIS

Barclay N[1], Tarallo M[2], Hendrikx T[3], Marett S[1]

[1]*The Research Partnership Ltd., London, UK,* [2]*Pfizer Italia, Rome, Italy,* [3]*Pfizer bv, Capelle aan den IJssel, The Netherlands*

OBJECTIVES: For patients with rheumatoid arthritis (RA), convenience, frequency of dosing, and invasiveness vary greatly across different administration routes and may influence their everyday lives. The objective of this study was to investigate the impact of administration method on patients' quality of life, understand their resulting unmet needs, and establish an overall preference for method of administration for RA treatment. **METHODS:** Patients from France, UK, Germany, Italy, Spain, Belgium, Sweden, and The Netherlands diagnosed with RA by a physician and taking prescription medication – disease-modifying anti-rheumatic drug (DMARD) monotherapy, biologic monotherapy, or DMARD and biologic combination therapy – completed a 20-minute online survey. Patients were asked about: 1) benefits and drawbacks of their current treatment administration method; 2) their preference for twice-daily oral therapy versus injection or intravenous (IV) infusion therapy if it met their safety and efficacy expectations; 3) if told by their doctor that they needed to change their current RA therapy, would they switch to twice-daily oral tablets, injections, or IV infusion if efficacy and safety requirements were met. **RESULTS:** 1400 patients were included: n=250 patients in each of France, UK, Germany, Italy, and Spain and n=50 in each of Sweden, Belgium, and The Netherlands. Oral DMARDs were seen as having more benefits and fewer drawbacks than DMARD injections, biologic injections, and IV therapy. The majority of patients (79%) would prefer a twice-daily oral tablet than an injection or IV infusion (21%) if it met efficacy and safety expectations. If told by their doctor that they needed to change their current RA therapy, 83% of all patients would prefer switching to twice-daily oral tablets over injection (13%) or IV infusion (4%). **CONCLUSIONS:** Oral therapy can meet some of the key practical and emotional unmet needs RA patients face with injectable or IV infusion therapy, providing efficacy and safety requirements are met.

PMS79

ARE PATIENTS' PREFERENCES FOR OSTEOPOROSIS DRUG TREATMENT TRANSFERABLE BETWEEN COUNTRIES? RESULTS FROM A DISCRETE-CHOICE EXPERIMENT CONDUCTED IN TWO EUROPEAN COUNTRIES

Hiligsmann M[1], Dellaert B[2], Dirksen C[1], Van der Weijden T[1], Goemaere S[3], McGowan B[4], Reginster JY[5], Watson V[6], Boonen A[1]

[1]*Maastricht University, Maastricht, The Netherlands,* [2]*Erasmus University Rotterdam, Rotterdam, The Netherlands,* [3]*Ghent University Hospital, Ghent, Belgium,* [4]*Trinity Centre for Health Sciences, Dublin, Ireland,* [5]*University of Liège, Liège, Belgium,* [6]*University of Aberdeen, Aberdeen, UK*