ported data. The objective of this study was to estimate persistence to oral bisphosphonates (OBPs) in the Portuguese postmenopausal osteoporosis (PMO) population, exploring different methods. **METHODS:** This was an observational, prospective cohort study of women ≥50 years old with PMO who had not been prescribed PMO treatment within 6 months prior to recruitment from community pharmacies. Patients were classified as persistent if they refilled their prescription within a 30-day grace period after exhausting the time covered by their previous supply. For subgroup analysis, non-persistent patients were followed up by telephone. Sensitivity analysis included 6 different methods, in particular, increasing the grace period to 90 days and allowing a switch to other PMO medication. **RESULTS:** A total of 427 women (mean age 65 years) were included in the analysis. Persistence rates at 6 months of follow-up (interim analysis) varied from 27.6% (95%CI 23.4%-32.0%) to 52.6% (95%CI 47.3%-57.6%) using pharmacy records exclusively and additional patient report of BP acquisition in a different pharmacy (reported by 113 of 269 patients), respectively. Allowing a longer grace period (90 days) and switch to other PMO medications resulted in rates of 49.9% (95%CI 33.8%-64.0%) and 28.6% (95%CI 24.3%-33.0%), respectively. **CONCLUSIONS:** Results at 6 months showed a variation in persistence rate estimates depending on the method applied, with increased estimates when self-reported data and longer grace periods were used. Ongoing analysis will allow assessment of the impact of the different methods over longer follow-up periods.

PMS58

FREQUENCY OF ADMINISTRATION OF BIOLOGICS HAS AN IMPACT ON TREATMENT DECISION MAKING

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OBJECTIVES: To document the real-life use of golimumab in patients with Ankylosing spondylitis (AS), Rheumatoid arthritis (RA) and Psoriatic arthritis (PsA), in terms of treatment persistence/ discontinuation, adherence and switching patterns. **METHODS:** This study was a single country (the Netherlands), retrospective database study of AS, RA and PsA patients treated with golimumab from March 17, 2010 onwards with last data collection being performed on October 3rd 2011. **RESULTS:** The sample consisted of 882 patients (163 with AS, 216 with PsA and 503 with RA; 33% being male patients) with a maximum follow-up period of 57 weeks. Forty-eight percent (n=422) were naïve patients, while 52% (n=460) were switched from a previous anti-TNF treatment; 37% were previously treated with etanercept and 38% with adalimumab, with no significant difference between the three indication groups. Among the switched patients, the main reason for switching to golimumab were the lack of efficacy of the previous treatment (30.9%), the more convenient frequency of administration with golimumab (27.0%) and unspecified side-effects (18.8%). Temporary treatment discontinuation of golimumab was observed in only 1.25% of the patients (n=11). For these patients, adherence ranged between 31.82% and 93.72%. The median time-to-dropout or median persistence was 195 days when calculated in the whole population (n=882). Sex and type of patient ("naïve" vs. "switcher") were identified as predictors, with a hazard ratio of 0.693 associated to male patients (vs. female patients; p-value=0.014) and of 0.596 associated to naïve patients (vs. switchers; p-value<0.001). **CONCLUSIONS:** Convenient frequency of administration has an impact on treatment decision making. Sex and type of patient ("naïve" vs. "switcher") were identified as predictors of switch, with male patients and naïve patients associated with a higher persistence to golimumab.

PMS59

IMPACT OF COMORBIDITIES ON MEASURING INDIRECT UTILITY BY THE MEDICAL OUTCOMES STUDY SHORT FORM 6D IN LOWER-LIMB OSTEOARTHRITIS

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OBJECTIVES: Comorbidities can influence generic measurement of health by multi-attributes or indirect utility. We investigated the impact of comorbidities to assess indirect utility with the Medical Outcomes Study Short Form 6D (SF-6D) measuring health-related quality of life in patients with osteoarthritis (OA). **METHODS:** The 878 patients, aged 45-75 years with symptomatic knee or/and hip, of the KHOALA (Knee and Hip OsteoArthritis Long term assessment) cohort were included in the study. Comorbidities were assessed by the Functional Comorbidity Index (FCI) and grouped in 9 categories. Limitation in activities and pain was measured by the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC).Two separate linear regression models, using the number of comorbidities or the different categories of comorbidities of the FCI, were fitted to determine predictors of utility score. **RESULTS:** For the 878 patients included, the mean (SD) utility score was 0.66 (11; range 0.32–1.00) and mean number of comorbidities 2.05 (1.58). In the first multivariate model, , for each additional comorbidity (range 0–9) the mean utility score decreased of 0.01 point (beta= -0.010, p<0.0001). In the second model, including comorbidities by categories, only psychiatric disease (beta=-0.043, p<0.0001) and degenerative disc disease (beta=-0.014, p=0.018) predicted low utility score. In both regression models a worsened function (increased WOMAC function score) significantly decreased the utility score. The number of comorbidities explained 2% of the variance in utility score (partial R-square=0.02) and psychiatric and degenerative disc diseases explained 2% (partial R-square=0.025) and 0.7% (partial R-square=0.007), respectively, of the variance in utility score, whereas the WOMAC function score explained 38% of the variance in both models (partial R-square = 0.38). **CONCLUSIONS:** Compared to greater negative effect of functional impairment, comorbidities have a negative but relatively marginal impact on indirect utility score. This suggests that clinically, considering the functional severity of OA remains a first priority.

PMS60

THE TIME HORIZON MATTERS: EXPLORATORY RESULTS VARYING THE TIME HORIZON IN TIME TRADE-OFF AND STANDARD GAMBLE UTILITY ELICITATION

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OBJECTIVES: In time trade-off (TTO) and standard gamble (SG) procedures for eliciting health state utilities, the duration of time spent in each health state is an integral component of the task. The most common time horizon is 10 years, but others are used, including personalized time horizons which aim to present realistic choices reflecting reasonable expectations of the respondent's lifespan. The purpose of this study was to examine implications of the time horizon used in direct utility assessment. **METHODS:** UK general population participants rated four health states (describing osteoarthritis) with a Visual Analog Scale (VAS), followed by TTO and SG procedures with a 10-year time horizon. Half of the sample was randomized to complete utility procedures again with a personalized time horizon based on self-reported additional life expectancy. Scores were compared in terms of discrimination between health states. **RESULTS:** The 10-year tasks were completed by 80 participants (mean age =47.3; 48.8% female), and 35 also completed personalized time horizon procedures. Nearly all participants (97.5%) rated health state A (mild osteoarthritis) higher than B (moderate) on the VAS. However, the 10-year tasks did not consistently detect this ranking, with only 32.5% (TTO) and 23.1% (SG) of respondents distinguishing between health states. The personalized time horizon resulted in increased rates of discrimination between health states: 54.3% with both TTO and SG. This increase was statistically significant (TTO: chi-square = 4.9; p = 0.03; SG: chi-square = 10.7; p = 0.001). Two other health state pairs followed similar patterns, but without statistically significant differences between time horizons. **CONCLUSIONS:** In this exploratory study, the personalized time horizon resulted in better discrimination between health states than the fixed 10-year approach. When designing utility evaluations, researchers should carefully consider the time horizon so that the relative value of health states are accurately represented in cost-utility models.

PMS61

HEALTH-RELATED QUALITY OF LIFE AFTER VERTEBRAL FRACTURE: DIFFERENCES BETWEEN THE EQ-5D AND TIME-TRADE-OFF INSTRUMENTS

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OBJECTIVES: To compare health utility estimated with the EQ-5D and the Time-trade-off (TTO) instruments after vertebral fracture. **METHODS:** The International Costs and Utilities Related to Osteoporotic fractures Study (ICUROS) is a prospective multinational study with the aim of estimating costs and health related quality of life (HRQoL) related to osteoporotic fractures. In the study, two instruments were used to estimate patients' perceived health utility: the direct individual preference based TTO instrument and the indirect EQ-5D instrument, valued by societal preferences. Health utility was measured before fracture (recollection), and 2 weeks, 4 months and 12 months after fracture. **RESULTS:** In the 225 patients included in the interim analysis, estimates of health utility elicited from the two instruments varied significantly and the EQ-5D systematically provided lower estimates compared to the direct TTO instrument. The smallest mean outcome difference was 0.10 (TTO: 0.91 and EQ-5D: 0.81), elicited before fracture and the largest difference was 0.20 (TTO: 0.44 and EQ-5D: 0.23), elicited after two weeks. The correlation coefficient for the health utility loss over 12 months, using Spearman's correlation, for the two instruments was 0.36 (p<0.05). **CONCLUSIONS:** Osteoporotic vertebral fractures give rise to significant loss of health utility, irrespective of instrument used. However, there are substantial differences in the extent of the health utility decrease assessed by the two instruments. The main explanation for these differences is that the instruments rely on different reference populations; respondents of direct TTO act as their own reference and express preferences regarding their own health state, whereas the EQ-5D reflects the preferences of healthy individuals assessing hypothetical health states.

PMS62

NOMINAL GROUP TECHNIQUE TO SELECT ATTRIBUTES FOR DISCRETE CHOICE EXPERIMENTS

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OBJECTIVES: The selection of attributes represents an important step in the development of discrete-choice experiments (DCE), but is often poorly reported. In some situations, the number of identified attributes may exceed what one may find possible to pilot in a DCE. Hence there is a need to gain insight into methods to

select attributes in order to construct the final list of attributes. This study aims to test the feasibility of using the nominal group technique (NGT) to select attributes for DCEs. **METHODS:** Patients group discussions (4-8 participants) were conducted in Belgium and the Netherlands to prioritize a list of twelve potentially important attributes for osteoporosis drug therapy that were retrieved from literature review and expert discussions. The NGT consisted of three steps: 1) an individual ranking of the twelve attributes by importance from 1 to 12; 2) a group discussion on each of the attributes including a group review of the aggregate score of the initial rankings; and 3) a second ranking task of the same attributes. The selection of attributes for the DCE was based on groups' ranking and NGT discussions followed by experts' discussion. **RESULTS:** In total, 26 osteoporotic patients participated in five nominal group sessions. Most (80%) patients changed their ranking after the discussion. However, the average initial and final ranking did not markedly differ, with two exceptions. In the final rank, the most important medication attributes were effectiveness, side-effects, frequency and mode of administration. It was also observed that some (15%) patients did not correctly rank from 1 to 12, and the order of attributes did play a role in the ranking. **CONCLUSIONS:** The nominal group technique is feasible and useful for selecting attributes for DCE, although the ranking task may be cognitively difficult and attributes order should vary over different NGT sessions.

PMS63

ASSESSMENT OF THE OSTEOPOROSIS SELF-EFFICACY SCALE IN RELATION TO OSTEOPROTECTIVE BEHAVIORS AMONG TYPE 2 DIABETICS PATIENTS IN NORTH MALAYSIA

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OBJECTIVES: To assess the factors that most predicts diabetic patients' self-efficacy toward osteoporosis with respect to dietary calcium and physical exercise activity. **METHODS:** A cross sectional study was undertaken in 250 diabetic type 2 outpatients (T2DM) over a 3-month period in 2011. A pre-validated questionnaire was administered to assess osteoporosis knowledge tool (OKT-M, two subscale: exercise and calcium), osteoporosis health behaviour scale (OHBS-M, seven subscales: perceived susceptibility, perceived seriousness, barriers to calcium intake, barriers to exercise, benefits of calcium intake, benefits of exercise, and health motivation), osteoporosis risk factor and other demographic questionnaires prior to the Malaysian osteoporosis self-efficacy scale (OSES-M, two subscale: calcium and exercise). Then differences, correlations and multiple regressions were examined in relation to the demographic data, OKT-M and OHBS-M. **RESULTS:** There were significant differences in the independent variables: education and income in relation to OSES-M total scores. Correlations were performed to determine the relationship between the two dependent variables (OSES-M calcium and exercise subscale) and the OKT-M and OHBS-M. The OKT-M calcium and exercise subscale, health motivation and perceived benefits for exercise were positively correlated with both OSES-M exercise and calcium intake. While perceived benefits for calcium intake was positively correlated with OSES-M exercise only. Perceived barrier for calcium intake was negatively correlated with self-efficacy for exercise and calcium. Regression analysis revealed that knowledge, health belief and some demographic data had an impact on OSES-M and the R2scores value were 0.260 and 0.309 for calcium and exercise self-efficacy, respectively. **CONCLUSIONS:** The present study findings suggested that assessing factors affecting the self-efficacy behaviour related to bone loss in diabetic patients will raised the potential importance of these components in the overall understanding of other diabetic complications and for development of early screening and prevention of osteoporosis in T2DM patients.

PMS64

COMPARATIVE EFFICACY OF TOCILIZUMAB AND ATNF BIOLOGIC MONOTHERAPIES ON PATIENT REPORTED OUTCOMES (PROS) IN RA PATIENTS WHO HAVE SHOWN AN INADEQUATE RESPONSE TO CONVENTIONAL DMARDS (DMARD-IR): A NETWORK META-ANALYSIS

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OBJECTIVES: Head to head data from randomized controlled trials (RCTs) comparing biologic monotherapies is limited. Our objective was to compare PROs for tocilizumab monotherapy vs. other approved biologic monotherapies, in DMARD-IR RA patients, based on currently available RCT evidence. **METHODS:** Full-text publications of RCTs that assessed tocilizumab, and other biologic therapies, as monotherapy in DMARD-IR patients were identified through a systematic literature review. RCTs reporting data on PROs (Health Assessment Questionnaire Disability Index (HAQ-DI), pain VAS, patient global assessment of disease activity (PGA) VAS, SF-36, or fatigue) at 24 weeks were included. Where sufficient data was available, Bayesian network meta-analyses was used to obtain treatment effect estimates between included interventions. It was assumed that the effects of the aTNF treatments were exchangeable, and data for the assessed aTNFs were pooled to give a single, more stable estimate. **RESULTS:** Four studies were identified that formed a network comparing monotherapy treatments (tocilizumab and aTNFs (adalimumab, etanercept, certolizumab pegol)) and reported PRO data. Data on pain VAS, PGA VAS, and HAQ-DI was most commonly reported. Tocilizumab monotherapy showed greater improvement in pain [Difference -11.38 (95% CrI -18.40, -4.32)] and PGA [Difference -10.49 (95% CrI -17.68, -3.24)] compared to the assessed aTNF monotherapies. Tocilizumab monotherapy showed greater improvement in HAQ-DI [Difference -0.52 (95% CrI -0.73, -0.31)] compared with placebo, and was at least as efficacious compared to aTNF monotherapy [Difference -0.16 (95% CrI -0.33, 0.01)]. Insufficient data was reported for the SF-36 and fatigue to allow network meta-analysis. **CONCLUSIONS:** Based on network meta-analysis of currently available RCT evidence, involving indirect comparison of trial findings, tocilizumab monotherapy was found to have better outcomes than assessed aTNF monotherapies in terms of patient reported pain and disease activity in a DMARD-IR RA population. Tocilizumab was at least as efficacious as aTNF agents in improvement in physical function.

PMS65

DETECTING POTENTIAL FIBROMYALGIA PATIENTS IN PRIMARY CARE SETTINGS: VALIDATION OF THE FIBRODETECT SCREENING TOOL

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OBJECTIVES: To validate and determine the discriminative power of the FibroDetect®screening tool in helping primary care physicians detect patients with fibromyalgia in routine practice. **METHODS:** The FibroDetect included 14 questions assessing patients' pain and fatigue, personal history and attitudes, symptoms and impact on lives. To discriminate between American College of Rheumatology positive (ACR+) patients and ACR negative (ACR-) patients (n=276), a scoring method was created using an iterative process based on statistical and clinical considerations. The discriminant model was then validated with fibromyalgia and non-fibromyalgia patients (n=312). A score threshold for individual ACR classification was defined. **RESULTS:** Of the 14 original FibroDetect questions, six questions were retained in the final scoring, demonstrating discriminative power between ACR+ and ACR- patients with an area under the ROC curve of 0.74. A majority of ACR+ patients (77%) and less than half of ACR– (39%) had a score ≥ 6, suggesting that patients with such score are likely to be ACR+, and should thus be referred to a fibromyalgia specialist. A total of 8% of ACR+ patients and 79% of ACR– patients had a score ≤ 3, suggesting that patients with such score were unlikely to be ACR+, and should thus be not be referred to a fibromyalgia specialist. Patients with a FibroDetect score of 4 or 5 would require further investigation. The predictive accuracy of the tool increased to 0.86 for fibromyalgia and non-fibromyalgia patient detection. With a 6-point cut-off, the sensitivity was 90% and the specificity was 67% for fibromyalgia and non-fibromyalgia patient detection. **CONCLUSIONS:** The FibroDetect is a screening tool that detects potential fibromyalgia patients among patients with chronic widespread pain. It can be used as a surrogate for ACR classification criteria in primary care settings, and improve referral to appropriate specialist.

PMS66

THE MYOTONIC DYSTROPHY TYPE-1 HEALTH INDEX (MDHI): AN ANALYSIS OF ITS ABILITY TO DIFFERENTIATE BETWEEN CLINICALLY DISTINCT POPULATIONS

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OBJECTIVES: Myotonic dystrophy type-1 (DM1) is a dominantly inherited disorder caused by an unstable CTG repeat expansion on chromosome 19. Clinically the disease is associated with a wide variety of symptoms. The Myotonic Dystrophy Health Index (MDHI) is a disease-specific patient reported outcome measure designed to measure total health, and 17 of the most important areas of disease-specific health in DM1. The items in this instrument were selected utilizing qualitative interviews and a cross-sectional study of 278 patients. The MDHI's total score (and each of the 17 subscales) are scored from 0-100 with 100 representing the highest level of disease. The objective of this research is to evaluate the MDHI's ability to differentiate between known groups of DM1 patients. **METHODS:** Each of the MDHI's 17 subscales was completed by a group of DM1 patients. DM1 respondents were divided into known groups by employment status, CTG repeat number (<300,300+), education (non-college graduate, college graduate), age (21-46,47+ years), and duration of symptoms (<21,21+ years). The average subscale score and total MDHI score was calculated for each known group. **RESULTS:** On average, 138 DM1 patients completed each subscale. The MDHI measured a higher disease burden in patients who were unemployed (MDHI total score: 41.5 vs. 25.0), less educated (41.4 vs. 33.8), had a longer duration of symptoms (41.3 vs. 34.6), were of older age (38.3 vs. 33.1) and those with a longer CTG repeat number (35.6 vs. 27.6). **CONCLUSIONS:** The MDHI and its subscales are capable of differentiating between known groups of DM1 patients who are suspected of having a higher burden of disease.

PMS67

LONG-TERM BENEFITS OF 4-WEEKLY CERTOLIZUMAB PEGOL COMBINATION AND MONOTHERAPY ON HOUSEHOLD PRODUCTIVITY AND SOCIAL PARTICIPATION IN RHEUMATOID ARTHRITIS: 5 YEAR RESULTS FROM AN OPEN LABEL EXTENSION STUDY

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