signed to duloxetine or pregabalin cohorts based on their initiated agent. Patients who had pill coverage of the agents over 90 days preceding the initiation were excluded. The two comparative cohorts were constructed using propensity score greedy match approach. Descriptive analysis and paired-t test were performed to compare fibromyalgia-related health care utilization rates (inpatient, outpatient, medication) in the one-year post-initiation period between the two matched cohorts. **RESULTS:** Both matched cohorts (n = 1,265 pairs) had a similar mean initiation age (49-50 years), female percentage (87-88%), and baseline co-morbid conditions (neuropathic pain other than diabetic peripheral neuropathic pain, low back pain, cardiovascular disease, hypertension, headache or migraine and osteoarthritis). In the year preceding the initiation, both cohorts had similar inpatient utilization rates (15.7-16.1%), outpatient utilization rates (100%) and medication utilization rates (97.9-98.7%). In the post-initiation year, the utilization rates were different between the cohorts with the pregabalin cohort using more fibromyalgia related inpatient care (3.2% vs. 2.2%, $p<0.05$), all inpatient care (19.3% vs. 16.8%, $p<0.05$), fibromyalgia related outpatient care (62.1% vs. 51.8%, $p<0.05$), selective serotonin reuptake inhibitors (34.0% vs. 20.1%, $p<0.05$) and other fibromyalgia related medications, including antidepressants and anticonvulsants other than duloxetine or pregabalin. **CONCLUSIONS:** Compared to fibromyalgia patients who initiated duloxetine, fibromyalgia patients who initiated pregabalin consumed more fibromyalgia-related inpatient, outpatient, and medication care in the first post-initiation year.

PMS78

DEMOGRAPHİC AND SOCİOECONOMİC CHARACTERİSTİCS THAT AFFECT SELECTİON OF İNTRAVENOUS VERSUS SUBCUTANEOUS İNJECTİON TUMOR NECROSIS FACTOR INHİBITORS FOR RHEUMATOID ARTHRITIS PATIENTS

Baser O[1], Wang L[2], Lewis-beck C[3], Wang H[3], Li L[2], Xie L[3]
[1]STATinMED Research/The University of Michigan, Ann Arbor, MI, USA, [2]STATinMED Research, Dallas, TX, USA, [3]STATinMED Research, Ann Arbor, MI, USA

OBJECTIVES: Identify the demographic and socioeconomic predictors associated with Rheumatoid Arthritis (RA) patients treated with intravenous (IV) versus injectable tumor necrosis factor inhibitors (TNF-i). **METHODS:** Patients with at least two RA diagnoses initiating infliximab, etanercept, adalimumab, and IV abatacept were selected from Medicare database (January 2006 to December 2009). The index date was defined as the initial prescription or IV administration date. Logistic regression was used to determine covariates that increased the probability a patient was treated with an IV form of TNF-i (infliximab or IV abatacept) as opposed to a subcutaneous injection (etanercept or adalimumab). Medications were also analyzed separately using a multinomial logistic regression model. Demographic, clinical and socioeconomic status (SES) scores were controlled in the models. **RESULTS:** Subcutaneous injections were used as the reference category in the regression model. Patients between ages 65 and 69 were less likely to use IV treatment compared to patients over age 80 (Odds Ratio [OR]: 0.59; $p<0.0001$]). Females were also less likely to be prescribed IV treatment (OR: 0.76; $p<0.0001$]). Patients with medium (OR: 1.46; $p<0.0001$) and high SES scores (OR: 1.51; $p<0.0001$) were more likely to use IV treatments compared to patients with low socioeconomic status. For multinomial regression, the reference treatment was etanercept. Female patients had a lower chance of switching to infliximab (OR: 0.73; $p<0.0001$) and abatacept (OR: 0.76; $p<0.0001$). Patients with an Elixhauser index score >2 were more likely to be prescribed abatacept (OR: 1.45; $p<0.0001$), but less likely to be prescribed infliximab (OR: 0.86; $p=0.0023$). Lastly, patients were less likely to switch to adalimumab from etanercept if they had high SES scores. **CONCLUSIONS:** RA medication prescriptions are dependent on patient demographic and clinical characteristics. Gender, socioeconomic status, age, and Elixhauser index are all significant variables in determining the treatment of choice.

PMS79

EVALUATION OF CURRENT HEALTH TECHNOLOGY ASSESSMENTS FOR RHEUMATOID ARTHRITIS – AN INSIGHT INTO THE KEY UNCERTAINTIES GENERATED BY THE AVAILABLE EVIDENCE

Sweeney N[1], Heemstra L[1], Hansen K[2], Adalsteinsson JE[2]
[1]Quintiles, Hoofddorp, The Netherlands, [2]Novo Nordisk A/S, Søborg, Denmark

OBJECTIVES: To gain insight into the key uncertainties generated from the available evidence in current health technology assessments (HTAs) for rheumatoid arthritis. **METHODS:** Step I: Manual search of 75 health care agencies' websites for published anti-rheumatic drug-related assessments (January 2010-May 2012). Step II: All HTAs that received a negative funding decision were then selected for further evaluation. Of these, the reasons for rejection were categorized and frequency of mentioning counted. **RESULTS:** Step I identified 96 HTAs for rheumatoid arthritis; 79 were relevant single technology assessments (STA), appraising a total of 21 drugs (of which 8 biologics). Step II: A total of 26 assessments received a negative funding decision by 11 independent HTA bodies, appraising between them 12 drugs (4 biologics). There were 17 reasons for rejecting drugs discussed; with uncertainties generated by the lack of head-to-head trials reported most frequent; together with unfavorable cost-effectiveness. Other reasons include but were not limited to; positioning in treatment pathway, dosing regimen and lack of long term follow up data. The two most rejected drugs were TNFα inhibitors: Certolizumab pegol (7 times rejected) and golimumab (4). Specific reasons for rejecting certolizumab pegol were concerns around the maintenance of response and high patient withdrawals in the study. Golimumab was rejected due to uncertainties regarding reduction in progression of structural damage (INESSS, Canada) and uncertainties associated with the indirect comparisons; including the sequence of treatments chosen for the economic assessment (NCPE, Ireland). NCPE later accepted golimumab for funding following a price reduction. **CONCLUSIONS:** HTA agencies report various reasons for rejecting anti-rheumatic drugs. Within the HTA agencies, there is a strong demand for comparative head-to-head studies with current biologics. Sound health economic evidence is essential for new medicines to increase the chances of approval.

PMS80

BIOLOGIC THERAPIES FOR RHEUMATOID ARTHRITIS – ELIGIBILITY CRITERIA IN THE UK

Lebmeier M, Righetti C
Bristol-Myers Squibb Company, Uxbridge, Middlesex, UK

OBJECTIVES: The British Society for Rheumatology (BSR) Guidelines recommends biological therapies for the treatments of patients with RA as measured by Disease Activity Score (DAS-28) ≥3.2. Current UK reimbursement Guidance recommends use for biologics to treat patients with RA who have a DAS-28 of ≥5.1 only (severe RA). Our objective is to highlight the need for a review of the eligibility criteria for use of biologic therapies to treat RA in the UK, and to illustrate the number of patients with RA who would be eligible to receive biologic therapies if the criteria of DAS-28 ≥3.2 were to be applied. **METHODS:** The UK-population estimate was applied to the NICE costing template for biologics for RA, and the number of RA patients eligible to receive biological treatment was calculated. Prevalence rates were based on Symmons. Percentages have been reworked by reference to the population age and sex profile. Based on the Commissioning Guide for biological therapies, which incorporates estimates of patients with a DAS-28 ≥5.1 in whom treatment with disease-modifying anti-rheumatic drugs has failed; 10% patients with RA are eligible for treatment with biologics. Based on clinical opinion collected from a number of leading UK rheumatologists the proportion of patients eligible for treatment with biologics at a DAS-28 score ≥3.2 was estimated to be 50%. **RESULTS:** The total estimated prevalence of patients with RA is 421,022. Utilising the restrictions outlined in current guidance and applying a DAS-28 score ≥5.1 results in 42,102 RA patients being eligible to receive treatment with biologics. Whereas 210,511 patients would be treated if a DAS-28 score ≥3.2 were to be applied. **CONCLUSIONS:** Restrictions on UK-guidance leave a significant number patients untreated compared to international guidance. There is widespread agreement that there is a need to make these drugs available to those patients most likely to respond to them.

PMS81

COST-EFFECTIVENESS AND BUDGET IMPACT OF CERTOLIZUMAB PEGOL AGAINST A MIX OF TREATMENTS IN AN OUTCOMES-BASED RISK-SHARING SCHEME IN FINLAND

Asseburg C[1], Soini EJ[1], Taiha M[2]
[1]ESiOR Oy, Kuopio, Finland, [2]UCB Pharma Oy Finland, Espoo, Finland

OBJECTIVES: Assessment of a risk-sharing scheme (RSS) for certolizumab pegol (CZP) in terms of per-patient value-for-money and affordability in the Finnish population. **METHODS:** Literature search, indirect comparison of American College of Rheumatology (ACR) responses for biologic treatments for RA in anti-TNF-naïve patients, and stochastic modelling using a new hybrid approach that combines the assessments of per-patient cost-effectiveness and per-population budget impact in one Markov model. Using 12-week cycles, multiple comparators (treatment-mix modelling, i.e. real-life combination of treatments instead of a single comparator) and a Finnish societal perspective, effects and costs (administration, drug, in-patient, monitoring, adverse event, travelling, productivity; 2011 real value) were evaluated over a five-year horizon. If an ACR20 response was achieved at 12 weeks, CZP treatment was continued. Otherwise, CZP acquisition costs were refunded under the RSS, and maintenance treatment was initiated. Quality-adjusted life-years were estimated based on a relationship between EQ-5D and Health Assessment Questionnaire. The budget impact part assumes a rising incidence of RA during 2013–2017 in Finland and includes treatment persistence estimates. **RESULTS:** Over the five years, introducing the CZP RSS for all starting patients provided cost savings of €4796 together with 0.04 additional quality-adjusted life-years per patient (100% cost-effectiveness probability). Approximately 4.7% of CZP acquisition costs were refunded due to RSS. The correspondent budget per patient-year was estimated at €27,310 under the current mix of anti-TNFs and subsequent therapies, which could be reduced to average €26,299 per patient-year if all starting patients were to receive CZP with RSS. Whereas the magnitude of the budget impact is based on several assumptions, all the sensitivity analysis conducted were consistent and showed that CZP would reduce costs and improve patient health. **CONCLUSIONS:** The current analysis showed that CZP in association with a RSS is cost-effective and affordable compared to current mix of treatments in Finland.

PMS82

US TREATMENT PATTERNS IN PSORIATIC ARTHRITIS NEWLY INITIATED ON ETANERCEPT OR ADALIMUMAB

Zhang F[1], Li S[2], Curtis JR[3]
[1]Celgene Corporation, Summit, NJ, USA, [2]Celgene Corporation, Warren, NJ, USA, [3]The University of Alabama at Birmingham, Birmingham, AL, USA

OBJECTIVES: Etanercept (ETN) and Adalimumab (ADA) are commonly prescribed biologic disease-modifying antirheumatic drugs (DMARDs) for psoriatic arthritis (PsA) patients. The objective of this study was to describe treatment patterns following the initiation of ETN and ADA in PsA. **METHODS:** Adult PsA patients were selected from MarketScan Commercial Claims database (2005-2009) if no index biologics prescription prior to the index date (first ETN/ADA prescription date); continuous enrollment 6-month prior and 12-month post index date; ≥2 PsA diagnoses in different office visits; no diagnosis of ankylosing spondylitis. Treatment patterns are defined as: treatment discontinuation--a treatment interruption of ≥60 consecutive days with no other DMARD use after last prescription; switch--the