(range:15.1mm/h (France)-21.0mm/h (Italy)) and CRP (range:5.6mg/dl (Spain)-12.5mg/dl (UK)). Current disease severity per physician-judgment (mild:moderate:severe) in 5EU were: UK-68%:22%:10%, Germany-57%:39%:5%, France-46%:47%:7%, Italy-64%:34%:2%, Spain-69%:27%:4%. Among patients with available data, current HAQ (range: 0.7(France)-1.5(Germany)), BASDAI (range:3.0(Spain)-3.4(UK)), 100mmVAS (range:19.0(France)-31.4(UK)) and Swollen Joint Count (range:0.5(France)-(3.7(UK)) differed within 5EU. Among patients with available data, response to current biologic per ASAS criteria were (%ASAS20:%ASAS40:ASAS5/6:%ASAS partial-remission): UK-12%:6%:0%:4%, Germany-20%:9%:9%:11%, France-13%:7%:7%:11%, Italy-30%:17%:13%:18%, Spain-19%:13%:5%:13%. **CONCLUSIONS:** Among AS patients receiving their first biologic, disease severity differed within 5EU, with patients in the UK with relatively higher burden and poorer treatment response. Impact of specific biologic treatments on the observed patterns warrants further scrutiny.

PMS10

COMPARISON OF DISEASE STATUS AND OUTCOMES OF PATIENTS WITH PSORIATIC ARTHRITIS (PSA) RECEIVING THEIR FIRST BIOLOGIC IN UK, GERMANY, FRANCE, ITALY AND SPAIN (5EU)

Narayanan S[1], Lu Y[2], Hutchings R[2], Baskett A[2]

[1]*Ipsos Healthcare, Columbia, MD, USA,* [2]*Ipsos Healthcare, London, UK*

OBJECTIVES: To compare the disease status and outcomes of patients with PsA receiving their first biologic in 5EU. **METHODS:** A multi-country multi-center medical chart-review study of PsA patients was conducted among physicians (rheumatologists:97%) in hospitals and private practices to collect de-identified data on patients who were recently treated with a biologic as part of usual care. Physicians were screened for duration of practice (3-30 yrs) and patient volume (incl. >5PsA biologic patients/month) and recruited from a large panel to be geographically representative in each country. Eligible patient charts (>3) were randomly selected from a sample of prospective patients visiting each center/practice during the screening period. Physicians abstracted patient diagnosis, treatment patterns/dynamics and patient symptomatology/disease status/outcomes. **RESULTS:** In 1Q2012, 1099 eligible PsA patient charts were abstracted; 916 (83%) patients were on their first biologic (mean-age:48.1yrs, female:46%). Geographic distribution of patients were – UK:20%, Germany:18%, France:22%, Italy:21%, Spain:19%. Time-to-1st biologic from diagnosis (range:31month (Italy)-50month (UK)) and time-on-current biologic (range:19month (Italy)-24month (France)) differed within 5EU. The top-4 reasons for biologic treatment initiation across 5EU were 'mechanism of action', 'improve signs/symptoms', 'preservation of structural damage' and 'positive personal experience'. Key lab measures documented were: ESR (range:18.6mm/h (France)-25.2mm/h (Italy)) and CRP (range:6.3mg/dl (Spain)-14.5mg/dl (UK)). Current disease severity per physician-judgment (mild:moderate:severe) in 5EU were: UK-61%:25%:13%, Germany-57%:37%:6%, France-44%:46%:11%, Italy-56%:41%:2%, Spain-64%:33%:3%. Among patients with available data, current HAQ (range: 0.7(Spain)-1.5(Germany)), BASDAI (range:2.7(Spain)-3.9(UK)), 100mmVAS (range:23.9(Spain)-31.4(UK)) and Swollen Joint Count (range:1.2(Spain)-(3.7(UK)) differed within 5EU. Among patients with available data, response to current biologic per ASAS criteria were (%ASAS20:%ASAS40:ASAS5/6:%ASAS partial-remission): UK-8%:8%:0%:4%, Germany-18%:7%:9%:12%, France-11%:6%:6%:10%, Italy-29%:16%:12%:15%, Spain-13%:14%:9%:9%. **CONCLUSIONS:** Among PsA patients receiving their first biologic, disease severity and outcomes differed within 5EU, with patients in the UK with relatively higher burden and poorer treatment response. Impact of specific biologic treatments on the observed patterns warrants further scrutiny.

PMS11

META-ANALYSIS FOR EFFICACY OF ETANERCEPT FOR TREATMENT OF PSORIATIC ARTHRITIS

Aggarwal S, Topaloglu H, Messenger M

Novel Health Strategies, Bethesda, MD, USA

OBJECTIVES: Psoriatic arthritis (PA) is an inflammatory disease affecting joints and connective tissues. The anti-tumor necrosis factor (TNF) biologics are increasingly being used in patients who have failed traditional disease-modifying antirheumatic drugs. Etanercept has shown efficacy in treatment of PA. The objective of this study was to conduct meta-analysis and present total evidence for etanercept in treatment of PA. **METHODS:** For this meta-analysis we included randomized controlled trials (RCTs)evaluating etanercept for the treatment of PS. RCTs studying adult populations with active and progressive PA with an inadequate response to previous DMARD therapy were eligible. Trials conducted among PA populations with prior experience with anti-TNF agents, including an inadequate response, were excluded. A systematic literature search for Etanercept trials was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar, and Cochrane. Data was collected for the study size, interventions, year, and the three outcomes HAQ, PASI and PsARC. For meta-analysis, random effects and fixed effects models were used to obtain cumulative statistics. **RESULTS:** Two RCTs with a total of 131 patients were identified. The pooled response rates for Etanercept for PsARC were 75% (95% CI 60%-90%), for HAQ were 59% (95% CI 46%-72%), and for PASI were 24% (95% CI 13%-34%). The pooled response rates for placebo for PsARC were 30% (95% CI 26%-35%), for HAQ were 5% (95% CI 1%-9%), and for PASI were 3% (95% CI 0%-7%). For PsARC the cumulative relative risk with Etanercept versus placebo was 0.40 (95% CI 33%-48%). For HAQ, the cumulative relative risk with Etanercept versus placebo was 0.08 (95% CI 5%-12%). For PASI, the cumulative relative risk with Etanercept versus placebo was 0.14 (95% CI 8%-20%). **CONCLUSIONS:** Meta-analysis shows Etanercept offers patients with psoriatic arthritis an effective therapeutic option for control of their disease.

PMS12

STRUCTURING CRITERIA IN MULTI-CRITERIA DECISION MODELS FOR BENEFIT/RISK ASSESSMENT OF BIOLOGICS IN JUVENILE ARTHRITIS

Satiti M[1], IJzerman MJ[1], Boere-Boonekamp M[1], Bridges JFP[2]

[1]*University of Twente, Enschede, The Netherlands,* [2]*Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA*

OBJECTIVES: Multi-criteria decision analysis (MCDA) is a technique which is proposed for quantitative benefit/risk assessment. MCDA structures benefits and risks in a decision or value tree, either by forming hierarchical clusters of benefits and risks separately or by placing both benefits and risks on the same level allowing direct comparison of all benefits and risks (non-hierarchical). The objective of this study was to compare two approaches for structuring decision trees and to evaluate the rank-order of three TNF– inhibitors for Methotrexate type of Juvenile Idiopathic Arthritis (JIA). **METHODS:** The alternatives selected for evaluation were Etanercept, Infliximab and Adalimumab. Six criteria were identified for evaluation, including improvement in pain, improvement in social function, Methotrexate (MTX) discontinuation, administration reaction, serious infection and cancer. The criteria were structured both non–hierarchically and hierarchically. Two different questionnaires were developed and randomized to 42 physicians in three hospitals. Weight elicitation was performed using the Analytic Hierarchy Process. **RESULTS:** In hierarchical structures, the criterion weights were more steep and the range between most and least important criterion was larger than in non-hierarchical structures. Risks were considered more important (aggregated w_{risk}=0.35) in an non-hierarchical structure than in an hierarchical structure (w_{risk}=0.20). Applying the performance weights for three TNF-a inhibitors showed that there is a different rank-order of drugs being considered. The weights elicited from non–hierarchical questionnaire showed Etanercept to be most preferred. Yet, Adalimumab was most preferred if a hierarchical structure was used. The non–hierarchical questionnaire could be transformed to a hierarchical structure after which a similar rank-order of drugs was found as in the hierarchical structure. **CONCLUSIONS:** The rank order of the alternatives indeed changes when the criteria were structured differently regardless where the criteria weights were obtained from similar or different group of participants. Policy implications need to be explored.

PMS13

ASSESSING THE GEOGRAPHIC AND DEMOGRAPHIC VARIATION ASSOCIATED WITH PSORIATIC ARTHRITIS PREVALENCE IN THE VETERAN POPULATION IN THE UNITED STATES

Wang L[1], Huang A[1], Baser O[2]

[1]*STATinMED Research, Dallas, TX, USA,* [2]*STATinMED Research/The University of Michigan, Ann Arbor, MI, USA*

OBJECTIVES: To study the relationship between psoriatic arthritis (PsA) prevalence and geographic variation and demographic characteristics in the U.S. veteran population. **METHODS:** Using the Veterans Health Administration (VHA) Medical SAS Datasets from October 1, 2005 to May 31, 2012, a retrospective database analysis was performed. All U.S. veteran beneficiaries diagnosed with PsA were identified using International Classification of Disease 9th Revision Clinical Modification (ICD-9-CM) diagnosis code 696.0. All patients with medical benefit enrollment in 2011 were included in the study. Descriptive statistics were calculated as means±standard deviation (SD) and percentages to measure age, race and other related factors in the sample. **RESULTS:** A total of 22,102 veterans were diagnosed with PsA during 2011. The state of Vermont had the highest prevalence rate (0.29%), followed by New Hampshire (0.23%), and Maine (0.23%). All other states were observed with prevalence rates lower than 0.2%. Washington D.C. had only three cases of the disease, which translated into 0.02% of prevalence. Patients age 55-64 were most likely to be diagnosed with PsA (0.15%). Prevalence was lower by 0.05% for patients age 35-54 and 65+ (0.10%). Younger patients were less likely to be diagnosed with the disease (<0.05%). PsA diagnoses also varied by race: Non-Hispanic White (0.14%), Hispanic (0.12%), Non-Hispanic Black (0.03%), and other races (0.08%). **CONCLUSIONS:** PsA was unevenly distributed across the United States when measured by age group and race. Geographic variation was also related to disease occurrence. These factors should be taken into consideration for further studies.

PMS14

ANNUAL MORTALITY IN A LARGE PREVALENCE-BASED SAMPLE OF UNITED STATES RHEUMATOID ARTHRITIS PATIENTS

Palmer LA, Farr A, Johnston SS

Truven Health Analytics, Washington, DC, USA

OBJECTIVES: Studies estimating mortality rates in United States rheumatoid arthritis (RA) patients have largely been based upon registry or single-center populations numbering in the hundreds or few thousands of RA patients, which limits the generalizability of their findings. The objective of this study was to describe annual mortality in a large prevalence-based sample of U.S. RA patients. **METHODS:** This was a retrospective study based on mortality data obtained from the Social Security Administration (SSA) linked to approximately 15 million individuals present in the Truven Health MarketScan® Commercial and Medicare Supplemental administrative claims databases. The SSA data currently include information on whether individuals were living or had died (including date of death) as of October 31, 2012. To maximize generalizability, this study used a prevalence-based sampling technique whereby RA patients representing a broad spectrum of disease durations and severity were selected. To that end, patients aged 18+ years were selected for study if they were continuously enrolled in insurance benefits throughout calendar year 2010 and during this time period had at ≥1 medical claim with an ICD-9-CM code for RA (714.0x). Claims that may have represented efforts to 'rule out' the presence of RA were excluded from consideration. The study outcome was age/sex-specific mortality rates in 2011.