OBJECTIVES: This study reports real-world utilization patterns observed for rheuma- toid arthritis (RA), ankylosing spondylitis (AS) patients treated with golimumab (GLM). METHODS: Patients with an ICD-9 code for RA, PSA, or AS receiving ≥ 2 fills of GLM as their first biologic medication (bio naive) or most recent biologic medication (bio-experienced) were identified between 1/1/2008 and 12/31/2008 from a large claims database (IHIS). Patient characteristics and refill patterns were summarized using descriptive statistics. The proportion of adherent refills was calculated as the number of refills occurring between 21 and 34 days from a previous fill divided by the total refill intervals. RESULTS: A total of 1,515 patients with ≥ 2 GLM fills and a diagnosis of RA (n = 1,036), PSA (n = 325) or AS (n = 154) were identified in the database. Median age was RA: 52 years; PSA: 50 years; AS: 47 years. The majority were bio-experienced (RA 72%; PSA 79%; AS 79%). A total of 3,173 GLM refills were observed (RA 9,398; PSA 2,967; AS 918). Adjusted GLM adherence was significantly greater in the GLM group (39.9%) than ADA (28.6%); CTZ (21.6%); and AS (15.8%). Clinicians’ perceptions of their patients’ adherence may be high in all groups, due to self-reporting bias. The implications of differences in clinical and demographic characteristics of patients achieving 100% refill compliance compared to other subcutaneous anti-TNF medications are discussed.

Three retrospective observational studies confirm earlier findings that GLM is utilized largely in patients who have used other biologic medications. A high proportion of GLM-treated patients were adherent to refilling medication and median refill intervals occurred as recommended in the GLM prescribing information.

PMS50
DIFFERENCES IN PATIENT CHARACTERISTICS AND UTILIZATION PATTERNS OF SUBCUTANEOUS ANTI-TNF MEDICATIONS OBSERVED IN A LARGE UNITED STATES MANAGED CARE POPULATION
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OBJECTIVES: To evaluate patient characteristics and real-world treatment patterns of subcutaneous anti-TNF medications for patients enrolled in Humana’s commercial and Medicare patient populations. METHODS: Adult patients (aged ≥ 18 years) with ≥ 2 fills of index biologic (adalimumab (ADA), certolizumab (CTZ), etanercept (ETA)) or golimumab (GLM) were identified in the post-index period from October 2007-February 2010. Months pre- and 12 months post-index were identified in health care claims. Patient age, gender, RxRisk-V score, biologic use and disease modifying anti-rheumatic drug (DMARD) use in the pre-index period were summarized. Utilization measures included monthly biologic dose, refill interval, proportion of adherent fills (i.e., 7 days of expected, and proportion of patients with 100% refill adherence. Descriptive statistics (mean, SD, n), one-way analysis of variance (continuous variables), and chi-squared tests (categorical variables) were employed. RESULTS: A total of 3,568 ADA, 287 CTZ, 3,625 ETA, and 158 GLM patients were studied. The CTZ and ETA groups were significantly younger than other groups (p < 0.001). The GLM group had a higher proportion of prior biologic use (58.2% vs. ADA (11.5%), CTZ (34.1%), and ETA (4.9%); p < 0.0001). The GLM group had higher mean Rx Risk-V scores as compared to ETA (6.5 ± 3.47 vs. 5.94 ± 3.14, respectively; p < 0.05) and had higher proportions of patients with pre-index DMARD use (71.5% vs. ADA: 57.3%, CTZ: 54.4% and ETA: 51.2%: p < 0.001). The proportion of patients with 100% of compliant refills was significantly greater in the GLM group (39.9% than ADA: -28.6%, CTZ: -21.6%; ETA: -29.3%: p < 0.001). Statistical analysis revealed a lower rate of adherence in the CTZ group compared to all other subgroups. Analyses using the MMAS-4 score as the adherence anchor. Ordinary least squares was used in regression analysis to determine potential factors for non-adherence to GLM. Compared with MMAS-4, the CQR scale appears to be more sensitive at high levels of adherence. The CQR appears to be useful as a predictive tool. It does not require claims-based data to assess historical non-adherence, and so may be a useful alternative. These results warrant further exploration of the GLM as a way to stream rheumatology patients into appropriate treatments, based on their potential to be non-adherent.

PMS51
TREATMENT PERSISTENCE WITH COMBINATION MONOTHERAPY IN COMMERCIAL INSURED PATIENTS WITH RHEUMATOID ARTHRITIS
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OBJECTIVES: To study 1-year treatment persistence among patients with rheuma- toid arthritis (RA), initiating biologics (etanercept or adalimumab) with or without non-biologic disease modifying anti-rheumatic drugs (NBDMARDs). METHODS: Adult (≥ 18 years) patients with RA newly treated with etanercept or adalimumab with ≥ 360 days continuous enrolment before and after their first [index] biologic claim were identified in the MarketScan® Research Databases (Jan 1, 2010-Dec 31, 2011) and the Optum Research Database (Jan 1, 2009-Oct 1, 2011). Patients with a claim for a biologic in the 360 days pre-index or treated with biologics for conditions other than RA were excluded. Monotherapy patients met the following criteria at index: 1) Initiated monotherapy; no claim for a NBDMARD between day -360 and -30 [pre-index] and no claims for a NBDMARD between day -29 and +30 and a DX for RA. 2) Patients met the following criteria at index: no initiation of monotherapy, no claims for NBDMARDS from day -360 to -30 and ≥ 1 claim for a NBDMARD from day -29 to -30 or Switched to combination therapy; a claim for a NBDMARD between day -360 and -30, and a DX for RA. RESULTS: Persistence was defined as the number of days from the index date until the earlier of a 45-day gap in therapy or a switch to another biologic. RESULTS: Of 6,626 patients in the MarketScan and 4,246 patients in the Optum databases, 35.7% and 34.6% were adherent to GLM for 90 days treatment with combination therapy (Truven/Optum: 45% 14.8% etanercept, 42.6% 41.4% adalimumab) than with monotherapy (Truven/Optum: 35.5% 43.1% etanercept, 35.1% 44.0% adalimumab). CONCLUSIONS: Combination therapy was associated with greater persistence than biologic monotherapy.
However, further methodological research is needed to achieve standardization of procedures.

PM555 EVALUATING THE DEGREE TO WHICH ABILITY TO PAY AND HEALTH-RELATED QUALITY OF LIFE (BIOLOGICAL) INFLUENCES WILLINGNESS TO PAY (WTP) IN PSORIASIS AND PSORIATIC ARTHRITIS PATIENTS

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OBJECTIVES: The aim of this study was to measure what matters most in WTP for a treatment, the patients’ perception of their health status, what they are willing to pay, or a combination of both. METHODS: 395 US patients diagnosed with either psoriasis (n=191) or psoriatic arthritis (n=245) completed a questionnaire as part of a broader survey of treatment of psoriasis/psoriatic arthritis in the US. The questionnaire included the EQ-SD-SL instrument and accompanying VAS. Patients were additionally asked to provide income data. The results are presented in terms of the amount of money per month they would be willing to pay for treatments that would improve their health status by 10 points, retain their current health and prevent a decline in health status by 10 points. Annual household income information was also reported by patients. RESULTS: Household income was a better predictor of WTP for a treatment; those patients with an annual income of less than $25,000 were willing to pay the least ($<0.001), whereas patients with an annual household income over $75,000 would pay most ($>0.001). Patients within the lowest VAS segment were prepared to pay significantly more for an improvement in their health status than patients within the other segments ($<0.003). No significant differences were noted between groups to either retain their health status or avoid health decline. For predicting WTP for an improvement in health status, a combination of low yearly income (<$25,000) and the EQ-SD-VAS was the best [R<0.001; WTP for a 10 VAS point improvement = 142 + $39.9Low Income + ($7.7 VAS score)]. CONCLUSIONS: Both ability to pay and health status are valid predictors of willingness to pay for a treatment. Yet ability to pay is a better overall predictor of willingness to pay than HRQoL.

PM556 FUNCTIONAL STATUS AND LABOR PRODUCTIVITY WITH TOPICAL TACITINIB IN PATIENTS WITH INADEQUATE RESPONSE TO NON-BIOLOGICAL DISEASE-MODIFYING ANTIRHEUMATIC DRUGS (DMARD) VERSUS ANTI-TUMOR NECROSIS FACTOR DRUGS (ANTI-TNF) IN COLOMBIA

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OBJECTIVES: To evaluate the benefits in functional status and labor productivity of tofacitinib in patients with inadequate response to non-bio logical DMARD or to anti-TNF in Colombia. METHODS: The response to treatment was assessed by the change in baseline of the Health Assessment Questionnaire-Disability Index (HAQ-DI) from baseline and works lost productivity: absenteeism and presenteeism (productivity reduction ≥50%) due to patient’s functional status, as reported by Chaparro del Moral R. 2012 and istres J. 2013. RESuLtS: The draft questionnaire corresponding to functional status regardless of treatment received. Comparison between anti-TNF and tofacitinib (5mg BID) was done directly to adalimumab (heat-to-heat study) and indirectly (Buchner’s indirect comparisons adjusted method) vs other anti-TNF available in Colombia (certolizumab, etanercept, golimumab and infliximab) using metathread as reference therapy. A discrete event model that simulates six cohorts of 1,000 patients (each per treatment option) was developed; productivity hours lost and productivity to HAQ-DI level during 52 weeks of therapy. The draft questionnaire was pre-tested with the anti-TNFs and incorporated at their market share as reported in the SISMED by the Health Ministry. RESULTS: Improvement in HAQ-DI score at 3, 6, 9 and 12 months from baseline with tofacitinib and anti -TNF were 61.9, 48.7, 65.2 and 53.2%, and: 45.9, 42.7, 51.7 and 47.1%, respectively (p<0.003). With the products, weeks 10-24, 52 weeks, and with the absence of absenteeism/presenteeism losses along the 52-week horizon were obtained, at last observation week: 2.72/2.67 and 4.07/3.23 hours with tofacitinib and anti-TNF respectively. CONCLUSIONS: The superior reduction in HAQ-DI scale at 52 weeks obtained with Tofacitinib in patients with inadequate response to a non-biological DMARD results in a greater reduction in work lost productivity, presenteeism and absenteeism, compared to anti-TNF available in Colombia.

PM557 WALKING SPEED PREDICTS WORK STATUS DUE TO HEALTH IN COMMUNITY DWELLING WOMEN: THE OSTEARTHritis INITIATIVE (OAI)

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OBJECTIVES: Early identification of declining health in working adults with osteoarthritis (OA) may allow targeted interventions that prevent health related job loss. Usual walking speed (WS) is a predictor of health status in adults ≥ 65 years and may also be a useful simple predictor of work status in younger adults with OA. The purpose of this paper was to determine whether walking speed is an independent predictor of work status in women with or at risk for osteoarthritis adjusting for covariates. METHODS: Participants were 2,634 women (23% African American) age 45-79 years from the self-selected 20 metropolitan sites in the OAI cohort. Linear regression examined WS as a predictor of work status (working versus not working due to health [NWH]) for those walking slow (<1.10 meters/second[s]), moderate (1.1-1.29 m/s) and normal (>1.3 m/s) speeds, adjusting for demographics and other confounders. RESULTS: The 2,634 women mean age 60.0, Standard Deviation [SD] 9.1, years, 57.9% (1,533) were working, 36.0% (952) were not working for other reasons and 5.6% (149) were NWH. WS was significantly faster in those working compared to those NWH (mean speed 1.33 m/s vs. 1.08 m/s; p<0.001). Compared to women with normal WS (>1.3 m/s), those considered slow walkers (WS ≤1.10) were 12 times more likely to be NWH compared to those walking at normal speed (Odds ratio [OR] = 12.4, 95% Confidence Interval [CI] 5.0 - 26.5; p<0.001) after controlling for age, gender, race, education, body mass index (BMI), income, and comorbidities. Further, the contribution of comorbidities in the model was significantly (p<0.001) weakened when WS entered the model. CONCLUSIONS: Walking speed was an independent predictor of NWH and controlling for competing during working may be useful in the work setting to identify those at high risk of health related job loss. Further evaluation of the longitudinal predictive capability of WS is needed.