OBJECTIVES: To determine factors that are responsible for the cost differential between private and public health facilities through the assessment of the cost per day of staging six common diseases in Bayelsa State, Nigeria.

METHODS: Prescriptions generated in three tertiary / public hospitals and three private hospitals for management of Malaria, Typhoid Fever, Essential Hypertension, Diarrhea, Pneumonia, and Rheumatoid Arthritis over a specified period were evaluated to determine direct cost of drugs. Questionnaires were used to obtain relevant data on staff wage bills, and utility bills. Data were analyzed to obtain the cost per day for each diagnosis, number of days paid required to pay for the treatment using the newly approved N18, 000.00 minimum wage by the Federal Gov- ernment. Sensitivity Analyses: Public facilities pay much higher by number of days of drugs and shorter duration, polypharmacy, co-morbidities, treatment duration and number of drug prescribed determine cost of treatment; treatment cost therefore varies with conditions was generally higher in the private facilities. Hypertension was the most costly to treat at a total cost of N20,570 for 30days requiring 36.28 days pay to afford; malaria was cheapest to treat for N227 requiring 0.4 day pay; the cost of treatment of the selected diseases are high and unaffordable.

CONCLUSIONS: Generally, costs of prescribed drugs were expensive in the private facilities. The costs of treatment were also generally not affordable when viewed from the point of globally accepted affordability standard. Therefore the need to make the costs cheaper for health care to become more affordable becomes imperative.

PMS13 COST-EFFECTIVENESS OF BIOLOGICAL TREATMENTS IN PATIENTS WITH RHEUMATOID ARTHRITIS IN TAIWAN
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OBJECTIVES: To determine if biologics might reduce reimbursement for biologics from the Bureau of National Health Insurance (BNIH) if they satisfied required criteria, which might have a significant impact on the annual budgets of the BNIH. The objective of this study was to analyze and compare the cost-effectiveness among existing reimbursed eleven possible combina- tions of biological treatment strategies, while under limited and lifelong treatment duration assumptions. METHODS: Under limited and lifelong treatment duration assumptions, Monte-Carlo simulation was used to compare the cost-effectiveness of eleven possible combinations of biological treatment (Adalimumab, Etanercept, and Rituximab) in patients with active RA. Treatment duration assumptions, effectiveness and utility parameters for different biological treatment strate- gies were obtained from published papers. Direct medical and drug costs were estimated according to Taiwan’s National Health Insurance fee schedule for 2011 and the National Health Insurance payment standard. Probability sensitivity analysis was applied after Monte-Carlo simulation. Incremental costs per quality-adjusted life-year (QALY) between the strategies were calculated. Both cost and effectiveness were discounted at the rate of 3.5%. RESULTS: There were differences between the results for limited and lifelong treatment duration assumptions. For limited treatment duration, strategies with Adalimumab as the first line biological (including Adalimumab only, Adalimumab followed by Rituximab, Adalimumab, Rituximab and Etanercept) were more cost-effective. For lifelong treatment duration, strategies with Etanercept as the first line biological (including Etanercept only, Etanercept followed by Rituximab,Etanercept, Adalimumab and Rituximab) were more cost-effective. CONCLUSIONS: From the Bureau of National Health Insurance point of view, there seems to be a difference in the cost-effectiveness strategy among different treatment duration assumptions, however, the strategy using Etanercept as the first line biological followed by Adalimumab and Rituximab was cost-effective under both assumptions.

PMS14 COST-EFFECTIVENESS ANALYSIS OF ETANERCEPT IN THE TREATMENT OF RHEUMATOID ARTHRITIS IN CHINA
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OBJECTIVES: Rheumatoid arthritis (RA) critically impair the quality of life of pa- tients. Biologic treatments represent a therapeutic alternative for patients who failed non-biologic disease-modifying antirheumatic drugs (DMARDs). Their high cost, however, is a challenge for clinicians and decision makers. The aim of this study was to assess the cost-effectiveness of biologic alternatives to treat RA cur- rently available in China, from a societal perspective.

METHODS: A Markov cohort model was adapted to estimate and costs per quality-adjusted life-year (QALY) gained. Costs included the lack of efficacy or a major adverse event (AE). Effective treatment was determined as proportion of patients achieving 20%, 50%, 70% improvement following the Amer- ican College of Rheumatology (ACR20, ACR50 and ACR70) criteria. Costs included biologic medicines, medical follow-up and side-effects management. Clinical response of alternatives and administration costs were extracted from published literature, while drug costs were collected from National Development and Reform Commission databases of China. RESULTS: When compared with Etanercept only, Adalimumab and Adalimumab + MTX, Etanercept is effective over other biologic treatments except in ACR70 2% less effectiveness compared with Infliximab + MTX. Etanercept is 56,179US$ less than Infliximab + MTX (the most costly alternative) and 30% more patients meet the ACR20 criteria regarding Adalimumab (the least effective alternative) when compared with Infliximab + MTX, Adalimumab and Adalimumab + MTX. Etanercept is also cost-effective over other biologic in either ACR20, ACR50 and ACR70. CONCLUSIONS: Due to their lower costs and favorable effectiveness profile, Etanercept or Etanercept + MTX are both less costly and the most effective over other biologic alternatives in the management of RA in China.
work/productivity was measured by the validated Work Productivity and Activity Impairment (WPAI) instrument. MRI was used to monitor MRI of the lumbar spine.

Comparisons were made between respondents who reported to be diagnosed with AS (excluding other auto-immune diseases) vs. respondents without AS (non-AS group).

RESULTS: Of 19,354 survey respondents, 52 (0.26%) were diagnosed with AS. The age of respondents (mean ± SD) at Week 19 was 62.4 ± 12.3 years. AS group showed higher Charlson comorbidity index score than in non-AS group (1.4 v. 0.2). The most common comorbidities (>25% of patients) were headache, insomnia, gingivitis, body pain, sleep difficulties, arthralgia, anxiety and arthritis. AS group had lower scores of HAQ (0.8 v. 0.5), EQ-5D (0.8 v. 0.62), SF-36 (44 v. 46.2), mobility, and visiting health care providers (71.2% v. 49.7%), ER (30.8% v. 17.6%) and hospitalized (19.2% v. 5.7%) in the past 6 months vs. non-AS group. Also, AS group reported more work productivity loss (absenteeism/presenteeism) with 40.1% vs. 23.3% and impairment in daily activities with 26.7% vs. 20.3% of males. AS group showed NSAI/DMArs superior to step-down treatment with MTX alone in their effects on functional and quality of life endpoints. Minimal differences in PROs were observed between AS and non-AS groups were statistically significant at P < 0.005, except MCS.

CONCLUSIONS: From the China NHWS results, AS patients suffer from impairment in quality of life, work/productivity loss, more comorbidities and use of medical services. The findings indicate there is still an unmet medical need in AS patients in China.

PMS18

IMPACT OF ETANECETP-METHOTREXATE THERAPY ON PATIENT-REPORTED OUTCOMES IN MODERATELY ACTIVE RHEUMATOID ARTHRITIS (RA) PATIENTS OF EUROPE, LATIN AMERICA, AND ASIA

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OBJECTIVES: To compare patient-reported outcomes (PROs) achieved with sustained, reduced, or suspended etanercept (ETN) in combination with methotrexate (MTX) in RA (n = 26) and 12 week induction with combined TNF-α inhibitors (TNFi/MTX) in RA MTX therapy in a sub-analysis of the developing countries from the multinational PRESERVE trial.

METHODS: Data from 9 developing countries of Asia, Latin America and Europe were included in this sub-analysis. Patients with moderately active RA (DAS28 of ≥ 3.2 and ≤ 5.1) who achieved DAS28 low disease activity (DLD; DAS28 ≤ 3.2, average Weeks 12–36 and at Week 36) during the 36-week open-label induction phase with ETN 50mg QW plus MTX (ESO/M) were randomised to double-blind treatment with ES0/M, ETN 25mg QW plus MTX (ES25/M), or placebo plus MTX (P/M) for an additional 52 weeks in a double-blind, randomised, placebo-controlled trial.

RESULTS: Of 491 patients enrolled, 388 were randomized blindly at Week 36: ESO/M (n = 127), ES25/M (n = 134), or P/M (n = 127). Significant improvement from baseline (P < 0.001) in all PROs was observed with ESO/M at Week 36. Adjusted mean changes in HAQ, EQ-5D, BPI and MOS from Weeks 36–88 were statistically significantly smaller with ESO/M and ES25/M vs P/M (P < 0.05), indicating less deterioration. Adjusted mean change in DAS28 was significantly smaller for ESO/M but not ES25/M vs P/M (P > 0.05). A higher percentage of patients in the ESO/M (57.5%) and ES25/M (56.0%) groups had a HAQ ≤ 0.5 compared to those in the P/M group (43.3%) at Week 88 (P < 0.05).

CONCLUSIONS: In patients with moderate RA, after 52 week of induction of low disease activity, ETN full- and reduced-dose treatment groups were superior to step-down treatment with MTX alone in their effects on functional and quality of life endpoints. Minimal differences in PROs were observed between the full- and reduced-dose treatment groups.

PMS19

INVESTIGATION OF COMPARATIVE CLINICAL OUTCOMES PROFILES AND COST-EFFECTIVENESS OF FOUR CLASSES OF ANTI-RHEUMATIC DRUGS USING HAQ DI, DAS -28 AND EQ5D3L IN A TERTIARY CARE HOSPITAL IN WESTERN INDIA

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OBJECTIVES: The objective of the present investigation was to investigate of comparative clinical outcome profile and cost effectiveness of DMARDs, NSAIDs, steroid, herbs and biologicals.

METHODS: It was prospec-tional, longitudinal, open label, parallel group study consisting of four groups with 40 patients in each cohort. The patients were grouped according to the treatment received (DMARDs, NSAIDs, steroid, herbs and biologicals).

RESULTS: The mean change in scores of patients subjected to HAQ DI was 0.54 in DMARD, 0.46 in NSAIDs, 0.50 in steroid drug treated and 0.63 in IL-1 inhibitor treated cohorts. The mean change in scores of patients subjected to DAS-28 was 0.54 in DMARD, 0.52 in NSAIDs, 0.79 in steroid drug treated and 1.39 in IL-1 inhibitor treated cohorts. The mean change in scores of patients subjected to EQ-5D3L was 0.37 in DMARD, 0.11 in NSAIDs, 0.35 in steroid drug treated and 0.16 in IL-1 inhibitor treated cohorts. The mean change in scores of patients subjected to EQ-5D3L was 0.26 in DMARD, 0.41 in NSAIDs; 0.39 in steroid drug treated and 0.72 in IL-1 inhibitor treated cohorts. The mean values varied significantly among all the groups. A significant cost effectiveness ratio was determined between IL-1 and DMARD and was found to be equal to 0.15.

CONCLUSIONS: IL-1 inhibitor therapy is the most cost effective for rheumatoid arthritis in western Indian population.

PMS20

PATIENTS REPORTED OUTCOMES IN PATIENTS WITH RHEUMATOID ARTHRITIS AND ANKYLOSING SPONDYLITIS TREATED WITH GOLIMUMAB: SUB-ANALYSIS OF ASIA POPULATION ENROLLED IN MULTICENTRE PHASE III CLINICAL TRIALS

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OBJECTIVES: Examine improvement in physical function, HRQL & work productivity in a subset of Asian patients from the golimumab (GLM) RA & AS trials.

METHODS: RA patients with inadequate response to MTX in GO-FORWARD (N = 444) & AS patients despite NSAID/DMARDs in GO-RAISE (N = 356) were randomized to SC GLM 50or100mg or placebo q4wks. At wk16, RA patients with <20% improvement in tender/swollen joint count or AS patients with <20% improvement in both total back pain & morning stiffness entered early escape (i.e., placebo received GLM 50mg & GLM 50 mg received GLM 100mg).Physical function was assessed using HAQ (0–3) or BASFI (0–10) in AS. HRQL was assessed using SF-36 PCS (0–100) & SF-36 MCS (0–100). Impact of disease on work productivity was assessed using a productivity VAS (0–10). Clinically meaningful improvement was defined as improvement of ≥0.25 point in HAQ, ≥2 points in BASFI or ≥5 points in SF-36 PCS & MCS.

RESULTS: At baseline, RA patients (N = 48) had a mean HAQ score of 1.35, & AS patients (N = 83) had a mean BASFI score of 3.25, PCS & MCS were 31.5 & 42.5, respectively, in RA, 33 & 36.1 in AS. productivity VAS was 6.2 in RA & AS. Compared to placebo–MTX-treated RA patients (N = 22), GLM–MTX-treated patients (N = 26) had greater mean improvement in HAQ (0.54 v. -0.01, p < 0.05), PCS (7.9 vs -1.0, p < 0.05) & work productivity (2.4 v. -0.4, p < 0.05), the change in MCS was statistically insignificantly different (3.0 v. 2.1, p = 0.5). Compared to placebo-treated AS patients (N = 17), GLM–treated patients (N = 66) had greater mean improvements in BASFI (1.51 v. 0.28, p < 0.05), MCS (5.3 v. -1.1, p < 0.05) & work productivity (-2.9 v. -0.9, p < 0.05); change in PCS was not statistically significant (9.0 v. 7.5, p = 0.05). Greater improvements of RA patients vs. AS patients were observed in clinically meaningful improvement in HAQ (73.1% vs 30%, p < 0.01), PCS (61.5% vs 25%, p < 0.01) & MCS (50% vs 35%, p = 0.31); in AS, similar trends in clinically meaningful improvement in BASFI, PCS & MCS were observed between groups. Improvements in HAQ, BASFI, SF-36 & work productivity in GLM-treated patients were sustained over wk52 and 104, & were consistent across populations (Asia vs non-Asia).

CONCLUSIONS: Patients from Asia with RA or AS treated with GLM demonstrated improved physical function & HRQL.