etanercept. For the combined ACR & PASI scores, the NNT ranges were 2.3 to 7.0 for infliximab and 2.9 to 33.3 for etanercept. Using average wholesale price minus 15% (AWP = 15%), the cost per successful outcome based on the ACR score ranged from $54,235 to $82,435 for infliximab and from $43,000 to $198,860 for etanercept. For PASI scores, the cost per successful outcome ranged from $30,900 to $53,390 for infliximab and from $54,860 to $530,280 for etanercept. For the combined ACR & PASI scores, the cost per successful outcome ranged from $46,280 to $144,220 for infliximab and from $46,790 to $530,280 for etanercept. CONCLUSIONS: This Excel based CE model enables payers to perform CE analyses for anti-TNF agents used in the treatment of psoriatic arthritis, utilizing plan-specific cost and utilization data.

A PROSPECTIVE STUDY COMPARING DRUG UTILIZATION PATTERNS AND COST OF TREATMENT OF PATIENTS FOR RHEUMATOID ARTHRITIS IN KERALA, INDIA

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OBJECTIVES: This prospective, observational, study evaluated the drug utilization patterns and cost of treatment of patients treated for rheumatoid arthritis at a government institution versus a private institution in Kerala, India. METHODS: Patients with a diagnosis of rheumatoid arthritis were enrolled into the study and were followed for a period of six months. Data regarding demographics, clinical outcome, laboratory results, drug utilizations, and cost was collected. The cost of drug therapy for each patient was calculated utilizing the Current Index of Medical Specialties 2004. Nominal data was analyzed using Chi square and Fisher’s exact test and logistic regression univariate analysis was conducted to determine the association between disease improvement and treatment factors. RESULTS: One hundred thirty-one patients were enrolled in the study, 96 at the government institution and 35 at the private institution. The mean age was 42.61 and 80% of the patients were female. The most frequently utilized DMARD was methotrexate, 66% for the government institution and 80% for the private institution. The most common DMARD combination therapy was methotrexate plus hydroxychloroquine (62.96%). Compliance was 68.75% in the government patients versus 94.28% in the private patients (P = 0.003). Logistic regression results indicated that increased WBC (p = 0.032), ESR (p = 0.003), and COX-2 usage (p = 0.039) was associated with poorer clinical outcome, while methotrexate use (p = 0.029) and physiotherapy (p = 0.041) was associated with improved outcome. The clinical outcome was not significantly associated with the site of care. The average cost of care was Rs. 420.13 per month at the government institution versus Rs. 713.14 per month at the private institution, and 16.1% of the total noncompliance was due to financial constraints. CONCLUSION: The treatment of rheumatoid arthritis is best managed with a protocol that includes methotrexate. While financial constraints affect the compliance rate, the site of care did not have any impact on clinical outcome.

ARTHRITIS—Health Care Use and Policy Studies

WITHDRAWAL OF COX-2 INHIBITOR ROFECOXIB AND VALDECOXIB: IMPACT ON NSAID AND PPI PRESCRIPTIONS AND EXPENDITURES

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OBJECTIVES: Cyclo-oxygenase (COX)-2 inhibitor rofecoxib and valdecoxib were withdrawn from the market because of their association with heart problems. There is a lack of information on the impacts of COX-2 withdrawal on the utilization of related drug classes. The objective is to evaluate to what extent prescriptions and expenditures of non-selective non-steroidal anti-inflammatory drugs (NSAIDs) and proton pump inhibitors (PPIs) changed after the removal of two COX-2 drugs. METHODS: Prescription records from January 1, 2004 through November 30, 2005 were obtained from pharmacy claims database in a pharmacy benefit management (PBM) organization. Clients continuously enrolled in the PBM but not enrolled in COX-2, PPI, or Prilosec OTC Step Care programs during the study period were included. Number of prescriptions per thousand eligible members per month, per member per month (PMPM) total costs for non-selective NSAIDs and PPIs were calculated and compared between the pre withdrawal (January 1, 2004 through September 30, 2004) and the post withdrawal (May 1, 2005 through November 30, 2005). RESULTS: This study included 536,569 patients. After the withdrawal of the two COX-2 inhibitors, the average non-selective NSAID prescriptions per thousand eligible members per month and PMPM total costs increased by 37.72% (from 13.94 to 19.20) and 75.56% (from $0.52 to $0.91). PPI prescriptions and PMPM total costs increased by 7.21% (from 25.73 to 27.58) and 12.32% (from $4.38 to $4.92). In contrast, the average prescriptions and PMPM total costs for COX-2 inhibitors dropped by 70.99% (from 16.52 to 4.79) and 66.16% (from $2.07 to $0.70). CONCLUSIONS: After the withdrawal of COX-2 inhibitor rofecoxib and valdecoxib, there has been a large increase in non-selective NSAID prescriptions and only slight increase of PPIs. Given the safety concerns with the NSAIDs, further studies are warranted regarding the health outcomes associated with the increased use of non-selective NSAIDs.

ARTHRITIS—Methods and Concepts

PRELIMINARY INVESTIGATION OF THE DISCRIMINATORY CAPACITY OF MEASURES OF LOW INTENSITY SYMPTOM STATE-ATTAINMENT USING THE WOMAC PAIN SUBSCALE SCORE IN PATIENTS TREATED WITH HYLAN G-F 20 FOR KNEE OSTEOARTHRITIS

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OBJECTIVES: Different pain thresholds were investigated, using the WOMAC Pain Scale (WOMAC-P) to determine if they could differentiate between treatment groups (hylan G-F 20 vs appropriate care) at low and very low levels of state-attainment in patients with knee osteoarthritis. A method, termed the BLISS (Bellamy et al Low Intensity Symptom State-attainment) Index, for analyzing Osteoarthritis (OA) knee clinical trials data, was proposed. METHODS: Five analyses were performed: time to first BLISS day, BLISS days over 12 months, patients with a BLISS response at month 12, patients with a BLISS response at any time, and number of BLISS periods over 12 months. For each analysis, five levels of WOMAC-P were examined: ≤5 Normalized Units (NU), ≤10, ≤15, ≤20 and ≤25 (higher = more pain). RESULTS: More patients in the hylan G-F 20 group achieved BLISS states in all five analyses. These differences were statistically significant for all pain threshold levels except ≤5 NU. CON-