and steroid treatment, ESR &/or CRP; current non-RA drugs, and co-morbidities. R2 values ranged from 0.27 (no inflammatory marker) to 0.331 (with CRP), while mean R2 for all cases was 0.33 (0.27). Step 3 and/or total Costs were assessed in 8,423 GPRD cases with similar gender balance (69.8% female) but older mean 64 years. Predicted HAQ (pHAQ) scores ranged from 0.45 to 3.00, with a mean of 1.78 (0.31). Mean annual cost of care in this population was $2792 (SE633), with 46% from hospital admissions, 24% prescriptions, 20% GP consultations, 5% outpatient attendances, and 11% investigations. Step 3 and/or total costs (pCOST) were optimally predicted from EXP(-5.613 + (Age*0.005) + (pHAQ*1.185) + (Age*pHAQ*0.001)). pCOST has an exponential correlation to pHAQ (R2 = 0.986, EXP(pCOST) = 1.888). CONCLUSIONS: Adjusted pre-
dicted total health care costs for RA patients increased exponentially across the range of estimated disability. Although higher than published estimates, exclusion of support-service costs suggests these values may be conservative.

**PM2**

REAL LIFE TREATMENT COST OF RHEUMATOID ARTHRITIS, PSORIASIS, CROHN’S DISEASE AND ULCERATIVE COLITIS IN THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM

**OBJECTIVES:** To estimate incremental health care expenditures related to changes in disease activity levels, patients at moderate and high disease activity levels experienced incremental increases in THCE of $3051 (95% CI: $1274, $4828) and $6221 (95% CI: $317, $925) increase in THCE. Data for the sub-
population was obtained from the CORRONA database in 2009. All information of patient demographic characters, clinical and costs were collected for the analysis. We used generalized estimating equations to examine potential predictors of the costs. RESULTS: Total of 349 RA patients (mean age = 58.9 years; 67% female), The mean length-of-stay was 19.0 days for RA patients with basic medical insurance for urban residents and 15.5 days for those with basic medical insurance for urban residents (P < 0.001). Patients from tertiary hospitals had 97.8% higher costs than those from primary hospitals, (P < 0.001) and patients from municipalities had 46.0% higher costs than those from prefecture-level cities. (P < 0.01). CONCLUSIONS: Patients with RA is associated with high cost. Costs are more driven predominantly by the cost of drugs, primarily biologic agents, and sociodemographic characteristics such as age and mortality all over the world and it is estimated that every day around 500,000 people die from road accidents and the data was received from 107 patients. Of these, 83% were adults.

**PM3**

MAPPING HEALTH CARE COSTS TO CLINICAL DISEASE ACTIVITY WHERE COST PREDICTION HAS THE HIGHEST VALUE

**RESULTS:** A total of 86% of RA patients were identified using ICD10 codes and observed between June 2009 and August 2011. Treatment costs included hospitalization, drug, lab, equipment, procedure, and other costs. RA patients spent $14,184 (mean: 4256.9; median: 3681.7, IQR: 1973.7-5295.3). The multiple linear regressions showed that the hospital cost of Patients with basic medical insurance for urban employees had 39.6% higher costs than those with basic medical insurance for urban residents (P < 0.001). Patients from tertiary hospitals had 97.8% higher costs than those from primary hospitals, (P < 0.001) and patients from municipalities had 46.0% higher costs than those from prefecture-level cities. (P < 0.01). CONCLUSIONS: Patients with RA is associated with high cost. Costs are more driven predominantly by the cost of drugs, primarily biologic agents, and sociodemographic characteristics such as age and mortality all over the world and it is estimated that every day around 500,000 people die from road accidents and the data was received from 107 patients. Of these, 83% were adults.

**PM4**

ADALIMUMAB AND INFLIXIMAB: A RETROSPECTIVE CLAIMS DATABASE ANALYSIS OF CANADIAN PATIENTS USING TNF INHIBITORS FOR RHEUMATOID ARTHRITIS

**OBJECTIVES:** To estimate the annual cost of etanercept, adalimumab and infliximab per treated RA patient using US managed care drug utilization data. METHODS: Adult patients who used tumor necrosis factor inhibitors (TNF-inhibitors), specifically etanercept, adalimumab, or infliximab, were identified in the MarketScan Commercial database between January 1, 2005 and June 30, 2009 and were followed for 1 year (study end date was June 30, 2010). The index event was the first use of TNF-inhibitors following a diagnosis for RA. Patients were classified as either initiating or continuing TNF-inhibitor treatment based on their utilization during the 6 months prior to index (pre-index period). Patients with other condi-
tions treated with TNF-inhibitors were excluded. Mean monthly dose was com-
pared for patients on therapy, September 2011 wholesale acquisition costs were applied to mean monthly dose and 2011 Medicare Physician Fee Schedule was applied to related drug administrations. Costs from re-indexing TNF-inhibitor therapy after discontinuation and costs from switching to a different TNF-inhibitor were attributed to patients’ index TNF-inhibitor therapy. RESULTS: In total, 13,850 patients met the study criteria (7,035 etanercept, 3,892 adalimumab, 2,923 infliximab). Patients were initiated on TNF-inhibitors across treatment groups (mean age = 50.5, SD = 10, 76% female). The mean annual TNF-
inhibitor cost per treated RA patient was $14,892 for etanercept, $18,381 for adali-
umab, and $23,265 for infliximab. For initiators, mean annual TNF-inhibitor cost per treatment was $14,949 for etanercept, $18,491 for adalimumab, and $23,265 for infliximab. Among patients continuing therapy, mean annual costs were $15,423 for etanercept, $19,845 for adalimumab, and $25,232 for infliximab. CONCLUSIONS: Etanercept had the lowest mean annual TNF-inhibitor cost per RA patient when using actual drug utilization from a US managed care population. The mean annual TNF-inhibitor costs per treated RA patient on adal-
umab and infliximab were approximately 23% and 56% higher than etanercept, respectively.

**PM5**

COST AND PATTERN OF MOTORCYCLE ACCIDENTS AT A TERTIARY CARE HOSPITAL IN SINDH

**OBJECTIVES:** Road Traffic Injuries are considered as one of the leading causes of mortality and morbidity all over the world. Every year, around 1.2 million people are killed in traffic injuries. Injuries caused by motorcycle accidents constitute a major preventable burden in developing countries and contribute sig-
ificantly to the overall traffic injuries. The consequences include acute medical, long-term, physical, short-term work loss, long-term work loss, and loss of quality of life. This study aims to determine the direct cost for treatment incurred due to Motorcycle incidents at a public tertiary care hospital. METHODS: This was a cross-
sectional observational study. The data was reviewed from March to June 2009 during August 2009. All motorcycle accident victims presented to emergency de-
partment were included in the study. Demographic, Injury related and cost data was collected from victims or their attendants by using structured pre-tested ques-
tionnaire by experienced data collectors over phone. Chi-square test was used to find statistical significance at 95% confidence level. RESULTS: In total 151 pa-
ients were presented at emergency department during the period from motorcy-
CLE accidents and the data was received from 107 patients. Of these, 83% were adult.

**PM6**

THEIR PATIENT COSTS AND THEIR PREDICTORS IN PATIENTS WITH RHEUMATOID ARTHRITIS IN CHINA

**Yang L1, Zhang Y1, Dong F2, Xie X2**

1Peking University, Beijing, Beijing, China, 2Pfizer China, Beijing, Beijing, China, 3Medical Science Development & Operations, Pfizer China, Beijing, China

**OBJECTIVES:** Rheumatoid arthritis (RA) is associated with poor quality of life and higher healthcare costs. This study aimed to assess the direct medical costs of rheumatoid arthritis (RA) and to characterize predictors of these costs. METHODS: A total of 127 RA patients were recruited by simple random sampling from the China Basic Health Insurance database in 2009. All information of patient demographic characters, clinical, costs and clinical data were collected. The analysis used generalized estimating equations to examine potential predictors of the costs. RESULTS: A total of 127 RA patients (mean age = 58.9 years; 67% female), The mean length-of-stay was 19.0 days for RA patients with basic medical insurance for urban residents and 15.5 days for those with basic medical insurance for urban residents (P < 0.001). Patients from tertiary hospitals had 97.8% higher costs than those from primary hospitals, (P < 0.001) and patients from municipalities had 46.0% higher costs than those from prefecture-level cities. (P < 0.01). CONCLUSIONS: Patients with RA is associated with high cost. Costs are more driven predominantly by the cost of drugs, primarily biologic agents, and sociodemographic characteristics such as age and mortality all over the world and it is estimated that every day around 500,000 people die from road accidents and the data was received from 107 patients. Of these, 83% were adults.