Annual direct costs were calculated (by third-party payer perspective) for privately-insured (n = 4,764) and Medicare (n = 48,742; medical costs only) beneficiaries. Indirect costs were calculated for privately-insured employees with disability data (n = 11,484). Costs were reported in 2006 dollars. RESULTS: In Medicare, mean medical costs per non-RA/RA patient were $7,463 in excess of controls ($13,720 vs. $6,258; p < 0.01). The most expensive patients had fractures of the hip, multiple sites, and femur (excess costs of $25,120; $20,049; $19,213, respectively). Aggregate annual excess medical costs of these NVNH patients (n = 35,933) were $268 million versus $200.9 million for hip fracture patients (n = 7,997) (excludes patients with hip and NVNH on index date). In the privately-insured population, excess mean direct costs per NVNH fracture patient were $5,381 ($11,090 vs. $5,709; p < 0.01). The most expensive patients had fractures of the hip, multiple sites, and pelvis (excess costs of $15,801; $9,642; and $8,164, respectively). Aggregate annual excess direct costs of these NVNH patients (n = 4478) were $24.1 million versus $3.5 million for hip fracture patients (n = 255). Mean excess indirect costs per NV employee were $1936 ($4,349 vs. $2193; p < 0.01). CONCLUSIONS: Excess direct and indirect costs of NV osteoporotic fracture patients to payers are substantial. While hip fracture patients are more costly per patient, NVNH fracture patients are associated with a larger percentage of fractures and aggregate excess costs for both these privately-insured and Medicare samples.

GOLIMUBAB SIGNIFICANTLY REDUCES TIME LOST FROM WORK FOR PATIENTS WITH RHEUMATOID ARTHRITIS: POOLED DATA FROM THREE PHASE 3 STUDIES


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OBJECTIVES: To evaluate the effect of golimubab (GLM) on time lost from work in patients with rheumatoid arthritis (RA). METHODS: The effect of GLM on time lost from work (days) was prospectively evaluated in 3 multicenter, randomized, double-blind, placebo-controlled studies in patients with RA. Pooled data from patients receiving any injection of study agent (GLM or placebo) with or without methotrexate (MTX) in 3 RA studies (GO-BEFORE, GO-FORWARD, and GO-AFTER) were included. GLM SC injections of 50 or 100 mg were administered q4 weeks. Time lost from work for patients was collected through a questionnaire at baseline and q8 weeks through week 24 and was summarized cumulatively through week 52. Comparisons between groups using baseline mean values were performed. The proportion of patients reporting no time lost from work in the GLM (+) MTX group was compared with the PBO (+) MTX group using the chi square test.

RESULTS: Through week 24, significant differences in time lost from work were observed between the GLM (+) MTX group and the PBO (+) MTX group. At week 24, the PBO (+) MTX group lost 6.9 ± 19.7 days compared with 5.0 ± 19.4 days for the combined GLM (+) MTX group. At week 24, the 75th percentile for the combined GLM (+) MTX group was 1,000 day (range 0-180) compared with 3,000 days (range 0-120) for the PBO (+) MTX group. A significantly higher proportion of patients in the combined GLM (+) MTX group reported no time lost from work compared with the PBO (+) MTX group (73.1% vs. 60.7%; p < 0.002). CONCLUSIONS: GLM (+) MTX significantly reduced time lost from work for patients with RA compared with PBO (+) MTX.

THE ECONOMIC CONSEQUENCES OF RHEUMATOID ARTHRITIS: ANALYSIS OF THE MEDICAL EXPENDITURE PANEL SURVEY (MEPS) 2005 AND 2006 DATA

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OBJECTIVES: Previous research reported the prevalence and health care and productivity cost of rheumatoid arthritis (RA) using Medical Expenditure Panel Survey (MEPS) 2004 data; this study replicates the analyses using 2005 and 2006 data. METHODS: MEPS, a comprehensive survey of approximately 35,000 individuals in the US, was used to identify non-institutionalized US persons with RA. Multiple linear and semi-log regressions were applied to estimate total annual health care expenditure and income (yearly wages) associated with RA. Covariates in the expenditure equations included demographic, comorbidity, and overall health status. Semi-log regression and income renders the distribution of income symmetric. Covariates in the income equations included demographic, comorbidity, education, occupation, and health status. RESULTS: A total of 150 and 148 patients with RA were identified in 2005 and 2006 versus 136 in 2004; 75% (2005) and 80% (2006) were women versus 76% (2004), and 53% (2005) and 50% (2006) of RA patients were between the ages 41–64 years versus 56% in 2004. Linear regressions demonstrated that the incremental increase in health care cost associated with RA was $2902 (p < 0.0001) in 2005 and $1882 (p = 0.003) in 2006, versus $4422 (2004). Semi-log regression explaining wages in 2005 and 2006 had adjusted R² of 56% and 59%. RA significantly reduced wages by $2207 (0.9237 log estimate) annually (p < 0.0001) in 2005 and $1,559 (0.3038 log estimate; p = 0.05) in 2006; wages of RA patients in 2004 were reduced by $3526 (1.0388 log estimate). CONCLUSIONS: The economic impact of RA is substantial to both income loss and health care costs. Replication and validation of outcomes research is important to establish the precision of statistical associations as well as changes across time. Further study will explore whether changes in the care of patients with RA affect changes in outcomes over time.

CONCLUSIONS AND CLINICAL CHARACTERISTICS OF PATIENTS WITH FIBROMyalgia

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OBJECTIVES: Fibromyalgia syndrome (FMS) is a chronic disorder defined by widespread musculo-skeletal pain that is often associated with a number of comorbidities including fatigue, sleep disturbance, stiffness and functional limitation. In absence of a specific diagnostic test, FMS is typically difficult to identify, and there is limited knowledge about the economic burden of FMS. The objectives of this study were to estimate prevalence of comorbidities, health care resources utilization and cost associations with FMS. METHODS: A retrospective cohort study was conducted using data from the Quebec provincial health plan (RAMQ) for a random sample of patients with two or more recorded diagnoses of FMS and a control cohort without FMS, matched for age and gender, for a period spanning from June 2006 to July 2007. Participants were patients who were diagnosed with comorbidities in both the FMS and a chronic disease and indicated the economic burden associated with FMS is substantial.

HIGHER OUT-OF-POCKET PHARMACY EXPENSE IS ASSOCIATED WITH HIGHER SWITCHING RATES AMONG ANTI-TUMOR NECROSIS FACTOR IN PATIENTS WITH RHEUMATOID ARTHRITIS

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OBJECTIVES: To evaluate the relationship between out-of-pocket (OOP) pharmacy expenses and switching rates among anti-tumor necrosis factor (anti-TNF) agents in patients with rheumatoid arthritis (RA). METHODS: This retrospective study utilized claims for RA patients from the PharMetrics Patient Centric database. The index biologic date was defined as the first anti-TNF claim between January 1, 2000 and December 31, 2006. A minimum of 30 months of continuous plan eligibility was required, 6 months prior to and 24 months following the index biologic date. Patients were followed for 24 months after the index biologic date. Switching among anti-TNFs (infliximab, etanercept, or adalimumab) was recorded. The pharmacy OOP expense was defined as the allowed amount minus cash paid. The annual OOP of Switchers was used as a cut point to define the high and low OOP groups. Results for a total of 3,086 patients were analyzed (74.5% female; mean age = 49.9 years). Half (557, 51.7%) had an annual pharmacy OOP >$500. The mean and median annual OOP expenses for the study population were $929 and $328, respectively. During the study period, 463 (15.1%) patients switched to a different anti-TNF agent. Compared to the low OOP expense group, patients in the high OOP group had a higher switching rate (18.0% versus 12.0%, p < 0.0001), and shorter time to switch (329 days versus 352 days, p = 0.236). In the logistic regression, after controlling for age, gender, co-morbidity, and disease staging, patients in the high OOP group had significantly higher switching rate (odds ratio 1.60, 95% confidence interval 1.30–1.96). CONCLUSIONS: Higher OOP expenses were associated with higher rates of switching among the anti-TNF agents in the RA patient population. Decision makers may consider such findings in the benefit design of this therapeutic class.

BURDEN OF ILLNESS OF CONSERVATIVE MEDICAL MANAGEMENT OF OSTEOPOROTIC VERTEBRAL COMPRESSION FRACTURES IN JAPAN

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OBJECTIVES: The purpose of this study was to estimate the expected medical cost of a single conservative medical management (CMM) per patient with osteoporotic vertebral compression fracture (VCF) in Japan. METHODS: A questionnaire survey was conducted for Japanese orthopedic surgeons who mainly provide CMM for patients with VCF during their daily clinical practices, and who was consenting to participate in the survey. Responses to the questionnaire were summarized and the expected medical costs for each therapeutic regimen until recovery per patient