valdecoxib), valdecoxib had a lower cost (€0.26) per treatment day (95% CI: €-3.23, €2.72). The cost difference associated with GI-SAEs per treatment day was lower for valdecoxib: €1.57 (95% CI: €3.90, €0.75).

CONCLUSIONS: Valdecoxib relative to diclofenac has significantly lower hospitalization costs per patient, and the total costs for the two treatments are not significantly different, indicating that the superior safety benefits with valdecoxib might be achieved without an increase in total treatment costs.

**PAR6**

**ACUTE GOUTY ARTHRITIS: THE COST-EFFECTIVENESS OF A NEW SELECTIVE COX-2 INHIBITOR (ETORICOXIB) IN THE UK**

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**OBJECTIVES:** To evaluate the cost-effectiveness of etoricoxib, a new selective Cox-2 inhibitor, in the treatment of acute gouty arthritis compared with indomethacin in the United Kingdom. METHODS: Using a recent clinical trial comparing etoricoxib with indomethacin in the treatment of acute gouty arthritis, a Markov model was built based on four 8-day treatment cycles spread over four years. In the trial, etoricoxib and indomethacin demonstrated equivalent efficacy but adverse event (AE) and treatment discontinuation rates favored etoricoxib. In calculating the total cost for each type of AE, its frequency in the trial was taken into account. The medical treatment of AEs and the average predicted probability of seeking treatment were obtained from expert opinion and used for the base case analysis. In the model, all patients suffering an AE or discontinuing treatment selected a different treatment for their next gout attack. The model further assumed a general practitioner would treat all patients and that an AE could necessitate one additional GP visit. RESULTS: After one cycle of treatment the incremental cost per patient successfully treated with etoricoxib (no AE or discontinuation), including drug therapy costs, was £15.43, decreasing to £6.27 over 4 cycles of treatment. CONCLUSION: In this study, etoricoxib was a cost-effective alternative to indomethacin for treatment of acute gouty arthritis based on the modelling calculations using published clinical trial data and conservative assumptions regarding the treatment of AEs.

**PAR7**

**PHARMACOECONOMICS OF COX-2-SELECTIVE INHIBITORS VERSUS NON-SELECTIVE NSAIDS AND CONCOMITANT COUMARIN USE: ECONOMIC EVALUATION LINKED TO A CASE-CONTROL STUDY**

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**OBJECTIVE:** To determine the incremental cost-effectiveness of COX-2-selective versus non-selective non-steroidal anti-inflammatory drugs (NSAIDs) in relation to bleeding in a cohort of coumarin users. METHODS: A pharmacoeconomic evaluation was linked to a case-control design within an observational study in concomitant NSAID and coumarin users (with versus without bleeding). Medical costs associated with bleeding as well as costs associated with NSAID-use were determined, according to the Dutch guideline prices and Health care tariffs. Rofecoxib, meloxicam, and naproxfen were considered to be COX-2-selective. Total costs were calculated and compared for two hypothetical scenarios in which patients would use either COX-2-selective NSAIDs or non-selective NSAIDs. Sensitivity analyses were performed varying both the Odds Ratio (OR) and costs of NSAIDs and bleedings. RESULTS: A total of 1491 bleeding complications were detected among 4400 coumarin users. Of the bleeders, 14.8% (n = 221) used a non-selective (96.1%) or COX-2-selective (3.9%) NSAID. The OR for bleeding was 3.07 (95% CI 1.18–8.03) for non-selective versus COX-2-selective NSAIDs. The mean cost of a bleeding was €478. Factoring in the excess costs of COX-2-selective over non-selective NSAID-use resulted in net savings of €53,786. In the sensitivity analysis, cost savings remained, except for situations with the OR in the lower range of the confidence interval (1.18–1.26). CONCLUSIONS: In coumarin users, the reduction of bleeding complications by the more expensive COX-2-selective inhibitors (compared with non-selective NSAIDs) is also associated with medical cost savings.

**PAR8**

**AVERAGE DAILY DOSE AND COSTS OF REIMBURSED COX-2 INHIBITORS FOR PATIENTS WITH RHEUMATOID ARTHRITIS IN NORWAY**

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**OBJECTIVES:** To assess the average prescribed daily dose and cost of the two reimbursed coxibs, rofecoxib and celecoxib, in Norway. Given the drugs’ different price structures, prescribed number of tablets and strength impact the daily treatment cost differentially. As a prerequisite for continued general reimbursement for rofecoxib and celecoxib from July 1, 2003, the Norwegian Ministry of Health required post-marketing data regarding prescription patterns in clinical practice to further evaluate the drugs’ relative cost effectiveness. The Ministry’s re-evaluation will be based on this and other studies. METHODS: All accessible physicians within the field of rheumatology (specialists) in Norway were invited to prospectively register their prescriptions of reimbursed coxibs for patients with Rheumatoid Arthritis (RA) and/or Osteoarthritis (OA), over a period of 2 months (October to December 2002). Data from registration forms and patient records were collected through per-
OBJECTIVE: Variability in dosing of biologic agents among patients with rheumatoid arthritis (RA), and associated economic impact, is of great interest to payers and providers. We examined dosing patterns for patients with RA who were newly treated with infliximab or etanercept as well as corresponding 1-year costs of care.

METHODS: Integrated pharmacy and medical claims data were obtained from 61 U.S. health plans. Patients with a diagnosis of RA who were newly treated with infliximab or etanercept from July 1999 to June 2002 with a diagnosis of RA who were newly treated with infliximab or etanercept from July 1999 to June 2002 were selected. Among infliximab patients, a maintenance number of vials was determined after the “loading period” (2–3 infusions); those with ≥ 2 occurrences of an increase in number of vials was determined after the “loading period” (2–3 infusions); those with ≥ 2 occurrences of an increase in dose at one year, compared to 18% of patients new to etanercept. Infliximab patients who experienced a dose increase had significantly higher average RA-related costs than those with no increase ($20,915 vs. $16,713; p < 0.0001). Costs among etanercept patients did not substantially differ based on dose escalation ($14,482 vs. $13,866 respectively). CONCLUSIONS: Patients new to infliximab had much higher rates of dose escalation relative to etanercept recipients. These dose increases resulted in significantly higher medical costs at one year.

ARTHRITIS—Quality of Life Studies

PAR 10

CROSS-CULTURAL ADAPTATION AND VALIDATION OF KOREAN VERSION OF EQ-5D IN PATIENTS WITH RHEUMATIC DISEASES

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OBJECTIVE: This study aims at translating and adapting the EQ-5D cross-culturally into Korean (KEQ-5D), and evaluating its reliability and validity among patients with various rheumatic diseases. METHODS: The EQ-5D was translated into Korean by 2 translators and back into English by another 2 translators. Then lay assessment was done according to the EuroQol Group’s translation guidelines. Based on the repeated measure data of 65 patients with rheumatoid arthritis (RA), we examined test-retest reliability by intra-class correlation (ICC), and responsiveness by effect size and t-statistic. To evaluate validity, we recruited 100 patients with RA, 103 with osteoarthritis (OA), 111 with systemic lupus erythematosus (SLE), 104 with fibromyalgia syndrome (FMS), and 90 with ankylosing spondylitis (AS). For concurrent validity, we explored correlation between the KEQ-5D and KEQ-VAS (visual analog scale), KSF-36 global, utility measures such as time-trade off (TTO) and standard gamble (SGM), and disease-specific measures, including KHAQ and for RA, KWOMAC for OA, SLEDAI and SLICC for SLE, KFIQ for FMS, and KRAFI for AS. RESULTS: Test-retest reliability measured by ICC was 0.635. The effect size was 0.683. Correlations with KEQ-VAS and SF-36 global were significant, however those with TTO and SGM were not. Correlations with disease-specific measures were all significant except for SLEAI and SLICC in SLE, ranging from −0.477 to −0.603. Correlations between physical domains of KEQ-5D and KSF-36P were higher those with KSF-36M, on the contrary, correlation between anxiety/depression and KSF-36M was higher than that with KSF-36P in both overall and disease-specific analysis. CONCLUSION: These findings indicated that KEQ-5D had stability and responsiveness, and moreover, criterion and construct validity were satisfactory. We concluded that KEQ-5D could be applied to Korean patients with various rheumatic diseases.

PAR 11

IMPLEMENTATION STUDY OF A HEALTH EDUCATION AND EXERCISE PROGRAM FOR OSTEOARTHRITIS OF THE KNEE

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