

## Abstracts

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group, there were nine lives saved compared with the NSAID group with 18 life-years gained for each death avoided. The total cost/life saved with Celecoxib was 25,458,588 pesetas (US \$131,909) with a cost/life-year gained of 1,414,366 pesetas (US \$7,328) when compared with the use of NSAIDs.

**CONCLUSIONS:** The use of Celecoxib instead of NSAIDs to treat osteoarthritis will produce a lower incidence of severe G-I complications, thus avoiding deaths. The cost per life-year gained when using Celecoxib is a reasonable amount, easily covered by the Spanish NHS.

**PA07**

### **AN ECONOMIC EVALUATION OF THE COST OF EDEMA AND SYSTOLIC BLOOD PRESSURE DESTABILIZATION IN COX-2-TREATED PATIENTS WITH OSTEOARTHRITIS AND HYPERTENSION**

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**OBJECTIVES:** To perform an economic evaluation on the short-term costs of managing edema and hypertension in COX-2-inhibitor-treated patients with osteoarthritis (OA) and hypertension (HTN).

**METHODS:** Two randomized clinical trials (RCT) in OA/HTN patients showed a significantly higher incidence of systolic blood pressure (SBP) destabilization (8.7% to 15.6%; RR = 0.61,  $p < .001$ ), edema (4.8% to 8.5%, RR = 0.67,  $p = 0.04$ ), and both SBP/edema (0.6% to 2.2%; RR = 0.28,  $p = 0.003$ ) for rofecoxib 25 mg/day ( $n = 942$ ) compared to celecoxib 200 mg/day ( $n = 960$ ). The RCT results were projected onto a typical US managed-care organization (MCO) population using: (1) the age distribution from a large MCO; (2) age- and gender-specific prevalence of OA and HTN from US government data; (3) age-specific incidence of cardiorenal events from pooled RCT data, and (4) prevalence of COX-2 inhibitor use in a large insurer. We determined resource utilization and treatment patterns from the published literature and an expert physician panel. Costs were obtained from standardized databases and published literature.

**RESULTS:** For a population of 1,000,000 MCO members, 8% of members ( $n = 79,903$ ) are projected to have OA and HTN, while 2.2% of members ( $n = 21,594$ ) have OA/HTN and use a COX-2 inhibitor. From the analysis, the number of additional events predicted to occur with rofecoxib (relative to celecoxib) are: SBP destabilization ( $n = 1144$ ); edema-alone ( $n = 453$ ); edema and SBP destabilization ( $n = 345$ ). The total cost savings of treatment with celecoxib would be \$474,007. Translated into other parameters, the cost savings from the celecoxib usage would be \$1.83 in per patient per month costs, and \$0.24 in the daily cost of COX-2 inhibitor use for an average patient.

**CONCLUSION:** The short-term management of SBP de-

stabilization and edema adds to the cost of rofecoxib treatment, relative to celecoxib. Clinicians and payers should not ignore the clinical effects and economic impact of arthritis medications on blood pressure and edema.

**PA08**

### **THE COST-EFFECTIVENESS OF INFLIXIMAB FOR SEVERE RHEUMATOID ARTHRITIS**

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RA is a chronic disease that affects 0.5 to 1% of the population. The economic impact of RA on individuals and society is enormous and the costs of RA rise steeply with disease severity. A therapy that reduces disease progression could be expected to lead to reductions in resource use as well as maintaining quality of life.

**OBJECTIVE:** To estimate the costs and consequences of adding infliximab to the care of patients with severe rheumatoid arthritis (RA) already being treated with methotrexate.

**METHODS:** Estimates of the impact of infliximab on disease progression were obtained from the ATTRACT trial in which 428 RA patients were randomly assigned to methotrexate or methotrexate plus infliximab. Since patients in the ATTRACT trial were followed for only 54 weeks, we developed a Markov model in order to estimate the long-term consequences of RA. The model was based on a cohort (ARAMIS) involving 4258 consecutively enrolled RA patients followed in nine centres in USA and Canada. Markov health states were based on the Health Assessment Questionnaire and on drug treatment. For the first year, costs were calculated using the resource utilization by UK patients in the ATTRACT trial and applying UK unit costs. Long-term costs were obtained from the Norfolk Arthritis Register (NOAR) cohort. Utilities were based on visual analogue scale assessments in ATTRACT (first year) and ARAMIS (long-term).

**RESULTS:** In the base-case analysis, the incremental cost per QALY of infliximab was £33,618. Assuming radiographic stabilization of joint disease for patients treated with infliximab after the first year of treatment (as suggested in the long-term data from the ATTRACT trial) the cost-effectiveness ratio falls to £5111 per QALY. Sensitivity analyses were performed to allow for uncertainty in some of the estimates.

**CONCLUSION:** Infliximab is likely to be a cost-effective treatment for patients suffering from severe RA.

**PA09**

### **DISABILITY, RESOURCE UTILISATION, AND WORK ABSENCES ASSOCIATED WITH OSTEOARTHRITIS (OA) AND RHEUMATOID ARTHRITIS (RA): AN INTERNATIONAL DATABASE ANALYSIS**

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