OBJECTIVE: To estimate aggregate burden imposed on the Australian community each year by the systemic rheumatic disease ankylosing spondylitis (AS). METHODS: The study used a bottom-up approach consisting of: a survey of 143 AS patients; estimation of the costs associated with each patient; estimation of the incidence and prevalence of AS in Australia; and integration of these data to estimate the total costs of AS in Australia each year. The patient survey collected information about respondents’ disease characteristics, quality of life, health care resource utilisation, and employment. Health Care costs accrued by patients were classified into six categories: medications; hospitalisations; specialist attendances; visits to other medical professionals and allied health care appointments; medical procedures and tests; and complementary Health Care appointments. Non-Health Care costs comprised lost productivity due to absence from paid and unpaid employment, assessed using the human capital and friction cost methods, and using the value of a quality-adjusted life year (QALY). RESULTS: It is estimated the number of patients in the Australian health care system with diagnosed AS is currently 6895. However, an additional 12,905 undiagnosed AS patients are predicted. The aggregate annual costs of AS in Australia in 2004 are estimated to be between AUS$109,432,035 and AUS$483,010,549, depending on methods used to assess indirect costs. Direct Health Care costs of AS are expected to be approximately A$34 million in 2004, accounting for 7%–31% of the total burden. CONCLUSIONS: Comparison of the aggregate costs of AS with other cost-of-illness studies reported in Australia shows that the health care costs of AS are lower than those for many other conditions. However, the majority of the total costs of AS is attributable to lost productivity highlighting the effect on a predominantly working-age population. The burden of AS in Australia is expected to increase in the next four years as population grows.

THE TOTAL COST OF TREATMENT AND THE COST-EFFECTIVENESS OF VALDECOXIB VS DICLOFENAC IN THE TREATMENT OF PATIENTS WITH OSTEOARTHRITIS (OA) OF THE HIP AND/OR KNEE

Objective: To evaluate the cost-effectiveness and the total cost differences between valdecoxib 10 or 20 mgqd and diclofenac 75 mg SR bid in the treatment of OA of the knee and/or hip. METHODS: Study 063, a double-blind, randomized, 12-month study, evaluated the efficacy of valdecoxib 10 mgqd (n = 259) and valdecoxib 20 mgqd (n = 261) versus diclofenac 75 mg SR bid (n = 262). Hospitalizations, unscheduled health care visits, concomitant medications and unscheduled diagnostic and medical procedures were prospectively collected during the trial. This economic evaluation was conducted from a UK National Health Service perspective, using published UK sources for cost. Cost per averted ulcer was used as a cost-effectiveness measure. RESULTS: Valdecoxib 10 and 20 mgqd had comparable efficacy to diclofenac 75 mg SR bid at all time points; none of the 95% confidence intervals (CIs) overlapped 15 mm VAS, the smallest difference determined to be clinically meaningful. The overall incidence of adverse events was significantly lower in both valdecoxib groups than in the diclofenac group. Both valdecoxib groups demonstrated a lower mean number of hospital days (valdecoxib 10: 0.44 days; valdecoxib 20: 0.53 days; diclofenac: 1.02 days) and a smaller percentage of patients hospitalized (valdecoxib 10: 7.3%; valdecoxib 20: 8.4%; diclofenac: 9.5%).
from persistent surveys on medical prescription, from the French cost per DRG database, and from various other data sources. Perspective was that of health insurance and prices were consequently based on reimbursement tariffs. RESULTS: From 1991 to 2002, the direct medical cost of osteoarthritis in France has raised by 156% (from 0.64 to 1.64 billion Euros), i.e 9% per year. The number of treated patients increased by 54% (from 3 million to 4.6 million), so that the cost per patient rose by 4.8% per year in average. Taking the GDP price index as deflator, the real average annual rates of growth per treated patient were 3.3%, 0.3%, 7.4% and 3.7% respectively for total expenses, doctors’ visits, pharmaceuticals and hospitalisations. Sick leave cost to health insurance rose by 2.5% per year and per patient in real terms. CONCLUSIONS: During the past eleven years, the cost of osteoarthritis has substantially raised in France. Half of the growth was attributable to the number of treated patients and to general inflation, the other half being due to changes in the treatment patterns, especially in pharmaceutical prescriptions. The emergence of new treatments such as COX-2 inhibitors may largely explain this tendency. Hospital costs also showed a marked growth, certainly due to the generalisation of hip or knee arthroplasty surgery procedures. In the future, it may be thought that the cost will continue to grow at a similar rate under the influence of both demographic factors and treatment innovations.

**Abstracts**

**ECONOMIC EVALUATION OF THERAPY WITH NSAID AND WITH COX-2 IN SUBJECTS AGED 66 YEARS OR MORE**

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**OBJECTIVE:** The aim of this study was to compare the economic consequences of the treatment of elderly patients with selective COX-2 inhibitors (Celecoxib and Rofecoxib) and non-selective NSAIDs. METHODS: A cost-effectiveness analysis compared costs and effects of Celecoxib versus NSAIDs, versus Diclofenac plus Misoprostol and versus Rofecoxib in the perspective of the Italian National Health Service (NHS). Effects were derived from the study of Mamdani and colleagues (BJN 2002; 325:624–627). Direct costs were measured (hospitalisation and pharmacological costs). Pharmacological costs were quantified according to the Italian market price of the drugs. Hospitalisation costs were quantified on the basis of DRG tariffs. Effects were expressed as reduction in hospitalisation for upper gastrointestinal haemorrhage. The mean duration of follow-up was 12 months. A sensitivity analysis was conducted on unit cost of drugs and hospitalisations. RESULTS: Clinical effects of treating an hypothetical cohort of 1000 patients for up to 12 months with Celecoxib would correspond to an extra cost of 29,256,98 € and of 39,120,09 € per bleeding avoided compared to NSAIDs and of 19,157,27 € and of 33,951,94 € per bleeding avoided compared to Diclofenac/Misoprostol. The therapy with Celecoxib dominates Rofecoxib as it is less costly and more effective. CONCLUSIONS: Treating subjects aged 66 years with Celecoxib is more effective but also more costly than with NSAIDs and with Diclofenac plus Misoprostol. On the contrary, treating elderly subjects with Celecoxib is not only more effective but also less costly than with Rofecoxib.

**FIBROMYALGIA COST OF CARE**

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**OBJECTIVE:** To evaluate the cost of treatment of FS in Italy and its determinants. METHODS: Multicenter retrospective cost of care study with patients enrolled from 28 Italian rheumatologic centers. Time: 12 months. Cost: we quantified direct costs attributable to FS management: drugs, hospitalisations, physicians’ visits, diagnostic tests, and other medical services (e.g. ionophoresis, mesotherapy, massage, thermal baths). Costs were estimated applying the National Health Service (NHS) tariffs expressed in Euro 2001. Perspective: NHS and patients perspective. RESULTS: We enrolled 402 patients with FS (mean age 48.4 ± 12.3 years old), 94.3% women. The mean annual cost per patient was euro €801 ± 1007.5; 33.7% attributable to hospitalisations, 17.45% to drugs and 17.7% to other pain coping strategies. Anti-inflammatory drugs were the mainly used drugs (72.1% of the patients used anti-inflammatory drugs). CONCLUSION: The cost of fibromyalgia treatment was estimated for the first time in Italy. The mean yearly cost is 880€ and it is principally caused by high use of symptomatic drugs and other pain coping strategies.