OBJECTIVE: To estimate aggregate burden imposed on the Australian community each year by the systemic rheumatic disorder 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 un- or misdiagnosed 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 AUS$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

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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%). The valdecoxib 10 mg group resulted in lower mean total costs than the diclofenac group with a treatment cost difference of—£129.20 (95% CI: −£448.80, £190.39). The corresponding difference between the valdecoxib 20 mg group and the diclofenac group was —£79.74 (95% CI: −£400.92, £241.44). Cost per averted ulcer showed valdecoxib as the dominant therapy with fewer ulcers and lower total medical costs. CONCLUSIONS: Valdecoxib 10 and 20 mgqd provided comparable efficacy with a more beneficial safety profile at a similar total medical cost compared to diclofenac 75 mg bid in treating OA.

QUANTIFYING DISEASE SEVERITY AS A DETERMINANT OF COSTS AND QUALITY OF LIFE IN PATIENTS WITH ANKYLOSING SPONDYLOYSIS IN AUSTRALIA

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OBJECTIVE: To evaluate the determinants of costs and quality of life for patients in Australia with the systemic rheumatic disorder ankylosing spondylitis (AS). METHODS: The study employed a survey of 143 AS patients in Australia to collect information about respondents’ disease history, quality of life, health care resource utilisation and employment. Patient-level estimation of total (direct and indirect) costs was performed. Two disease status instruments measured disease activity and level of disability: Bath Ankylosing Spondylitis Function Index (BASFI) and Bath Ankylosing Spondylitis Disease Activity Index (BASDAI). The burden of AS on quality of life was assessed using utility values derived by the Assessment of Quality of Life (AQoL) scale. RESULTS: The mean utility value across the surveyed population was 0.56. Utilities ranged from 0.02 to 1.00, with a median of 0.58 and a mode of 0.84. Mean BASFI and BASDAI scores were 4.1 and 4.8, respectively. The mean cost per patient over the 3 months prior to the survey was estimated to be between AUS$2188 and AUS$6870 depending on the method used to value indirect costs. Linear regression showed significant associations between utility values and BASFI and BASDAI scores. Log-linear regression of Health Care and indirect costs against respondents’ BASFI and BASDAI scores showed a significant association when each of these instruments is used to predict health care costs. Log-linear regression of total costs also showed that these increased with disease severity. CONCLUSIONS: BASFI and BASDAI scores compared with utility values show an intuitive relationship: as disease severity decreases, utility scores increase. Similarly, total costs are positively related to disease severity. This study showed the costs and quality of life effects of AS can be predicted by patients’ disease severity. Knowledge of the predictors of costs enable policies and/or health care interventions to be adopted that help to minimise these costs.


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OBJECTIVES: We performed a macro-economic assessment of the cost of osteoarthritis in 2002 and compared our results to those computed in 1991 in an earlier study using the same methodology. METHODS: The macro-economic cost assessment was based on prevalence data. Medical consumption items were described both in term of quantity and price. Data were collected