

health-care context was developed, based on the use of epidemiological and clinical data obtained from literature and local data on health-care resource utilisation and health-care unit costs. Only direct medical costs were analysed. The perspective of the health-care payers (sick funds and patients) and a time horizon of six months were taken. The target population was RA patients aged 55, with an average risk of 9-12 points using Fries calculator. Effectiveness was expressed in terms of the number of patients free of symptomatic ulcer. On this basis, saved lives and life years gained were calculated. The cost-effectiveness threshold, calculated on the basis of one-year haemodialysis treatment cost of 60000 PLN (1 USD = 4 PLN), was determined to assess whether celecoxib therapy should be adopted.

RESULTS: The cost-effectiveness analysis showed that celecoxib treatment of RA patients gives additional life years for extra costs. The cost per symptomatic ulcer or death averted for celecoxib, compared with diclofenac, were 20431 to 20676 and 600887 to 608887 PLN respectively. In the study population, 1 LYG costs 32300 PLN and is below the suggested threshold. One-way sensitivity analysis showed that results are sensitive to changes in price of celecoxib and the probability of NSAID-induced GI events. The threshold analysis suggests that celecoxib would be the dominant therapy if its cost or daily dose were to decrease by 60%.

CONCLUSION: The treatment with celecoxib vs. diclofenac 75 SR in RA may be cost-effective in Poland. Cost/LYG was below the suggested cost-effectiveness threshold, if avoidance of 1 death generates more than 10 LY.

PA05

COST ANALYSIS OF CELECOXIB AND CONVENTIONAL NSAIDS WITH OR WITHOUT GASTROPROTECTIVE AGENTS FOR TREATMENT OF OSTEOARTHRITIS AND RHEUMATOID ARTHRITIS

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OBJECTIVES: To analyze direct medical costs for management of nonsteroidal anti-inflammatory drug (NSAID) induced gastrointestinal adverse events, with or without gastroprotective agents, in patients with osteoarthritis or rheumatoid arthritis from the perspective of a public health organization in Hong Kong.

METHODS: A decision-tree was used to analyze, over six months, the resource utilization associated with five treatment alternatives: a cyclooxygenase-2 (COX-2) inhibitor (celecoxib); NSAID only; NSAID plus H₂-receptor antagonist (H₂RA); NSAID plus misoprostol, and NSAID plus proton-pump inhibitor (PPI). Each alternative could lead to five possible outcomes: no gastrointestinal (GI) toxicity; GI discomforts; symptomatic ulcer; anaemia with occult bleeding, and serious GI complications. The probabilities of GI adverse events were taken from the literature. Resource utilization for all outcomes,

except for anaemia with occult bleeding, was retrieved from the database of a major public hospital in Hong Kong. The resource utilization for anaemia with occult bleeding was gathered by expert interview. A one-way sensitivity analysis was performed to assess the relative impact of patients' underlying GI risk score, based on the modified version of the Fries risk calculator, on the expected value of each alternative.

RESULTS: The costs associated with the alternatives, per base case analysis, were as follows: NSAID plus H₂RA HK\$966 (1USD=7.8HKD); celecoxib HK\$1189; NSAID alone HK\$1293; NSAID plus misoprostol HK\$1523, and, NSAID plus PPI HK\$2327. One-way sensitivity analysis showed that the cost of NSAID plus H₂RA was the lowest in patients with a GI risk score below 15-16, and the cost of celecoxib therapy was the lowest when the GI risk score was greater than or equal to 15-16.

CONCLUSION: Based on the decision-tree analysis of the data obtained, NSAID plus H₂RA is the least costly regimen in patients with low GI risk score and celecoxib is the least costly alternative in patients with intermediate to high GI risk score in Hong Kong.

PA06

COST-EFFECTIVENESS ANALYSIS OF USING CELECOXIB IN THE TREATMENT OF OSTEOARTHRITIS

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OBJECTIVE: To ascertain the efficiency of Celecoxib versus non-steroidal anti-inflammatory drugs (NSAID) in treating osteoarthritis.

METHODS: The study was performed using a decision analytic model that represents the daily medical practice in our country by running two hypothetical cohorts of 10,000 patients either with Celecoxib or any NSAID. The simple decision tree of the model has two different branches: a) Celecoxib, and b) NSAID, divided into NSAID + gastroprotective agents and NSAID alone. Each branch may follow different clinical evolutions: no adverse reactions; appearance of gastro-intestinal (G-I) discomfort; symptomatic ulcers, and severe G-I complications followed by death. The probabilities for the development of these adverse events have been obtained from medical literature, national statistics (life expectancy) and a local expert panel. The effectiveness unit chosen was life-years gained after the use of both options. Only direct costs were included (medications, additional examinations and analytical tests, days of hospitalization, treatment of ulcers and G-I complications). The time horizon was six months and the perspective selected was the Spanish National Health Service (NHS).

RESULTS: The total cost of the cohort treated with Celecoxib was 570,456,110 pesetas (US \$2,955,731) while in the cohort treated with NSAIDs this amounted to 340,328,814 pesetas (US \$1,763,361). In the Celecoxib