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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INTRODUCTION

• To compare the cost-effectiveness and the total cost differences between valdecoxib 10 or 20 mg qd and diclofenac slow release (SR) 75 mg bid in patients with OA of the knee and/or hip. All patients were randomly assigned to receive either valdecoxib 10 or 20 mg qd or diclofenac SR 75 mg bid for 1 year.

OBJECTIVE

• Cyclooxygenase-2 (COX-2) specific inhibitors have similar efficacy profiles to nonselective nonsteroidal anti-inflammatory drugs (NSAIDs) for the relief of signs and symptoms of osteoarthritis (OA) and acute rheumatoid arthritis (RA). However, COX-2 specific inhibitors are associated with an increased risk of gastrointestinal (GI) adverse events compared with nonselective NSAIDs.1

METHODS

• In a 12-month, double-blind 2x2x5 trial, patients with OA of the knee and/or hip were randomly assigned to receive either valdecoxib 10 or 20 mg qd or diclofenac SR 75 mg bid and followed at baseline and 12 months. The perspective was the UK National Health Service (NHS) and Pfizer was used.

RESULTS

• Total costs per patient were compared between the valdecoxib 10 and 20 mg qd treatment groups and the diclofenac SR 75 mg bid treatment group over the 12-month treatment period.

• Concomitant care cost was calculated as the primary cost-effectiveness measure.

• Incremental cost-effectiveness ratios for the additional cost per non-GI serious adverse event were calculated for valdecoxib 10 mg qd compared with diclofenac SR 75 mg bid for the total care (mean total costs), for the probability that valdecoxib is more effective in most cases and costs less than diclofenac SR 75 mg bid for the total care (mean total costs), the smallest difference determined to be clinically meaningful.

• The overall incidence of adverse events was significantly lower in both valdecoxib treatment groups than in the diclofenac SR 75 mg bid treatment group. The overall incidence of adverse events was significantly lower in both valdecoxib treatment groups than in the diclofenac SR 75 mg bid treatment group. The overall incidence of adverse events was significantly lower in both valdecoxib treatment groups than in the diclofenac SR 75 mg bid treatment group. The overall incidence of adverse events was significantly lower in both valdecoxib treatment groups than in the diclofenac SR 75 mg bid treatment group.

• In the diclofenac treatment group, concomitant medication costs were the second largest cost component. The distribution of total costs per patient was compared between the valdecoxib 10 and 20 mg qd treatment groups and the diclofenac SR 75 mg bid treatment group over the 12-month treatment period.

• The cost-effectiveness plane shows the probability that valdecoxib 10 or 20 mg qd is cost-saving for avoiding all adverse outcomes of significance. An high percentage of the valdecoxib samples are found in the first 25% and second 75% quadrants, indicating that valdecoxib is more effective in most cases and costs less than diclofenac SR 75 mg bid for the total care (mean total costs).

CONCLUSIONS

• The improved safety profile of valdecoxib 10 and 20 mg qd results in lower costs for healthcare resource utilization compared with diclofenac SR 75 mg bid.

• Of the three different criteria evaluated, valdecoxib 10 mg qd was statistically superior to diclofenac SR 75 mg bid for the total care (mean total costs), the smallest difference determined to be clinically meaningful.

• The total costs per patient were compared between the valdecoxib 10 and 20 mg qd treatment groups and the diclofenac SR 75 mg bid treatment group over the 12-month treatment period.

• The cost-effectiveness plane shows the probability that valdecoxib 10 or 20 mg qd is cost-saving for avoiding all adverse outcomes of significance. An high percentage of the valdecoxib samples are found in the first 25% and second 75% quadrants, indicating that valdecoxib is more effective in most cases and costs less than diclofenac SR 75 mg bid for the total care (mean total costs).

REFERENCES