senting net savings of €1123 per patient. Using rhBMP-2 in all grades of tibia fracture resulted in an incremental cost of €134 per patient and a cost-effectiveness ratio of €3052/QALY. In France, using rhBMP-2 for grade III open tibia fractures, and all fractures resulted in cost savings of €2312, and €824 per patient, respectively. When analyzed from the NHS perspective in the UK, rhBMP-2 treatment for grade III open tibia fractures resulted in a cost-effectiveness ratio of €10,847 (GBP7445) per QALY and €32,151 (GBP22,066) per QALY for all types of fractures. CONCLUSIONS: From a payer’s perspective, rhBMP-2 is a cost-saving treatment option in grade III open tibia fractures for the German and French health care systems and cost-effective for all grades of open tibia fractures in Germany, UK, and France.

AN ECONOMIC EVALUATION OF ZOLEDRONIC ACID TREATMENT IN PAGET’S DISEASE OF BONE IN THE HUNGARIAN HEALTH CARE SETTING

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Cost-effectiveness model was adopted to the Hungarian health care settings in order to evaluate the costs, effectiveness and cost-effectiveness of two years comparison of zoledronic acid therapy (5 mg infusion over 15 minutes given once) with risedronate therapy (30 mg/day orally given for 2 months), alendronate therapy (40 mg/day orally given for 6 months), tiludronate therapy (180 mg I.V. in 6 weeks) in patients with Paget’s disease of bone. The long term outcome was evaluated by the cost per time in response over two years period. The measure of effect the time patients are in response was based on SAP measurement. Data sources were randomized clinical trials of treatments in PDB, literature and expert opinion. The analysis was performed from a society perspective. Discounting rate of 6% was applied for costs and effects in the second year. A standard costing methodology was used, according to the patterns of care currently in use in Hungary. Costs were calculated to cover medical procedures performed in two years time frame for patients with PDB and include direct costs of treatment and follow-up (visit to physicians offices, prescription of medication, laboratory procedures and treatment costs of side effects. As a result zoledronic acid dominated all the other therapies compared, hence it was the most effective and the least expensive in the treatment of Paget’s disease of bone.

COST-EFFECTIVENESS OF RISEDRONATE VS. GENERIC ALENDRONATE: CONSIDERATION OF CALCIUM SUPPLEMENTS

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OBJECTIVES: Treatment of post-menopausal osteoporosis with bisphosphonates should be supplemented by adequate amounts of calcium. The objective of this analysis was to assess the cost-effectiveness of the combination package of risedronate plus calcium compared to generic alendronate and calcium supplements in high-risk osteoporotic patients in Germany. METHODS: A validated model (Tosteson, 2001) was used to estimate the impact of therapy on hip and vertebral fractures, costs, and quality adjusted life years (QALYs). The analysis included women 70 years with a BMD T-Score of <-2.5 and a history of vertebral fracture, treated over 3 years. The model further simulated downstream costs and QALYs for a 10-year period. Country-specific data included general population mortality, hip and hospitalized vertebral fracture rates, fracture costs, and annual drug costs (risedronate plus calcium £54.76; generic alendronate £41.23; calcium £59.50). Hip and vertebral fracture reductions for risedronate were 60% (McCung, Geusens, Miller, 2001) and 49% (Register, Minne, Sorenson, 2000) respectively; and for alendronate were 51% and 47% (Black, Cummings, Karpef, 1996) respectively. RESULTS: In a cohort of 1000 postmenopausal women with 3 years of treatment the model predicted the following costs of £8.42M versus £8.40M, total hip and hospitalized vertebral fractures of 140 versus 143 and QALYs of 6168 versus 6164 for risedronate plus calcium and generic alendronate plus calcium, respectively. Risedronate plus calcium was more cost-effective than generic alendronate plus calcium, with a cost per fracture averted of £8764 and a cost per QALY gained of £8698. CONCLUSIONS: The analysis favors the adoption of risedronate plus calcium therapy for the treatment of postmenopausal osteoporosis compared to generic alendronate plus calcium.