MODEL-BASED COMPARATIVE PHARMACOECONOMIC ANALYSES OF BIMATOPROST 0.03% IN THE TREATMENT OF GLAUCOMA OR OCULAR HYPERTENSION IN ADULT PATIENTS IN AUSTRIA AND FINLAND
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OBJECTIVES: Glaucma is a condition affecting one or both eyes with raised intraocular pressure (IOP). Target IOP should be reduced to 15 mmHg to prevent progression of visual field loss. The objective of the present study was to perform and compare two country-specific cost-effectiveness analyses of bimatoprost 0.03% (Lumigan) compared with latanoprost 0.005% (Xalatan) as a second-line mono-therapy for glaucoma patients in Austria and Finland. METHODS: Revealing identical practice patterns in glaucoma treatment in Austria and Finland a decision model based on effectiveness and resource-use data from a multinational RCT was constructed. The RCT covered 269 adult patients with inadequately controlled IOP. In the model country-specific unit costs were used and cost-effectiveness was analysed from a societal perspective within a 12-months time horizon. The measure of effectiveness was “patients achieving target IOP”. To handle uncertainty sensitivity analyses (one-way, break-even, extreme scenario) were undertaken. RESULTS: The RCT showed that 36% of the patients using bimatoprost achieved target IOP opposed to 22% using latanoprost. In the Austrian cost-effectiveness analysis bimatoprost (£2279 per patient achieving target IOP) showed to be cost-effective compared with latanoprost (£3917). With nearly identical ratios the same result appeared for Finland (bimatoprost: £2317; latanoprost: £3998). The relative decrease in the costs using bimatoprost was therefore 42% in both countries per patient achieving target IOP. The major reason to this difference was the extra need for adjunctive therapies using latanoprost. For all IOP-target levels in the range 12–18 mmHg bimatoprost was cheaper and more effective (dominating strategy). CONCLUSION: Bimatoprost showed to be a more cost-effective second-line mono-therapy for glaucoma treatment in Austria and Finland. The study furthermore showed that at least for the two countries it seems possible to transfer cost-effectiveness results between countries and still arrive at the same recommendations for decision-making.

ECONOMIC EVALUATION OF PHOTODYNAMIC THERAPY WITH VERTEPORFIN FOR SMALL SUBFOVEAL CNV LESIONS: THE CASE OF AUSTRALIA
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OBJECTIVE: To assess the cost-effectiveness of photodynamic therapy (PDT) with verteporfin as treatment for subfoveal choroidal neovascularisation (CNV) with small lesions (≥4 macular photocoagulation study disc areas), relative to no treatment. METHODS: This analysis assesses the cost-effectiveness of PDT using verteporfin in patients with small subfoveal CNV lesions, based on results of two multicentre, double-blind, randomised, placebo-controlled trials (VIP and TAP). Data on visual acuity were collected for 24–48 months. Patients with visual acuity scores above the level of legal blindness in Australia (which is ≥34 letters) were defined as not blind. The proportion of patients not blind at each three-month interval was plotted on a “vision curve”, which was extrapolated to 84 months. The area under this curve was calculated for each group. The difference in the area under the curve between groups represents the vision-years gained from treatment. A costing analysis was performed, based on an average of 3.4 treatments in the first year, 2.2 in the second year, 1.3 in the third year and 0.4 in the fourth year. Costs of nursing home, home and community care, falls and the disability pension considered to be due to visual decline were also included. RESULTS: Treatment using PDT with verteporfin results in a cost saving, relative to no treatment, of between $2909 and $4992 over the 7-year period, depending on assumptions made in the extrapolation of trial data. Over this period, between 1.801 and 2.194 vision-years were gained. Therefore, PDT with verteporfin is both less expensive and more effective than no treatment in this population. Sensitivity analyses demonstrated these results were robust to changes in the value of key variables. CONCLUSIONS: PDT with verteporfin represents a cost-effective intervention in the proposed population. There is currently no alternative therapy for patients with small subfoveal CNV lesions.

COST-EFFECTIVENESS ANALYSIS OF CATARACT CONTROL IN 14 WORLD REGIONS
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OBJECTIVES: Cataract is a major cause of blindness and of severe visual impairment leading to bilateral blindness in an estimated 20 million people worldwide. In developing countries 50–90% of all blindness is due to cataract. There are several possible approaches to removal of the cataract. This paper reports estimates of the population health effects, costs and cost-effectiveness of selected interventions in cataract surgery to restore eyesight in areas of the world with different epidemiologic profiles. METHODS: Effectiveness estimates are based on literature review taking into account factors such as oper-