

dorzolamide ($P < 0.01$). Seventy-five percent of the patients had a treatment duration longer than 203 days when treated with brinzolamide versus 140 days with dorzolamide. The probability of a failure was 1.61 ($P < 0.02$) times higher with dorzolamide, after adjusting for treatment line and the number of drugs prescribed. The yearly glaucoma treatment cost for a patient with a treatment failure was found to be higher (GBP 15.21) than for patients who continued their treatment. **CONCLUSION:** In comparison to dorzolamide, patients treated with brinzolamide experienced fewer treatment failures, leading to cost savings.

PAE10

COMPARISON OF THE CLINICAL EFFICACY AND COST-EFFECTIVENESS OF LUMIGAN AND XALATAN IN THE TREATMENT OF GLAUCOMA

Roberts G¹, Buchholz P², Holmstrom S³, Finck K³, Gillard S⁴, Warner J⁴, Teale C¹

¹Allergan Ltd, Buckinghamshire, United Kingdom; ²Allergan, Ettlingen, Germany; ³Allergan, Mougins, France; ⁴ABACUS International, Oxfordshire, United Kingdom

OBJECTIVES: The purpose of this study was to compare the intraocular pressure (IOP)—lowering efficacy and cost-effectiveness of Lumigan (Bimatoprost) versus Xalatan (Latanoprost) in glaucoma patients. **METHODS:** A Markov model was developed to compare the cost-effectiveness of Lumigan initiated treatment with Xalatan initiated treatment in the context of the French Health care system. The model uses a timeframe of one year and data from published randomised clinical trials, which included a total of 249 patients. Patients were allowed to switch medication up to a maximum of two times if target IOP was not met or adverse events occurred and each switch was associated with a physician visit (cost: €23.00 each). Drug costs used were €20.10 for Lumigan and €17.67 for Xalatan. A probabilistic analysis was performed using 1000 Monte Carlo simulations. The primary outcome measures were the number of months patients spent at IOP < 17mmHg and the cost per month at IOP < 17mmHg. Sensitivity analyses were conducted varying the target IOPs. **RESULTS:** More patient months at IOP < 17mmHg were achieved by patients on Lumigan versus Xalatan initiated therapy (9.7 versus 9.3; $P < 0.05$). Lumigan initiated therapy was also associated with fewer annual physician visits per patient (5.14 compared to 5.48; $P < 0.001$). The cost per patient per month at IOP < 17mmHg was €41.96 for patients on Lumigan compared to €44.60 for those on a Xalatan initiated therapy. The results of the sensitivity analysis determined that at target IOPs of 14 to 17mmHg there was a lower average annual treatment cost per patient for Lumigan initiated patients. **CONCLUSIONS:** Lumigan initiated treatment is more cost-effective than Xalatan initiated treatment at target IOPs between 14–17mmHg.

PAE11

ECONOMIC EVALUATION OF LATANOPROST AS FIRST LINE GLAUCOMA THERAPY IN 6 EUROPEAN COUNTRIES

Aballéa S¹, Martin M², Bernard L³, Althin R⁴

¹Innovus Research UK, High Wycombe, United Kingdom; ²Innovus Research, High Wycombe, United Kingdom; ³Innovus Research Inc, Burlington, ON, Canada; ⁴Pfizer, High Wycombe, United Kingdom

OBJECTIVE: The aim of glaucoma treatment is to delay progression of the disease to blindness, by lowering intra-ocular pressure (IOP). Clinical trials have shown that latanoprost (Xalatan®, Pfizer) achieves better IOP control than beta-blockers. We assessed the cost-effectiveness of latanoprost as 1st-line therapy, compared to beta-blockers, in Austria, Belgium, France, Germany, Italy and the UK. **METHODS:** Clinical outcomes and resource utilisation data were obtained from a retrospective chart review study of glaucoma patients initially treated with latanoprost or beta-blocker in Germany, Italy, Spain, and the UK. A Markov model was used to calculate the number of months of IOP control and total costs (including drugs, physician visits, diagnostic tests and surgeries) per patient over 2 years from a third-party payer perspective. The model was estimated by Monte Carlo simulation. The incremental cost per IOP-controlled month was reported for each country and variability around this ratio was examined. **RESULTS:** Seventy-three percent of patients remained on treatment with latanoprost, compared to 29% with beta-blocker, over 2 years. The higher acquisition cost of latanoprost was partly offset by lower surgery costs. The ICER ranged from €24.94 (95% CI: 20.68–30.11) per IOP-controlled month, for France, to €272.84 (251.24–297.17), for Germany. Sensitivity analyses showed that survival on therapy, the duration of medication bottles and parameters related to surgery costs were the main drivers of cost-effectiveness. **CONCLUSIONS:** Differences between countries were mainly attributable to variation in drug and surgery unit costs. First-line treatment with latanoprost is predicted to be cost-effective if decision-makers value the control of IOP at a minimum of approximately €25 per month in France, €45 per month in Belgium, UK and €275 per month in Germany, under the current system and costs of care. Relatively low unit costs for surgery and the drug co-payment system contributed to the higher ICER in Germany.

PAE12

TREATMENT DURATION AS A COST DRIVER OF GLAUCOMA CARE: A LIFE-LONG SOCIETAL PERSPECTIVE IN FRANCE, GERMANY AND THE NETHERLAND

Lafuma A¹, Voinet C¹, Berdeaux G²

¹Cemka, Bourg-La-Reine, France; ²Alcon, Rueil-Malmaison, France