Abstracts

tional 83% and 52% risk of hyperaemia respectively. Based on the current meta-analyses, latanoprost treated patients had least risk of developing hyperaemia and bimatoprost the highest risk.

SENSORY SYSTEMS DISORDERS—Cost Studies

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COST-EFFECTIVENESS OF ETANERCEPT AND EFALIZUMAB IN THE MANAGEMENT OF MODERATE AND SEVERE PLAQUE PSORIASIS

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OBJECTIVES: To assess the cost-effectiveness of intermittent therapy with etanercept at a starting dose of 25 mg twice a week (biw) or 50 mg biw compared to efalizumab and non-systemic therapy (NST) in patients with moderate-to-severe plaque psoriasis in France. METHODS: An economic model was developed to estimate the incremental cost per quality-adjusted life-year (QALY) gained. Patients considered had a Psoriasis Area Severity Index (PASI) and a value of Dermatology Life Quality Index ≥ 10 at baseline. Four therapeutic strategies were considered: 1)etanercept given intermittently (until remission defined by PASI 90 or with maximum treatment period of 24 weeks) either 25 mg biw; 2)etanercept 50 mg biw for 12 weeks followed by 25 mg biw; 3)efalizumab 1 mg/kg once weekly; and 4)NST. Response rates were taken from clinical trials for each agent and were extrapolated to a time horizon of ten years using a Markov process. Costs were estimated from the French Third Payer perspective. A stochastic analysis using bootstrap re-sampling was conducted to generate 95% confidence intervals completed by one-way sensitivity analyses on treatment response to etanercept at 12 weeks, length of free treatment period, costs of visits, number of hospitalisations, discount rates. RESULTS: Over ten years, the QALYs gained were respectively for NST, efalizumab, etanercept 25 mg and 50 mg: 0.82, 1.09, 1.35 and 1.46. Costs per patient were respectively €34,091, €41,797, €36,437 and €38,572. The incremental cost-effectiveness ratio (ICER) compared to NST was €4,404/QALY for etanercept 25 mg biw, €6,982/QALY for etanercept 50 mg biw and €29,001 for efalizumab. For both etanercept dosages, the ICER obtained from sensitivity analysis varied from cost-saving to €20,000/QALY. Etanercept (25 mg and 50 mg) is cost-saving compared to efalizumab and sensitivity analysis performed confirmed this result. CONCLUSIONS: In patients with moderate-to-severe plaque psoriasis, intermittent therapy with etanercept was more cost-effective than continuous therapy with efalizumab and than NST within French setting care.

PHARMACOECONOMIC EVALUATION OF RANIBIZUMAB IN THE TREATMENT OF AGE-RELATED MACULAR DEGENERATION IN AUSTRIA

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¹IPF—Institute for Pharmaeconomic Research, Vienna, Austria, ²IMS HEOR, Brussels, Belgium, ³Novartis Pharma AG, Basel, Switzerland **OBJECTIVES:** Age-related macular degeneration (AMD) is one of the most common eye diseases causing vision loss in western industrial nations. In Austria, about 25,000 people experience blindness in one or both eyes due to AMD. The incidence averages 3000 to 4000 people. The purpose of this pharmacoeconomic analysis was to evaluate the cost-effectiveness of the

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treatment of AMD with Ranibizumab versus Verteporfin. METHODS: The analysis was conducted using a Markov Model designed to be flexible to target populations and was adapted to Austrian situation. Clinical data included in the model is based on three clinical trials (MARINA, ANCHOR and PIER). Evaluation of the effectiveness of therapeutic alternatives was determined by 'Vision Years' and 'QALYs'. The period under consideration was 10 years and the analysis was performed from the perspective of the Austrian health care system. Costs are represented using data from 2007. Treatment paths, resource consumption, costs as well as mortality data have been adapted for Austria. RESULTS: Within the 10-year period under consideration, the costs per QALY for Ranibizumab amount to €9,267 and to €8,795 for Verteporfin. Treatment with Ranibizumab leads to a QALY of 4.2, that with Verteporfine to a QALY of 3.91. The incremental cost-effectiveness-ratio (ICER) is €15,647. The costs per Vision Year amounts to 13,641€ (2.85 VY) for Ranibizumab and €21,351 (1.61VY) in the Verteporfine-group. The incremental cost-effectiveness-ratio (ICER) is €3,642. Sensitivity analyses-deterministic and probabilistic-demonstrated the robustness of the model results. CONCLUSIONS: The study suggests that in Austria, the treatment of age-related macular degeneration with Ranibizumab is a cost-effective strategy.

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COST-EFFECTIVENESS OF THREE INTRA-OCULAR LENSES AFTER CATARACT SURGERY IN THE NETHERLANDS: RESTOR®, ARRAY-SA40® AND A MONOFOCAL

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OBJECTIVES: To compare the lifetime costs and consequences of liberating patients from spectacles after cataract surgery, by implanting multifocal IOLs (ReSTOR® or ARRAY-SA40®) versus a monofocal IOL. METHODS: A Markov model was created to follow a 69-year old patient cohort from cataract surgery until death. Prevalence rates of patients not needing spectacles after cataract surgery were obtained from a randomized clinical trial (ARRAY-SA40® versus monofocal) pooled with a cohort of ReSTOR® patients. Resource utilization, estimated from a Dutch survey, included surgery, IOLs, spectacles, visits to ophthalmologists and optic centers, transportation, and time lost by patients. Economic perspectives were those of Society and Sick Funds (SF). Dutch mortality rates were introduced into the model. Discount rates were applied. Sensitivity analyses were performed. RESULTS: A total of 86.4% of patients implanted with ReSTOR® were spectacle-free compared to 8.5% with monofocal and 8.1% with ARRAY-SA40®. On average, 1.2 pairs of spectacles were purchased after ReSTOR® implantation, versus 7.6 after ARRAY-SA40® or the monofocal. Surgical costs were €3740 for ReSTOR® and ARRAY-SA40® and €2140 for the monofocal. From the societal perspective, total undiscounted cost estimates were €5514 with ReSTOR® compared to €7568 with ARRAY-SA40® and 6526 with the monofocal. With a 4% discount rate these costs became €5425, €6944 and €5740, respectively. From the SF perspective, total undiscounted cost estimates were €2423 with ReSTOR®, €2616 with ARRAY-SA40 and €2615 with monofocal IOLs. With a 4% discount these costs became €2415, €2556 and €2555, respectively. Costs and intervals between spectacle replacements were the most sensitive parameters. CONCLUSIONS: From both the societal and SF perspectives, discounted and undiscounted savings achieved by liberating patients from spectacles counterbalanced the ini-