practice patterns. CONCLUSIONS: The interviews allowed to extrapolate European findings to the Asia-Pacific region and therefore improved the validity of the cost-effectiveness models developed for these countries. This methodology represents an acceptable alternative when more time-consuming and costly chart reviews cannot be repeated in multiple countries. The significant economic burden of OAG was confirmed.

PSS4
THE COST-EFFECTIVENESS OF TAPROSTOP PRESERVED WITH POLYQUAD IN NEWLY TREATED OPEN-ANGLE GLAUCOMA PATIENTS IN 7 ASIAN COUNTRIES

OBJECTIVES: Topical prostaglandin analogues are safe and effective to treat ocular hypertension (OHT) and open-angle glaucoma (OAG). The preservatives used in prostaglandin, however, drops increase the short- to long-term risk of developing ocular surface disease (OSD). We aimed to compare the 10-year costs and clinical outcomes with Polyquad®-preserved travoprost to costs and outcomes with benzalkonium chloride (BAK)-preserved prostaglandins in 7 Asian countries.

METHODS: A semi-Markov health economic model was developed. Treatment-naive OHT/OAG patients were initiated on treatment with Polyquad®-travoprost, latanoprost or bimatoprost (both BAK-preserved prostaglandins). The initial decision model was validated and adapted in each country by clinical experts. Local unit costs were collected and applied to each resource (All-Payer perspective, 2011 costs). Country-specific discounting was used. RESULTS: Compared to BAK-preserved prostaglan- dinss, Polyquad®-preserved travoprost was dominant (15% less OSD; total costs reductions vs. latanoprost in Singapore – 14%, India and Malaysia – 13%, South Korea – 9% and vs. bimatoprost from –2% in Thailand to –19% in South Korea), or else cost-effective (incremental cost-effectiveness ratios <1,000US$ per OSD-free year gained). In each country, the estimated reductions in glaucoma medical (non-drug) management costs (range from –18% to –22%), and total OSD costs (from –25% to –27%), were significant as per second-order sensitivity analysis. As a long-term consequence of the modeled lower persistence and impaired compliance the presence of OSD was associated with higher total costs. CONCLUSIONS: This multi-country model estimated that treatment Asian OHT/OAG patients with Polyquad®-preserved travoprost would generate significantly less OSD compared to BAK-preserved prostaglandins, together with savings on glaucoma and OSD management costs.

PS5
NEW FORMULATION OF TAPROSTOP REDUCES DRY EYE OCCURRENCE AND COSTS IN GLAUCOMA PATIENTS. MODEL-BASED RESULTS FOR HONG KONG

OBJECTIVES: Prostaglandin analogues are approved as a first-line treatment of ocular hypertension (OHT) and open-angle glaucoma (OAG). Existing molecules are often preserved with benzalkonium chloride (BAK), which is known to create dry eye. We aimed to conduct a long-term impact of replacing BAK-preserved prostaglandins on OHT/OAG treatment outcomes and costs in Hong Kong.

METHODS: A semi-Markov model was developed to evaluate the 10-year dry eye rate and management costs of OHT/OAG patients initiating a treatment with either Polyquad®-preserved travoprost or latanoprost and bimatoprost (both BAK-preserved). The probability of experiencing dry eye was obtained from literature. Switch rates to surgical or medical treatment were taken from UK/US health care databases. Local unit costs (All-payer perspective, 2011 private and public tariffs) were applied to the medical resources collected in a German retrospective chart review, re-assessed and adapted to the local practice by 3 clinical experts. Discount rate was 3% for costs and outcomes. A second-order sensitivity analysis provided 95% confidence intervals. RESULTS: The 10-year clinical and economic outcomes were significantly improved with travoprost compared to BAK-preserved latano- prost: dry eye rate decreased from 35% (42,5% vs. 35% [31,58%], the proportion of patients reaching a 3rd line treatment from 85% [80,88%] to 57% [44,68%], the sur- gery rate dropped from 3.0% [2,43,5%] to 1.3% [0.6,1,8%] while the total costs were significantly reduced by 25% [private setting] and 29% (public setting) vs. latanoprost, mostly due to a 33% reduction in glaucoma non-drug management costs. The benefits vs. bimatoprost were similar. The impact of the presence of OSD on costs was sizeable, and the treatment switch rate was an important cost driver.

CONCLUSIONS: This model suggests a favorable impact of using travoprost rather than BAK-preserved prostaglandins on 10-year clinical outcomes, which generates savings on total costs (20-30%) due to reduced medical management costs.

PSS6
HEALTH ECONOMIC EVALUATION OF PRESERVATIVE-FREE TAPROSTOP VERSUS PRESERVED LATANOPROST IN THE TREATMENT OF OPEN-ANGLE GLAUCOMA OR OCULAR HYPERTENSION (OH)

OBJECTIVES: Safety and efficacy of taprostop for open-angle glaucoma or ocular hypertension (OH) have been proven in clinical trials. While taprostop and latanoprost have similar efficacy, the absence of the preservative benzalkonium chloride (BAK) in tafluprost may make it a preferred alternative for patients who are intolerant to this preservative, reduces cost and reduces risk symptoms such as irritation and dry eye. Reduced ocular symptoms offers clinical/QoL benefits and cost savings associated with less rescue medication use (articul fever). Further, the single-dose unit formulation of taprostop is predicted to lessen medication wastage and thus generate cost savings dispensed in multi-dose bottles. The cost-savings are quantified and cost-effectiveness ratios are calculated in the current study.

METHODS: Resource usage and associated costs are quantified to determine cost savings offered by taprostop over latanoprost. Discount from adverse ocular symp- toms were also determined. This model was adapted to transform literature to transform taprostop’s superior tolerability to QALYs. The perspective of this analysis is the Australian health care system. RESULTS: Preservative-free taprostop was shown to be a highly cost-effective, most likely dominant, strategy over preserved latanoprost. The likely cost savings due to reduced irritation, informed by the pattern of latanoprost utilization observed in the Australian drug reimbursement system (PBS), in itself would make taprostop a cost-saving strategy versus latanoprost. The available evidence suggested that 47.6% of patients on preserved latanoprost experience some adverse ocular symptoms, while this is expected to be 29.0% with preservative-free taprostop. Average cost savings attributable to reduced artificial tear use was estimated to be $23.64 per patient per year. This superior tolerability is also estimated to produce an incremental QALY of 0.0107 for preservative-free taprostop each year when compared with preserved latanoprost. CONCLUSIONS: Preservative-free taprostop is a highly cost-effective, most likely dominant, strategy over preserved latanoprost.

PSS7
COST EFFECTIVENESS ANALYSIS OF COMMUNITY SCREENING FOR GLAUCOMA IN INDIA

OBJECTIVES: To investigate the cost-effectiveness of a hypothetical community screening and subsequent treatment programme for glaucoma in comparison with current practice (i.e. with no screening programme but with some opportunistic case finding), in both urban and rural areas of India. METHODS: A decision analytical model was built to model events, costs and treatment pathways with and without a hypothetical screening programme for glaucoma for a population aged between 40-69 years age in urban and rural areas. The treatment pathway included both primary open-angle glaucoma and angle closure disease. Screening and treatment costs were obtained from an administrator of a tertiary eye hospital in India. The probabilities for each pathway (i.e. for urban and rural areas) were derived from published literature and expert opinion (Glaucoma specialist currently prac- ticing in India). The glaucoma prevalence rates for urban and rural areas were adapted from the Chennai Glaucoma Study findings. Separate decision analytical models for urban and rural areas were built for calculating the cost-effectiveness of community screening for glaucoma in comparison to current practice (i.e. no screening programme with some opportunistic case finding), in both urban and rural areas of India. RESULTS: If adequate resources (trained medical personnel and equipment) is available the likelihood of community screening for glaucoma to be cost-effec- tive and have an impact on reducing glaucoma-related blindness burden, remains high in India.

SENSORY SYSTEMS DISORDERS - Patient-Reported Outcomes & Patient Preference Studies

PSS8
HEALTH BURDEN OF VISION PROBLEMS IN ASIA: A STUDY OF MALAYS AND INDIANS IN SINGAPORE

OBJECTIVES: To quantify the health burden associated with vision problems in Singaporean Malays and Indians, using the EQ-5D health index. METHODS: The Singapore Malay Eye Study (SiMES) and the Singapore Indian Eye Study (SIINDO) were population-based studies of 3,259 Malays (mean age: 59 years; range: 40 to 80; male: 48.1%) and 3,397 Indians (mean age: 58 years; range: 43 to 84; male: 50.2%), respectively. Each participant was given a comprehensive eye assessment and answered EQ-5D questions. The prevalence of case blindness (GBL), visual impairment and 5 major eye conditions (i.e. age-related macular degeneration (AMD), glaucoma, cataract, diabetic retinopathy, and refractive error) on the EQ-5D health index score was estimated using separate linear regression models. According to US definition, low vision is defined as 0.30 ≤ LogMAR ≤ 1.00 and blindness as LogMAR ≤ 1.00. RESULTS: After adjusted for age, gender and co-morbidities, Singapore Ma- lays with low vision in one eye and normal vision in the other eye (difference: