

(EQ-5D), disease severity (DLQI), resource utilisation and productivity losses was collected from patient questionnaires. Patient characteristics and type of treatment were collected from patient records. Prescribed medications were collected from national drug registry data. **RESULTS:** During 12 months, 64% of the patients used only emollients and topical corticosteroids and 21% used systemic treatment (not biological). During part of or during the whole period 15% used biological treatment. Mean direct cost per patient related to in and out-patient care was estimated to €488, and indirect cost was €758. Cost for drugs was €1892 per patient and cost for light treatment was €930. QoL according to EQ-5D was 0.73 (SD 0.25), VAS 72.7 (SD 20.6) and DLQI was 7.0 (SD 6.6) corresponding to “moderate effect on patient’s life”. **CONCLUSIONS:** Patients with more extensive psoriasis problems experienced lower QoL according to EQ-5D and higher discomfort and a larger effect on their lives according to DLQI. Direct and indirect costs increased with disease severity. Costs increased with the use of more potent drugs (biological and systemic drugs).

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#### COSTS OF GLAUCOMA IN DENMARK

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**OBJECTIVES:** To describe costs of glaucoma treatment in Denmark by treatment sequence. **METHODS:** The analyses were based on registry data. A new or incident patient was defined as a patient who did not use any medicine related to glaucoma for 6 months—that is, the study estimated the number of new patients in a 5.5 year period (from mid-2002 to 2007). New (incident) glaucoma patients (primary open-angle glaucoma or ocular hypertension) were defined via their “first” use of prescribed medicine related to glaucoma (that is, via the ATC-codes) and the patients were identified in the Danish Register of Medicinal Product Statistics for the years 2002–2007. Subsequently a cross sectional analysis for 2007 was performed including use of medicine related to glaucoma and use of services in the primary (ophthalmologists’ services) and secondary care services (relevant out-patient treatment and admissions—relevance defined by a ICD10 code). Patients were categorized according to their number of treatment changes. **RESULTS:** Based on these data the yearly Danish incidence was estimated to 1.2 per 1000 persons. The sex ratio (male/female) was 44%/56% with a mean age of 68 and 71 years, respectively. Thirty-seven percent of the patients were in their first treatment sequence (that is, no treatment changes), 21% were in their second, and 43% of the patients had 3 or more treatment sequences. The number of treatment sequences influenced cost. The total costs of glaucoma (public payer perspective) were DKK 2200 (€300) per year for a patient in first treatment sequence whereas the corresponding costs for a patient with 3 or more treatment sequences were DKK 4600 (€610). Drug cost accounted for 62% of the total. **CONCLUSIONS:** Drugs represent the bulk of the costs of glaucoma and the costs increase with the number of treatment changes.

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#### DECISION MAKING ANALYSIS FOR DIFFERENT NEUROSENSORIAL DEEP HYPOACUSIA TREATMENTS IN COLOMBIA. COST-PRODUCTIVITY ASSESSMENT

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**OBJECTIVES:** Use decision making tools to determine which of three alternatives—Cochlear Implants, Hearing aids or no treatment—assure that a person, who suffers from Deep Neurosensorial Hypoacusia, will achieve the best cost-productivity relation for his or her life. **METHODS:** This study is based on a decision making analysis methodology which includes a description of the problem, a bibliographic review, a formulation of the problem, data analysis and incorporation, a mathematical model and results analysis. The problem is described as an alternatives issue concerning different treatments for Deep Neurosensorial Hypoacusia and a cost-productivity relation in order to evaluate each of the alternatives. This relation is measured as the NPV of the salary cash flow that the patient expects to receive during his/her productive life as compared with the treatment and education costs. Actual data from the Cochlear Group of the Fundacion Santafe concerning audiology and language comprehension levels from patients using different treatments for deep deafness is analyzed in order to generate probability distributions and develop an influence diagram. Finally, a sensitivity analysis is conducted in order to verify the robustness of the solution obtained. **RESULTS:** As a result of the study was obtained that the cochlear implant provides a cost-productivity relation of COP\$253,936,210 (US\$123,871), Hearing aids: COP\$ 138,307,940 (US\$67,467) and not following any treatment: COP\$107,510,318 (US\$52,444). According to this assessment, the cochlear implant is the best treatment. **CONCLUSIONS:** According to the results, individuals who use a cochlear implant have a productivity of 1.5 times higher for individuals with hearing aids and almost 3 times higher than individuals who do not follow any treatment. This confirms the excellent performance in terms of effectiveness and utility of the cochlear implant compared to hearing aids. The sensitivity analysis conducted showed that the cochlear implant is the best decision in a real scenario.

#### A HEALTH ECONOMIC EVALUATION OF ELIMINATING NON-COMPLIANCE WITH ORAL TREATMENT OF SKIN AND SOFT TISSUE INFECTIONS IN DOGS IN GERMANY

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**OBJECTIVES:** Non-compliance is frequently reported as a cause of treatment failure of oral antimicrobials. As the long-term injectable cefovecin eliminates non-compliance, the study objective was to investigate the impact of non-compliance on the costs and effectiveness of treatment of superficial pyoderma, wounds and abscesses (SP-W-A), and deep pyoderma (DP) in dogs in Germany. **METHODS:** A Markov model, containing the health states “Worsening”, “Status quo”, “Improvement”, “Cure”, and “Relapse”, was adapted to Germany to calculate costs and benefits (days without symptoms of SP-W-A or DP) over a 6-months (SP-WA) and 1-year (DP) period, for dogs on cefovecin versus amoxicillin/clavulanic acid (amoxi/clav). Efficacy parameters were derived from clinical studies. For amoxi/clav, first line treatment failure caused by non-compliance was estimated at 13.6% of all dogs, calculated from published literature. Cost data were derived from German official price and tariff lists (2009, dog owner’s perspective). All relevant input parameters were varied extensively in one-way and probabilistic sensitivity analyses. **RESULTS:** Cefovecin was more effective than amoxi/clav, with 161 versus 156 days without symptoms of SP-W-A and 316 versus 307 days without symptoms of DP. Up to a bodyweight (b.w.) of 15 kg (SP-W-A) or 16 kg (DP), cefovecin was a dominant strategy, i.e. also cost-saving when considering total therapy expenditure (including anamnesis, diagnosis, treatment). In dogs of 25 kg b.w., total therapy costs for cefovecin were slightly increased versus comparator, €297.25 versus €272.72 (SP-W-A) and € 498.60 versus €477.75 (DP). Model outcomes were sensitive to changes of non-compliance data, but remained robust when varying other parameters. **CONCLUSIONS:** Considering non-compliance with oral treatments as a cause of treatment failure, higher drug and administration costs of cefovecin became totally or partly offset by the increased incremental efficacy resulting in less costs for supplementary treatments of relapses and failures.

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#### A FRENCH ECONOMIC MODEL COMPARING COST-EFFECTIVENESS OF DUOTRAV AND XALACOM IN GLAUCOMA

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**OBJECTIVES:** Topical prostaglandin analogs combined with timolol demonstrate strong intra-ocular pressure lowering effect and are indicated in second line treatment. This study aims to estimate the 5-years cost effectiveness of Duotrav® and Xalacom® in second line glaucoma treatment in France from the perspective of the health care system. **METHODS:** A 5 year Markov model was built to populate the treatment of two cohorts of glaucoma patients. Time to treatment modification, a key cost factor in real life, was estimated on the basis of an analysis of the UK GPRD database and a hazard-ratio (DuoTrav vs Xalacom) taken from a French observational study. Visual field defect (VFD) occurrence rates by treatment line were estimated from the literature. French standard costs were applied. Sensitivity analyses were carried out. **RESULTS:** Average times to treatment changes were 38.0 and 31.1 months for Duotrav and Xalacom, respectively. A total of 45.4% of the patients remained with their treatment at 5 years in the DuoTrav cohort compared with 29.1% in the Xalacom group. The clinical benefit of DuoTrav was 0.06 less new VFDs on average per patient. The longer duration of treatment with DuoTrav was associated with an extra costs of €144, an amount that was totally offset by a decrease in operating procedures (–€98.7) and cost of rescue medications (–€98.5). Other resources used (visits, exams...) were similar. Total costs were lower in the DuoTrav cohort (–€81.8) than in the Xalacom cohort. Sensitivity analyses confirmed these findings. **CONCLUSIONS:** Treatment persistency is a key indicator of the effectiveness of chronic disease treatment in daily practice. The longer duration of treatment with DuoTrav as compared with Xalacom lead to better glaucoma control, less VFD progression, and lower medical care costs. According to this analysis, DuoTrav economically dominates Xalacom.

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#### CEFOVECIN AS TREATMENT OF SUPERFICIAL PYODERMA, WOUNDS AND ABSCESSSES IN DOGS: ESTIMATION OF THE HEALTH AND ECONOMIC IMPACT OF ELIMINATING ORAL MEDICATION NON-COMPLIANCE IN THE UNITED STATES

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**OBJECTIVES:** Cefovecin, an injectable antimicrobial, maintains a therapeutic tissue concentration for approximately 14 days, and hence eliminates non-compliance reported with oral comparators. This study compared treatment costs and effectiveness of oral medication to cefovecin in resolving superficial pyoderma, wounds, and abscesses (SP-W-A) in dogs. **METHODS:** A Markov model was developed to reflect treatment with cefovecin versus oral amoxicillin/clavulanic acid (amoxi/clav) over a six months period. The health states “Worsening”, “Status quo”, “Improvement”, “Cure”, and “Relapse” were included to reflect treatment costs and outcomes of first, second and third line therapy protocols and account for treatment relapses. Effectiveness parameters were derived from published clinical studies. For amoxi/clav, first line treatment failure caused by non-compliance was estimated at 13.6% of all dogs