resource utilization and associated cost of proactive use of tacrolimus ointment (PU) versus standard use of tacrolimus ointment (SU) in children with moderate or severe atopic dermatitis (AD) over a period of 12 months. METHODS: A pan-European, phase III multicentre randomized clinical trial FG-506-06-41 ‘CONTROL’ was conducted. After randomization patients (2–15 years old) applied tacrolimus 0.03% ointment (PU) or vehicle ointment (SU) at the usually affected areas twice per week for 12 months. Disease exacerbations were treated using open-label tacrolimus 0.03% ointment twice daily. Resource utilization data (e.g. for ointments, drugs, doctor consultations, out-of-pocket-expenses, absence from school) were collected alongside the clinical trial by caregiver questionnaires, prospectively. Costs of pooled resource data were determined using German unit cost data. Direct and indirect costs were considered from third party payer (TPP), caregiver, and societal perspectives. RESULTS: 146 patients were included in the analysis, 75 PU patients (53% moderately affected) and 71 SU patients (51% moderately affected). Mean age of patients was 7 years (SD 3.94.5) in both treatment groups. Mean + SD body surface area in both groups was 1.0 + 0.4 m2. The mean number of disease exacerbations requiring substantial therapeutic intervention in the PU and SU arms was 1.7 + 2.2 and 3.4 + 3.2 (p < 0.001), respectively. In patients with severe AD the mean total annual cost per patient was higher in the standard regimen €2,002 + 2,315 compared to PU €1,571 + 1,122. In the subgroup of severely affected 2–6 year-old patients these cost differences were larger in favour of tacrolimus ointment: €1,465 + 837 (PU) versus €2,253 + 2,855 (SU). In moderately affected patients there were no cost differences: €1,233 + 1,507 (PU) and €1,136 + 1,494 (SU). CONCLUSION: Proactive treatment with tacrolimus 0.03% ointment is more effective and leads to cost savings in comparison to standard treatment with tacrolimus 0.03% ointment, especially in children with severe AD.

**PSS22**

THE ANNUAL COST OF BACTERIAL CONJUNCTIVITIS IN THE UNITED STATES: EVIDENCE FROM AN ECONOMIC MODELLING APPROACH

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OBJECTIVE: The aim of this study was to determine the annual direct costs of treating bacterial conjunctivitis (BC) in the United States. METHODS: A systematic review of the medical literature was supplemented with information from detailed physician interviews on resource utilization associated with bacterial conjunctivitis therapy in the United States. Data on the annual incidence of BC was obtained from an analysis of the National Ambulatory Medical Care Survey (NAMCS) database for the year 2005. Cost estimates for resource utilization such as physician visits and prescription drugs were taken from standard cost reference sources. Due to the acute nature of BC no cost discounting was performed. The economic perspective presented is that of the payer. All costs are expressed in 2007 USD. RESULTS: The number of BC cases in the United States for 2005 was estimated at 4,016,544, yielding an estimated annual incidence rate of 135.46 per 10,000. Base-case analysis estimated the direct cost of treating patients with bacterial conjunctivitis in the United States at US$765,063,696. One-way sensitivity analysis assuming either a 20% variation in the annual incidence of bacterial conjunctivitis or treatment costs generated a cost range of US$612,030,957 to US$918,076,435. Two-way sensitivity analysis assuming a 20% variation in both the annual incidence of bacterial conjunctivitis and treatment costs occurring simultaneously resulted in an estimate cost range of US$489,627,912 to US$1,101,711,002. CONCLUSION: This study reports the first known estimate of the direct costs of treating and managing patients with bacterial conjunctivitis in the United States. The economic burden of this condition is substantial. Our estimates represent conservative amounts because indirect costs were not considered in the analysis. This information may prove useful to decision makers with respect to the adequate allocation of health care resources necessary to address the economic burden of BC in the United States.

**PSS23**

PROACTIVE USE OF TACROLIMUS 0.03% OINTMENT IN CHILDREN WITH MODERATE OR SEVERE ATOPIC DERMATITIS—OUTCOMES AND COST


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OBJECTIVE: To describe treatment outcomes and to evaluate resource utilization and associated cost of proactive use of tacrolimus ointment (SU) in children with moderate or severe atopic dermatitis (AD) over a period of 12 months. METHODS: A pan-European, phase III multicentre randomized clinical trial FG-506-06-41 ‘CONTROL’ was conducted. After randomization patients (2–15 years old) applied tacrolimus 0.03% ointment (PU) or vehicle ointment (SU) at the usually affected areas twice per week for 12 months. Disease exacerbations were treated using open-label tacrolimus 0.03% ointment twice daily. Resource utilization data (e.g. for ointments, drugs, doctor consultations, out-of-pocket-expenses, absence from school) were collected alongside the clinical trial by caregiver questionnaires, prospectively. Costs of pooled resource data were determined using German unit cost data. Direct and indirect costs were considered from third party payer (TPP), caregiver, and societal perspectives. RESULTS: 146 patients were included in the analysis, 75 PU patients (53% moderately affected) and 71 SU patients (51% moderately affected). Mean age of patients was 7 years (SD 3.94.5) in both treatment groups. Mean + SD body surface area in both groups was 1.0 + 0.4 m2. The mean number of disease exacerbations requiring substantial therapeutic intervention in the PU and SU arms was 1.7 + 2.2 and 3.4 + 3.2 (p < 0.001), respectively. In patients with severe AD the mean total annual cost per patient was higher in the standard regimen €2,002 + 2,315 compared to PU €1,571 + 1,122. In the subgroup of severely affected 2–6 year-old patients these cost differences were larger in favour of tacrolimus ointment: €1,465 + 837 (PU) versus €2,253 + 2,855 (SU). In moderately affected patients there were no cost differences: €1,233 + 1,507 (PU) and €1,136 + 1,494 (SU). CONCLUSION: Proactive treatment with tacrolimus 0.03% ointment is more effective and leads to cost savings in comparison to standard treatment with tacrolimus 0.03% ointment, especially in children with severe AD.

**PSS24**

TRENDS IN EPISODE OF TREATMENT COSTS OF ACNE ACROSS THE UNITED STATES

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OBJECTIVE: Acne is a common dermatological condition and impacts millions of adolescent and adult lives in the United States (US). The purpose of this study was to accurately quantify the cost per episode for the treatment of acne in the US and to examine disparities in treatment costs. METHODS: Information was collected from the Pharmetrics Integrated Patient-centric Database, a large collection of administrative claims in the year 2004. The database included more than 80 public and private health care plans included in the database, representing approximately 9.6 million unique patients. Analysis was performed using the Total Resource Utilization (TRU) Benchmarks process, a descriptive methodology which organizes and separates information from the third-party database, into accessible benchmarks for comparison. RESULTS: There are many different drug treatment therapies that can be used to treat acne which can range in price dramatically. The average acne episode cost $777.19, with pharmacy costs representing 59.5% and outpatient costs representing 39.1%. Inpatient services were reported in only 0.1% of acne episodes and were associated with $9,297.56 in costs. For patients diagnosed with acne, pharmacy visits represented 83.5% of all episodes. Average outpatient costs were $303.99, attributable to 3.73 outpatient services with 2.18 of these services were physician visits. The lowest average total episode costs were found in the South-central region and were $624.05. The highest
average total episode costs were found in the Northeast region and were $856.50. Average outpatient costs in the Northeast region were the highest in the country at $377.64—the range for other regions was $240.70-$285.93. CONCLUSION: Much diversity exists in the cost of treating acne across different segments of the United States. Future research should be done to determine what the underlying factors are when accounting for the discrepancies in cost per episode of acne.

PHARMACOECONOMIC STUDY OF WET AGE-RELATED MACULAR DEGENERATION (AND) TREATMENT IN MEXICO

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OBJECTIVE: To determine the most cost-effective Wet AMD treatment alternative in Mexico. METHODS: A decision tree with Bayesian approach and a Markov chain considering the probabilities of increasing, decreasing or maintaining visual acuity (VA) through eight health states based on VA from 20/20 to 20/400 due to the use of a pharmacological alternative, with a time horizon of 5 years and institutional perspective, were performed. The discounting rate was three percent for costs and benefits. Adverse events and their treatment costs, for every alternative were considered; costs, benefits and probabilities of transition data were estimated from the meta-analysis with available published literature, including the MARINA and ANCHOR studies, validated by a panel of Mexican experts through the Delphi technique. Study comparators examined were Ranibizumab (RAN), photodynamic therapy with Verteporfin (PDTV), pegaptanib sodium (PEG) and standard care (STD). Sensitivity analysis was one-way and probabilistic (acceptability curve, analysis of components for the ellipse method). RESULTS: Patients using Ranibizumab get more benefits (RAN = 2.71 QALY; PDTV = 2.03 QALY; PEG = 1.89 QALY; STD = 1.78 QALY), with the lowest total cost per treatment (RAN = $43,984 USD; STD = $63,531 USD; PDTV = $83,546 USD; PEG = $92,247 USD) and the lowest cost per QALY (RAN = $16,257 USD/QALY; STD = $35,749 USD/QALY; PDTV = $41,074 USD/QALY; PEG = $48,263 USD/QALY). Incremental analysis showed Ranibizumab to be the dominant alternative. Net benefits are greater with Ranibizumab independent of willingness to pay. Acceptability curves showed absolute superiority for Ranibizumab. The confidence interval of 95% with the ellipse method showed Ranibizumab to be dominant in 95% of the cases with a willingness to pay of $924/USD. The sensitivity analysis on efficiency and costs of Ranibizumab in an interval of ±50%, was robust with the base analysis. CONCLUSION: Ranibizumab is the most cost-effective Wet AMD treatment alternative; it offers the greatest benefits with the lowest cost. Sensitivity analyses showed the robustness of the base study.

USING MEDICATION POSSESSION AND DAYS OF COVERAGE ON THERAPY TO ASSESS PERSISTENCE WITH PROSTAGLANDIN OCULAR HYPOTENSIVE THERAPY

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OBJECTIVE: To evaluate persistence among glaucoma patients with prostaglandin therapy during the first therapy year. METHODS: Patients with latanoprost (LAT), bimatoprost (BIM), or travoprost (TRAV) dispensed during January 1, 2004–December 31, 2004 were screened for inclusion (Ingenix managed care database). Index agent = first agent filled; index date = fill date; follow-up = 358 days. Patients excluded if age < 40 years; not continuously enrolled for 180 days before/358 days after index date; had ocular hypotensive dispensed or had no glaucoma diagnosis within 180 days before index date. First year persistence measures: whether last fill had sufficient days supply to achieve medication possession at year’s end; number of days for which index agent was available (days covered). Possible inconsistencies between quantity dispensed and reported days supply addressed by multiplying claimed days supply with alternative measures from the literature. Models of associations between index agent and medication possession (logistic regression) and days covered (linear regression) were adjusted for gender, age, and previous ocular hypertension diagnosis. RESULTS: A total of 7783 patients met inclusion criteria (LAT, n = 4994; BIM, n = 1464; TRAV, n = 1415). Overall medi-