tions increased as the frequency and severity of exacerbations increased. CONCLUSION: This was the first study that generated COPD-specific utilities for health profiles that included the health status during exacerbations. Their compatibility with TTO values of the EQ-5D requires discussion.

**PR19**

**Epidemiological Study to Investigate Patients’ Views on Chronic Obstructive Pulmonary Disease (COPD)**

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OBJECTIVES: COPD is a cause of high morbidity and mortality in the population, associated with high individual and social burden. Projections for 2020 indicate an increase in COPD mortality from the 6th to the 3rd position. Recent discussions conducted in the field of COPD suggest that achievement of systematic treatment is accomplished through timely diagnosis of the disease. Although there is no clear consensus on the treatment patterns for COPD, there is a need to gain a better insight into approaches of COPD management that better fit the needs of patients. The aim of this study was to obtain information on patient perception of the disease, to investigate ways of control and management of COPD, to examine patient adaptation to treatment, as well as to assess how COPD affects patients’ life.

METHODS: This study was conducted in 79 primary care physician (GP/specialists) practices and involved one visit to complete an extensive questionnaire. The questionnaire contained demographic data of patients, their symptoms, their pharmaceutical treatment and their concerns for COPD. RESULTS: In total, interviewer administered questionnaires were answered by 474 patients (62.7% male, 37.3% female). From those, 53% were smokers, 97% had symptoms (bronchitis 16.5%, chronic cough 20.3%, asthma 18.4%, chest tightness 11.5%) whereas 80% of patients received regular pharmaceutical treatment. Satisfaction with their treatment and their concerns for COPD is an impediment for the normal life of patients. Symptoms are evident, even though patients receive treatment. Strong concerns from patients themselves are expressed regarding possible deterioration of their condition.

**SKIN**

**PSK1**

**Efficacy of Biological Therapies in the Treatment of Psoriasis: A Meta-Analysis**

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OBJECTIVES: Biological therapies are considered effective for treating chronic plaque psoriasis. We compared two methods of indirect statistical analyses to assess the relative efficacies of these treatments. METHODS: A literature search was undertaken to identify all relevant randomized controlled trials (RCTs) evaluating alefacept, efalizumab, etanercept and infliximab in patients with psoriasis. Relative risks (RRs) with 95% confidence intervals were calculated for primary outcome measures (i.e., Psoriasis Area Severity Index (PASI) 75 response rates at week 10/12) using the Mantel-Haenszel method. Heterogeneity was estimated across trials, and the null hypothesis (study effects were homogeneous) was tested. Treatments were also compared in an evidence synthesis with endpoints jointly modeled using an ordered probit model. This mixed treatment comparison was implemented as a Bayesian hierarchical model. RESULTS: A comparison of predicted probabilities and relative risks with the Mantel-Haenszel calculated results indicated a good fit for the Bayesian model. In terms of RR compared to placebo, infliximab is the most effective for the PASI 75 response (Mantel-Haenszel Relative Risk [MHRR] 18.23, 95%CI 8.45 to 39.34; Bayesian Relative Risk [BRR] 20.53, Bayesian Confidence Interval (BCI) 16.75 to 25.05). The next most effective was etanercept 50 mg (MHRR 11.92, 95%CI 8.17 to 17.39; BRR 12.39, BCI 10.10 to 15.12) followed by etanercept 25 mg (MHRR 10.68, 95%CI 6.15 to 18.57; BRR 8.87, BCI 7.02 to 11.10) then efalizumab (MHRR 7.47, 95%CI 5.20 to 10.73; BRR 7.27, BCI 5.88 to 8.92) then alefacept (MHRR 3.37, 95%CI 2.18 to 5.23; BRR 4.49, BCI 3.44 to 5.79). The ordering of effectiveness seen in PASI 75 response was reflected in results for other outcomes (i.e., PASI 50, 90 and response rates). CONCLUSIONS: Two statistical methods for meta-analysis give comparable results and demonstrate that infliximab is significantly more effective at week 10/12 than other currently available biological therapies for chronic plaque psoriasis.

**PSK2**

**Medication Adherence and Health Care Costs Associated with Biologics in Medicaid-Enrolled Patients with Psoriasis**

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OBJECTIVE: Biologics have the most favorable clinical profile required for the management of moderate to severe psoriasis. However, costs and patients’ adherence related to biologics are important factors to consider while making informed decisions regarding the biologics therapy in psoriasis management. This study examined predictors of biologics related adherence, total health care costs, and service utilization among psoriasis patients enrolled in Medicaid program. METHODS: This was a longitudinal cohort study of psoriasis patients (<65 years old) enrolled in North Carolina Medicaid who were prescribed one of the biologics (alefacept, efalizumab, and etanercept) approved by the US Food and Drug Administration during the study period. Patients’ medication adherence, total health care costs, and service utilization (hospitalizations, inpatient and outpatient visits) patterns in pre- and post-biologics period were examined. RESULTS: Adherence to biologics was significantly higher as compared with the other psoriasis medications (0.66 vs. 0.39; P < 0.001). Prescription drug costs was significantly higher in the post-biologics period ($3796.77 vs. $11706.32; p < 0.001). However, total health care costs in the post-biologic period did not differ significantly from pre-biologic period ($14,662.22 vs. $16,156.1; p > 0.05). Patients’ adherence and health care costs did not differ significantly across biologics. After controlling for other variables, patients had significantly lower number of hospitalizations in the post-biologic period (p < 0.001). Adherence related to psoriasis medications (biologics and other psoriasis medications) remained the strongest predictors of number of ED visits in the study cohort (both p < 0.001) CONCLUSIONS: Although costs associated with biologic prescriptions were higher, total health care costs did not differ significantly in the post-biologics period. Biologics had a better adherence rate as compared to other psoriasis medications. Increased medication adherence was associated with a lower number of ED visits.
Further investigations using larger cohorts are warranted to better understand economic and patient-reported outcomes associated with biologic treatment in psoriasis.

PSK3

A COST-EFFECTIVENESS ANALYSIS OF BIOLOGIC THERAPIES FOR THE TREATMENT OF CHRONIC PLAQUE PSORIASIS

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OBJECTIVES: Biologic therapies have been shown to be a safe and effective treatment for chronic plaque psoriasis. However, there appear to be notable differences in effectiveness between treatment options. Given the considerable costs of these treatments, their relative cost-effectiveness is an important consideration. METHODS: A cost-effectiveness model was developed to estimate the incremental cost per responder associated with each biologic licensed in the UK for psoriasis. Data on response, defined as Psoriasis Area Severity Index (PASI) 75 or 90, were derived from randomized controlled trials for efalizumab, etanercept and infliximab. An ordered probit model was used to model response rates jointly. Treatment effects, defined as response rates, and direct health care costs from published sources were modelled over a 1-year time-horizon. Costs included in the analysis comprised drug acquisition, monitoring and administration costs, as well as costs associated with outpatient and inpatient hospital episodes. Treatment non-responders were assumed to receive best supportive care. All licensed regimens were included as potential treatment options.

RESULTS: In the analysis utilising PASI 75 response, efalizumab and etanercept 25 mg twice weekly (BIW) continuous, were dominated by other regimens. Of the remaining strategies, etanercept 25 mg BIW had the lowest ICER vs. supportive care (response rate 31.78%, £8891 per responder gained), followed by infliximab (78.79%, £11,302) and then etanercept 50 mg continuous, (45.99%, £12,598). For PASI 90 response, the same two strategies were dominated. However infliximab was the most effective and had the lowest ICER vs. supportive care (response rate 56.65%, £15,721 per responder gained) followed by etanercept 25 mg BIW (12.34%, £22,907) then etanercept 50 mg continuous, (21.58%, £26,853). CONCLUSIONS: Provided decision-makers are willing to pay up to approximately £12,000 to gain an additional PASI 75 responder and also value clearance of symptoms (PASI 90 responder), treatment with infliximab is likely to represent the most cost-effective strategy.

PSK4

COST-EFFECTIVENESS OF TOPICAL CALCIPOTRIOL/BETAMETHASONE DIPROPIONATE TWO-COMPOND PRODUCT IN A SCOTTISH CARE MODEL

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OBJECTIVES: UVB phototherapy is an effective treatment for psoriasis, typically introduced after a patient with widespread disease has failed to respond to a couple of topical agents. A pharmacoeconomic model was devised to analyse the cost implications of different treatment combinations based on a Scottish model of care. METHODS: A calcipotriol/betamethasone dipropionate two-compound product was assessed alongside two of the UK’s most commonly prescribed topical antipsoriatic agents (calcipotriol and betamethasone valerate in several different treatment regimens to determine the most cost-effective treatment A Markov chain approach was used to model the progression of psoriatic patients through the response or non-response to 4 weeks treatment with different topical agents. The patient pathway consisted of two four-week treatments with first and second line topical agents before referral to secondary care and phototherapy. Non-responders (i.e. those who did not achieve PASI-75) on first line treatment were then given a second line topical agent. Those who failed again were referred to secondary care and waited 6 months before completing 20 treatments of phototherapy. One hundred patients were evaluated in each of the six different treatment pathways over one year to determine overall cost per patient. RESULTS: Mean annual cost per patient showed that the most cost-effective treatment regimen used the two compound product as first and second line treatments. It was 19.7% cheaper (≤€90.99 vs ≤€60.62) and 32% fewer patients required phototherapy (30 vs 44) when compared to the next best regimen which used the two-compound product and calcipotriol as first and second line treatments respectively. CONCLUSION: This pharmacoeconomic evaluation demonstrates that the two-compound product, when used as an initial therapy in psoriasis, could result in a reduction in overall costs per patient and in fewer patients requiring phototherapy. This in turn, could improve access to phototherapy for more patients with light-responsive dermatoses.

PSK5

COST OF ATOPIC DERMATIS IN ADULTS: THE CODA STUDY

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OBJECTIVES: The aim of the Cost- & Outcomes-in-Dermatite-Atopic (CODA) study was to evaluate the socioeconomic impact of AD. METHODS: The CODA study was a naturalistic, multicentre, longitudinal ambispective (retro-prospective), prevalence based Cost Of Illness study. Data on patients with moderate or severe AD enrolled during flare-up was collected: socio-demographic, clinical (SCORing-Atopic-Dermatitis index (SCORAD); 0 = no disease; 100 = maximum manifestation) economic (direct and indirect costs), HRQoL (intangible costs), preferences towards pharmacological treatment. The following results pertain to the economic burden of AD and its treatment in adult patients. The analysis was conducted from the societal perspective with a 3 month time horizon. Direct medical costs (hospitalizations, drugs, cosmetics, personal health supplies, specialist visits, diagnostics and laboratory exams) were quantified using prices or tariffs expressed in Euro 2005. Also indirect cost, in terms of productivity losses by patients, were calculated using human capital approach. RESULTS: We enrolled 104 valid adults from 6 Italian dermatological referral centres (males 53.8%, mean age = 32.9 ± 11.8 y.o.). At the enrolment the median SCORAD was 32.0 while after 2 months was 18.0 (p < 0.0001 Wilcoxon Signed Rank test). Direct cost/patient/month was at baseline 369.6 ± 440.0: 26.5% drugs, 25.2% hospitalizations, 19.9% cosmetics. After 2 months from the enrolment direct cost/patient/month was €247.0 ± 626.5 at baseline and €32.8 ± €106.1 after 2 months (p < 0.0001). CONCLUSION: This is the first study evaluating the socioeconomic impact of AD in Italy. The difference between cost during relapse period and after 2 months is significant. Among adult patients hospitalisations and drugs are the cost drivers at baseline and after 2 months respectively. High cost