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 (79.79%, £11,302) and then etanercept 50 mg continuous, (43.99%, £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-COMPUND 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 (≤£690.99 vs ≤£860.62) 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.
and the sensitive impairment of quality of life significantly contribute to the high socioeconomic burden of AD.

BELGIAN DRUG UTILISATION STUDY OF ELIDEL® IN ROUTINE PRACTICE IN ATOPIC DERMATITIS

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OBJECTIVES: To assess the impacts of Elidel® (pimecrolimus) cream 1% usage, in routine Belgian clinical practice in patients with mild to moderate atopic dermatitis, in terms of: pimecrolimus drug consumption; use of topical corticosteroids; quality of life; and safety. METHODS: An open-label, single arm, observational, multicenter study with one year follow-up to cover the seasonality of atopic dermatitis. Yearly pimecrolimus drug consumption was estimated based on the number and quantity of delivered prescriptions and on the number of unused or partially used tubes left at the end of the study. Topical corticosteroid use was assessed by a steroid usage questionnaire and the delivered topical corticosteroid prescriptions. Quality of life was gauged using validated disease specific instruments, i.e. the Parents’Index Quality of Life-Atopic Dermatitis (PIQoL-AD) or the Quality of Life Index-Atopic Dermatitis (QoLIAD), depending on patient's age. All adverse events were recorded.

RESULTS: A total of 416 patients were enrolled from 49 study centers geographically spread over Belgium. For patients who completed this 12 months study, the mean (SD) amount of prescribed pimecrolimus cream 1% per patient was 120.8 (117.0) gram per year, with an estimated consumption of 104.4 (117.6) gram per year. Topical corticosteroids were used before the study in 81.7% of the population. At the end of study 83.5% of them stated that they were using less topical corticosteroids when pimecrolimus is part of their treatment regimen. Mean (SD) improvements versus baseline in PIQoL-AD and QoLIAD scores were 34.5% (84.3%) and 31.2% (70.8%), respectively. Median (IQR) improvements were 50.0% (12.5%–85.7%) and 46.4% (0.0%–85.0%), respectively. Pimecrolimus also showed good tolerability profile. CONCLUSIONS: This observational study showed favorable pimecrolimus profile in routine practice reflected by relatively small amount of drug used, corticosteroid sparing effect, improvement in quality of life, and good tolerability.

CONVERGENT VALIDITY AND SENSITIVITY TO CHANGE OF THE GENERIC INSTRUMENT EQ-5D AND THE DISEASE-SPECIFIC DLQI IN ATOPIC DERMATITIS

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OBJECTIVE: To assess the convergent validity and sensitivity to change over time of EQ-5D and the Dermatology-Life-Quality-Index (DLQI), in Atopic Dermatitis (AD), a very frequent, chronic, sensitive disabling disease. METHODS: Data from the Costi-& Outcomes-in-Dermatite-Atopica (CODA) naturalistic, prospective Cost-Of-Illness study, involving moderate and severe AD patients, were used. Patients aged 5–16 y.o. and/or their caregivers completed twice (at flare-up and after 2 months) the KINDL (children-reported version: KINDL-C, parent-reported version: KINDL-P; scores = 0–100, higher score = higher QoL) and CDLQI (Children’s-Dermatology-Life-Quality-Index, with scores = 0–30, higher score = lower QoL). Patients’ clinical status was evaluated with the SCORAD index (SCORing-Atopic-Dermatitis, possible score = 0–100, higher score = higher severity). We tested convergent validity by investigating correlations between QoL instruments; sensitivity to change over time was tested with paired students’ t tests, Standardized Response Mean (SRM), Effect Size (EF). RESULTS: Pediatric patients were 66, 43.9% male, median age = 8.8 y.o., median SCORAD at enrolment = 41.5 (3.0–85.0). CDLQI significantly correlated with KINDL-P (Spearman’s r = 0.44 p = 0.001) and KINDL-C (r = 0.36 p = 0.008), KINDL-P sensitively correlated with KINDL-C (r = 0.67 p < 0.0001). At follow-up clinical severity significantly decreased (Student’s paired t test, p < 0.0001). Patients reported significant lower scores of CDLQI (Student’s paired t test, p < 0.05), while no statistical change was found with KINDL-P and KINDL-C. SRM and ES were moderate for CDLQI (SRM = 0.44, ES = 0.41) and low for KINDL-C (SRM = 0.26, ES = 0.26) and KINDL-P (SRM = 0.12, ES = 0.11). CONCLUSION: KINDL significantly correlated with CDLQI, anyway sensitivity to change results were moderate to low. Understanding these properties in QoL questionnaires is necessary to allow their appropriate use and interpretation of QoL data.

CONVERGENT VALIDITY AND SENSITIVITY TO CHANGE OF GENERIC AND DISEASE-SPECIFIC INSTRUMENTS USED IN CHILDREN WITH ATOPIC DERMATITIS

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OBJECTIVE: To assess convergent validity and sensitivity to change over time of generic and disease-specific pediatric questionnaires to evaluate wellbeing in children with Atopic Dermatitis (AD), a very frequent, chronic and disabling disease. METHODS: Data from the Costi-& Outcomes-in-Dermatite-Atopica (CODA) naturalistic, prospective Cost-Of-Illness study, involving moderate and severe AD patients, were used. Patients aged 5–16 y.o. and/or their caregivers completed twice (at flare-up and after 2 months) the KINDL (children-reported version: KINDL-C, parent-reported version: KINDL-P; scores = 0–100, higher score = higher QoL) and CDLQI (Children’s-Dermatology-Life-Quality-Index, with scores = 0–30, higher score = lower QoL). Patients’ clinical status was evaluated with the SCORAD index (SCORing-Atopic-Dermatitis, possible score = 0–100, higher score = higher severity). We tested convergent validity by investigating correlations between QoL instruments; sensitivity to change over time was tested with paired students’ t tests, Standardized Response Mean (SRM), Effect Size (EF). RESULTS: Pediatric patients were 98, 48% male, median age = 30.5 y.o. (18–77). At enrolment median SCORAD = 53.0 (18.4–90.0), median EQ-VAS = 65.0 (0.0–95.0), median utility score from EQ-profile =