tiveness when correcting for the poorer-seeing eye. **METHODS:** An existing Markov model comparing three treatment frequencies of Bevacizumab (Avastin) is used to investigate the economic burden of Stage III untreated and treated for visual impairment caused by DME (DBAPOS). **RESULTS:** Data from RESTORE clinical trials with 12 months follow up of ranibizumab treatment for DME were analyzed. 8 health states were defined by BCVA in the treated eye. Mean utility was estimated using multivariate regression (regegrated means analysis). The regression was confounded by disease severity. The influence of BCVA in the fellow eye on the health index was explored by separating treated eyes into cohorts according to visual acuity of the fellow eye: better, equal or worse. Results were compared with other published studies. **RESULTS:** The utility ranged from 0.96 (SE = 0.04) for 0-16 letters (Snellen score) to 0.95 (SE = 0.083) with BCVA 0-25 letters (unadjusted model). Disease severity had a non-significant effect on this range (p>0.05). BCVA of the worse seeing eye had a significant impact on the utility (decrement -0.11 from 16 to 26 letters for the poorer seeing eye). Poorer seeing decrement -0.14 from 76-100 letters to 36-45 letters. Results were inconclusive for health states below 35 letters due to small numbers. **CONCLUSIONS:** This explorative analysis reveals that visual acuity of a worse seeing eye has a significant impact on utility and may be comparable to the impact on the better seeing eye. Importantly, these findings are supported by improvements in quality of life observed using the National Eye Institute Visual Function Questionnaire-25 (NEI-VFQ-25) for DME patients treated with ranibizumab in the worse seeing eye in RESTORE.

**PS31**

**ASSOCIATION BETWEEN EQ-SD AND DERMATOLOGY LIFE QUALITY INDEX (DLQI) IN PATIENTS WITH CHRONIC HAND ECZEMA**

**OBJECTIVES:** The aim of the current study was to investigate the associations observed between EQ-SD and Dermatology Life Quality Index (DLQI) in patients with chronic hand eczema. **METHODS:** Adult patients with chronic hand eczema were recruited from a large cohort of patients enrolled in a clinical trial assessing the efficacy and tolerability of the anti-fungal agent Terbinafine (N = 1,500). All patients completed the EQ-SD and DLQI questionnaires during the enrolment visit. **RESULTS:** A total of 104 patients (mean age = 44.5 ± 15.0; 39.4% male) were enrolled. EQ-SD mean ± standard error summary score was 0.87 ± 0.21. DLQI mean ± standard error summary score was 0.81 ± 0.23. EQ-SD and DLQI summary scores were strongly correlated (Spearman’s correlation coefficient, r = 0.87, p < 0.001). The EQ-SD summary score provided a more detailed picture of the association between patient utility and QoL impact of chronic hand eczema. **CONCLUSIONS:** EQ-SD summary score is significantly associated with the EQ-SD-VAS and utility index. Our results could be useful to derive EQ-SD information from DLQI data, to perform economic evaluations targeted to patients with severe CHE refractory to therapy with topical potent corticosteroids. **METHODS:** Within a naturalistic, multicentre cost-of-care study, patients aged ≥18 years, consecutively accessing at the participating centres, completed the EQ-SD and DLQI questionnaires during the enrolment visit. Individual patient utility was estimated from EQ-SD responses using the standard UK scoring algorithm. A multivariable linear regression model was built to estimate the associations between the EQ-SD VAS and DLQI summary scores adjusted for age and gender. The bootstrap resampling was used to calculate standard error and 95% confidence intervals. **RESULTS:** A total of 104 patients (mean age = 44.5 ± 15.0; 39.4% male) were enrolled. EQ-SD mean ± standard error summary score was 0.87 ± 0.21. DLQI mean ± standard error summary score was 0.81 ± 0.23. EQ-SD and DLQI summary scores were strongly correlated (Spearman’s correlation coefficient, r = 0.87, p < 0.001). The EQ-SD summary score provided a more detailed picture of the association between patient utility and QoL impact of chronic hand eczema. **CONCLUSIONS:** EQ-SD summary score is significantly associated with the EQ-SD-VAS and utility index. Our results could be useful to derive EQ-SD information from DLQI data, to perform economic evaluations targeted to patients with severe CHE refractory to therapy with topical potent corticosteroids.

**PS32**

**IMPACT OF DRY EYE ON EVERYDAY LIFE (IDEEL) – SYMPTOM BOTHER: ESTIMATING CUT-OFF SCORES FOR DRY EYE SEVERITY GROUPS**

**OBJECTIVES:** The aim of the study was to estimate score ranges associated with dry eye severity based on the Impact of Dry Eye on Everyday Life (IDEEL) Symptom Bother (SB) domain, and to evaluate the overall performance of the SB domain. **METHODS:** A total of 210 participants (130 dry eye patients, 32 Sjogren’s patients and 48 healthy controls) completed the IDEEL SB domain. The associations between dry eye severity on an ordinal response scale of none, mild, moderate or severe. Ordinal regression analysis using a proportional-odds model was used to provide SB cut-off score ranges associated with the highest probability of membership of each of the four response categories. **RESULTS:** ROC analysis was used to examine the specificity and sensitivity of the overall SB scale. **RESULTS:** Ordinal regression revealed SB to be a significant predictor of patient-reported dry eye severity (p < 0.001). Examination of individual probabilities associated with each SB score range indicated that the following score ranges were associated with the highest probability of membership of each dry eye category: None (0-0.16), Mild (0.17-0.38), Moderate (0.39-0.65), Severe (0.66-1). ROC curve analysis revealed excellent performance of the SB
domain at differentiating adjacent dry eye categories across a range of probability cut-offs with the following Area Under the Curve (AUC) statistics resulting from 2000 bootstrap replications for each task. These values were: Astigmatism (AUC = 0.96; CI = 0.90-0.98), Mild versus Moderate (AUC = 0.74; CI = 0.66-0.84) and Moderate versus Severe (AUC = 0.82, CI = 0.74-0.90). CONCLUSIONS: The IDEEL 5B domain provides a simple and effective basis for differentiating categories of patient-reported dry eye severity.

PSS33 ESTIMATION OF MEANINGFUL CHANGE ON THE SKINDEX-29 AND DERMATOLOGY LIFE QUALITY INDEX IN PATIENTS WITH CHRONIC HAND ECZEMA
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OBJECTIVES: A key question when interpreting quality of life data is: which magnitude of change is important? This paper presents an initial analysis of the minimum important difference (MID) for the Skindex-29 and Dermatology Life Quality Index (DLQI) in patients with chronic hand eczema. METHODS: Secondary psychometric analysis was undertaken on data from two cost-of-illness studies in Germany (N = 310). Patients completed the Skindex-29 and DLQI. The Skindex-29 is summarised into domains measuring symptoms, emotions, and functioning, plus a total score. DLQI (10-items) is assessed as a total score. MID was assessed using statistical methods including standard error of measurement (SEM) and MID standard deviation (VSD). Internal consistency was also estimated in order to support estimation of the SEM. Estimates were then correlated against existing consensus for Skindex dimensions (symptoms α = 0.834, emotions α = 0.910; function α = 0.934) and DLQI (α = 0.835) was confirmed. The MID estimated for DLQI was (SEM = 0.04, VSD = 2.53); and for Skindex-29 was (SEM = 0.16, VSD = 10.01). VSDs were calculated from correlation coefficients. RESULTS: RESULTS: The skindex-29 MID was 3.9. The IDEEL MID for other skin diseases has previously been proposed to range from 2.3 to 5.7 in stable plaque psoriasis (Shikari et al., 2006) and of 2.24 to 3.10 in chronic idiopathic urticaria (Shikiar et al., 2005) which is consistent with current estimates. PSS34 QUALITATIVE GROUNDING FOR A NEW PATIENT ASSESSMENT MEASURE IN OPHTHALMOLOGY: THE FUNCTIONAL ASSESSMENT OF VISUAL TASKS (VISTAS)
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OBJECTIVES: Patients’ ability to perform vision-dependent tasks is essential to daily function and quality of life. Visual function measures do not typically assess both corrected and uncorrected function and lack an intermediate visual range scale. To address these limitations, the current qualitative study identifies the preliminary content and item pool for a future measure (Functional Assessment of Visual Tasks, FOT). METHODS: Occupational therapists (n = 72) with mild to severe myopia, hyperopia, presbyopia, astigmatism, cataracts and glaucoma participated in a variety of qualitative studies (life event journaling, interviews, on-line and face-to-face focus groups). The objective of these studies was to identify and thematically group meaningful visual tasks occurring in the near, intermediate and distant visual ranges. The journal entries and transcripts were thematically coded and organized into related domains of life function. RESULTS: Some task groupings were comprised of activities that occur predominantly within the distance visual range. These groupings included: mobility (ambulation), driving, leisure and sports, and social functioning. Some task groupings relied more heavily on the predominantly near and intermediate visual ranges. These groupings included: technology use and activities of daily living. Other task groupings were heterogeneous in terms of visual ranges required for their performance. CONCLUSIONS: Participants identified a wide variety of distance-specific visual tasks that impacted the quality of their lives. These included tasks related to their physical safety as well as to functioning at home and in the workplace. The thematic analysis provided a rich body of information with which to design items to assess important functional dimensions that are made more difficult by visual impairment. The measurement properties of this pool of candidate items were evaluated in clinical samples as a part of two larger psychometric validation studies.

PSS35 VALIDATION OF THE EIGHTEEN ITEM FUNCTIONAL ASSESSMENT OF VISUAL TASKS (VISTAS-18) USING A NEW LEN S PRESCRIPTION METHODOLOGY
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OBJECTIVES: To psychometrically evaluate the VISTAS item pool and develop four new distance-specific visual function scales (VISTAS-18). METHODS: Study participants (n = 113) were recruited from those attending an optometry clinic to change an existing eyeglass prescription. Sampling was balanced across myopic, hyperopic, presbyopic, and astigmatic conditions. Four VISTAS-18 Function Scales (Near, Intermediate, Extended-Intermediate and Distant Function) were identified and refined using PCA factor analysis with oblique rotation. Less prescription data and visual acuity assessments in the near, intermediate and distant ranges were used to provide concurrent criterion-related validity to the new scales. RESULTS: Participants’ mean age was 50.7 years (SD 15.0) and was roughly balanced by gender (f:m = 4:3). Astigmatism (97/139), Presbyopia (92/139), Myopia (88/139), Hyperopia (43/139), and Cataracts (28/139) were all equally common. The analysis revealed three and four-factor solutions that explained over 80% of the variance in task difficulty. The VISTAS-18 Function Scales were internally consistent (Cronbach’s Alpha = 0.89 - 0.96) with normally distributed uncorrected task difficulty scores and floor effects associated with corrected ratings. Moderate correlations were observed between the uncorrected VISTAS-18 Function Scales scores and both the logMAR visual acuity (r2 = 0.41 - 0.63) and temporary lens strength (r2 = 0.30 - 0.66). With one exception, the correlations between change in lens strength and change in VISTAS-18 Function Scales were all statistically significant. CONCLUSIONS: This study provides initial structural and criterion-related validity for the 4 VISTAS-18 Function Scales. The VISTAS-18 Function Scales responded linearly to the range of both visual acuity and corrective lens strength in each distance range. Despite the small numbers of evaluable cases, three of the VISTAS scales were responsive to relatively minor adjustments in lens strength in the near, intermediate and distant visual ranges.

PSS36 DEMONSTRATING CONCEPTUAL EQUIVALENCE: TRANSLATION OF THE CU-QOL FROM ITALIAN INTO ENGLISH
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OBJECTIVES: Translation and linguistic validation of patient reported outcomes (PRO) instrument is an essential step of research methodological preparation for multinational research studies. The Chronic Urticaria Quality of Life questionnaire (CU-QOL) is a disease specific tool developed in Italian to assess chronic urticaria from the patient’s viewpoint. The objective of this work was to translate and linguistically validate from Italian to English the CU-QOL. METHODS: The CU-QOL was translated into English according to industry standard methodology. After the translation was completed, five patients completed the translated questionnaire and participated in a cognitive debriefing interview. Interviews were conducted using a standardized guide to assess the relevance, understandability, and appropriateness of the translations. Qualitative analyses were performed to ensure equivalence and that the content validity of the CU-QO was maintained for the English version. RESULTS: The study sample consisted of 5 patients diagnosed with chronic idiopathic urticaria (80% male). Mean age of the patients was 39 years. The sample consisted of English speaking patients in the US. All CU-QOL items were well understood and proved relevant to the patients in this sample. Of interest, terms such as, “hives”, and “swelling of the eyes” were clearly understood as intended. CONCLUSIONS: The results indicate that the English version of the CU-QOL translation is conceptually equivalent to the Italian source version and easily understood by the target population in the United States. We consider the translation to be acceptable for PRO assessment in research and clinical practice. Future research could include testing of the questionnaire with patients in other English speaking countries to confirm its acceptability beyond the US.

PSS37 THE CLINICAL AND ECONOMIC BURDEN OF ACUTE OTITIS MEDIA: A LARGE PROSPECTIVE OBSERVATIONAL COHORT STUDY IN EUROPE
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OBJECTIVES: Acute otitis media (AOM) is one of the commonest paediatric bacterial infections, often requiring general practitioners/ paediatrician consultation and antibiotic prescription. AOM management guidelines differ between countries. We aimed to prospectively assess the incidence and economic burden of AOM across five European countries. METHODS: A large, prospective, observational cohort study was conducted to investigate the incidence in Europe, gathering information on clinical symptoms, treatment and quality-of-life. A total of 5882 healthy children aged 6–12 years were enrolled from 73 medical practices in Germany, Italy, Spain, Sweden and the UK. A patient reported outcome (PRO) questionnaire was distributed to parents to assess health status associated with medically diagnosed AOM. Assessment included direct medical costs (e.g. medication/physician consultations/hospitalisations), direct non-medical costs (e.g. transportation/baby-sitting), and indirect costs (e.g. absence from work/school). RESULTS: OF 1419 AOM episodes, 511 (36.1%) had a prescription for antibiotic. The median time from diagnosis to the first antibiotic prescription (any) was taken for 58.8% of episodes, but the proportion varied between countries (Spain: 14.8%; Germany: 33.2%; Italy: 93.8%; UK: 94.6%; Sweden: 95.7%). The child missed day-care/school in 48.3% of episodes (median hours missed: 18), the caregiver missed work in 17.1% of episodes (median hours missed: 16). Hospitalisation rates were similar across countries (<1.0%). The mean total cost/episode ranged between £24.16 (Spain) and £306.09 (Sweden). Mean direct medical costs