and their combination are medicines of choice for treatment of glaucoma in Russia. CONCLUSIONS: More attention is being paid to prostaglandins and CAIs. The information of ophthalmologist and their patients about the cost of therapy is a very important component for pharmaco economical decisions together with medical effectiveness of treatment. But it is rather low in Russia in whole.

EYE/EAR/SKIN DISEASES/DISORDERS

EYE/EAR/SKIN  DISEASES/DISORDERS—Quality of Life/Utility/Preference Studies

RESPONSIVENESS OF SELF-REPORTED VISUAL FUNCTIONING IN AGE-RELATED MACULAR DEGENERATION (AMD) PATIENTS TO GENERAL HEALTH AND CHANGES IN VISUAL ACUITY IN A PHASE III RANDOMIZED CONTROLLED TRIAL OF LUCENTIS™ (RANIBIZUMAB; RHUFab V2)

Globe D 1, Tonnu I 1, Chang T 1, Fine J 1

1University of Southern California, Los Angeles, CA, USA;
2Genentech, Inc, South San Francisco, CA, USA

OBJECTIVES: Evaluate association of National Eye Institute Visual Functioning Questionnaire-25 (VFQ-25) score changes with systemic comorbidities and visual acuity (VA) changes in neovascular AMD patients in a phase III randomized controlled trial of Lucentis™ (ranibizumab; rhuFab V2).

METHODS: At baseline and three months, 57 patients completed the VFQ-25 (self-reported visual function) and VA was measured. The presence of seven comorbidities was recorded at baseline. VA score (number of lines read) was converted to a weighted log of the minimum angle of resolution (0.25 worse eye logMAR + 0.75 better eye logMAR). To estimate the relative association of changes in VA and comorbidities with changes in VFQ-25 scores, separate regression models of three-month changes in each subscale score on the logMAR scores were developed for each comorbidity.

RESULTS: Mean number of comorbidities was 3, including: 25 (44%) hypertension, 24 (42%) arthritis, 14 (25%) hearing loss, 12 (21%) diabetes, 12 (21%) psychiatric disease, 12 (21%) back pain, 11 (19%) cancer. Due to small sample size, only VA estimates in the regression were significant after controlling, individually, for the comorbidities. For all models, a one-line (0.1 logMAR) worsening in VA was significantly associated with decreased subscale scores, particularly those related to central vision (Near Activities, Distance Activities). VA alone explained 11% of the variation in the VFQ-25 change between baseline and 3 months in the Near Activities subscale. Inclusion of an individual comorbidity improved the explanatory power of the models slightly (r²): to 12% for hypertension, hearing loss, diabetes, psychiatric disease, cancer, and back pain, 13% for arthritis subjects, and 14% when summing all comorbidities a patient had.

CONCLUSIONS: Some selected VFQ-25 subscale scores were decreased with the presence of visual impairment and comorbidities. Systemic diseases should be included in VFQ-25 assessments to control for differences between patients and samples.

SCALING PROPERTIES OF THE DERMATOLOGY LIFE QUALITY INDEX (DLQI)

McKenna SP, Meads DM, Doward LC

Galen Research, Manchester, UK

OBJECTIVES: The Dermatology Life Quality Index (DLQI) is a widely-used HRQL measure. The instrument is intended for use by patients with any skin disease. The aim of this study was to assess the scaling properties of the DLQI and whether it is free from differential item functioning (DIF).

METHODS: DLQI data collected in atopic dermatitis (AD) and psoriasis studies in the UK were subjected to Rasch (one-parameter logistic item response theory) analysis. Fit to the Rasch model was examined via Chi² statistics and assessments of DIF related to gender, age and type of skin disease were made.

RESULTS: Sample: Psoriasis study: n = 148 (49.7% male; mean age 45.1 ± 14.9; mean illness duration 20.9 ± 13.5; mean DLQI score 8.7 ± 6.7); AD study: n = 286 (29.4% male; mean age 44.9 ± 16.4; mean illness duration 29.0 ± 16.7; mean DLQI score 7.0 ± 5.1).

The DLQI showed significant misfit to the Rasch model in psoriasis and AD—indicating that the instrument is not unidimensional. Several DLQI items exhibited DIF by age and gender. Four of the ten items in the measure exhibited DIF by disease.

CONCLUSIONS: The DLQI was found to misfit the Rasch model in both patient samples, indicating that it is unsafe to use the total score on the measure. Its validity is further compromised by DIF associated with age and gender which indicates that items work differently with different subgroups of patients. For example “How much has your skin influenced the