Title (250): Impact of light conditions on the efficacy of pseudophakic presbyopic correction.

Purpose (100): Validation of VC-ADL (Visual Capacity of Activities of Daily Living) index.

Setting (50): Department of Ophthalmology, University Hospital of Alexandroupolis, Ophthalmology Clinic.

Methods (100): An experimental facility with dimensions 6.87 x 3.5 x 3 m and flat white surface walls was constructed. An advanced light diffusion system which secured maximal uniformity at different user-defined lighting settings was installed. A set of 10 tasks that simulated ADLs was developed. All tasks required intermediate (60cm) and near (40cm) vision and contributed equally to VC-ADL score. 60 participants populated 3 study groups according to the near vision acuity [J1 (20 patients), J3(20 patients) and J6(20 patients)] and performed the tasks.

Results (100): Significant differences were detected among study groups for all tasks (all p<0.05) and for the total VC-ADL score (p=0.01).

Conclusions (100): VC-ADL score is a reliable index for the evaluation of functional capacity of near and intermediate vision.

Financial disclosure: This research is co-financed by Greece and the European Union (European Social Fund-ESF) through the Operational Programme «Human Resources Development, Education and Lifelong Learning 2014-2020» in the context of the project "Impact of light conditions on the efficacy of pseudophakic presbyopic corrections." (MIS:5050303)"