

Table S5: Linear Regression β Coefficients for the Association of VSQOL and VFL in the BSE among African Americans in MOCCaS*

| Vision-Specific Quality of Life | β_{MD} | (95% CI) | MD (dB) of VFL Associated with 5-point Difference in QOL** | P-Value Interaction by Race, Ethnicity | | |
|---------------------------------|--------------|-----------------|--|--|---------|-------------------|
| | | | | African Americans | Latinos | Chinese Americans |
| <u>Item Response Theory</u> | | | | | | |
| Task Composite, IRT† | 0.496 | (0.374, 0.617) | 10.1 | < 0.001 | 0.004 | 0.172 |
| Well-Being Composite, IRT‡ | 0.387 | (0.263, 0.511) | 12.9 | < 0.001 | 0.002 | 0.420 |
| <u>Classical Test Theory</u> | | | | | | |
| Overall Composite, CTT§ | 0.261 | (0.174, 0.349) | 19.1 | < 0.001 | < 0.001 | 0.009 |
| Driving Difficulties | 0.884 | (0.725, 1.044) | 5.7 | < 0.001 | < 0.001 | 1.000 |
| General Vision | 0.562 | (0.430, 0.694) | 8.9 | < 0.001 | 0.004 | 1.000 |
| Near Vision | 0.397 | (0.269, 0.525) | 12.6 | < 0.001 | < 0.001 | 0.620 |
| Peripheral Vision | 0.313 | (0.190, 0.436) | 16.0 | < 0.001 | < 0.001 | 1.000 |
| Vision-Related Mental Health | 0.263 | (0.098, 0.428) | 19.0 | 0.012 | < 0.001 | < 0.001 |
| Vision-Related Role Function | 0.191 | (0.029, 0.353) | 26.2 | 0.084 | < 0.001 | < 0.001 |
| Distance Vision | 0.181 | (0.068, 0.294) | 27.6 | 0.012 | < 0.001 | 0.008 |
| Ocular Pain | 0.143 | (-0.011, 0.297) | 34.9 | 0.207 | < 0.001 | 0.063 |
| Vision-Related Social Function | 0.128 | (0.044, 0.212) | 39.0 | 0.015 | < 0.001 | 1.000 |
| Vision-Related Dependency | 0.112 | (-0.027, 0.251) | 44.5 | 0.227 | < 0.001 | 0.004 |
| Color Vision | -0.014 | (-0.102, 0.074) | | 0.753 | < 0.001 | 1.000 |
| <u>General Health Item</u> | | | | | | |
| General Health | 0.564 | (0.370, 0.759) | 8.9 | < 0.001 | 0.071 | 0.015 |

VSQOL = Vision-Specific Quality of Life; VFL = Visual Field Loss; BSE = Better Seeing Eye; MOCCaS = Multiethnic Ophthalmology Cohorts of California Study; 95% CI = 95% confidence interval; NEI-VFQ-25 = National Eye Institute Visual Function Questionnaire 25-Item; MD = Mean Deviation; IRT = Item Response Theory; CTT = Classical Test Theory

*VFL is presented as mean deviation score in decibels; VSQOL is assessed by the NEI-VFQ-25. Data are presented as coefficient (95% CI). NEI-VFQ-25 scores are adjusted for age, gender, education, employment status, income, acculturation, co-morbidities, health insurance, vision insurance, and visual acuity impairment. There was an interaction term for race, ethnicity and VFL. The Holm method was used to adjust for multiple comparisons for 15 VSQOL outcomes.

**Regression coefficients were transformed per 5-point difference in HRQOL score, a clinically significant difference in VSQOL score.

†IRT Task Composite was calculated from a graded response theory model of 12 items from near vision, distance vision, driving, color vision, peripheral vision, and role difficulties subscales.

‡IRT Well-Being Composite was calculated from a graded response model of 12 items from general vision, dependency on others, mental health, ocular pain, and social functioning subscales.

§Composite score is an un-weighted mean of the 12 subscale scores (excluding general health).

||Scores could be generated for only 4,610 African Americans who reported that they were currently driving or had driven in the past.