

Table A1. Summary of individual regression variables. Brief description of each of the variables discussed, including: retinal image quality, LOCS-III, and forward scatter metrics. The retinal image quality metrics are described in detail in reference 5, the LOCS-III metrics in reference 27, and the forward scatter metrics in reference 35. Not all commonly used retinal image quality and forward scatter metrics are described in this table, and references 5 and 35, respectively, may be consulted for more complete accountings of such metrics.

Category	Metric	Definition
	Age	Age at study entry
Retinal image quality metrics	AreaMTF	Image quality metric calculated as the area of the modulation transfer function (MTF) lying below the radial average and above the neural contrast threshold (area of visibility), diffraction limit normalized
	Coma	Wavefront error mode calculated as the root mean square magnitude of horizontal and vertical coma calculated from the Zernike coefficients as $[(C_3^{-1})^2 + (C_3^1)^2]^{0.5}$ (microns)
	D50	Image quality metric calculated as the diameter of a circular area centered on the PSF peak and capturing 50% of the PSF light energy (arcmin)
	ENT	Image quality metric calculated as the entropy of the retinal PSF
	HOA	Wavefront error metric calculated as the root mean square error of all aberrations between the 3 rd and 10 th radial order (microns)
	SM	Image quality metric calculated as the square root of the second moment of the light distribution of the retinal PSF (arcmin)
	Spherical aberration	Wavefront error mode calculated from the Zernike coefficients as $[(C_4^0)^2]^{0.5}$ (microns)
	SRMTF	Strehl ratio computed in the frequency domain using the MTF method
	STD	Standard deviation of the intensity values in the PSF
	Trefoil	Wavefront error mode calculated from the Zernike coefficients as $[(C_3^{-3})^2 + (C_3^3)^2]^{0.5}$ (microns)
VSMTF	Image quality metric calculated as the visual Strehl computed in the frequency domain, where the MTF is weighted by the neural contrast sensitivity function	
LOCS-III	C	LOCS-III subjective measure of cortical lens changes with respect to a set of reference photos
	NO	LOCS-III subjective measure of nuclear opalescence of the lens with respect to a set of reference photos
	NC	LOCS-III subjective measure of lens color with respect to a set of reference photos
	P	LOCS-III subjective measure of posterior subcapsular lens changes with respect to a set of reference photos
Forward Scatter	Max_Max	Maximum pixel value in the Shack-Hartmann spot image
	Max_Mean	Maximum mean pixel value of all PSFs in the Shack-Hartmann spot image
	Max_SD	Maximum standard deviation of pixel values of all PSFs in the Shack-Hartmann spot image
	Mean_Mean	Mean of the mean pixel values of all PSFs in the Shack-Hartmann spot image