

Supplementary Online Content

Waldstein SM, Vogl W-D, Bogunovic H, Sadeghipour A, Riedl S, Schmidt-Erfurth U. Characterization of drusen and hyperreflective foci as biomarkers for disease progression in age-related macular degeneration using artificial intelligence in optical coherence tomography. *JAMA Ophthalmol*. Published online May 7, 2020.
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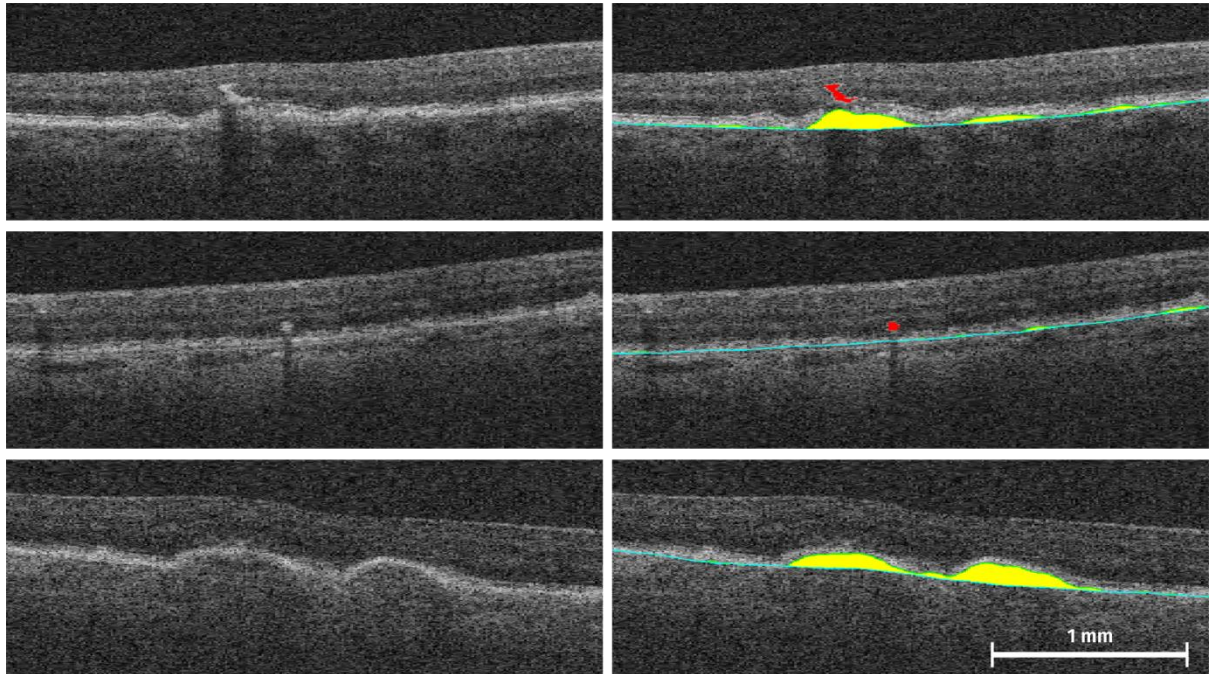
eFigure. Representative Examples of the Quantified Imaging Biomarkers

eTable. Logistic Regression Model

This supplementary material has been provided by the authors to give readers additional information about their work.

eFigure. Representative Examples of the Quantified Imaging Biomarkers

Fully automated segmentation was used to quantify drusen and hyperreflective foci (HRF) in optical coherence tomography images. **Top row** shows an example of HRF overlying drusen, **middle row** shows an example of HRF not overlying drusen, and **bottom row** shows an eye with large drusen that is developing a macular neovascularization at that location one month later. The **left column** shows the SD-OCT images, and **right column** the corresponding segmentations overlaid. (Green) outer boundary of retinal pigment epithelium segmentation, (blue) Bruch's membrane segmentation, (yellow) drusen, (red) HRF segmentation.



eTable. Logistic Regression Model

The table provides the area under the receiver operating characteristics curves (ROC AuC) for the logistic regression model targeting conversion to macular neovascularization (MNV) and macular atrophy (MA) using a set of different biomarkers. SD, standard deviation.

Component	Eccentricity	ROC AuC mean (SD)	
		MNV vs None	MA vs None
Baseline		0.55 (0.047)	0.36 (0.072)
Drusen volume	0- 0.5mm	0.65 (0.063)	0.53 (0.101)
	0.5-1.5mm	0.66 (0.066)	0.59 (0.094)
	1.5-3mm	0.60 (0.066)	0.46 (0.095)
Hyperreflective foci volume	0- 0.5mm	0.59 (0.066)	0.54 (0.102)
	0.5-1.5mm	0.62 (0.067)	0.73 (0.109)
	1.5-3mm	0.57 (0.061)	0.37 (0.078)
Hyperreflective foci not above drusen volume	0- 0.5mm	0.56 (0.063)	0.40 (0.088)
	0.5-1.5mm	0.56 (0.06)	0.64 (0.121)
	1.5-3mm	0.54 (0.067)	0.37 (0.067)