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En face Optical Coherence Tomography Imaging for the Detection of Nascent Geographic Atrophy

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ABSTRACT

PURPOSE: To determine if *en face* optical coherence tomography (OCT) imaging can identify nascent geographic atrophy (nGA) in eyes with intermediate age-related macular degeneration (iAMD).

DESIGN: Retrospective observational case series.

METHODS: Patients with iAMD from the COMPLETE study at the Bascom Palmer Eye Institute were evaluated to determine if nGA was present at baseline and at follow-up using high density Spectralis OCT B-scans and *en face* OCT images from the Cirrus OCT instrument. If available, additional *en face* OCT images and B-scans were analyzed at follow-up times beyond the 52-week period.

RESULTS: A total of 37 eyes (27 patients) were evaluated for at least one year using both B-scans and *en face* images. Two drusen suspicious for nGA at baseline were identified, but neither druse developed GA after 24 and 62 months of follow-up, respectively. Another druse displayed hypertransmission into the choroid at week 52 on B-scan imaging and was classified as nGA. *En face* OCT imaging identified this druse as a focal bright area. This druse did progress to GA during a follow-up of 38 months.

CONCLUSIONS: *En face* OCT imaging appeared to be as useful as routine B-scan imaging for identifying areas suspicious for nGA in this population from the COMPLETE Study. Additional longitudinal follow-up of eyes with drusen is needed to determine if *en face* OCT imaging can replace the evaluation of individual B-scans for the detection of nGA.