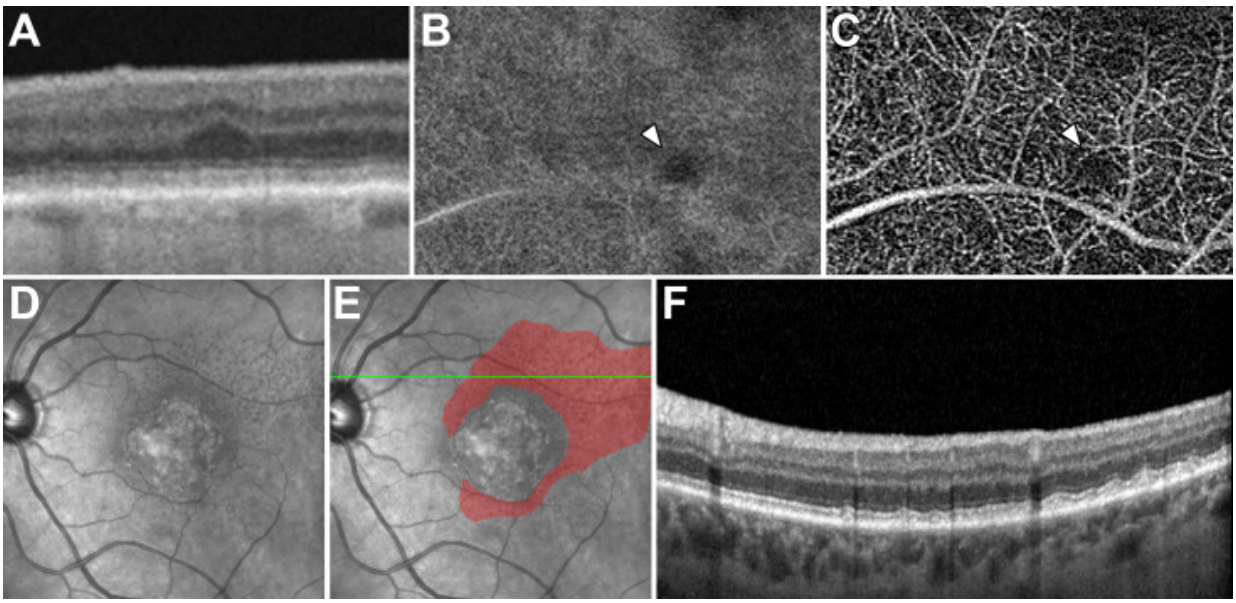
Independence of ocular biomarkers of cardiac risk in macular degeneration



Retinal ischemic perivascular lesions (RIPLs; small middle macular ischemic lesions), and subretinal drusenoid deposits (SDDs; small subretinal lesions most commonly seen in age-related macular degeneration [AMD]), have recently been associated with increased risk for cardiovascular disease. [1] Additionally, these retinal lesions have been found to correlate with local anatomic changes in the ophthalmic microvasculature: RIPLs to regions of decreased vessel density in the deep capillary plexus (DCP), and SDDs to focal areas of decreased vessel density in the choriocapillaris. While it is unknown whether a correlation between RIPLs and SDDs exists, a shared vascular pathophysiological mechanism is plausible. However, a positive correlation between RIPLs and SDDs could limit their utility as independent predictors of cardiovascular risk. We investigated the relationship between the number of RIPLs per

eye and the percentage of the macula affected by reticular pseudodrusen (RPD), a near-infrared reflectance (NIR) retinal imaging finding known to represent SDDs, with a retrospective, non-masked, consecutive, cross-sectional, observational clinical study in a cohort of patients with AMD.