



**Supplementary figure 1. Multimodal imaging of the fellow eye during 6.6 years of follow-up.**

**A,B.** Images were acquired 3.1 years before patient death, at the time when the right eye (Figure 2) was diagnosed with macular neovascularization (MNV). Best-corrected visual acuity (BCVA) in this eye was 20/80. **A.** Color fundus photograph shows drusen (yellow arrowhead) and a small atrophic area (teal arrowhead) in the central macula. **B.** Late venous-phase fluorescein angiography shows hyperfluorescence associated with drusen (yellow arrowhead) and a central window defect (teal arrowhead). **C-F.** Near-infrared reflectance (NIR, second column) with corresponding OCT B-scans (third column) through a foveal location indicated by green arrows, tracked over 6.6 years. Time in years before patient death is indicated. Lamellar hole (white asterisks) and lamellar hole-associated epiretinal proliferation (white arrowhead) on the surface of internal limiting membrane was stable over time. **C.** Subretinal drusenoid deposits (orange arrowhead) in the nasal macula and soft drusen (yellow arrowhead) in the central macula at baseline. BCVA: 20/60. **D.** Soft drusen collapsed with a shallow irregular retinal pigment epithelium (RPE) elevation (SIRE, pink arrowhead), sparse subretinal fluid (yellow asterisk), and stripes of choroidal hypertransmission (teal arrowheads) suggesting early RPE degeneration. Intravitreal anti-vascular endothelial growth factor therapy with ranibizumab (0.5 mg/ 0.05 ml) was initiated at this time. BCVA: 20/70. **E.** The length of the SIRE increased, with more subretinal fluid (yellow asterisk) and choroidal hypertransmission stripes (teal arrowheads). BCVA: 20/100. **F.** The length of the SIRE increased slowly with persistence of some subretinal fluid (yellow asterisk). Compared to D (-2.7 y) the loss of RPE, ellipsoid zone, and external limiting membrane and increase in choroidal hypertransmission (teal arrowheads) appear to be modest over the SIRE. BCVA: 20/200.