Supplementary Table 1. Detailed definitions of assessed SD-OCT lesions

Vitreomacular adhesion (VMA)

VMA is characterized by an elevation of the vitreous body from the macular (peri-foveal) area with remaining vitreous attachment at the fovea (Figure 1A). The VMA should not cause any change in contour or morphologic features at the fovea. The detached vitreous presents as a media reflective line over the retina. VMA can be further divided into two categories according to the area of remaining vitreomacular adhesion:

- 1) Focal VMA: diameter of remaining vitreofoveal attachment in foveal area is <1500µm
- 2) Broad partial VMA: diameter of remaining vitreofoveal attachment in foveal area is >1500µm

Vitreomacular Traction (VMT)

Traction of the cortical vitreous can distort the contour of the foveal surface. VMT is defined as three abnormalities: vitreofoveal adhesion, distortion of the foveal surface, and elevation of the foveal floor (Figure 1B). The definition is based on the appearance of the detached vitreous and can be further divided into two categories:

- 1) Focal traction: diameter of the vitreofoveal distortion is $\leq 1500 \mu m$
- 2) Broad traction: diameter of the vitreofoveal distortion is >1500μm

Epiretinal membrane (ERM)

ERM presents as a highly reflective layer on or above the inner surface of the retina and is usually accompanied by a broad adhesion on the retina. ERM may be associated with winkling of the retinal surface, distortion of the foveal contour, thickening of the retina, intraretinal cysts, or macular pseudoholes (Figure 1C).

Full thickness Macular Hole (FTMH)

FTMH is a defect of the neurosensory retina affecting all layers from the inner limiting membrane (ILM) to the ellipsoid zone (Figure 2A). An incompletely detached operculum pulled by the posterior vitreous can be seen in early stages of FTMH with disappearance of layers from the ILM to the ellipsoid zone. In advanced FTMH, the operculum is detached, with or without elevated photoreceptors layers at the edge of the hole.

Lamellar macular hole (LMH)

LMH is an aborted process in the formation of a full thickness macular hole. LMH is characterized by an irregular fovea with partial loss of the inner layers of retina, but with intact photoreceptor layer and RPE/Bruch's complex (Figure 2B). A dehiscence between the inner foveal retina and the outer retina can typically also be seen.

Macular Retinoschisis (MRS)

MRS is characterized by single or multiple separations within the neurosensory retina (Figure 2C). This splitting, mostly present in outer layers, can occur between different layers or within one neurosensory layer. Columnar structures between two split layers may be seen. MRS may or may not involve the fovea.

Retinal Detachment (RD)

RD is defined as separation of neurosensory retina from the RPE. A hyporeflection area can be seen between the split layers, and the separated sensory retina typically has a dome-shape configuration (Figure 2D). RD may be associated with macular retinoschisis, macular hole, or macular edema depending on etiology.

Macular Edema (ME)

ME is characterized by 1) an increased macular thickness throughout all layers of retina, 2) a focal thickening with or without intraretinal cyst formation, or 3) a retina with thickness in any sector $>300\mu m$ on the macular tomographic map (Figures 2E and 2F). ME is measured within a $500\mu m$ -diameter circle centered at fovea. The presence or absence of sub-retinal fluid is not factored into the definition.

Intraretinal Hyperreflective Lesion

Intraretinal hyperreflective lesions are characterized by a hyper-reflective area in the neurosensory retina with or without shadowing of the underneath outer retina and choroid (Figure 2G). The lesion may be a sign of intraretinal hemorrhage, dense exudation, neovascularization, or pigment migration. Imaging artifact from normal retinal vessels, which show a "ghost image" referred to as a shadow artifact, should be excluded.

RPE Thickening

RPE thickening can be the result of RPE proliferation, hypertrophy, change in pigmentation, or migration. Thickness changes in the RPE tend to be localized and irregular, appearing as small protrusions on the RPE surface which may be associated with distortion of the layer (Figure 3A).

Pigment Epithelium Detachment (PED)

PED is characterized by separation of the RPE from Bruch's membrane, with an accumulation of sub-RPE fluid, blood, fibrovascular tissue, or lipoprotein-derived debris (Figure 3B). The inner retinal layers usually remain unchanged. PED can be further classified as:

- Serous PED: presents as a dome-shape elevation in which the sub-RPE area is filled with hyporeflective fluid
- 2) Hemorrhage PED: presents as a dome-shape elevation with steep slope in which signal from the underneath choroid is weak or absent due to the masking effect of blood
- 3) Fibrovascular PED: presents as a low and irregular elevation of the RPE in which the sub-RPE area is filled with solid stripes of medium reflectivity
- 4) Drusen: presents as a separation of the RPE and Bruch's membrane due to accumulation of drusen. Drusen appears as material of medium reflectivity and can coexist with other types of PED

Dome-Shaped Macula (DSM)

DSM is characterized by an inward bulge of the RPE layer in the macular area, resulting in a "dome-like" appearance of the macula (Figure 3C). The height of protrusion should be $>50\mu m$ when measured as the vertical distance between the peak of the bulge to the tangential line of the RPE. DSM cannot be properly assessed if PED is present.