Supplementary Online Content

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eFigure 1. Multimodal Retinal Imaging of Blood-Brain Barrier Disruption (BBBD) Associated Maculopathy

eFigure 2. Maculopathy Progression and Geographic Atrophy After Completion of Blood-Brain Barrier Disruption (BBBD) Therapy

eFigure 3. Maculopathy Evolution After Completion of Blood-Brain Barrier Disruption (BBBD) Therapy

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



eFigure 1. Multimodal retinal imaging of blood-brain barrier disruption (BBBD) associated maculopathy. Multimodal retinal imaging in 12 patients treated with blood-brain barrier disruption therapy and associated maculopathy grouped by morphologic features: 1st row – reticular pigmentary changes, 2nd row – parafoveal bull's eye or RPE stippling, 3rd row – geographic atrophy of the RPE.



B Time from end of BBBD therapy



C Time from end of BBBD therapy



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eFigure 2. Maculopathy progression and geographic atrophy after completion of bloodbrain barrier disruption (BBBD) therapy. (A) Multimodal retinal imaging over a 14 year period following completion of BBBD therapy in a patient (P8) treated for a CNS glioma. OCT demonstrates expanding cRORA in both eyes and formation (arrow) and loss (arrowhead) of outer retinal tubulations. (B) Multimodal retinal imaging in a patient (P1) with primary CNS lymphoma. Choroidal neovascularization in the left eye was first seen at 5 years after completion of BBBD therapy with subsequent submacular hemorrhage. Six years later, there is reduction in reticular pigmentary changes and enlargement of cRORA in both eyes. (C) Multimodal retinal imaging in a patient (P5) after completion of BBBD therapy demonstrates resolution of pigmentary changes and the appearance of focal cRORA in the left eye. Subsequent follow up demonstrates enlargement of the atrophic area.



eFigure 3. Maculopathy evolution after completion of blood-brain barrier disruption

(BBBD) therapy. Near infrared and OCT imaging in patients P2 (A) and P3 (B) demonstrate partial resolution of reticular pigmentary changes with persistence of outer retinal and ellipsoid zone irregularity following completion of BBBD therapy.