SUPPLEMENTAL DATA

Methods

All protocols follow the UIC Institutional Animal Care and Use Committee protocols. Breeding and colony maintenance was conducted at the UIC as described (66).

Immunohistochemical analysis

General tissue processing and staining was conducted as described (71). Nine nonadjacent sections (108μm apart) were utilized for quantification per animal.

Fibrinogen extravasation

Fibrinogen (Rabbit anti-fibrinogen diluted 1:200 from Dako, AlexaFlour 647 anti-rabbit 1:200 from Invitrogen) was co-stained with CD31 (Rat anti-CD31 diluted 1:10 from B& D Bioscience with AlexaFlour 405 anti-rat diluted 1:200 from Invitrogen). 6 random images from each cortex per section were captured on a Zeiss Axio Imager M1 under identical capture settings at 20x magnification. For representative images, Z-stack images were taken at 20x magnification on a Zeiss LSM 710 Confocal Microscope and 3D reconstructions produced using Imaris 7.7.2 software. *Quantification.* Converted images were thresholded equally to diminish background signal (NIH ImageJ software) and quantified using the Analyze Particles function. Identified objects after thresholding were scanned to validate fibrinogen extravasation.

CAA-like deposition

Aβ (MOAB-2, mouse IgG_{2b}, 1:400 dilution, Biosensis Dako, Alexafluor 350 anti-mouse IgG_{2b}) was co-stained with laminin (Rabbit, 1:400 dilution, Abcam). Mosiac images were captured on a

Zeiss Axio Imager M1 under identical capture settings at 20x magnification. *Quantification.* Converted images were thresholded equally and quantified using the colocalization threshold (NIH ImageJ software) function in For more detailed analysis of CAA, a triple stain for laminin, CD31 and MOAB-2 was conducted, Z-stack images were taken at 20x magnification on a Zeiss LSM 710 Confocal Microscope and 3D reconstructions produced using Imaris 7.7.2 software.