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Supplemental Information

Safety of Same-Eye Subretinal

Sequential Readministration

of *AAV2-hRPE65v2* in Non-human Primates

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Supplementary Figures

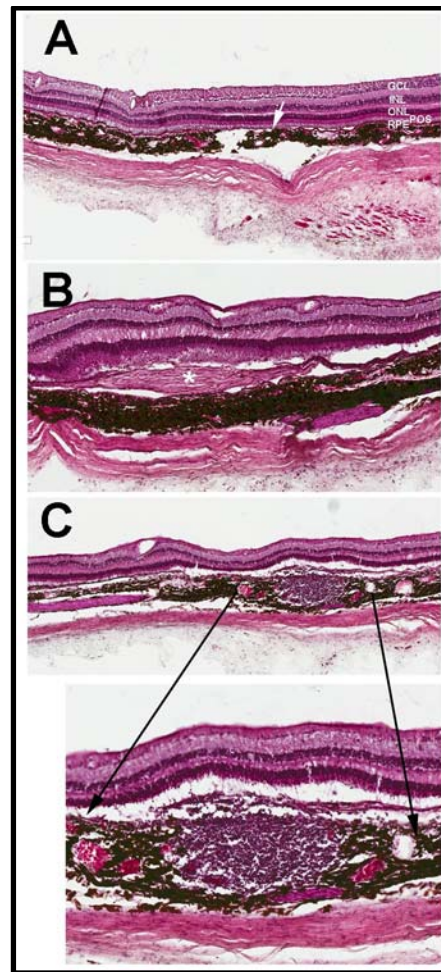


Fig. S1. Examples of focal and rare histopathologic findings. Shown are hematoxylin and eosin-stained cryosections from the right retina of 11D086. (A) There is a focal break in the RPE layer (arrow) coinciding with shortening of outer segments. B) Fibrinoid scar (*) is present in the subretinal space; (C) focal collection of monocytes in the choroid, extending towards subretinal space. The RPE is missing in this area. Inset shows a higher magnification view of this area. GCL, ganglion cell layer; INL, inner nuclear layer; ONL, outer nuclear layer; POS, photoreceptor outer segment; RPE, retinal pigmented epithelium.

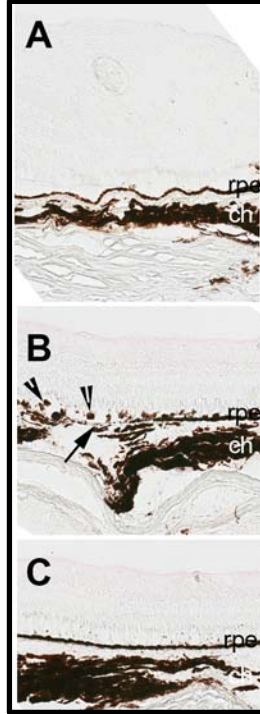


Fig. S2. Representative RPE65 immunohistochemistry results after ipsilateral subretinal readministration in a non-human primate (BF54F) in (A) injection region #1, (B) overlapping injection region, and (C) on injection region #2. (B) Arrowheads, dislodged RPE cells; arrow, atrophic retinal pigmented epithelium (RPE) cells; ch, choroid

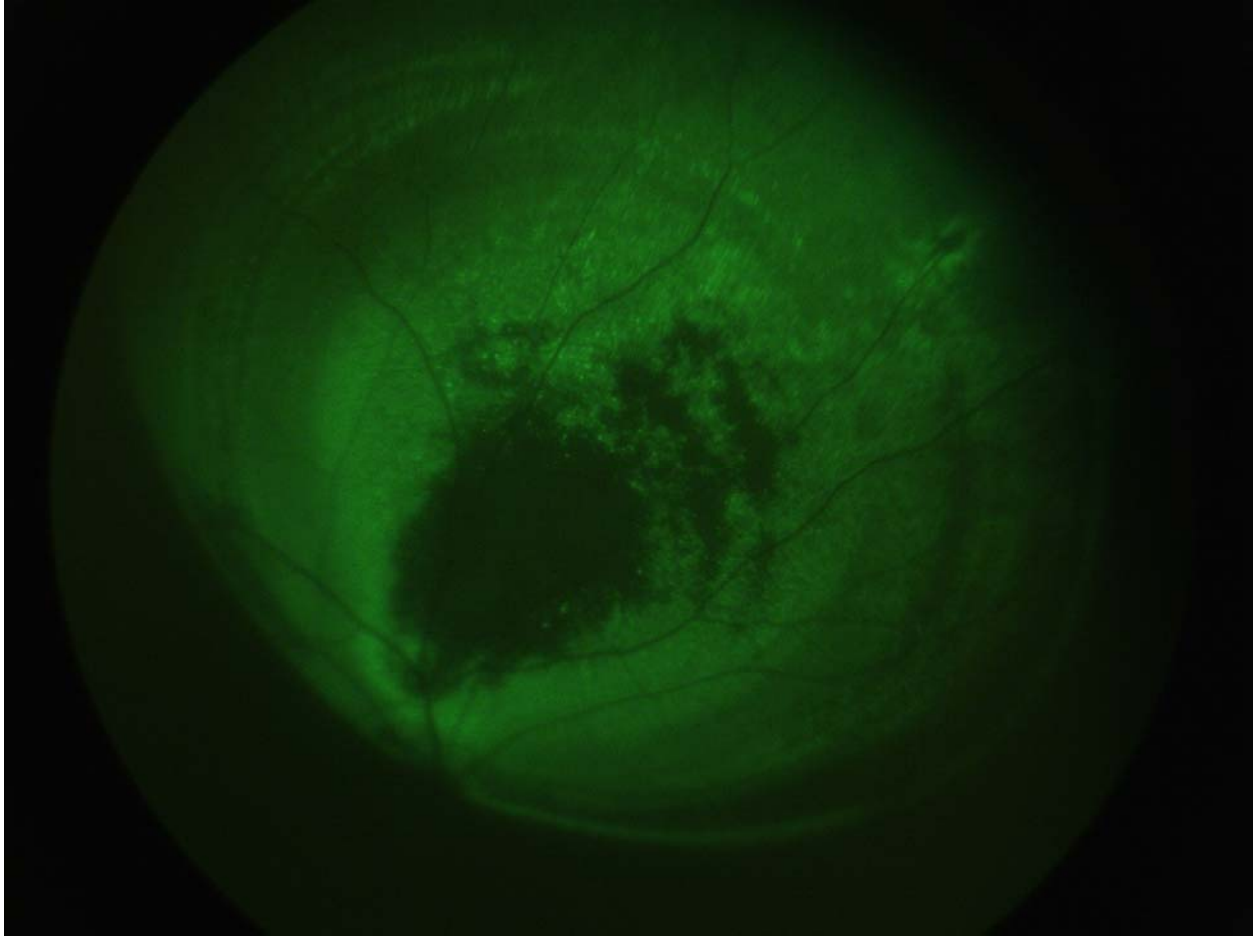


Fig. S3. Example of contour map-like appearance effect documented by imaging with a RetCam equipped with fluorescein filters after subretinal injection of AAV.EGFP in a NHP. This animal had received a subretinal injection of $1E11$ vg of a tyrosine-mutant AAV (AAV2TYF) carrying CVM-driven enhanced green fluorescent protein (EGFP) three months earlier. The image shows EGFP fluorescence occupying the region exposed to the AAV. A ringlike pattern is detected surrounding a black-appearing center of the bleb.