C20D₃-Vitamin A Prevents Retinal Pigment Epithelium Atrophic Changes In A Mouse Model

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SUPPLEMENTAL MATERIAL



Supplemental Figure 1

Retinal layer thickness, measured 1 mm from either side of the optic nerve head, in $Abca4^{-/}/Rdh8^{-/}$ mice administered a diet containing vitamin A as either retinyl acetate or $C20D_3$ -retinyl acetate. Averages and SEM are shown. $C20D_3$ -retinyl acetate: n = 6 at 3 months, n = 14 at 12 months, and n = 4 at 18 months. Retinyl acetate: n = 5 at 3 months, n = 5 at 12 months and n = 10 at 18 months. Each eye was from a different animal.



Supplemental Figure 2

(**A-C**) Representative H&E cross-sections of 18-month-old *Abca4^{-/-}/Rdh8^{-/-}* control animals administered vitamin A as retinyl acetate. Each panel represents a slice from a different eye. Focal RPE atrophic changes (boxed) were observed in all eyes examined. Areas without focal RPE pathology appeared relatively normal.

(**D**) Representative OCT cross-section of a human eye with AMD. Similarly, focal RPE atrophic changes (boxed) are observed, while areas away from the RPE pathology appear relatively normal.