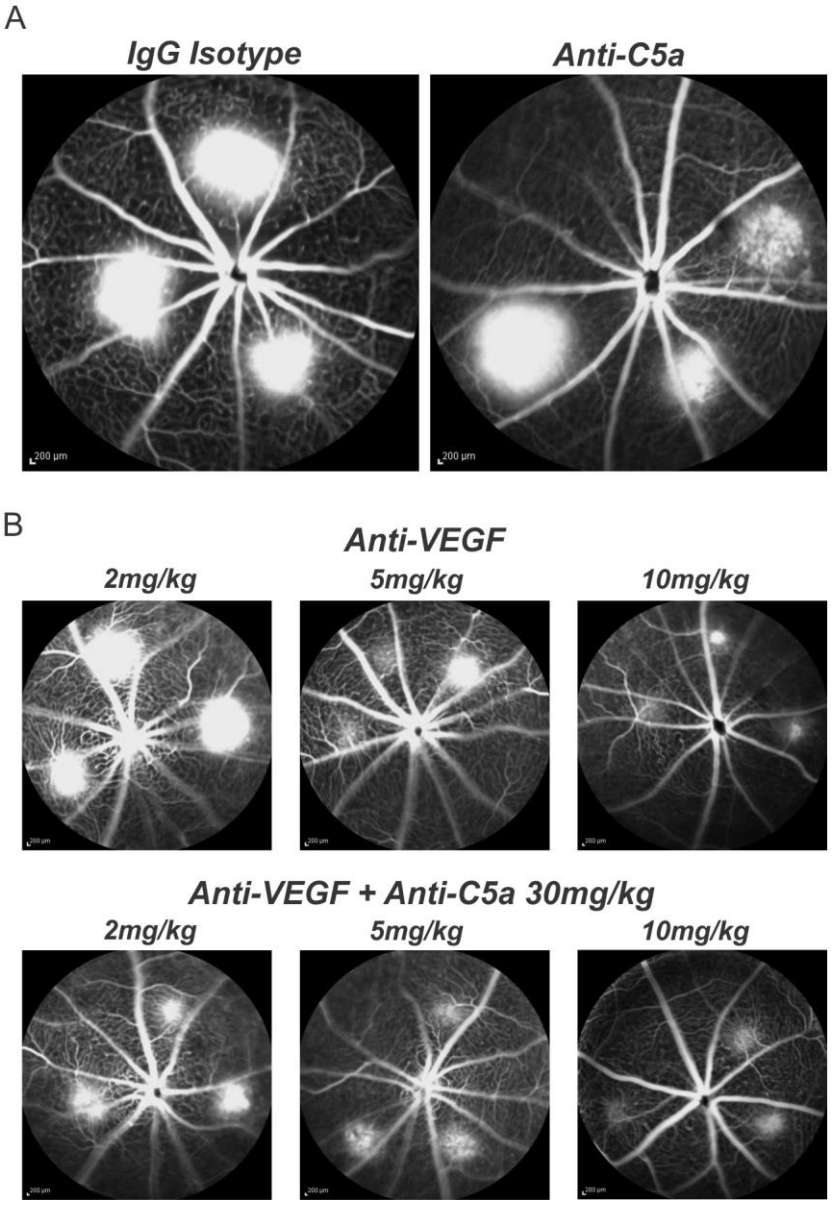
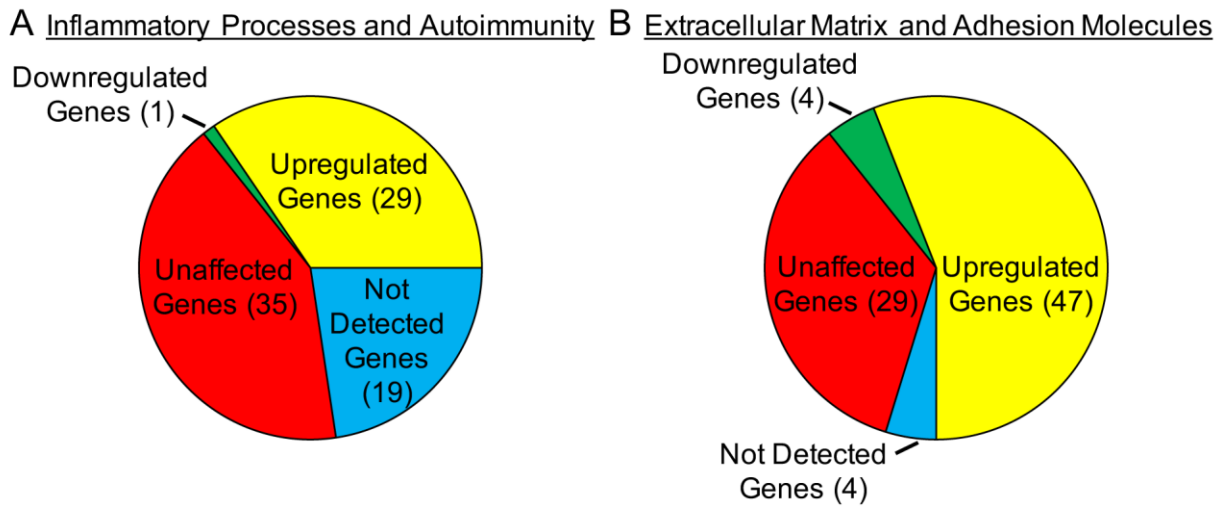
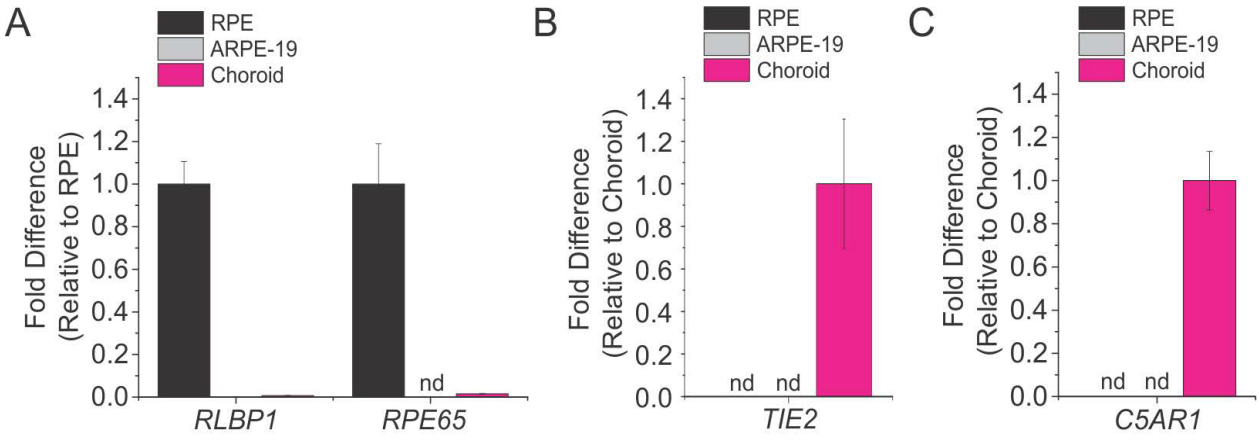


Supplemental Figure S1: Anti-C5a therapy enhances the efficacy of anti-VEGF therapy for "wet" AMD-like features seen in laser-induced choroidal neovascularization.
"Wet" AMD-like features were assessed using the laser-induced CNV model. CNV lesion size was assessed following administration of either IgG isotype control or anti-C5a alone or in combination with anti-VEGF. (**A**) Scanning laser ophthalmoscopy angiography images of anti-C5a therapy versus IgG isotype controls show a decrease in neovascular exudative lesions following anti-C5a therapy. (**B**) Comparing anti-VEGF therapy to combinatorial therapy (anti-VEGF with anti-C5a) decreased neovascular exudative lesions were seen with combinatorial therapy at 2 and 5 mg/kg of anti-VEGF.



Supplemental Figure S2: Overall trends of gene expression changes in inflammatory and ECM remodeling genes detected on pathway-focused PCR arrays of eye cups of aged Cfh+/- fed an HFC diet.

Graphic representation illustrating the change in expression of the 84 genes on the Inflammatory Processes and Autoimmunity and on the Extracellular Matrix and Adhesion Molecules pathway-focused PCR arrays (Qiagen). For these analyses, a gene was considered to be upregulated or downregulated if the fold change was greater than ±1.25 as previously described[2]. (**A**) An upregulation of 29 genes involved in inflammation was detected in the eye cups of aged *Cfh+/-* mice fed an HFC diet compared to age-matched *Cfh+/-* mice fed a normal diet. (**B**) 47 genes involved in extracellular matrix remodeling were upregulated in the eye cups of aged *Cfh+/-* mice fed an HFC diet. Together these gene expression changes indicate support that there is inflammation and extracellular matrix remodeling in the eyes of aged *Cfh+/-* mice fed the HFC diet. All genes and their fold changes are shown in **Supplemental tables 1** and **2**.



Supplemental Figure S3: C5AR1 expression in human RPE and Choroid and immortalized human RPE.

RNA was isolated from RPE and choroid of a human donor eye as well as cultured ARPE19 RPE cells. (**A**) Expression of two RPE markers (*RLBP1* and *RPE65*) and (**B**) one choroid marker (*TIE2*) was examined in these RNA samples. (**C**) *C5AR1*expression was examined using these samples. *C5AR1* was abundantly detected in choroid-enriched RNA. No *C5AR1* expression was detected in isolated RPE or cultured ARPE19 cells. This supports the *C5ar1* expression pattern seen in primary mouse posterior tissues. nd: none detected