Supplemental figure 1: Total number of patients recruited and samples collected and their use.

**Total number of patients**
- Macular hole: 33
- Retinal Detachment: 120
- Developed PVR: 14
- PVR at presentation: 7

**Samples used in the Decorin ELISA**
- Macular hole: 33
- Retinal Detachment: 71
- Developed PVR: 14
- PVR at presentation: 7

**Samples used in the TGFβ2 ELISA**
- Macular hole: 21
- Retinal Detachment: 62
- Developed PVR: 13
- PVR at presentation: 6

**Vitreous samples used in assay optimisation**
- 32 retinal detachment patients
- No/insufficient vitreous collected: 3 retinal detachment patients
Supplemental figure 2: mRNA expression profile of Decorin and TGFβ1-3 in ARPE-19 cells in the presence of Decorin only or TGFβ2 with Decorin. ARPE-19 cells were serum starved and treated with TGFβ2 with no significant changes in (A) Decorin or (B) TGFβ2 mRNA expression. Treatment with low and high dose Decorin only did not alter (C) Decorin mRNA expression however there was a reduction in (D) TGFβ2 with higher doses of decorin. ARPE-19 cells were treated + and -serum and 10ug/ml of TGFβ2. Data is presented as a fold change over GAPDH. Each group is representative of n=3 with 3 experimental repeats. Data was analysed by one way ANOVA *p<0.05.
Supplemental figure 3: Proliferation measurements of ARPE-19 cells following Decorin with and without TGFβ2 treatment. The BrDU assay was used to determine the level of proliferation of ARPE-19 cells following (A) Decorin treatment alone or (B) Decorin treatment followed by TGFβ2. No changes in proliferation were observed suggesting treatments did not induce toxicity. Data was analysed by the one way ANOVA.