## **Supplementary Materials**

**Authors:** Dun Jack Fu<sup>1</sup> PhD; Veronika Lipkova<sup>1</sup> MSc; Bart Liefers<sup>1,2</sup> PhD; Sophie Glinton<sup>1</sup> PhD, MSc; Livia Faes<sup>1</sup> MD; Alex McKeown<sup>3</sup> PhD; Lukas Scheibler<sup>3</sup> PhD; Nikolas Pontikos<sup>1</sup> PhD; Praveen J Patel<sup>1</sup> MD FRCOphth;Gongyu Zhang<sup>1</sup> MSc;Pearse A Keane<sup>1</sup> MD FRCOphth; Konstantinos Balaskas<sup>1</sup> MD

## Affiliations:

<sup>1</sup> NIHR Biomedical Research Centre At Moorfields Eye Hospital NHS Foundation Trust, UCL Institute of Ophthalmology, London, UK <sup>2</sup> Department of Ophthalmology, Erasmus University Medical Center, Rotterdam, The Netherlands <sup>3</sup> Apellis Pharmaceuticals, Inc, Waltham, Massachusetts, United States **Corresponding Author:** Dun Jack Fu Moorfield Eye Hospital 162 City Rd, London EC1V 2PD Email: d.fu@nhs.net

Supplementary Table 1. Patient-level differences in GA.								
	FAF (N = 144)	RORA (N = 144)	PRD (N = 144)	PRD (isolated) $(N = 144)$	RPE loss $(N = 144)$			
Difference in area (mm <sup>2</sup> )								
Mean (SD) Median [Min, Max]	3.30 (2.87) 2.45 [0.0700, 13.7]	2.48 (2.13) 1.92 [0.0378, 11.1]	2.98 (2.72) 2.01 [0.0392, 12.9]	1.77 (1.57) 1.37 [0.0686, 8.32]	2.60 (2.20) 1.90 [0.00140, 11.3]			

Supplemental Table 1. Difference in area by imaging modality. A table showing the mean

(SD) and the median [min, max] intra-person difference in area (mm<sup>2</sup>). RORA = RPE and

outer retinal atrophy; PRD = photoreceptor degeneration; RPE = retinal pigment epithelium;

PEOM = pegcetacoplan every other month; PM = pegcetacoplan monthly; FAF = fundus

autofluorescence. SD = standard deviation.

Type of imaging	Author (year)	Number of patients	Baseline area statistic	Value	Growth rate statistic	Value
CFP	Sunness et al (2007) <sup>4</sup>	131 (212 eyes)	Correlation coefficient**	0.81	Correlation coefficient	0.76
	Klein et al (2008) <sup>17</sup>	31 (42 pairs)	Pearson correlation coefficient	0.87	Pearson correlation coefficient	0.85
	Lindblat et al (2009) <sup>18</sup>	70			Intraclass correlation coefficient	0.88
FAF	Bellman et al (2002)* <sup>5</sup>	72 (144 eyes)	Correlation coefficient**	0.58	-	-
			Wilcoxon signed- rank test (95% CI for mean difference between eyes)	P=0.81 (-1.6 to 1.4)		
	Fleckenstein et al (2010) <sup>3</sup>	78 (156 eyes)	Spearman coefficient	0.592 (P<0.0001)	Spearman coefficient	0.74 (P<0.0001)
			Concordance correlation coefficient	0.706	Concordance correlation coefficient	0.753
			Wilcoxon signed rank test	P=0.403	Wilcoxon signed rank test	P=0.369
					Absolute value	0.42 mm <sup>2</sup> /year
					Bland Altman mean difference	-0.084 mm <sup>2</sup> /year

Supplemental Table 2. Studies of bilateral GA concordance. A table delineating key features

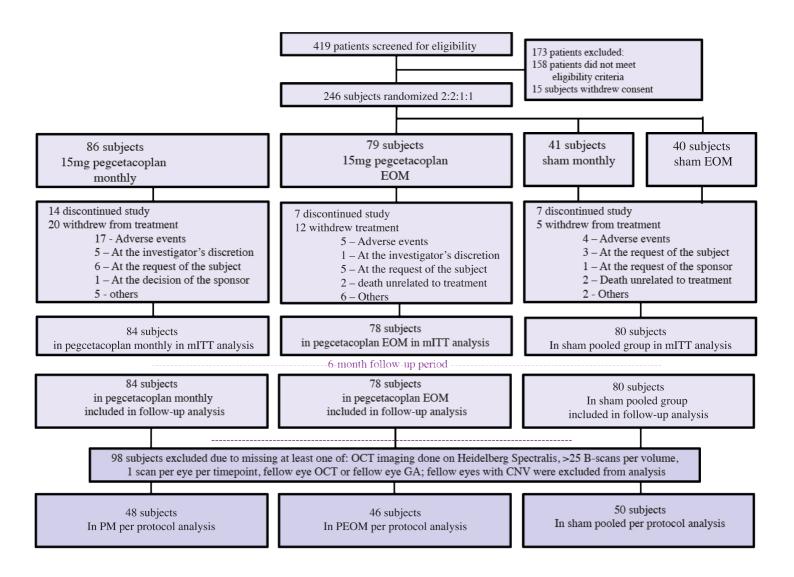
of agreement between paired eyes in studies using CFP and FAF imaging.<sup>3-5,19,20</sup> CFP = colour

fundus photography; FAF = fundus autofluorescence.

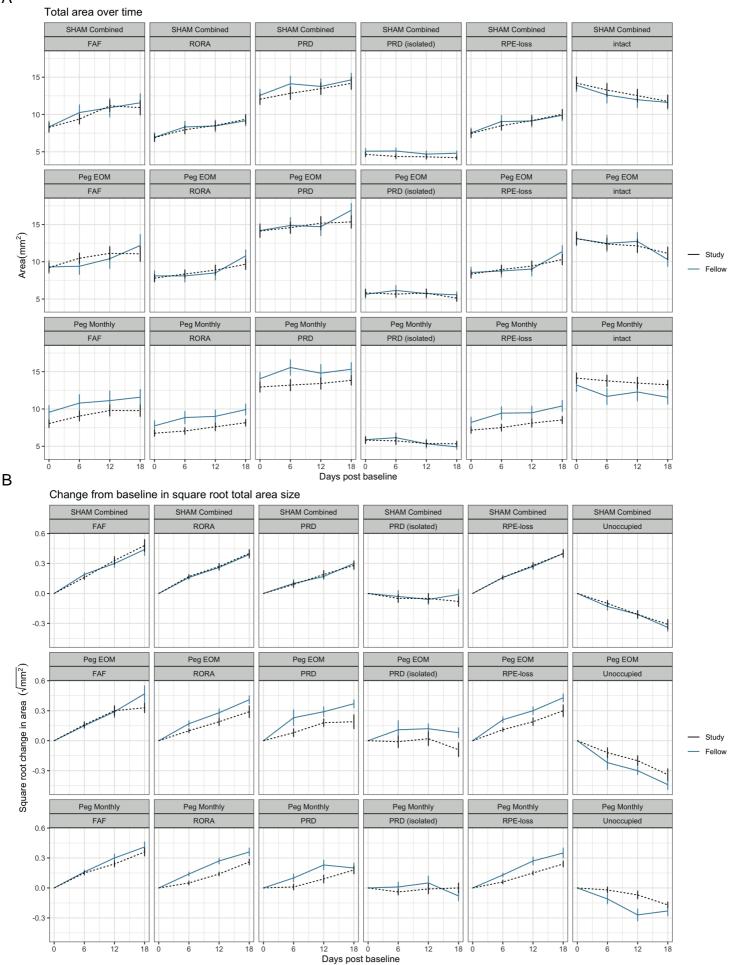
\*Bellman also observed no statistical difference for the number of lesions (focality) between

paired eyes (Wilcoxon signed rank test P=0.62, 95% CI: -1.3 to 0.8; correlation coefficient

r=0.56)



**Supplemental Figure 1**. CONSORT diagram. Figure depicting the selection of subjects for the study. Pale purple depicts the original FILLY trial patient selection; dark purple represents additional patient selection criteria and patient numbers used in this *post hoc* analysis. Reproduced from Liao et al.<sup>10</sup>



A

**Supplemental Figure 2.** Change in GA area from baseline. (A) The change in total area (mm<sup>2</sup>) for study eyes (black dotted line) and fellow eyes (blue solid line) from each treatment arm are plotted over time with their corresponding confidence intervals at 6 and 12-month timepoints. This is shown by treatment arm (SHAM, PEOM and PM) and by imaging modality (FAF as well as OCT features [RORA, PRD, PRD (isolated), RPE-loss and intact macula]). (B) The square root change in total area (mm) for study eyes (black dotted line) and fellow eyes (blue solid line) from each treatment arm are plotted over time with their corresponding confidence intervals at 6 and 12-month eyes (blue solid line) from each treatment arm are plotted over time with their corresponding confidence intervals at 6 and 12-month timepoints. This is shown by treatment arm imaging modality. GA = geographic atrophy; FAF = fundus autofluorescence; RORA = RPE and outer retinal atrophy; PRD = photoreceptor degeneration; RPE = retinal pigment epithelium; PEOM = pegcetacoplan every other month; PM = pegcetacoplan monthly.