

**Supplementary Table 4.** RPE layer and single cell characteristics per sample

Original image	Final mask	Number of cells	Area ( $\mu\text{m}^2$ )	Circularity	Eccentricity	Solidity	Intensity	Center shift (pixels)	CMDDcv	Number of neighbor cells	Colony density (cells / $\mu\text{m}^2$ )	Coverage (%)	Time (s)
		6,322	192	0.83	0.66	0.92	0.48	0.24	0.18	5.29	3,801	89	45
		6,565	191	0.82	0.67	0.92	0.45	0.31	0.19	5.26	3,784	90	41
		6,341	189	0.84	0.64	0.92	0.44	0.26	0.17	5.25	3,875	91	46
		5,012	201	0.83	0.66	0.92	0.33	0.28	0.18	5.31	3,338	74	57
		7,789	177	0.83	0.68	0.92	0.44	0.31	0.19	5.21	4,237	100	48
		7,422	178	0.83	0.66	0.92	0.42	0.19	0.18	5.25	3,961	83	75
		7,017	329	0.82	0.69	0.91	0.31	0.28	0.20	5.12	2,213	97	48
		5,718	400	0.81	0.69	0.91	0.46	0.39	0.20	5.25	1,797	88	50
		6,995	195	0.83	0.67	0.92	0.44	0.23	0.19	5.19	3,701	87	62

		7,533	175	0.83	0.66	0.92	0.51	0.21	0.19	5.20	4,112	90	57
		8,452	180	0.83	0.67	0.92	0.42	0.29	0.19	5.20	4,060	94	67
		6,662	344	0.82	0.68	0.92	0.46	0.39	0.20	5.21	2,144	98	41
		6,973	307	0.83	0.68	0.92	0.45	0.37	0.20	5.16	2,371	98	43
		7,300	348	0.82	0.70	0.91	0.32	0.33	0.20	5.18	2,098	96	48

Final mask: cell masks – green, VOoF mask – cyan

CMD<sub>CY</sub>: coefficient of variation of RPE cellular membrane mask

VOoF: vessel & out-of-focus mask