

Supplementary Table 1.1. Exact p-values for comparisons of IOP, SE, CDVA at each postoperative time point versus baseline.

| Variable | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|----------|--------------|---------------|----------------|----------------|
| IOP | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| SE | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| UDVA | <0.0001 | <0.0001 | <0.0001 | <0.0001 |
| CDVA | <0.0001 | <0.0001 | <0.0001 | <0.0001 |

Supplementary Table 1.2. Exact p-values for comparisons of IOP, SE, CDVA between postoperative time points.

| Variable | Week 1 vs Day 1 | Month 1 vs Day 1 | Month 3 vs Day 1 | Month 1 vs Week 1 | Month 3 vs Week 1 | Month 3 vs Month 1 |
|----------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|
| IOP | 0.8539 | 1.0000 | 1.0000 | 0.5721 | 1.0000 | 1.0000 |
| SE | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| CDVA | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

SE, spherical equivalent; CDVA, corrected distance visual acuity; IOP, intraocular pressure

Supplementary Table 2.1. Exact p-values for comparisons of RT at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | 0.2347 | 0.0002 | 0.0002 | <0.0001 |
| Foveal | 0.5483 | 0.7345 | 0.0019 | 0.0019 |
| Parafoveal | 0.8439 | 0.0041 | 0.0031 | 0.0009 |
| Perifoveal | 0.1134 | <0.0001 | <0.0001 | <0.0001 |
| Temporal | 0.2547 | 0.0008 | 0.0009 | <0.0001 |
| Superior | 0.0366 | <0.0001 | <0.0001 | <0.0001 |
| Nasal | 0.3681 | 0.0037 | 0.0030 | 0.0030 |
| Inferior | 0.7124 | <0.0001 | 0.0002 | 0.0002 |

Supplementary Table 2.2. Exact p-values for comparisons of RT between postoperative time points.

| Region | Week 1 vs Day 1 | Month 1 vs Day 1 | Month 3 vs Day 1 | Month 1 vs Week 1 | Month 3 vs Week 1 | Month 3 vs Month 1 |
|------------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|
| Global | 0.4071 | 0.4435 | 0.2224 | 1 | 1 | 1 |
| Foveal | 0.0022 | <0.0001 | <0.0001 | 0.5011 | 0.5057 | 1 |
| Parafoveal | 0.6835 | 0.5720 | 0.2706 | 1 | 1 | 1 |

| | | | | | | |
|----------------|--------|--------|--------|---|---|---|
| Perifovea l | 0.3662 | 0.5126 | 0.2406 | 1 | 1 | 1 |
| Temporal | 0.8146 | 0.8728 | 0.0884 | 1 | 1 | 1 |
| Superior | 0.3767 | 0.5216 | 0.2637 | 1 | 1 | 1 |
| Nasal | 1 | 1 | 1 | 1 | 1 | 1 |
| Inferior | 0.0782 | 0.1293 | 0.1075 | 1 | 1 | 1 |

RT, retinal thickness;

Supplementary Table 3.1. Exact p-values for comparisons of MVD at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | 1.0000 | 1.0000 | 1.0000 | <0.0001 |
| Foveal | 1.0000 | 1.0000 | 0.6936 | <0.0001 |
| Parafoveal | 1.0000 | 1.0000 | 1.0000 | 0.0028 |
| Perifoveal | 1.0000 | 1.0000 | 1.0000 | <0.0001 |
| Temporal | 1.0000 | 1.0000 | 1.0000 | 0.0197 |
| Superior | 1.0000 | 1.0000 | 0.4628 | <0.0001 |
| Nasal | 1.0000 | 1.0000 | 1.0000 | <0.0001 |
| Inferior | 1.0000 | 1.0000 | 1.0000 | 0.0381 |

Supplementary Table 3.2. Exact p-values for comparisons of MVD between postoperative time points.

| Region | 1 day vs 1 week | 1 day vs 1 month | 1 day vs 3 months | 1 week vs 1 month | 1 week vs 3 months | 1 month vs 3 months |
|----------------|-----------------|------------------|-------------------|-------------------|--------------------|---------------------|
| Global | 1.0000 | 1.0000 | 0.0007 | 1.0000 | <0.0001 | 0.0030 |
| Foveal | 1.0000 | 1.0000 | 0.0034 | 0.7349 | <0.0001 | 0.0695 |
| Parafovea l | 1.0000 | 1.0000 | 0.2262 | 1.0000 | 0.0096 | 0.1288 |
| Perifovea l | 1.0000 | 1.0000 | <0.0001 | 1.0000 | <0.0001 | 0.0007 |
| Temporal | 1.0000 | 1.0000 | 0.3997 | 1.0000 | 0.0072 | 0.2263 |
| Superior | 1.0000 | 1.0000 | 0.0122 | 1.0000 | 0.0020 | 0.1503 |
| Nasal | 1.0000 | 1.0000 | <0.0001 | 1.0000 | <0.0001 | 0.0033 |
| Inferior | 1.0000 | 1.0000 | 0.0379 | 1.0000 | <0.0001 | 0.0035 |

MVD, macular vessel density;

Supplementary Table 4.1. Exact p-values for comparisons of MSmVD at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | 1 | 1 | 0.0869 | <0.0001 |
| Foveal | 1 | 1 | 0.69 | <0.0001 |
| Parafoveal | 1 | 1 | 1 | 0.0028 |
| Perifoveal | 1 | 1 | <0.0001 | <0.0001 |
| Temporal | 1 | 1 | 1 | 0.020 |
| Superior | 1 | 1 | 0.46 | 0.0001 |
| Nasal | 1 | 1 | 1 | <0.0001 |
| Inferior | 1 | 1 | 1 | 0.038 |

Supplementary Table 4.2. Exact p-values for comparisons of MSmVD between postoperative time points.

| Region | 1 day vs 1 week | 1 day vs 1 month | 1 day vs 3 months | 1 week vs 1 month | 1 week vs 3 months | 1 month vs 3 months |
|------------|-----------------|------------------|-------------------|-------------------|--------------------|---------------------|
| Global | 1 | 1 | 0.0007 | 1 | <0.0001 | 0.0030 |
| Foveal | 1 | 1 | 0.0034 | 0.73 | <0.0001 | 0.069 |
| Parafoveal | 1 | 1 | 0.23 | 1 | 0.0096 | 0.13 |
| Perifoveal | 1 | 1 | <0.0001 | 1 | <0.0001 | 0.0007 |
| Temporal | 1 | 1 | 0.0051 | 1 | <0.0001 | 0.0014 |
| Superior | 1 | 0.9726 | <0.0001 | 0.6112 | <0.0001 | <0.0001 |
| Nasal | 1 | 0.1004 | <0.0001 | 0.1823 | <0.0001 | <0.0001 |
| Inferior | 1 | 1 | <0.0001 | 1 | <0.0001 | <0.0001 |

MSmVD, macular small vessel density;

Supplementary Table 5.1. Exact p-values for comparisons of SVD at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | 0.6171 | 0.9824 | 0.9556 | <0.0001 |
| Foveal | 0.9999 | 0.9991 | 0.9996 | 0.2634 |
| Parafoveal | 0.9982 | 0.9994 | 0.9992 | <0.0001 |
| Perifoveal | 0.3195 | 0.9828 | 0.8365 | <0.0001 |
| Temporal | 0.9620 | 0.8770 | 0.9996 | 0.0445 |
| Superior | 0.8750 | 0.9885 | 0.3398 | <0.0001 |
| Nasal | 0.9217 | 0.8823 | 0.4762 | <0.0001 |
| Inferior | 0.4201 | 0.1769 | 0.7355 | <0.0001 |

Supplementary Table 5.2. Exact p-values for comparisons of SVD between postoperative time points.

| Region | 1 day vs 1 week | 1 day vs 1 month | 1 day vs 3 months | 1 week vs 1 month | 1 week vs 3 months | 1 month vs 3 months |
|------------|-----------------|------------------|-------------------|-------------------|--------------------|---------------------|
| Global | 0.9099 | 0.2127 | <0.0001 | 0.7238 | <0.0001 | <0.0001 |
| Foveal | 0.9999 | 0.9999 | 0.2038 | 0.9999 | 0.1643 | 0.1789 |
| Parafoveal | 0.9999 | 0.9819 | <0.0001 | 0.9900 | <0.0001 | <0.0001 |
| Perifoveal | 0.6621 | 0.0283 | <0.0001 | 0.5120 | <0.0001 | <0.0001 |
| Temporal | 0.9987 | 0.9896 | 0.0054 | 0.9440 | 0.0021 | 0.0251 |
| Superior | 0.6032 | 0.0402 | <0.0001 | 0.6506 | <0.0001 | <0.0001 |
| Nasal | 0.3971 | 0.1008 | <0.0001 | 0.9588 | <0.0001 | <0.0001 |
| Inferior | 0.9877 | 0.9877 | <0.0001 | 0.8598 | <0.0001 | <0.0001 |

SVD, superficial vessel density

Supplementary Table 6.1. Exact p-values for comparisons of DVD at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | 0.9605 | 0.9597 | 0.0466 | 0.8199 |
| Foveal | 1.0000 | 0.8487 | 0.2131 | <0.0001 |
| Parafoveal | 0.8685 | 0.9831 | 0.9865 | 0.9105 |
| Perifoveal | 0.9881 | 0.8795 | 0.0078 | 0.3599 |
| Temporal | 1.0000 | 0.9108 | 0.8852 | 0.9135 |
| Superior | 0.5830 | 0.8254 | 0.8828 | 1.0000 |
| Nasal | 0.9422 | 1.0000 | 0.2178 | 0.6647 |
| Inferior | 0.9991 | 0.1685 | 0.0007 | 0.0364 |

Supplementary Table 6.2. Exact p-values for comparisons of DVD between postoperative time points.

| Region | 1 day vs 1 week | 1 day vs 1 month | 1 day vs 3 months | 1 week vs 1 month | 1 week vs 3 months | 1 month vs 3 months |
|------------|-----------------|------------------|-------------------|-------------------|--------------------|---------------------|
| Global | 0.6500 | 0.0056 | 0.4022 | 0.2311 | 0.9951 | 0.4456 |
| Foveal | 0.8033 | 0.1770 | <0.0001 | 0.8047 | 0.0006 | 0.0301 |
| Parafoveal | 0.9929 | 0.5770 | 1.0000 | 0.8326 | 1.0000 | 0.6477 |
| Perifoveal | 0.6045 | 0.0013 | 0.1412 | 0.1161 | 0.9029 | 0.5539 |
| Temporal | 0.8814 | 0.8516 | 0.9376 | 1.0000 | 0.4267 | 0.3854 |
| Superior | 0.9943 | 0.1154 | 0.4999 | 0.2678 | 0.7562 | 0.9297 |
| Nasal | 0.9766 | 0.0347 | 0.2217 | 0.1536 | 0.5555 | 0.9415 |
| Inferior | 0.2746 | 0.0018 | 0.0714 | 0.3955 | 0.9716 | 0.7856 |

DVD, deep vessel density;

Supplementary Table 7.1. Exact p-values for comparisons of CT at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | <0.0001 | <0.0001 | 0.2181 | 0.0547 |
| Foveal | 0.0002 | 0.0074 | 0.0903 | 1.0000 |
| Parafoveal | <0.0001 | <0.0001 | 0.1262 | 0.2058 |
| Perifoveal | <0.0001 | <0.0001 | 0.4396 | 0.0505 |
| Temporal | <0.0001 | <0.0001 | 0.7866 | 0.0390 |
| Superior | <0.0001 | <0.0001 | 0.0623 | 0.1536 |
| Nasal | <0.0001 | <0.0001 | 0.3991 | 0.2570 |
| Inferior | <0.0001 | 0.0005 | 1.0000 | 0.0759 |

Supplementary Table 7.2. Exact p-values for comparisons of DVD between postoperative time points.

| Region | Week 1 vs Day 1 | Month 1 vs Day 1 | Month 3 vs Day 1 | Month 1 vs Week 1 | Month 3 vs Week 1 | Month 3 vs Month 1 |
|------------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|
| Global | 1.0000 | 0.0015 | <0.0001 | 0.0585 | <0.0001 | <0.0001 |
| Foveal | 1.0000 | 0.9912 | <0.0001 | 1.0000 | <0.0001 | 0.0008 |
| Parafoveal | 1.0000 | 0.1093 | <0.0001 | 0.5242 | <0.0001 | <0.0001 |
| Perifoveal | 1.0000 | 0.0005 | <0.0001 | 0.0323 | <0.0001 | <0.0001 |
| Temporal | 1.0000 | 0.0005 | <0.0001 | 0.1209 | <0.0001 | <0.0001 |
| Superior | 1.0000 | 0.0304 | <0.0001 | 0.1220 | <0.0001 | 0.0000 |
| Nasal | 1.0000 | 0.0189 | <0.0001 | 0.0473 | <0.0001 | 0.0002 |
| Inferior | 1.0000 | 0.0005 | <0.0001 | 0.0915 | <0.0001 | 0.0004 |

CT, choroidal thickness

Supplementary Table 8.1. Exact p-values for comparisons of CVI at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|------------|--------------|---------------|----------------|----------------|
| Global | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Foveal | 1.0000 | 1.0000 | 0.1257 | 0.0203 |
| Parafoveal | 1.0000 | 1.0000 | 0.3578 | 0.1130 |
| Perifoveal | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Temporal | 1.0000 | 0.9029 | 0.0873 | 1.0000 |

| | | | | |
|----------|--------|--------|--------|--------|
| Superior | 1.0000 | 1.0000 | 0.4374 | 1.0000 |
| Nasal | 0.1200 | 0.9960 | 1.0000 | 1.0000 |
| Inferior | 0.0562 | 0.5772 | 1.0000 | 0.9530 |

Supplementary Table 8.2. Exact p-values for comparisons of CVI between postoperative time points.

| Region | Week 1 vs Day 1 | Month 1 vs Day 1 | Month 3 vs Day 1 | Month 1 vs Week 1 | Month 3 vs Week 1 | Month 3 vs Month 1 |
|-------------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|
| Global | 1.0000 | 0.0430 | 0.4688 | 0.5392 | 1.0000 | 1.0000 |
| Foveal | 1.0000 | 0.0282 | 0.0035 | 0.5214 | 0.1125 | 1.0000 |
| Parafovea 1 | 1.0000 | 0.0195 | 0.0042 | 0.2225 | 0.0654 | 1.0000 |
| Perifovea 1 | 1.0000 | 0.1586 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Temporal | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 0.1136 |
| Superior | 1.0000 | 0.3255 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| Nasal | 1.0000 | 0.0063 | 0.0006 | 0.1053 | 0.0166 | 1.0000 |
| Inferior | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

CVI, choroidal vascularity index

Supplementary Table 9.1. Exact p-values for comparisons of OVD at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|-------------------|--------------|---------------|----------------|----------------|
| Global | 1 | 1 | 0.3465 | <0.0001 |
| Nasal-superior | 1 | 1 | 1 | 0.0306 |
| Nasal-inferior | 1 | 1 | 1 | <0.0001 |
| Inferonasal | 0.2382 | 1 | 1 | 0.0006 |
| Inferotemporal | 1 | 1 | 0.0023 | <0.0001 |
| Temporal-inferior | 1 | 1 | 0.0274 | <0.0001 |
| Temporal-superior | 1 | 1 | 0.0016 | <0.0001 |
| Superotemporal | 1 | 1 | 0.0180 | <0.0001 |
| Superonasal | 1 | 1 | 1 | 0.1037 |

Supplementary Table 9.2. Exact p-values for comparisons of OVD between postoperative time points.

| Region | Week 1 vs Day 1 | Month 1 vs Day 1 | Month 3 vs Day 1 | Month 1 vs Week 1 | Month 3 vs Week 1 | Month 3 vs Month 1 |
|--------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|
|--------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|

| | | | | | | |
|-------------------|--------|---------|---------|--------|---------|--------|
| Global | 0.7298 | 0.0185 | <0.0001 | 1 | <0.0001 | 0.0001 |
| Nasal-superior | 1 | 1 | 0.0236 | 1 | 0.1696 | 0.0283 |
| Nasal-inferior | 1 | 1 | <0.0001 | 1 | 0.0034 | 0.0006 |
| Inferonasal | 0.6957 | 0.0781 | <0.0001 | 1 | <0.0001 | 0.0031 |
| Inferotemporal | 0.2607 | <0.0001 | <0.0001 | 0.0267 | <0.0001 | 1 |
| Temporal-inferior | 0.7074 | 0.0094 | <0.0001 | 1 | 0.0043 | 0.4337 |
| Temporal-superior | 1 | 0.0006 | <0.0001 | 0.0952 | <0.0001 | 0.4912 |
| Superotemporal | 1 | 0.0027 | <0.0001 | 0.0673 | <0.0001 | 0.0103 |
| Superonasal | 1 | 1 | <0.0001 | 1 | 0.0019 | 0.0153 |

OVD, peripapillary optic disc vessel density;

Supplementary Table 10.1. Exact p-values for comparisons of OSmVD at each postoperative time point versus baseline.

| Region | Day 1 vs Pre | Week 1 vs Pre | Month 1 vs Pre | Month 3 vs Pre |
|-------------------|--------------|---------------|----------------|----------------|
| Global | 0.2729 | 0.5458 | 1 | <0.0001 |
| Nasal-superior | 1 | 0.1834 | 0.6893 | <0.0001 |
| Nasal-inferior | 1 | 1 | 1 | <0.0001 |
| Inferonasal | 0.3972 | 0.7268 | 0.0013 | <0.0001 |
| Inferotemporal | 0.0019 | 1 | 1 | <0.0001 |
| Temporal-inferior | 1 | 1 | 1 | 1 |
| Temporal-superior | 1 | 1 | 1 | 0.4530 |
| Superotemporal | 0.0054 | 1 | 1 | 1 |
| Superonasal | 0.5012 | 0.8608 | 1 | <0.0001 |

Supplementary Table 10.2. Exact p-values for comparisons of OSmVD between postoperative time points.

| Region | Week 1 vs Day 1 | Month 1 vs Day 1 | Month 3 vs Day 1 | Month 1 vs Week 1 | Month 3 vs Week 1 | Month 3 vs Month 1 |
|--------|-----------------|------------------|------------------|-------------------|-------------------|--------------------|
| Global | 1 | 1 | 0.0009 | 1 | 0.0003 | <0.0001 |

| | | | | | | |
|-------------------|--------|--------|---------|--------|---------|---------|
| Nasal-superior | 1 | 1 | <0.0001 | 1 | 0.0004 | <0.0001 |
| Nasal-inferior | 0.7365 | 0.9358 | <0.0001 | 1 | <0.0001 | <0.0001 |
| Inferonasal | 1 | 0.7335 | <0.0001 | 0.4012 | <0.0001 | 0.0289 |
| Inferotemporal | 0.0673 | 0.0046 | <0.0001 | 1 | 0.5624 | 1 |
| Temporal-inferior | 1 | 1 | 1 | 1 | 1 | 1 |
| Temporal-superior | 1 | 1 | 0.4119 | 1 | 0.4545 | 0.1670 |
| Superotemporal | 0.0163 | 0.0015 | 0.0033 | 1 | 1 | 1 |
| Superonasal | 1 | 1 | 0.0045 | 1 | 0.0018 | <0.0001 |

OSmVD, Peripapillary optic disc small vessel density;