

Supplementary

Table S1 The correlation of age with reflectivity of each choroidal slab and the distribution of hyperreflective spots

| | DRI OCT Triton | | PLEX Elite 9000 | |
|-------------------------------|----------------|---------|-----------------|---------|
| | ρ | P value | ρ | P value |
| First choroidal layer | | | | |
| Reflectivity | -0.054 | 0.775 | -0.278 | 0.137 |
| Hyperreflective spots | | | | |
| Number | 0.136 | 0.474 | 0.311 | 0.094 |
| Total area | 0.169 | 0.372 | 0.350 | 0.058 |
| Second choroidal layer | | | | |
| Reflectivity | -0.094 | 0.620 | 0.108 | 0.569 |
| Hyperreflective spots | | | | |
| Number | 0.202 | 0.286 | -0.030 | 0.876 |
| Total area | 0.219 | 0.246 | 0.018 | 0.925 |
| Third choroidal layer | | | | |
| Reflectivity | -0.472 | 0.008* | 0.426 | 0.019 |
| Hyperreflective spots | | | | |
| Number | -0.274 | 0.143 | 0.082 | 0.665 |
| Total area | -0.510 | 0.004* | 0.146 | 0.441 |
| Fourth choroidal layer | | | | |
| Reflectivity | -0.582 | 0.001* | 0.202 | 0.285 |
| Hyperreflective spots | | | | |
| Number | -0.455 | 0.011* | 0.148 | 0.435 |
| Total area | -0.561 | 0.001* | 0.148 | 0.435 |
| Fifth choroidal layer | | | | |
| Reflectivity | -0.452 | 0.012* | -0.403 | 0.027* |
| Hyperreflective spots | | | | |
| Number | -0.213 | 0.258 | -0.294 | 0.115 |
| Total area | -0.410 | 0.025* | -0.284 | 0.128 |

*, P values using Spearman's correlation analysis were statistically significant at the P<0.05 level.

Table S2 The correlation of axial length with reflectivity of each choroidal slab and the distribution of hyperreflective spots

| | DRI OCT Triton | | PLEX Elite 9000 | |
|-------------------------------|----------------|---------|-----------------|---------|
| | ρ | P value | ρ | P value |
| First choroidal layer | | | | |
| Reflectivity | -0.235 | 0.212 | 0.078 | 0.682 |
| Hyperreflective spots | | | | |
| Number | -0.056 | 0.770 | -0.030 | 0.873 |
| Total area | -0.102 | 0.590 | -0.021 | 0.914 |
| Second choroidal layer | | | | |
| Reflectivity | -0.131 | 0.489 | <0.001 | 0.998 |
| Hyperreflective spots | | | | |
| Number | 0.054 | 0.776 | -0.016 | 0.933 |
| Total area | -0.181 | 0.337 | -0.056 | 0.768 |
| Third choroidal layer | | | | |
| Reflectivity | -0.365 | 0.047* | -0.100 | 0.599 |
| Hyperreflective spots | | | | |
| Number | -0.222 | 0.238 | -0.005 | 0.979 |
| Total area | -0.317 | 0.088 | -0.093 | 0.627 |
| Fourth choroidal layer | | | | |
| Reflectivity | -0.046 | 0.808 | -0.138 | 0.466 |
| Hyperreflective spots | | | | |
| Number | -0.118 | 0.536 | -0.093 | 0.626 |
| Total area | -0.132 | 0.487 | -0.166 | 0.381 |
| Fifth choroidal layer | | | | |
| Reflectivity | 0.049 | 0.795 | -0.242 | 0.198 |
| Hyperreflective spots | | | | |
| Number | -0.086 | 0.653 | -0.201 | 0.286 |
| Total area | -0.098 | 0.605 | -0.392 | 0.032* |

*, P values using Spearman's correlation analysis were statistically significant at the P<0.05 level.

Table S3 Post hoc multiple pairwise comparisons of reflectivity of the choroidal slab and distributions of hyperreflective spots between en face slab images obtained at five different depth positions of the upper choroid

| OCT devices | Pairwise comparisons | Hyperreflective spots | | | | | | | | | |
|-----------------|----------------------|------------------------|---------|------------------------|---------|------------------------|---------|------------------------|---------|------------------------|---------|
| | | Reflectivity | | Number | | Total area | | Circularity | | Average Size | |
| | | Difference in rank sum | P value |
| DRI OCT Triton | 1st slab - 2nd slab | -90.0 | <0.001* | -63.5 | <0.001* | -78.0 | <0.001* | 57.5 | <0.001* | -91.0 | <0.001* |
| | 1st slab - 3rd slab | -64.0 | <0.001* | -104.0 | <0.001* | -95.0 | <0.001* | 44.5 | 0.003* | -74.0 | <0.001* |
| | 1st slab - 4th slab | -44.0 | 0.003* | -69.0 | <0.001* | -55.0 | <0.001* | 29.0 | 0.179 | -41.0 | 0.008* |
| | 1st slab - 5th slab | -32.0 | 0.090 | -64.0 | <0.001* | -67.0 | <0.001* | 56.5 | <0.001* | -69.0 | <0.001* |
| | 2nd slab - 3rd slab | 26.0 | 0.338 | -40.0 | 0.011* | -17.0 | >0.999 | -13.0 | >0.999 | 17.0 | >0.999 |
| | 2nd slab - 4th slab | 46.0 | 0.002* | -5.5 | >0.999 | 23.0 | 0.604 | -28.5 | 0.200 | 50.0 | <0.001* |
| | 2nd slab - 5th slab | 58.0 | <0.001* | -0.5 | >0.999 | 11.0 | >0.999 | -1.0 | >0.999 | 22.0 | 0.724 |
| | 3rd slab - 4th slab | 20.0 | >0.999 | 34.5 | 0.048* | 40.0 | 0.011* | -15.5 | >0.999 | 33.0 | 0.071 |
| | 3rd slab - 5th slab | 32.0 | 0.090 | 39.5 | 0.013* | 28.0 | 0.222 | 12.0 | >0.999 | 5.0 | >0.999 |
| PLEX Elite 9000 | 4th slab - 5th slab | 12.0 | >0.999 | 5.0 | >0.999 | -12.0 | >0.999 | 27.5 | 0.247 | -28.0 | 0.222 |
| | 1st slab - 2nd slab | -19.0 | >0.999 | -13.5 | >0.999 | -17.0 | >0.999 | 24.0 | 0.500 | -29.0 | 0.179 |
| | 1st slab - 3rd slab | -60.0 | <0.001* | -48.5 | <0.001* | -50.5 | <0.001* | 63.0 | <0.001* | -59.0 | <0.001* |
| | 1st slab - 4th slab | -92.0 | <0.001* | -78.0 | <0.001* | -86.5 | <0.001* | 72.0 | <0.001* | -89.0 | <0.001* |
| | 1st slab - 5th slab | -89.0 | <0.001* | -100.0 | <0.001* | -98.5 | <0.001* | 66.0 | <0.001* | -83.0 | <0.001* |
| | 2nd slab - 3rd slab | -41.0 | 0.008* | -35.0 | 0.043* | -33.5 | 0.062 | 39.0 | 0.015* | -30.0 | 0.143 |
| | 2nd slab - 4th slab | -73.0 | <0.001* | -64.5 | <0.001* | -69.5 | <0.001* | 48.0 | <0.001* | -60.0 | <0.001* |
| | 2nd slab - 5th slab | -70.0 | <0.001* | -86.5 | <0.001* | -81.5 | <0.001* | 42.0 | 0.006* | -54.0 | <0.001* |
| | 3rd slab - 4th slab | -32.0 | 0.090 | -29.5 | 0.160 | -36.0 | 0.033* | 9.0 | >0.999 | -30.0 | 0.143 |
| | 3rd slab - 5th slab | -29.0 | 0.179 | -51.5 | <0.001* | -48.0 | <0.001* | 3.0 | >0.999 | -24.0 | 0.500 |
| | 4th slab - 5th slab | 3.0 | >0.999 | -22.0 | 0.724 | -12.0 | >0.999 | -6.0 | >0.999 | 6.0 | >0.999 |

* P values using Dunn-Bonferroni multiple comparison test were statistically significant at P<0.05.