**Table S1. OCTA parameters evaluated in control eyes, non-ischemic BRVO eyes and ischemic eyes at the baseline**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Control** | **non-ischemic** | | **ischemic** | **P value**  **(control vs non-ischemic)** | **P value**  **(control vs ischemic)** | **P value**  **(ischemic vs non-ischemic)** |
| Choriocapillaris  Flow area(mm2) | 2.07±0.14 | 1.57±0.32 | 1.45±0.50 | | < 0.0001\*\* | < 0.0001\*\* | 0.6266 |
| FAZ(mm2) | 0.37±0.10 | 0.33±0.14 | 0.37±0.12 | | 0.3922 | 0.9474 | 0.4991 |
| PERIM(mm) | 2.43±0.36 | 2.50±0.69 | 2.56±0.52 | | 0.7009 | 0.4251 | 0.8654 |
| AI | 1.14±0.04 | 1.25±0.10 | 1.19±0.09 | | 0.0002\*\* | 0.0179\* | 0.2855 |
| FD-300 (%) | 50.77±3.03 | 47.80±3.13 | 45.60±3.66 | | 0.0419\* | 0.0004\*\* | 0.2599 |
| **SCP-Vessel Density (%)** | | | | | | | |
| whole image | 47.03±3.37 | 40.00±4.42 | 39.64±5.20 | | 0.0002\*\* | < 0.0001\*\* | 0.8931 |
| Fovea | 19.88±4.57 | 24.85±6.29 | 23.08±9.04 | | 0.0739 | 0.2212 | 0.7344 |
| Parafovea | 49.94±3.33 | 41.62±4.84 | 41.31±5.90 | | < 0.0001\*\* | < 0.0001\*\* | 0.9198 |
| **DCP-Vessel Density (%)** | | | | | | | |
| whole image | 47.22±3.78 | 41.75±4.44 | 41.75±4.05 | | 0.0048\*\* | 0.0016\*\* | > 0.9999 |
| Fovea | 27.14±6.13 | 34.88±15.93 | 31.44±9.82 | | 0.0620 | 0.1663 | 0.6426 |
| Parafovea | 49.60±3.84 | 41.95±3.91 | 43.08±4.24 | | 0.0002\*\* | 0.0003\*\* | 0.6212 |

All data are presented as mean± SD, \*P < 0.05, \*\*P < 0.01. OCTA, optical coherence tomography angiography; BRVO, branch retinal vein occlusion; SCP, superficial capillary plexus; DCP, deep capillary plexus; FD-300, the vessel density within 300μm width ring surrounding the FAZ; AI, acircularity index; FAZ, foveal avascular zone; PERIM, FAZ perimeter

**Table S2. OCTA parameters evaluated in non-ischemic BRVO eyes before and after treatment**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Pre-injection** | **Post-injection** | **P value** |
| Choriocapillaris  flow area(mm2) | 1.57±0.32 | 1.65±0.23 | 0.7116 |
| FAZ(mm2) | 0.33±0.14 | 0.32±0.09 | 0.9593 |
| PERIM(mm) | 2.50±0.69 | 2.28±0.34 | 0.5595 |
| AI | 1.25±0.10 | 1.14±0.03 | 0.0700 |
| FD-300 (%) | 47.80±3.13 | 45.33±3.85 | 0.2947 |
| **SCP-Vessel Density (%)** | | | |
| whole image | 40.00±4.42 | 36.40±3.88 | 0.2231 |
| Fovea | 24.85±6.29 | 18.83±6.73 | 0.2385 |
| Parafovea | 41.62±4.84 | 38.65±3.56 | 0.3270 |
| **DCP-Vessel Density (%)** | | | |
| whole image | 41.75±4.44 | 39.58±3.96 | 0.4525 |
| Fovea | 34.88±15.93 | 27.53±4.61 | 0.4028 |
| Parafovea | 41.95±3.91 | 41.23±4.64 | 0.7958 |

All data are presented as mean± SD, \*P < 0.05, \*\*P < 0.01. OCTA, optical coherence tomography angiography; BRVO, branch retinal vein occlusion; SCP, superficial capillary plexus; DCP, deep capillary plexus; FD-300, the vessel density within 300μm width ring surrounding the FAZ; AI, acircularity index; FAZ, foveal avascular zone; PERIM, FAZ perimeter

**Table S3. OCTA parameters evaluated in ischemic BRVO eyes before and after treatment**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Pre-injection** | **Post-injection** | **P value** |
| Choriocapillaris  flow area(mm2) | 1.45±0.50 | 1.80±0.25 | 0.0967 |
| FAZ(mm2) | 0.37±0.12 | 0.80±0.63 | 0.0756 |
| PERIM(mm) | 2.56±0.52 | 4.14±2.13 | 0.0606 |
| AI | 1.19±0.09 | 1.34±0.22 | 0.1062 |
| FD-300 (%) | 45.60±3.66 | 44.21±5.69 | 0.5718 |
| **SCP-Vessel Density (%)** | | | |
| whole image | 39.64±5.20 | 39.26±5.67 | 0.8923 |
| Fovea | 23.08±9.04 | 16.21±6.62 | 0.1051 |
| Parafovea | 41.31±5.90 | 41.18±6.64 | 0.9657 |
| **DCP-Vessel Density (%)** | | | |
| whole image | 41.75±4.05 | 38.21±7.00 | 0.2364 |
| Fovea | 31.44±9.82 | 24.60±5.75 | 0.1178 |
| Parafovea | 43.08±4.24 | 39.90±8.01 | 0.3388 |

All data are presented as mean± SD, \*P < 0.05, \*\*P < 0.01. OCTA, optical coherence tomography angiography; BRVO, branch retinal vein occlusion; SCP, superficial capillary plexus; DCP, deep capillary plexus; FD-300, the vessel density within 300μm width ring surrounding the FAZ; AI, acircularity index; FAZ, foveal avascular zone; PERIM, FAZ perimeter