# Optical coherence tomography angiography microvascular findings in macular edema due to central and branch retinal vein occlusions

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**Table S1.** Morphologic parameters (macular thickness) in patients with retinal vein occlusion at baseline.

| Variable | Controls | CRVO | *p-value vs controls* | BRVO ST | *p-value vs controls* | BRVO IT | *p-value vs controls* | *p-value[a]* |
|---|---|---|---|---|---|---|---|---|
| **Macular thickness (ILM-RPE) (µm)** | | | | | | | | |
| Fovea | 251.11±39.67 | 575.25±111.77[**] | *<0.001* | 373.58±125.47 | *<0.001* | 465.89±145.35 | *<0.001* | *0.034* |
| ParaFovea | 317.42±17.44 | 451.63±66.78 | *<0.001* | 391.33±73.90 | *<0.001* | 420.78±81.96 | *<0.001* | *0.493* |
| Para-Temporal | 307.82±18.49 | 450.63±74.29 | *<0.001* | 395.00±86.96 | *<0.001* | 438.33±94.93 | *<0.001* | *0.493* |
| Para-Superior | 314.16±50.16 | 452.63±72.95 | *<0.001* | 446.83±127.25 | *<0.001* | 347.56±26.42 | *0.465* | *0.001* |
| Para-Nasal | 321.45±19.84 | 473.38±75.31[*] | *<0.001* | 378.92±55.02 | *0.002* | 404.11±90.50 | *<0.001* | *0.074* |
| Para-Inferior | 318.79±17.30 | 429.63±57.45 | *<0.001* | 345.25±51.10[++] | *0.493* | 493.33±150.61 | *<0.001* | *<0.001* |

CRVO, central retinal vein occlusion; BRVO ST, superotemporal branch retinal vein occlusion; BRVO IT, inferotemporal branch retinal vein occlusion;

ILM, inner limiting membrane; RPE, retinal pigment epithelium; IPL, inner plexiform layer.

[*] $p<0.05$; [**] $p<0.01$; [***] $p<0.001$ CRVO *vs* BRVO ST

[°] $p<0.05$; [°°] $p<0.01$; [°°°] $p<0.001$ CRVO *vs* BRVO IT

[+] $p<0.05$; [++] $p<0.01$; [+++] $p<0.001$ BRVO ST *vs* BRVO IT

[a] Probability that values are influenced by type of occlusion (CRVO and BRVO) adjusted for presence of macular ischemia.

**Table S2.** Functional parameters (visual acuity and microperimetry) in patients with retinal vein occlusion after treatment.

| Variable | CRVO (n=10) | | | BRVO ST (n=12) | | | BRVO IT (n=16) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Before treatment | After treatment | *p-value*[a] | Before treatment | After treatment | *p-value*[a] | Before treatment | After treatment | *p-value*[a] |
| **Microperimetry (dB)** | | | | | | | | | |
| 20 degree sensitivity | 7.39±3.92 | 12.04±1.45 | *0.003* | 8.96±4.56 | 10.17±0.36 | *0.313* | 5.87±3.87 | 8.88±4.58 | *0.014* |
| 8 degree sensitivity | 7.45±4.24 | 10.16±2.27 | *0.001* | 11.38±2.35 | 13.33±1.81 | *0.130* | 7.27±3.32 | 11.33±2.32 | *0.041* |
| 4 degree sensitivity | 7.40±4.23 | 10.76±1.98 | *<0.001* | 9.98±3.27 | 11.20±1.08 | *0.181* | 6.91±3.14 | 10.00±3.50 | *0.018* |
| Superior emifield | 5.50±3.56 | 11.32±2.18 | *<0.001* | 9.42±2.63 | 11.30±1.70 | *0.215* | 5.36±2.94 | 9.10±3.87 | *0.013* |
| Inferior emifield | 3.75±2.20 | 11.86±3.14 | *<0.001* | 8.47±2.10 | 12.60±0.62 | *<0.001* | 3.96±1.73 | 7.75±2.93 | *0.017* |
| **BCVA (logMar)** | 0.35±0.12 | 0.10±0.09 | *<0.001* | 0.33±0.29 | 0.50±0.09 | *0.001* | 0.41±0.28 | 0.15±0.12 | *0.003* |

CRVO, central retinal vein occlusion; BRVO ST, superotemporal branch retinal vein occlusion; BRVO IT, inferotemporal branch retinal vein occlusion.

[a] Probability that values are influenced by treatment adjusted for presence of macular ischemia

**Table S3.** Morphologic parameters (macular thickness) in patients with retinal vein occlusion after treatment

| | CRVO (n=10) | | | BRVO ST (n=12) | | | BRVO IT (n=16) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Before treatment | After treatment | *p-value*[a] | Before treatment | After treatment | *p-value*[a] | Before treatment | After treatment | *p-value*[a] |
| **Macular thickness (ILM-RPE) (µm)** | | | | | | | | | |
| Fovea | 575.25±111.77 | 272.20±45.74 | *<0.001* | 373.58±125.47 | 258.00±26.35 | *0.028* | 465.89±145.35 | 290.50±89.70 | *0.015* |
| ParaFovea | 451.63±66.78 | 329.40±18.86 | *<0.001* | 391.33±73.90 | 328.33±48.67 | *0.027* | 420.78±81.96 | 334.75±40.65 | *0.057* |
| Para-Temporal | 450.63±74.29 | 311.00±10.69 | *0.001* | 395.00±86.96 | 323.00±62.82 | *0.034* | 438.33±94.93 | 351.75±81.84 | *0.036* |
| Para-Superior | 452.63±72.95 | 337.00±19.74 | *<0.001* | 446.83±127.25 | 333.67±67.67 | *0.023* | 347.56±26.42 | 341.50±34.23 | *0.074* |
| Para-Nasal | 473.38±75.31 | 335.80±31.90 | *<0.001* | 378.92±55.02 | 339.00±49.97 | *0.021* | 404.11±90.50 | 326.75±19.70 | *0.101* |
| Para-Inferior | 429.63±57.45 | 333.80±15.92 | *<0.001* | 345.25±51.10 | 317.33±13.87 | *0.155* | 493.33±150.61 | 320.00±48.09 | *0.054* |

CRVO, central retinal vein occlusion; BRVO ST, superotemporal branch retinal vein occlusion; BRVO IT, inferotemporal branch retinal vein occlusion.

[a]Probability that values are influenced by treatment adjusted for presence of macular ischemia
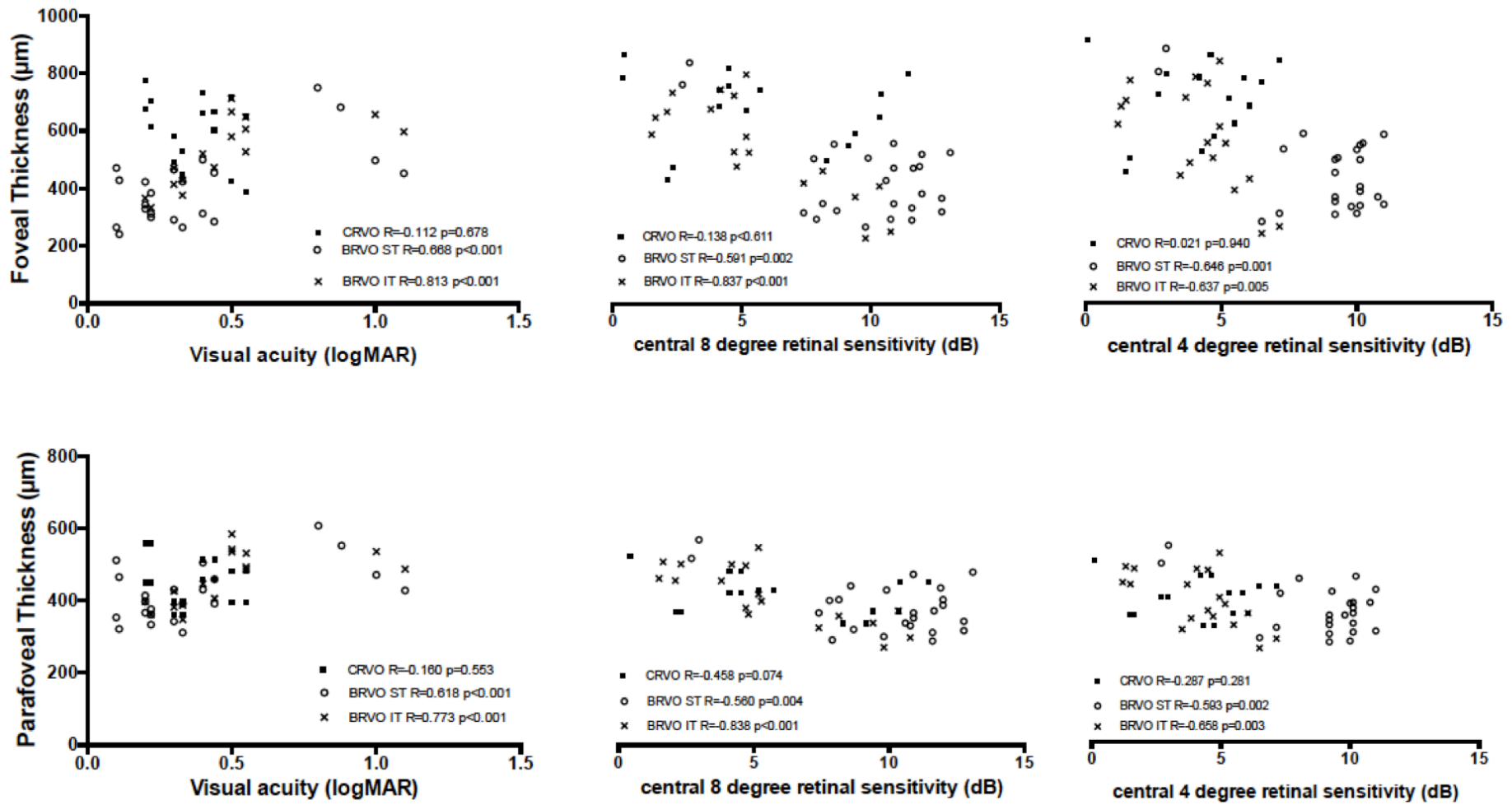
**Figure 1S.** Correlations [Pearson correlation coefficient (R)] between morphological (foveal and parafoveal thickness) and functional parameters (visual acuity and microperimetry at 4 and 8 degree) in RVOs patients.