

## Abstract 68

### TOPOGRAPHICAL ANALYSIS OF THE CHORIOCAPILLARIS REPERFUSION AFTER LOADING ANTI-VEGF THERAPY IN NEOVASCULAR AMD

Oral

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#### **Purpose:**

To evaluate choriocapillaris vascular density changes around macular neovascularization (MNV) before and after anti-vascular endothelium growth factor (VEGF) injections by optical coherence tomography angiography (OCTA).

#### **Methods:**

Treatment-naïve eyes with a diagnosis of exudative AMD and type 1 MNV were included. En face optical coherence tomography angiograms were analyzed for percentage of CC FD (FD%), the FD average area (FDa), and the FD number (FDn) in five progressive 200- $\mu$ m-wide concentric rings (R1, R2, R3, R4, and R5) surrounding the dark halo around MNV. The OCTA acquisition was performed at the following visits: (i) before the loading phase (LP) of intravitreal injection of aflibercept or ranibizumab (T1), (ii) 1 month after the last intravitreal injection of LP comprising three monthly injections (T2).

#### **Results:**

A total of 30 eyes of 30 Caucasian patients with nAMD naïve were included in the study. All rings showed a progressive FD% reduction at T2 in comparison to T1 values indicating gradual CC reperfusion of the peripheral rings. Furthermore, we found a progressive contraction of the FD average area in all the rings considered ( $p < 0.05$ ). On the other hand, at T2, a significant increase in the FD number of the five rings was displayed, as compared to T1 ( $p < 0.05$ ).

#### **Conclusions:**

Our analysis showed topographical CC reperfusion after loading anti-VEGF therapy. CC flow deficits were greater around the associated dark halo before treatment, followed by a progressive recovery of CC flow after intravitreal therapy.