ANTI-PLGF, A SAFER ALTERNATIVE FOR ANTI-VEGF, IN THE TREATMENT OF AMD?

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Purpose: To design additional or adjunctive therapeutic strategies to improve the current treatment options for CNV. The efficacy and safety of anti-PIGF therapy as monotherapy as well as in combination with anti-VEGF treatment was checked.

Methods: To assess the ability of anti-PIGF to suppress CNV, a laser-induced murine CNV model was used and the size and vascularity of the lesions were evaluated on choroidal flat-mounts and serial sections.

Results: Anti-PIGF suppressed choroidal neovascularization. Combination treatment of antiPIGF with an antibody to VEGFR2 augmented the CNV suppression. Additionally, anti-PIGF suppressed the local inflammation, while anti-VEGFR2 did not. Anti-PIGF treatment proved to be safe for the retinal vascular development, and did not cause retinal neurodegeneration.

Conclusion: Our study explored the role of PIGF in CNV and the therapeutic potency and safety of anti-PIGF antibodies in the treatment of this disease. With these efforts we are hoping to improve the visual prognosis of the vast population suffering from this blinding disease.