

Efficacy of a Topical Tubulin Inhibitor, OC-10X, in a Non-Human Primate Model of Exudative AMD

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Purpose: To determine the efficacy of OC-10X in a non-human primate model of exudative AMD

Methods: Laser induced choroidal neovascularization, simulating exudative AMD, was generated in both eyes of 8 non-human primates. Intravitreal injection of OC-10X was performed in one eye at baseline and two weeks, while the fellow control eye received concomitant intravitreal saline injections. Animals were evaluated at two and four weeks for presence of ocular and systemic toxicity, and were sacrificed at four weeks. Area of choroidal neovascularization was measured by FITC-dextran technique.

Results: A 43% reduction in the area of the CNV in OC-10X treated eyes compared to control eyes was observed ($p=0.025$). No toxic effects of OC-10X or vehicle were noted in the anterior segment, posterior segment, or systemically.

Conclusion: OC-10X inhibits experimental CNV in a non-human primate model of AMD. Tubulin inhibition requires further investigation and may represent a safe, useful alternative approach in the management of exudative AMD