Retina

ILUVIEN® IMPLANT ASSOCIATED IMPROVEMENT IN THE STAGE OF DIABETIC MACULOPATHY BASED ON OPTIC COHERENCE TOMOGRAPHY BIOMARKERS ASSESSMENT

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Purpose: The purpose of this study is to evaluate the improvement in the stage of diabetic maculopathy after 36 months following ILUVIEN® intravitreal implant (flucinolone acetonide, FAc 0.2 μg/day), in relation to the inflammatory optic coherence tomography (OCT) retinal features.

Methods: Retrospective, observational analysis of 45 eyes of 35 patients with a 36-months follow-up. Demographics were recorded at baseline. Best corrected visual acuity (BCVA) and central subfield thickness (CST) were recorded from baseline to month 36. All patients underwent OCT scanning before and after implantation of ILUVIEN®, in all time-points, with 7 parameters being considered (foveal thickness, intraretinal cysts, ellipsoid zone and/or external limiting membrane status, disorganization of the inner retinal layers, number of hyperreflective foci, subfoveal fluid and vitreoretinal relationship), according to ESASO’s proposal.

Results: The mean age was 70.4 ± 7.6 years and the average diabetic macular edema (DME) duration was 4.3 ± 1.3 years. Mean change from baseline BCVA to 36 months was +14.3 ETDRS letters (p 0.001). CST decrease by 182.9µm (p<0.001) from baseline to 36 months. According to ESASO classification, at baseline, 76% eyes showed advanced DME and 24% early DME. At 36 months, diabetic maculopathy staging showed great improvement with 14% and 86% of the eyes presenting advanced and early DME, respectively (p<0.001).

Conclusion: This study demonstrated marked visual gains and great reversion in retina status in eyes with DME treated with ILUVIEN® implant.

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