Purpose: To show the effect of Dexamethasone-0.7mg implants (Ozurdex) in refractory and naïve Diffuse Diabetic Macular Edema (DDME).

Methods: Prospective study of 76 eyes with Visual Acuities (VA) between 15 and 72 ETDRS letters, central OCT foveal thickness 300 microns. Two groups: 1) Refractory DDME, not responding to conventional treatments 6 months evolution (40 eyes). 2) Naïve DDME with severe inflammatory component characterized by total macular volume 9mm3 in Topcon OCT-2000-3D (36 eyes). Follow-up: Visits included VA, OCT and ophthalmic examination at 24h, days 7 and 21, and then monthly (Maximum: 12.4 months). Quarterly Angiographical control. Photocoagulation (PC) allowed complementarily after the first month, and reinjection possible if OCT thickness increased 150 microns compared to the best recorded or VA losses 10 letters. Results: VA increases and OCT thickness decreases were statistically significant (p0.05) compared to baseline at days 21 and 7, respectively in both groups. The maximum VA increase occurred 2 months after the injection in both groups: +8.8 letters in refractory group and +13.7 in naïve group. Statistically significant differences were found between both data. The maximum OCT decrease was detected 2 months after the injection in both groups. PC was performed in 47/76 eyes. Transient Intraocular pressure peaks (10 mmHg) were recorded in 6/76 eyes. In 57/76 eyes, a new Ozurdex was needed. Mean time between injections: 4.9 months. Conclusions: We have achieved important VA improvements (greater in the naïve group) and OCT thickness in both groups with a satisfactory safety profile.