

## Abstract 78

### EVALUATION OF THE ADDITIVE EFFECT OF INTERFERON A 2B WITH MONTHLY INTRAVITREAL INJECTION OF BEVACIZUMAB IN REFRACTORY DIABETIC MACULAR EDEMA

Oral

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#### Purpose:

To evaluate the additive effect of topical or sub-tenon injection of interferon (IFN) - $\alpha$  2b in the treatment of refractory diabetic macular edema.

#### Methods:

In this prospective study, 59 eyes of 35 patients with refractory center-involved DME who were unresponsive to three monthly consecutive IVB injections were recruited. Patients were divided into three groups: group1, received IFN-  $\alpha$  2b topical drop at a dose of 1mIU/ml four times a day for three months. Group 2, received a single sub-tenon injection of 1mIU/ml IFN-  $\alpha$  2b at the enrollment. Group 3 received artificial tears four times a day for three months (control group). All groups received three consecutive monthly IVB injections and were evaluated monthly up to one month following the last IVB injection.

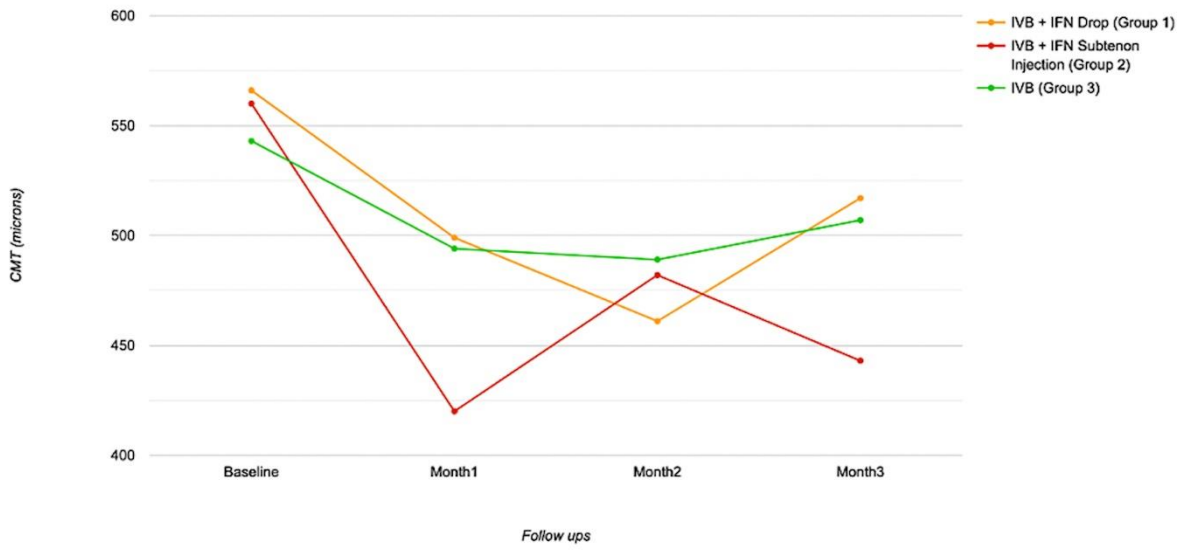
#### Results:

The final follow-up showed that although CMT decreased in all groups, only patients in Group 2 had statistically significant lower CMT (p-value=0.025). Comparison of CMT changes between three groups showed no significant difference, although it was higher in group 2. Considering patients with baseline CMT > 400  $\mu$ m, subtenon iIFN  $\alpha$ 2b led to a significant reduction of CMT at the first month and final follow-up visit (p-value= 0.018 and 0.035, respectively). Alterations of CDVA were not significant among groups, although Group 1 patients had a significant visual improvement at second and last follow up ( p-value= 0.030 and 0.010, respectively).

#### Conclusions:

Subtenon injection of IFN might have an additive anatomical effect in patients with refractory DME. Validation of this observation requires further prospective controlled studies.

Mean CMT changes in all patients



Mean CMT changes in patients with baseline CMT > 400 microns

