Body: The aim of this study was to determine the effect of combined therapy of ICSs/LABAs plus tiotropium bromide in patients with COPD, by analyzing of IL-8 and MEF25-75 at the beginning and after 6 months of therapy. The study included 33 patients with severe COPD. In each of them were measured serum IL-8 levels by the ELISA method and MEF25-75 which are indicated the small airways obstruction. They were treated with combined therapy of ICSs/LABAs (500mcg) plus Tiotropium Bromide (18mcg) daily in duration of 6 months. The results were statistically elaborated according to the T-test for Dependent Samples. The obtained results of IL-8 showed that the level of IL-8 before the start of therapy were much higher and that treatment significantly reduces their value (t=3.13, p=0.003, p<0.05). The results of MEF 25-75 at the start of therapy were lower and after 6 months of treatment showed a slight improvement of lung function but statistically insignificant (t= -0.83, p=0.41,p<0.05). The concentration of IL-8 is closely related with airway obstruction in patients with COPD and may serve as a marker for evaluating the severity of airway inflammation. ICSs/LABAs and tiotropium bromide have inhibitory effect on neutrophilic inflammation through the suppression of IL-8 production from epithelial cells and thus may contribute to lower cellular inflammation in COPD. Because it is a progressive disease and airflow limitation is not fully reversible, we cannot expect spectacular results like we show with the value of MEF25-75, but should strive to prevent progression and reduce airway remodeling with education, pharmacologic and non-pharmacologic treatment.