

### 1.19 Comparing the Impact of Biological Treatment in Severe Asthmatics on Markers of Inflammation

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**Background** Severe asthma affects about 2-5% of asthmatics. Some severe asthmatics are treated with biological agents which target T2 inflammatory pathways. We carried out a study of 83 patients with severe asthma and compared those on biological agents to those not on biological agents. **Methods** Each patient had spirometry, completed an ACQ-7 questionnaire and had bronchoscopy with bronchoalveolar lavage. BAL cytokines and serum blood markers were also analysed. **Results** We found that those on biologics were older ( $P=0.02$ ), more likely to be female and had significantly less blood eosinophils ( $P<0.0001$ ). There were also differences in some BAL cytokine levels. Interestingly, CCL11 was significantly more elevated in those on biological agents ( $P=0.03$ ). CCL11 has been identified as a potential biomarker for asthma severity and control. **Conclusion** Some differences in clinical features and cytokines were observed when severe asthmatics treated with biological agents were compared to severe asthmatics not on this treatment. **Disclosures: Conflict of Interest:** The Authors declare that they have no conflict of interest.