1.01 An assessment of compliance with biologic therapies for severe eosinophilic asthma

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Background: Mepolizumab and Benralizumab are biologic therapies used for severe eosinophilic asthma. This study aimed to examine patient compliance with biologic therapy at home. **Methods:** We used prescription collection rates from the pharmacy high-tech hub to measure compliance, examining six months of retrospective data. Secondary endpoints included refill rates for preventer inhalers, corticosteroid courses, and hospitalizations for asthma exacerbations. **Results:** We assessed 15 males and 22 females, with 11 on benralizumab and 26 on mepolizumab. Nineteen patients were fully compliant, 12 were partially compliant, and 6 were non-compliant. Among fully compliant patients, only 58% collected a preventer inhaler monthly. For partially and non-compliant patients, 50% collected a preventer inhaler monthly. There were six hospitalizations for asthma exacerbations: five in non-compliant patients and one in a fully compliant patient. A total of 36 corticosteroid courses were prescribed over the 6 month period, the majority of these were prescribed to patients in the non-compliant (14) or partially compliant groups (13). **Conclusion:** Compliance with biologic therapy and preventer inhalers was low in patients with severe eosinophilic asthma at our institution. Further study is needed to understand the causes of poor compliance. **Disclosures: Conflict of Interest:** The Authors declare that they have no conflict of interest.