|  |
| --- |
| **The Severe Asthma Monoclonal ANtibody THerapy and Assessment Programme (SAMANTHA)** |
| Harrington J1,2, Harvey E1,2, Chapman M2, McDonald VM1,2,Gibson PG1,2 |
| *1College of Health Medicine and Wellbeing, University of Newcastle, Newcastle, Australia; 2Department of Respiratory and Sleep Medicine, John Hunter Hospital, Newcastle, Australia;* |
| **Introduction/Aim:** Monoclonal antibody (biologic) medications can be life changing for individuals with severe asthma. Currently, there are four biologics available for severe asthma in Australia, with Pharmaceutical Benefits Scheme subsidy. The process for accessing these treatments is complex, often resulting in obstacles and delays to treatment initiation and continuation. Aim: To implement a clinical support system for the management of biologic therapy processes and quality assurance within the John Hunter Hospital (JHH) severe asthma service.  **Methods:** The SAMANTHA programme, comprising an interactive clinical support and monitoring system, and database was developed using REDCap, hosted by Hunter Medical Research Institute. SAMANTHA organises health information and tracks and monitors processes pertinent to biologic treatment. Patients receiving biologic treatment through the JHH severe asthma service were registered prior to SAMANTHA’s launch (March 2023). Continuation assessments, treatment changes, and new patients were entered prospectively. Automated notifications to the clinical team and patients were generated at time-dependant continuation points. Treatment use was described.  **Results:** At the time of SAMANTHA commencement the service has 363 registered biologic users receiving current biologic treatment: omalizumab (n=42, 11%), mepolizumab (n=116, 32%), benralizumab (n=115, 32%) and dupilumab (n=90, 25%). Approximately half commenced their current treatment within two years prior, with the longest treatment durations being >10 years. Sixty-eight patients commenced their current treatment switching from one biological to another via PBS approval criteria. Time between completion of initial application for therapy and commencement was mean 31.56 (SD29.95) days (n=336 applications). In 7.5 months, 29 treatment cessations were captured. Of those, 28 resulted in a switch to a different treatment. Applications for continuing treatment were alerted, completed and captured (n=346 applications). Of new patients registered (n=45), 36 had commenced treatment.  **Conclusion:** SAMANTHA provides real-time data on patients receiving biologic treatment, from referral through to cessation/change of therapy, supporting the clinical management of severe asthma. Evaluation of user and patient experience will further inform the programme.  **Grant Support:** JHH Special Purpose Fund |