|  |
| --- |
| **Usage of biologic therapies for severe asthma from a nationally representative population survey** |
| Helen Reddel1,2,3,4, Rosario Ampon1, Leanne Poulos1, Taehoon Lee1,5, Brett Toelle1,2,6, Guy Marks1,7, Sharon Davis1 |
| *1Australian Centre for Airways disease Monitoring, Woolcock Institute of Medical Research, Macquarie University, Sydney, Australia**2 Sydney Local Health District, Sydney, Australia**3 Macquarie Medical School, Faculty of Medicine, Health and Human Sciences, Macquarie University, Sydney, Australia**4* *Faculty of Medicine and Health, The University of Sydney, Sydney, Australia**5Ulsan University Hospital, Korea**6* *Department of Health Sciences, Faculty of Medicine, Health and Human Sciences, Macquarie University, Sydney, Australia**7* *School of Clinical Medicine, University of NSW, Sydney, Australia* |
| **Introduction/Aim:** Most data about usage of biologic therapies for severe allergic or eosinophilic asthma come from registries. We aimed to describe the use of biologics in a large nationally representative population of adult Australians with current asthma**Methods:** We conducted a cross-sectional survey of Australians aged ≥18 years with current asthma from large web-based survey panels in February/March 2021. Enrolment was stratified by gender, age-group and state/territory based on national data for people with asthma. Difficult-to-treat or severe asthma was defined by ERS/ATS criteria: (a) taking medium/high dose ICS-LABA plus poor asthma control (ACT <20) and/or urgent asthma healthcare in the previous year, and/or (b) taking maintenance OCS (>3 months in previous year), and/or (c) prescribed biologic therapy (omalizumab, mepolizumab, benralizumab) for severe asthma in the previous year. Questions included demographics and clinical characteristics, and, for those receiving biologic therapy in the last 3 months, factors which affected their use. Survey weights were applied where needed.**Results:** Treatment with biologics in the last 3 months was reported by 171 participants, representing 13.2% of n=1313 participants with difficult-to-treat asthma and 2.9% of n=6,048 with current asthma (weighted proportions). Use of omalizumab was reported by n=109, mepolizumab n=36, and benralizumab n=26. Similar proportions received their biologic therapy at a clinic (48.0%) or from a GP (42.1%). Most participants reported one or more practical issues affecting their use of biologic therapy, such as difficulty obtaining it from the pharmacy (49.7%), forgetting when it was due (50.3%), cost (50.9%), the time taken on injection day (48.5%), painful (38.6%) and allergic reactions (29.2%).**Conclusion:** These findings from a nationally representative population give insights into use of biological therapies for severe asthma, and may assist in providing support for people receiving these therapies in the future.**Grant Support:** The Australian Centre for Airways disease Monitoring (ACAM) is a unit of the Woolcock Institute of Medical Research. ACAM funding includes NHMRC CRE, and investigator-initiated research grants from GlaxoSmithKline, and AstraZeneca.  |