



The Thoracic Society
of Australia & New Zealand
LEADERS IN LUNG HEALTH

THORACIC SOCIETY OF AUSTRALIA AND NEW ZEALAND
AUSTRALASIAN SEVERE ASTHMA NETWORK



ASAR

Australasian Severe
Asthma Registry

PUBLIC

**ANNUAL
REPORT
2023**



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SUMMARY

Severe asthma is a serious public health concern in the Australasian region, particularly in Australia and New Zealand. The medical complexity and heterogeneity of severe asthma pose unique challenges for the clinical management of patients in healthcare settings. Consequently, severe asthma directly results in deleterious disease outcomes, as well as economic burden in the region. Prior to the establishment of the Australasian Severe Asthma Registry (ASAR), long-term data of a large cohort of patients with severe asthma was scarce, thus limiting our understanding of the disease progression and management.

The ASAR is a collaborative clinical quality registry established to address the lack of knowledge about clinical outcomes in adults with severe asthma in the Australasian region. After transitioning from the Severe Asthma Web-Based Database (SAWD), the ASAR is now a longitudinal clinical quality registry (CQR), following participants for 10 years. The data being collected through the registry will allow healthcare professionals and researchers to gain valuable insights on the characteristics, progression, treatment and management of the disease, and thus improve the care and quality of life of patients living with the disease.

The year 2023 was a productive time, with several exciting participant recruitment and follow-up completion milestones achieved, and significant progress on the scholarly publications using the ASAR data. As of 31 December 2023, the ASAR included a total 1,088 eligible patients who had completed the baseline visit.

The purpose of this report is to share an overview of the ASAR, including key achievements of the ASAR in 2023. In addition, we report the preliminary data analyses of the registry population, such as the characteristics of participants with severe asthma. We also highlight the important research being conducted by the ASAR publication working groups and point to the future directions of the ASAR.

This report was prepared by the TSANZ Registries Team:

Dr Hayley See, Ms Natasa Petrovic, Dr Joanna Lee, Dr Shakti Shukla



Australia and New Zealand have some of the highest rates of severe asthma in the world. Severe asthma – heterogenous and medically complex – presents unique challenges for the clinical management of patients in healthcare settings. Consequently, it is responsible for substantial adverse illness outcomes, economic burden, and burden of disease. Little is known about the longitudinal clinical outcomes and the impact of severe asthma in the Australasian context.



In Australia, asthma accounted for 35% of the total burden of disease due to respiratory conditions and 2.5% of the total disease burden in 2023.

[Chronic respiratory conditions: Asthma - Australian Institute of Health and Welfare \(aihw.gov.au\)](https://www.aihw.gov.au)



Severe asthma is defined as asthma that requires treatment with high dose inhaled corticosteroids plus a second controller and/or systemic corticosteroids to prevent the disease from becoming “uncontrolled” or, asthma that remains “uncontrolled” despite this therapy.

(Chung et al., 2014)



In New Zealand, asthma affects 12.3% New Zealanders, corresponding to 515,000 individuals (15 years or older). Asthma hospitalisations remain little below 170 per 100,000 individuals per year.

[NZ health statistics](#)
[Ministry of Health NZ](#)

Australia and New Zealand have higher rates of severe asthma compared to other regions in the world. In Australia, about 2.8 million (10.8%) Australians have a diagnosis of asthma ([Australian Institute of Health and Welfare, 2024](#)) and in New Zealand, the prevalence of asthma is slightly higher, with one in eight (12.3%), or 515,000 New Zealanders living with asthma (Ministry of Health, 2022/2023). International datasets estimate that of these, approximately 3–10% (Chung et al., 2014, Hekking et al., 2015) will have a severe, uncontrolled form of the disease. This equates to 81,000–270,000 people in Australia and 13,560–45,200 New Zealanders suffering with an uncontrolled severe form of asthma.

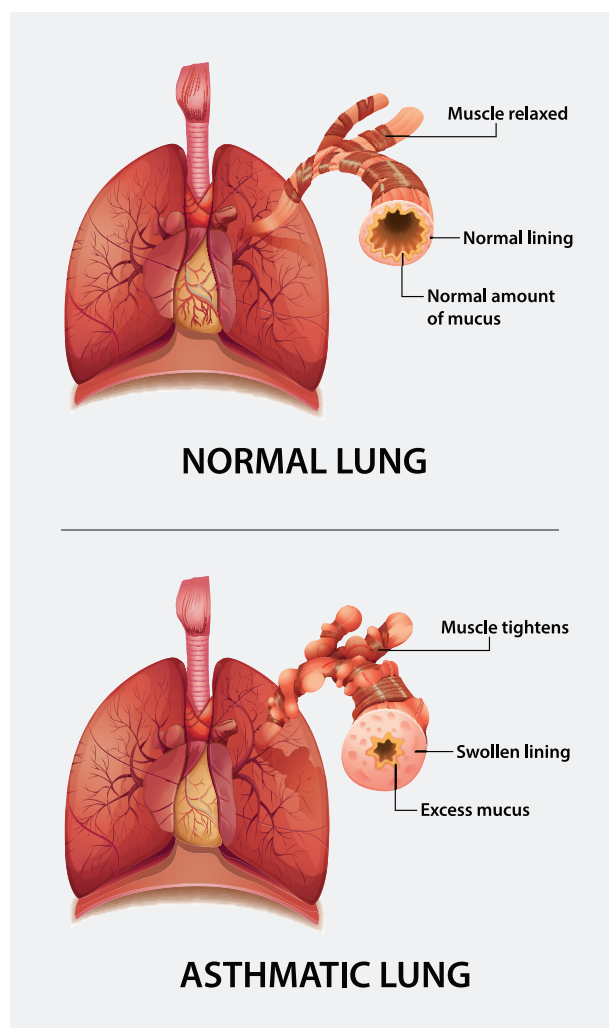
The high prevalence and clinical complexity of severe asthma translates to significant burden of disease, healthcare costs and deaths in our region (Australian Bureau of Statistics, 2019). In New Zealand, asthma was estimated to cost \$1.018 billion in 2018, with \$198.3 million in direct costs, and \$828.2 million in indirect costs from workdays lost, disability-affected life years, and mortality (Barnard and Zhang, 2021). The estimated cost of asthma to the Australian health system in 2015 was a staggering \$1.2 billion. Severe asthma, while

representing only 3–10% of the asthma population, accounts for up to 50% of asthma-related healthcare expenditure (O'Neill et al., 2015). Furthermore, the associated indirect economic costs (including productivity loss and associated financial costs, e.g., travel and government programs) totalled \$3.3 billion (Asthma Australia and National Asthma Council Australia, 2015). The overall burden of disease, which accounts for suffering and premature death experienced by people with asthma in Australia in 2015 was estimated at \$24.7 billion. These numbers reflect the significant long-term impact of severe asthma on daily living and quality of life.

The burden of disease of severe asthma is indicative of the far-reaching consequences for individuals living with the disease. Adverse side effects of oral corticosteroids, one of the mainstay maintenance treatments for patients with severe asthma, include hypertension, decreased bone density with resultant increased risk of fractures, cataracts, gastrointestinal conditions, risk of infections and metabolic issues (Rice et al., 2017). People with severe asthma are more likely to experience greater impairment at work and outside the workplace than people who have non-severe asthma (Hiles et al., 2018). Furthermore, they are two to three times more likely to experience symptoms of anxiety and depression than those with mild or non-steroid-dependent asthma (Amelink et al., 2014). Understanding the complexity and impact of severe asthma from a real-life, local perspective is imperative to manage the significant burden of this disease.

Furthermore, data related to the effectiveness and safety of biologic treatments for severe asthma are limited in a real-world setting. Whilst pivotal randomised-controlled trials (RCTs) have demonstrated the efficacy of emerging and available biologic treatments, these treatments are inherently expensive and limited to eligible patients who meet the criteria through adequate phenotyping (Grainge et al., 2016). With only 10% of patients meeting the specific eligibility criteria for clinical trial entry, questions about the generalisability of the RCT outcomes are raised. To achieve a more comprehensive, real-world understanding of the efficacy of these treatments for severe asthma, investigation and evaluation of clinical practice evidence is warranted (Albers et al., 2018).

Severe asthma registries are invaluable evidence platforms used to systematically obtain and report information related to this disease and its treatments. They provide the basis for understanding the population characteristics and disease management, as well as to promote evidence-based clinical guidelines. The ASAR is a prospective, clinical quality registry of adults with severe asthma in Australia and New Zealand and will be utilised to monitor clinical outcomes, specific treatments, and quality of life for the severe asthma cohort in Australia and New Zealand.





REGISTRY GOVERNANCE

Governance for the ASAR is provided by the Thoracic Society of Australia and New Zealand (TSANZ) (Figure 1). The ASAR Management Committee (Table 1) plays a crucial role in the operation of the ASAR by providing strategic guidance and managing ongoing academic aspects and interests of the ASAR. The ASAR Management Committee liaises closely with the ASAR Publication working groups and the TSANZ Registries team (Table 2) which acts as a medium between all parties and the research sites, and is responsible for coordinating the daily processes of the ASAR, including: maintenance of the acquainted data, data cleaning, liaising with sites and offering assistance with their local governance, site payments, tracking participant recruitment and follow-ups, as well as providing feedback to the sites. The ASAR Management Committee provides recommendations regarding all aspects of the ASAR to the Registries and Clinical Quality (RCQ) sub-committee, which, in turn, makes a recommendation for the TSANZ Board.

Through the ASAR, we are dedicated to improving the quality of patient care, the cost-effectiveness of the healthcare system, and contributing to severe asthma research.

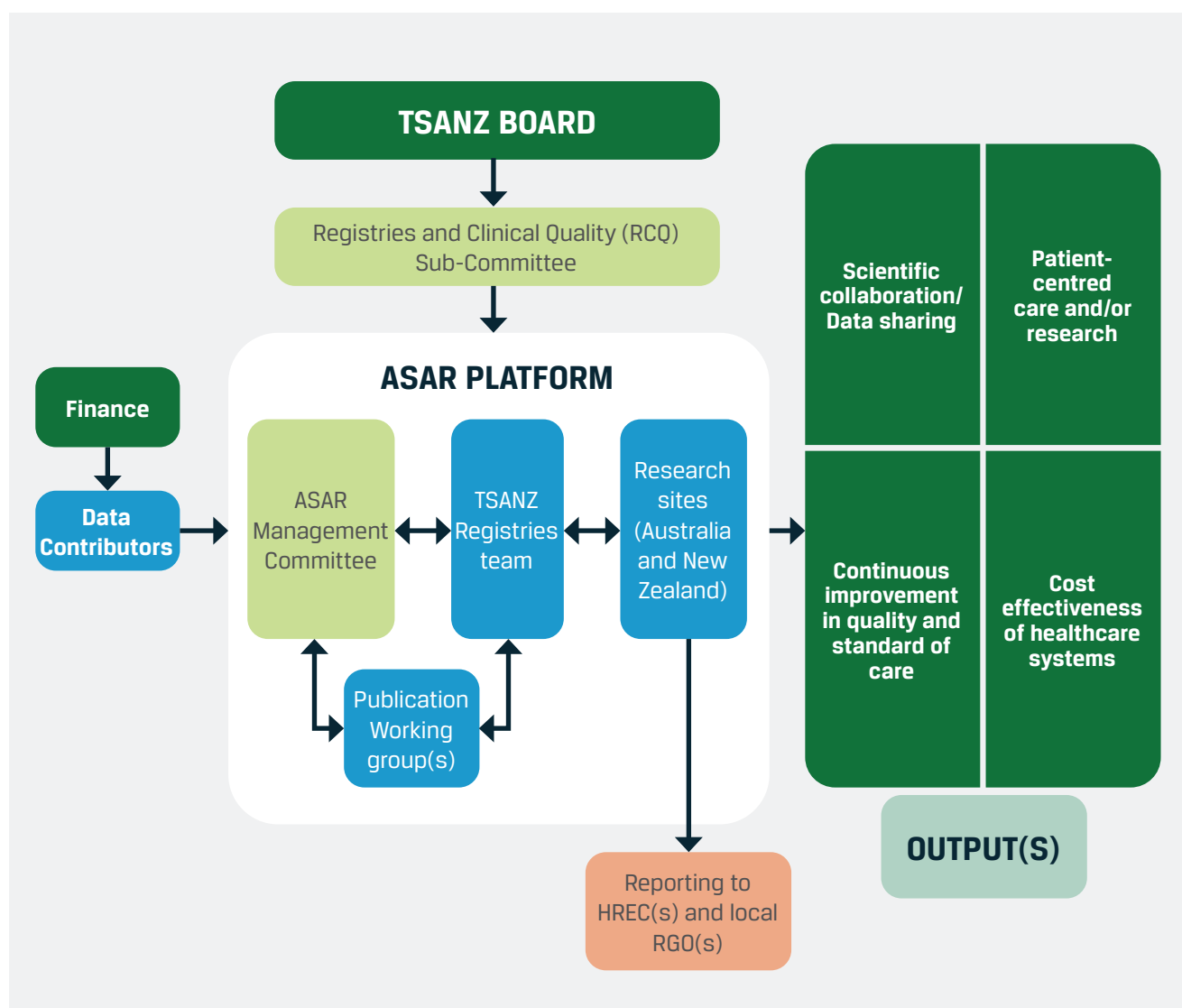


Figure 1 - Schematic of ASAR governance at TSANZ

Table 1 - TSANZ ASAR Management Committee

Name	Position	Affiliations
Prof Peter Gibson (Chair)	Senior Staff Specialist	Hunter Medical Research Institute/John Hunter hospital, NSW
Prof Matthew Peters	Respiratory and Sleep Medicine Physician, Head of Respiratory Medicine	Concord Repatriation General Hospital, NSW
Prof John Upham	Senior Respiratory Physician	Princess Alexandra Hospital, QLD
Prof Philip Bardin	Respiratory and Sleep Physician	Monash University and Medical Centre, VIC
A/Prof Gregory Katsoulotos	Consultant Physician and Senior Lecturer	St. George Specialist Centre, University of New South Wales, NSW
Dr Li Ping Chung	Respiratory Physician	Fiona Stanley Hospital, WA
Dr James Fingleton	Respiratory Physician and Clinical Director – Sub Speciality Medicine Medical Director	Te Whatu Ora- Capital Coast and Hutt Valley Asthma and Respiratory Foundation New Zealand
Dr Elaine Yap	Respiratory Physician	Middlemore Hospital, New Zealand
Dr Erin Harvey	Biomedical Scientist	Hunter Medical Research Institute/John Hunter Hospital, NSW
Ms Anna Mackay	Registered Nurse	Alfred Health, VIC

Table 2 - TSANZ Registries Team 2023-24

Name	Position
Mr Vincent So	TSANZ CEO
Dr Hayley See	Head, Public Affairs, Research and Operations
Dr Shakti Shukla	Registries Coordinator
Dr Joanna Lee	Registries Officer
Ms Natasa Petrovic	Senior Data Management Officer



KEY ACHIEVEMENTS 2023

In 2023, the ASAR continued to expand with additional participant enrolments and completion of follow-up visits, with the two additional ASAR modules and publication working groups also making significant progress. Detailed information about the progress and data collected for the ASAR is provided in the [Data Analysis section](#) of this annual report. Information about the ASAR modules and the research conducted by the publication working groups is provided below within this section (Figure 2).



On behalf of the ASAR Management Committee and the TSANZ, we would like to express our gratitude to all the staff involved in the ASAR for their continued contributions to the registries.

Clinical Quality Reporting

In alignment with the requirements of the [Clinical Quality Registries framework](#), the TSANZ Registries team produced Clinical Quality Reports that were shared with the principal investigators and staff involved in the ASAR. These reports were designed to provide an overall snapshot of participant recruitment and follow-up, as well as site-specific information about the characteristics of participants enrolled, and data completeness status. The information provided can help to enhance data quality for the ASAR, and allow individual sites to identify areas where quality of care may be improved.

ASAR Additional Modules

There are currently two additional modules that are built upon the ASAR: the Australian Benralizumab Registry (ABenRA) and the Australian Severe Asthma Dupilumab Registry (ASADR). These modules were designed to answer research questions related to the specific biologic treatment, Benralizumab and Dupilumab respectively.

Australian Benralizumab Registry (ABenRA)

The primary objective of the Australian Benralizumab Registry (ABenRA) is to help researchers and clinicians to gain a better understanding of the use, efficacy, and safety of Benralizumab in patients with severe asthma. Participants enrolled in this registry are monitored for a period of two years. The data collected will be used to assess changes in patient-reported asthma-related symptoms, quality of life, health care resource utilisation, and concomitant medications such as oral corticosteroids, over the follow-up period.

This registry commenced in 2020 and has achieved a major milestone in November 2022, by reaching its target number of 200 participant enrolments. Over half of the enrolled participants have completed the study with the last participant anticipating completing the follow-up visit at the end of 2024.

Australian Severe Asthma Dupilumab Registry (ASADR)

The Australian Severe Asthma Dupilumab Registry (ASADR) aims to monitor the use, efficacy, and safety of Dupilumab in the severe asthma population, and to examine the characteristics of patients who use this biologic treatment. Similar to the ABenRA, participants enrolled in this registry are followed for a period of two years. The data collected will be used to assess changes related to asthma symptom control, quality of life, activity impairment, and the use of asthma medications including oral corticosteroid over time.

This registry commenced in 2022 and aims to include a total of 110 participants. Two recruitment milestones were achieved in 2023 with 48 participants being successfully enrolled in the registry. To date, the registry has reached another two recruitment milestones and includes at least 70 participants. It is estimated that we will achieve the target number of enrolment by early 2025.

ASAR Publication Working Groups

Three working groups were established in 2023 that aimed to produce scholarly publications using the ASAR data. Each group focuses on a specific topic including oral corticosteroid stewardship, comorbidities, and phenotypes and biologics among patients with severe asthma. The success and progress of these groups are described below.

Oral Corticosteroid Stewardship

Phenotypes and Biologics

Severe asthma and comorbidities

International Collaboration

The ASAR continued its collaboration with the International Severe Asthma Registry (ISAR) during 2023 through the sharing of ideas and as active participants on their Steering Committee. The anonymous ASAR data transferred in 2021 and 2023 contributed to several ethically approved research analyses, including those published in 2023; GLITTER Phase I (Chen et al. 2022), FIRE (Pfeffer et al. 2023), GLITTER Phase II (Chen et al. 2023), PRISM I (Scelo et al. 2024), and BEAM (Perez-de-Llano et al. 2023). The contribution to and inclusion of the ASAR data in the ISAR dataset provides important geographical representation of the real-world experience from our region to the global understanding of severe asthma.

The ISAR is a global research initiative collecting anonymous longitudinal real-life data for the severe asthma cohort with collaborators from over 29 countries. TSANZ is committed to fostering fruitful international collaborations and supporting the collegiate and scientific benefits of our involvement with ISAR. A collaboration of this nature demonstrates the importance of the ASAR in its contribution to the understanding of severe asthma on the global scale.

The Australian Register of Clinical Registries (ARCR)

The Australian Commission on Safety and Quality in Healthcare (ACSQHC) operates and maintains the Australian Register of Clinical Registries (the Register) to facilitate collaboration and awareness of registry activity among key stakeholders.

Both the ASAR and ABenRA are registered on the ACSQHC's Australian Register of Clinical Registries (ARCR), with addition of the ASADR on the Commission currently underway.

Clinical quality registries are organisations that monitor the quality (appropriateness and effectiveness) of healthcare, within specific clinical domains, by routinely collecting, analysing and reporting health-related information, supporting a self-improving health system (Australian Commission on Safety and Quality in Health Care, 2024). Listing on the ARCR is important to generate visibility of our clinical quality registries and to promote interactions with other registries.





ETHICS AND SITE GOVERNANCE

Ethics Approvals

Australia

The ASAR is approved by the Hunter New England (HNE) Human Research Ethics Committee (HREC) in Australia with National Mutual Acceptance (NMA) for sites within Australia.

New Zealand

The ASAR is approved by the Health and Disability Ethics Committees (HDECs) in New Zealand.



Site Governance

As of December 2023, we have 18 approved ASAR sites across Australia and New Zealand (Table 3). We continue to receive considerable interest from additional sites in both countries to join the ASAR.

Table 3 - ASAR-approved sites

New South Wales	Queensland
Campbelltown Hospital	Cairns and Hinterland Hospital and Health Service
Concord Repatriation General Hospital	Mater Hospital Brisbane
John Hunter Hospital	Princess Alexandra Hospital
Liverpool Hospital	Western Australia
Royal Prince Alfred Hospital	Fiona Stanley Hospital
St George Specialist Centre (private room)	South Australia
St Vincent's Clinic (private room)	Royal Adelaide Hospital
Westmead Hospital	New Zealand
Victoria	Middlemore Hospital, Auckland
Austin Hospital	
Box Hill Hospital	
Frankston Hospital	
Alfred Health	



ASAR DATA ANALYSIS

During 2023, as part of a continuous improvement process, Microsoft Power BI has been fully adopted as a tool of choice for reporting within the TSANZ Registries team. It is used for clinical quality registries regulatory reporting and operational reporting to understand, summarise, and analyse the ASAR data.

In this report, Power BI is used to describe the ASAR population profile, recruitment, and retention. Exploration of different segments of participants was performed using AI-powered decomposition trees to discover possible new patterns. In addition, we have also presented data of baseline disease characteristics comparing between participants with severe asthma versus those with non-severe asthma. These analyses were performed using SPSS.

Population and Recruitment

Between January and December 2023, the ASAR experienced a drop in new enrolments from 107 in 2022 to 50¹ new enrolments in 2023. Of the new participants enrolled in 2023, 42 had severe asthma.

Asthma Severity by Region

Asthma severity and patient experience is assessed across the ASAR population using GINA classification (Global Initiative for Asthma, 2021), asthma control questionnaire - 6 (ACQ-6). Based on the baseline visits across the years, 32.1% of participants with severe asthma are in New South Wales, followed by 24.9% in Victoria and 8.5% in Western Australia (Figure 3).

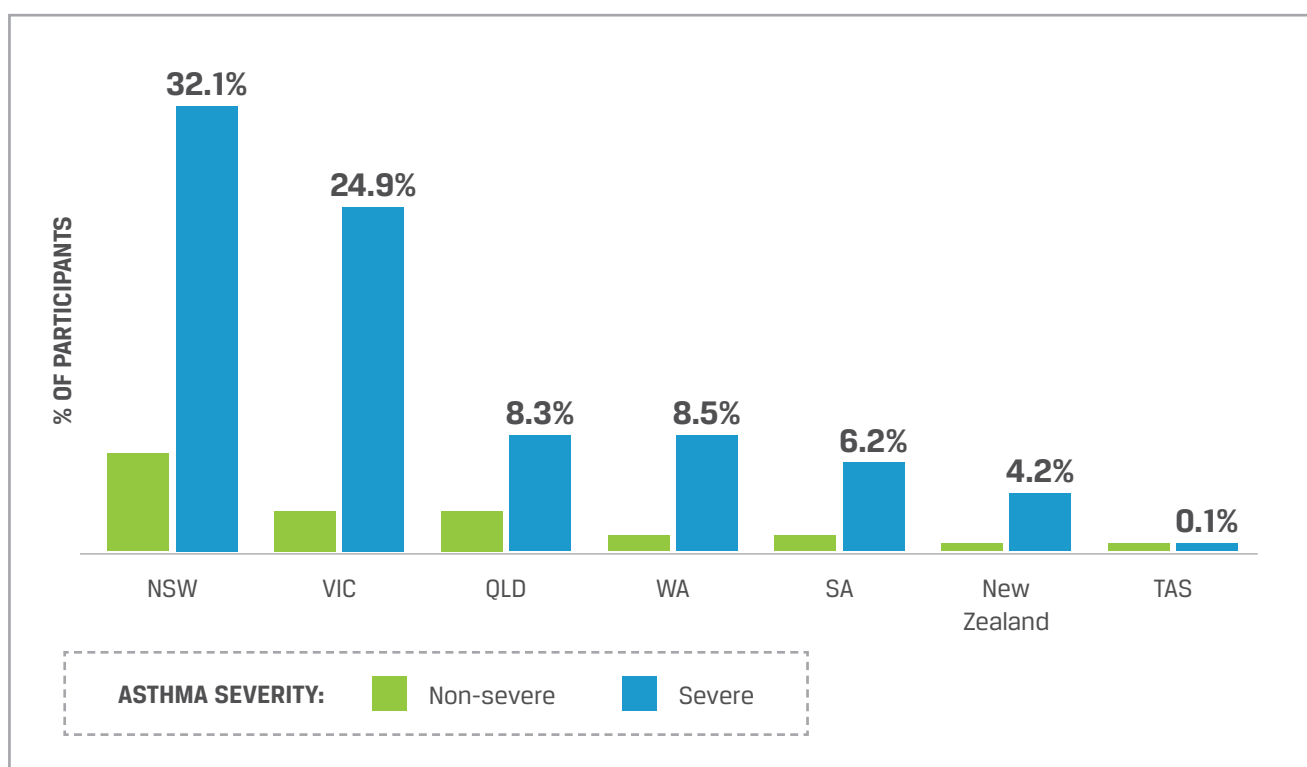


Figure 2 - ASAR participants by region

¹ Number of enrolled patients and number of visits in a year may not align. For example, a patient can enrol in 2023, but attend the first visit in 2024.

Visits Trend

As shown in Table 4 below, the total number of ASAR visits per year has been consistent. There were 6 participants who completed their final 10-year follow-up visit in 2023.

Table 4 - ASAR visits across the years

Visits	2023
Visit 1	50
12 month Follow-up (Year 1)	58
24 month Follow-up (Year 2)	34
36 month Follow-up (Year 3)	67
48 month Follow-up (Year 4)	16
5 year follow-up	9
6 year follow-up	27
7 year follow-up	23
8 year follow-up	21
9 year follow-up	23
10 year follow-up	6
Total	334

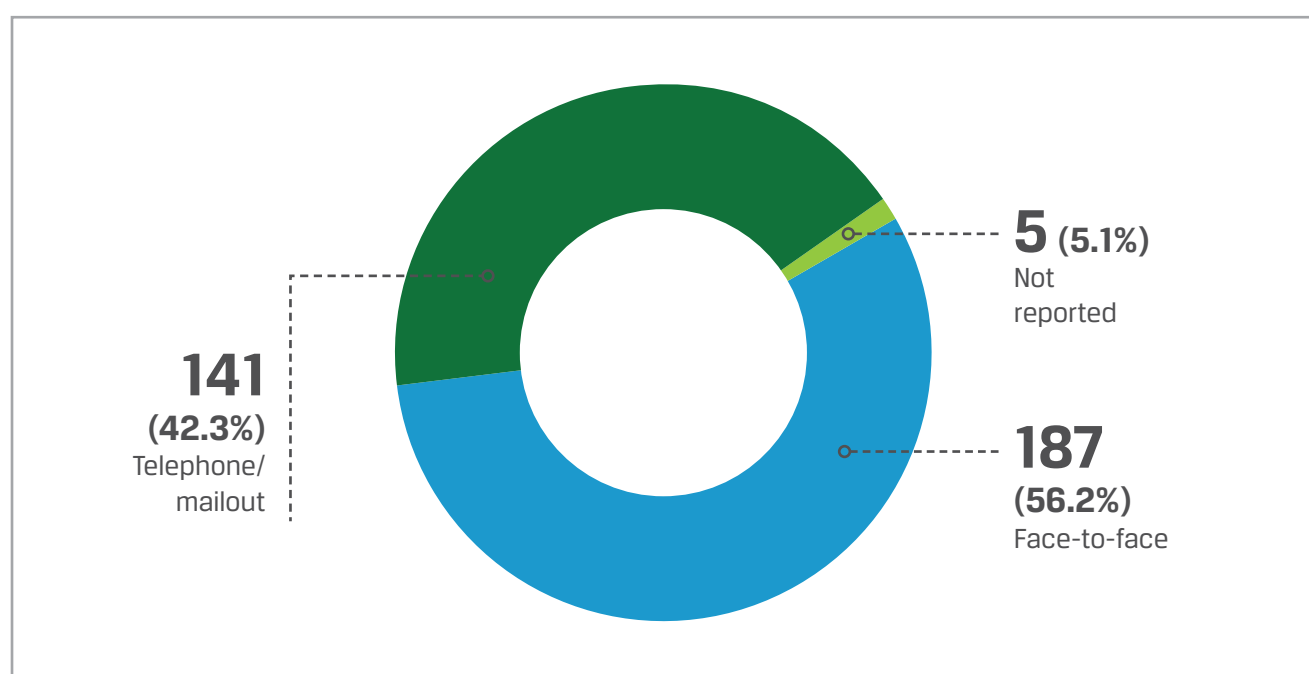


Figure 3 - Visits type

More than half of visits in 2023 were conducted face-to-face (56%) with 42% of visits conducted either via telephone or mailout.



REFLECTION ON 2023

In 2023 there was an ongoing focus on continuous quality improvement of the data capture and integrity of the registry through Clinical Quality Reports, which supported an overall improvement in data completeness for ASAR. This data quality is critical in providing a useful resource by which to analyse and understand severe asthma. By utilising ASAR data in 2023, research working groups were able to progress a number of important manuscripts which will help inform decision making and contribute towards improvements in healthcare quality.

ASAR is a now long-term CQR platform which boasts a cohort of over 1,000 well characterised participants who have severe asthma, and some who have non-severe asthma. This platform currently hosts two modules investigating biologics for the management of severe asthma. We aim for this utility of the ASAR platform to continue and welcome opportunities to discuss future ideas and concepts which warrant the clinical research we can facilitate in a real-world setting.

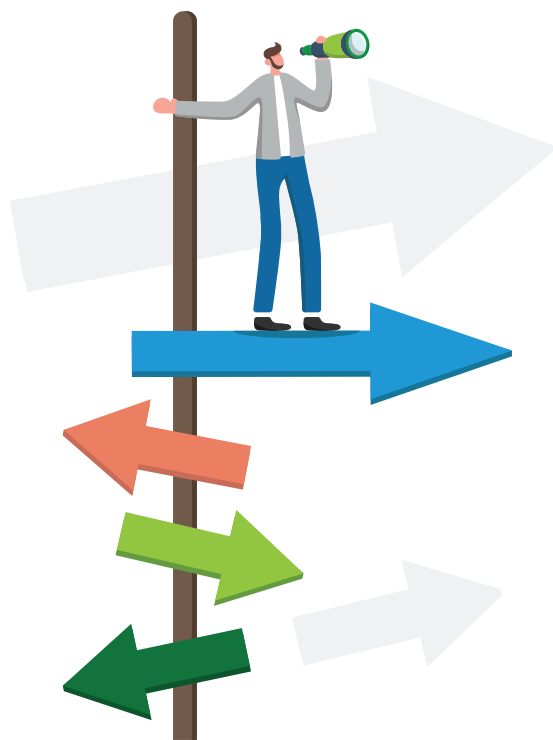


FUTURE DIRECTIONS

The ASAR is a well-established multicentre CQR, and the future of ASAR will encompass continued quality improvement, strengthening of our ANZ site network, and increased registry outputs. We are grateful for our ongoing active collaborations within the ASAR and the strong partnerships we hold with our sponsors. Over 2024, we will support growth of the ASAR into geographical areas which currently lack representation, and continue to support recruitment for all sites, but especially those which are under-resourced. There is also a focus on improving the user experience with the database which will be informed through active consultation between ASAR sites and the ASAR Management Committee. Once user interface changes are confirmed, improvements will be implemented by the TSANZ Registries team to ensure the ASAR database is efficient and effective.

ASAR holds a wealth of clinical data which participants have generously given to TSANZ to help understand severe asthma. As custodians of this knowledge, we intend to focus on increasing the output and translation of data into research papers, professional development resources, and health outcomes. This is the principal goal of a CQR and we will strive to continually improve the health outcomes related to severe asthma.

The TSANZ Registries team together with the ASAR Management Committee are focused on continued strong collaborations with all stakeholders and are committed to sharing with them knowledge, information and opportunities.





CONCLUSION

The ASAR continues to see substantial growth with site approvals and ongoing enrolments, and now increased data analyses and translation. With ongoing support from researchers, participant populations and external stakeholders, the ASAR will continue its important contribution to the understanding of severe asthma and its treatment in real-world settings. It will allow us to characterise severe asthma in Australia and New Zealand and the impact of asthma and its treatments on the quality of life and clinical outcomes of the cohort. The ASAR has developed into a robust registry with the potential for research outcomes to be used to significantly improve patient care and management of severe asthma.



Table 5. SAWD and ASAR reports, presentations, and publications to date.

Type	Details	Date
2024		
Report	Clinical Quality Report ¹	May 2024
PUBLICATION	Perez-de-Llano, L., Scelo, G., Canonica, G. W., et al. Impact of pre-biologic impairment on meeting domain-specific biologic responder definitions in patients with severe asthma (2024). <i>Annals of Allergy, Asthma and Immunology</i> , 132(5), 610-622. DOI: 10.1016/j.anai.2023.12.023 .	May 2024
PUBLICATION	Perez-de-Llano, L., Scelo, G., Tran, T. N., et al. Exploring definitions and predictors of severe asthma clinical remission post-biologic in adults (2024). <i>American Journal of Respiratory and Critical Care Medicine</i> . DOI: https://doi.org/10.1164/rccm.202311-21920C .	May 2024
PUBLICATION	Politis, J., Chung, L. P., Igwe, E., et al. Oral corticosteroid stewardship: key insights from the Australasian Severe Asthma Registry (2024). <i>Internal Medicine Journal</i> . DOI: 10.1111/imj.16392 .	April 2024
Report	Clinical Quality Report	February 2024
PUBLICATION	Scelo, G., Torres-Duque, C. A., Maspero, J., et al. Analysis of comorbidities and multimorbidity in adult patients in the International Severe Asthma Registry (2024). <i>Annals of Allergy, Asthma and Immunology</i> , 132(1), 42-53. DOI: 10.1016/j.anai.2023.08.021 .	January 2024
2023		
Annual Report	ASAR Annual Report 2022 ²	December 2023
PUBLICATION	Perez-de-Llano, L., Scelo, G., Canonica, G.W., Chen, W., Henley, W., Larenas-Linnemann, D., Peters, M.J., Pfeffer, P.E., Tran, T.N., Ulrik, C.S. and Popov, T.A., 2024. Impact of pre-biologic impairment on meeting domain-specific biologic responder definitions in patients with severe asthma. <i>Annals of Allergy, Asthma & Immunology</i> , 132(5), pp.610-622.	December 2023
Report	Clinical Quality Report	November 2023
PUBLICATION	Chen, W., Tran, T. N., Sadatsafavi, M., et al. Impact of initiating biologics in patients with severe asthma on long-term oral corticosteroids or frequent rescue steroids (GLITTER): data from the International Severe Asthma Registry (2023). <i>Journal of Allergy and Clinical Immunology</i> , 11(9), 2732-2747. DOI: 10.1016/j.jaip.2023.05.044	September 2023
Commentary	Harvey, E. S. and Peters, M. J. Asthma registries: tedious paperwork or a versatile tool for the generation of knowledge-Insights from the Australasian Severe Asthma Registry (ASAR) (2023). <i>Respirology</i> . 28(11), 986-988. DOI: 10.1111/resp.14585 .	Aug 2023
Report	Clinical Quality Report	August 2023
Report	Clinical Quality Report	June 2023
PUBLICATION	Pfeffer, P. E., Ali, N., Murray, R., et al. Comparative effectiveness of anti-IL5 and anti-IgE biologic classes in patients with severe asthma eligible for both (2023). <i>Allergy</i> , 78(7), 1934-1948. DOI: 10.1111/all.15711	March 2023

Type	Details	Date
2022		
Report	Clinical Quality Report	December 2022
Report	ASAR Biennial Research Summit: Report ³	December 2022
BIENNIAL RESEARCH SUMMIT	ASAR Biennial Research Summit	October 2022
PUBLICATION	Chen, W., Sadatsafavi, M., Tran, T. N., et al. Characterization of patients in the International Severe Asthma Registry with high steroid exposure who did or did not initiate biologic therapy (2022). <i>Journal of Asthma and Allergy</i>, 15, 1491–1510. DOI: 10.2147/JAA.S377174.	October 2022
Report	Clinical Quality Report	September 2022
Annual Report	ASAR Annual Report 2021	August 2022
Report	Clinical Quality Report	June 2022
Report	Clinical Quality Report	March 2022
2021		
Report	Clinical Quality Report	December 2021
Report	ASAR – Dual and Triple Therapies Report ²	November 2021
Report	Clinical Quality Report	September 2021
Annual Report	ASAR Annual Report 2020	August 2021
Report	ASAR Biennial Research Summit: Virtual Research Day Report	February 2021
2020		
BIENNIAL RESEARCH SUMMIT	ASAR Biennial Research Summit	December 2020
Annual Report	ASAR Annual Report 2019	June 2020
PUBLICATION	Wang, E., Wechsler, M. E., Tran, T. N., et al. Characterization of severe asthma worldwide: data from the International Severe Asthma Registry (2020). <i>Chest</i>, 157(4), 790-804. DOI: 10.1016/j.chest.2019.10.053.	April 2020
2019		
PUBLICATION	Denton, E., Hore-Lacy, F., Radhakrishna, N., et al. Severe Asthma Global Evaluation (SAGE): an electronic platform for severe asthma (2019). <i>The Journal of Allergy and Clinical Immunology: In Practice</i>, 7(5), 1440-1449. DOI: 10.1016/j.jaip.2019.02.042.	May 2019
Poster	Price, D. B., Canonica, G. W., ISAR Working Group. International Severe Asthma Registry (ISAR): the story so far (2019). <i>American Journal of Respiratory and Critical Care Medicine</i> , 199, A4900. <i>Presented at the American Thoracic Society International Conference, Dallas</i>	May 2019

Type	Details	Date
Poster	Price, D. B., Wang, E., Busby, J., et al. Cross-country comparison of demographic and clinical characteristics of patients managed in severe asthma services across UK, USA, Australia, South Korea, and Italy (2019). <i>American Journal of Respiratory and Critical Care Medicine</i> , 199, A4899. <i>Presented at the American Thoracic Society International Conference, Dallas</i>	May 2019
PUBLICATION	Bulathsinhala, L. et al. Development of the International Severe Asthma Registry (ISAR): A modified Delphi study (2019). <i>The Journal of Allergy and Clinical Immunology: In Practice</i>, 7(2), 578-588. DOI: 10.1016/j.jaip.2018.08.016	February 2019
2018		
PUBLICATION	McDonald, V. M., Hiles, S. A., Godbout, K., et al. Treatable traits can be identified in a severe asthma registry and predict future exacerbations (2019). <i>Respirology</i>, 24(1), 37-47. DOI: 10.1111/resp.13389.	September 2018
Conference Presentation – Oral	McDonald, V. et al., Treatable traits in severe asthma. <i>Presented at the Newcastle Asthma Meeting (NAME), Newcastle</i>	October 2018
Conference Presentation – Poster	McDonald, V. M., Hiles, S. A., Godbout, K., et al. Identification of treatable traits in a severe asthma registry: prevalence and exacerbation predictors (2018). <i>European Respiratory Journal</i> , 52, PA5043. <i>Presented at the European Respiratory Society International Congress, Paris</i>	September 2018
PUBLICATION	Hiles, S. A., Harvey, E. S., McDonald, V. M., et al. Working while unwell: workplace impairment in people with severe asthma (2018). <i>Clinical and Experimental Allergy</i>, 48(6), 650-662. DOI: 10.1111/cea.13153.	April 2018
Conference Presentation – Oral	McDonald, V., Godbout, K., Hiles, S., et al. Severe asthma treatable traits: prevalence and exacerbation prediction (2018). <i>Respirology</i> , 23(S1), 69. <i>Presented at the TSANZ Annual Scientific Meeting, Adelaide</i>	March 2018
Conference Presentation – Oral	Hiles, S., Harvey, E., McDonald, V. et al. Working while unwell: workplace impairment in people with severe asthma (2018). <i>Respirology</i> , 23(S1), 67. <i>Presented at the TSANZ Annual Scientific Meeting, Adelaide</i>	March 2018
2017		
Conference Presentation – Oral	Hiles, S. et al. The impact of severe asthma – workplace productivity in the Severe Asthma Web-based Database. <i>Presented at the Newcastle Asthma Meeting (NAME), Newcastle</i>	October 2017
PUBLICATION	Wang, G., Wang, F., Gibson, P. G., et al. Severe and uncontrolled asthma in China: a cross-sectional survey from the Australasian Severe Asthma Network (2017). <i>Journal of Thoracic Disease</i>, 9(5), 1333-1344. DOI: 10.21037/jtd.2017.04.74.	May 2017
2016		
Report	SAWD Data Report, Q4 2016 ⁴	December 2016
Conference Presentation – Poster	Harvey, E., Gibson, P., Bardin, P., et al. Severe asthma is associated with work productivity loss, activity impairment and reduced quality of life (2016). <i>Respirology</i> , 21(S2), 111. <i>Presented at the TSANZ Annual Scientific Meeting, Perth</i>	April 2016
Conference Presentation – Poster	Harvey, E., Gibson, P., Bardin, P., et al. Characterisation of severe asthma phenotypes via a severe asthma registry: the Severe Asthma Web-based Database (2016). <i>Respirology</i> , 21(S2), 110. <i>Presented at the TSANZ Annual Scientific Meeting, Perth</i>	April 2016

Type	Details	Date
2015		
Report	SAWD Data Report, Q3 2015	October 2015
Report	SAWD Enrolment Report, Q1 2015	April 2015
Report	SAWD Data Report, Q4 2014 - preliminary baseline data	March 2015

¹ ASAR Clinical Quality Reports were circulated to all ASAR principal investigators and site personnel.

² ASAR Annual Reports and the ASAR – Dual and Triple Therapies Report were circulated to all ASAR principal investigators, site personnel, and sponsors. A public edition of the ASAR Annual Report was circulated to all TSANZ members and appropriate consumer groups.

³ ASAR Biennial Research Summit Reports were circulated to Summit delegates, ASAR Sponsors and supporters, TSANZ members, and ASAR site personnel.

⁴ SAWD Reports were circulated to SAWD principal investigators and sponsors.

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