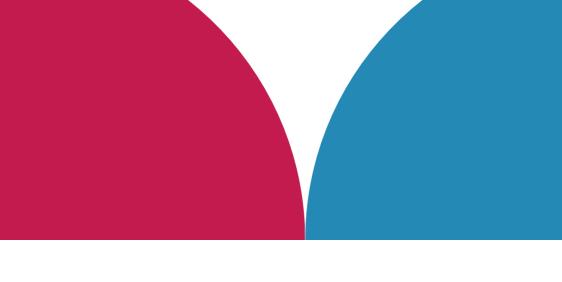


DECEMBER 2023



OPRI NEWSLETTER

STRIVING TO IMPROVE THE LIVES OF PATIENTS THROUGH REAL LIFE RESEARCH

Volume 2



OPRIKEY PUBLICATIONS

Manuscript Title: Adult severe asthma registries: a global and growing inventory

Breda Cushen, Mariko Siyue Koh, Trung N Tran, Neil Martin, Ruth Murray, Thendral Uthaman, Celine Yun Yi Goh, Rebecca Vella, Neva Eleangovan, Lakmini Bulathsinhala, Jorge F Maspero, Matthew J Peters, Florence Schleich, Paulo Pitrez, George Christoff, Mohsen Sadatsafavi, Carlos A Torres-Duque, Celeste Porsbjerg, Alan Altraja, Lauri Lehtimäki, Arnaud Bourdin, Christian Taube, Nikolaos G Papadopoulos, Csoma Zsuzsanna, Unnur Björnsdóttir, Sundeep Salvi, Enrico Heffler, Takashi Iwanaga, Mona al-Ahmad, Désirée Larenas-Linnemann, Job FM van Boven, Bernt Bøgvald Aarli, Piotr Kuna, Cláudia Chaves Loureiro, Riyad Al-lehebi, Jae Ha Lee, Nuria Marina, Leif Bjermer, Chau-Chyun Sheu, Bassam Mahboub, John Busby, Andrew Menzies-Gow, Eileen Wang, David B Price, and on behalf of ISAR Inventory Study Group

Prag Obs Res, 2023

Aims:

- The International Severe Asthma Registry (ISAR) aims to establish a standardized data collection framework through its Delphi study, fostering collaboration across 26 countries to enhance statistical power for global severe asthma research.
- The study further aims to assess and summarize data collected by both ISAR-affiliated and non-affiliated countries, focusing on core variables, steroid-related comorbidities, biologic safety variables, COVID-19 factors, and additional variables.
- This examination seeks to understand and support the diverse contributions of countries to global severe asthma research, promoting both individual interests and collaborative efforts in a standardized context.

Key Messages:

- With 13,169 patients as of October 2022, ISAR enables comprehensive research on severe asthma, addressing variations in definitions, treatments, and patient outcomes.
- Severe asthma registries, whether affiliated with ISAR or independent, collect >90% of ISAR's core variables, focusing on key aspects such as exacerbations, safety variables, and steroid-related comorbidities.
- This standardisation of data collection across registries enables data interoperability across the world, enhances statistical power of research conducted and catalyses the assembly of a global community with the common goal of enhancing care in severe and high risk asthma through high quality research.
- Going beyond research, standard data collection has set up previously disparate severe asthma
 ecosystems to adopt a global standard of care through quality improvement programs. The paper also
 highlights the utility of collecting individual country variables alongside standardized variables to
 support targeting for specific additional research questions such as linkage to EMR data.

Click here to read the full article

AstraZeneca funded the study and had a role in the study design and data interpretation.

If you are interested to hear more about ISAR matters, please contact isar@optimumpatientcare.org



OPRIKEY PUBLICATIONS

Patterns of Care in the Management of High-Risk COPD in the US (2011-2019): An Observational Study for the CONQUEST Quality Improvement Program

Margee Kerr, Yasir Tarabichi, Alexander Evans, Douglas Mapel, Wilson Pace, Victoria Carter, Amy Couper, M. Bradley Drummond, Norbert Feigler, Alex Federman, Hitesh Gandhi, Nicola A. Hanania, Alan Kaplan, Konstantinos Kostikas, Maja Kruszyk, Marije van Melle, Hana Müllerova, Ruth Murray, Jill Ohar, Michael Pollack, Rachel Pullen, Dennis Williams, Juan Wisnivesky, MeiLan K. Han, Catherine Meldrum, David Price

Lancet Reg Health Am, 2023

Aims:

- The primary aim of the study is to compare the management of patients with high-risk chronic obstructive pulmonary disease (COPD) in the United States to both national and international guidelines, as well as quality standards such as the COllaboratioN on QUality improvement initiative for achieving Excellence in STandards of COPD care (CONQUEST).
- Another aim is to assess the adherence to evidence-based guidelines in the management of high-risk COPD patients. The study investigates various aspects, including the identification, documentation of services, assessment, therapeutic intervention, and follow-up of patients with COPD, with the goal of identifying areas of inconsistent adherence and opportunities for improvement in COPD care.

Key Messages:

- Despite two decades of initiatives, COPD affects 16.6 million Americans, with 65-80% undiagnosed.
 This contributes to increased mortality, healthcare costs, and missed treatment opportunities.
- The CONQUEST initiative underscores key quality standards for COPD care, revealing significant gaps in adherence. Low spirometry use, insufficient cardiac risk assessments, and suboptimal smoking cessation support highlight areas needing urgent improvement.
- The alarming rise in COPD-related deaths, doubled since 1969, calls for improved strategies. Enhancing identification, diagnosis, disease assessment, and follow-up measures is crucial for effective COPD management in the United States.

Click here to read the full article

AstraZeneca funded the study and had a role in the study design and data interpretation.

If you are interested to hear more about CONQUEST matters, please contact **info.conquest@optimumpatientcare.org**







IGNITE: Real-world associations between outcomes and biomarkers in severe asthma patients treated with biologics

Presenter: Professor David Price

Key Message:

• The findings endorse the utilization of BEC and FeNO as valuable tools in determining which patients are most likely to derive significant benefits from biologics.

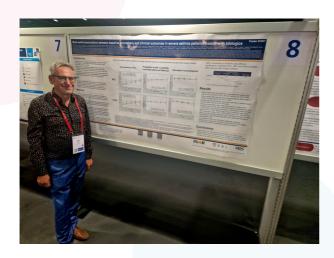
Click **here** to read the abstract

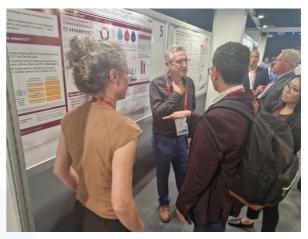
FULL BEAM: Clinical remission following biologic initiation in severe asthma: results of the International Severe Asthma Registry

Presenter: Trung Tran

Key Message:

Approximately 20% of adults with severe asthma achieved clinical remission across all
four endpoints after starting biologic treatment. While these results indicate that
biologics can effectively induce remission in real-world settings, there are still unmet
medical needs for certain patients within the existing treatment approach.











FULL BEAM: Real world biologic treatment response in severe asthma: an analysis of the International Severe Asthma Registry (ISAR)

Presenter: Trung Tran

Key Message:

• The efficacy of biologics is demonstrated by a significant proportion of patients showing response in at least one domain. However, there remains an unmet need, as the majority of patients did not respond across all four composite endpoints. Given the variation in response definitions, a comprehensive evaluation of biologic response should involve consideration of multiple endpoints.

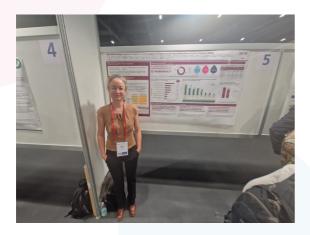
Click **here** to read the abstract

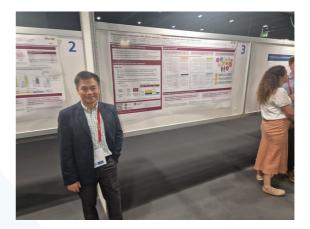
FULL BEAM: Characteristics associated with clinical remission in patients with severe asthma who initiate biologics

Presenter: Luis Perez

Key Message:

• Starting biologics earlier in the course of the disease, prior to the onset of severe impairments, is linked to a higher chance of achieving clinical remission after initiating biologic treatment.









Identifying opportunities for earlier diagnosis of high-risk COPD patients in Australia: an observational study

Presenter: Andrew Dickens

Summary of Key Messages:

• The potential exists for the earlier diagnosis of COPD in individuals at a heightened risk of exacerbation, aligning with established guidelines and meeting CONQUEST quality standards.

Click **here** to read the abstract

CVOT: COPD exacerbations during and beyond the COVID-19 pandemic in the UK

Presenter: Victoria Carter

Key Message:

• As the COVID-19 pandemic concludes and social interactions increase, COPD exacerbation rates in the UK are returning to levels observed before the pandemic. This underscores the public health significance of COPD exacerbations, emphasizing the imperative to diminish such risks, which could potentially influence future trials and research.

Click **here** to read the abstract

Medication success among real-world users of budesonide/glycopyrrolate/formoterol fumarate (BGF) for the management of COPD in a UK primary care population

Presenter: Hana Müllerova

Key Message:

• Individuals starting BGF demonstrated significant success in real-world medication outcomes, along with substantial protection against adverse cardiopulmonary events.





OPRI Research Faculty meeting

We were joined by over 50 attendees both in person and online from all across the world, including France and Canada.

The key objectives were to lay out:

- OPRI's Vision and development of the research field
- Generation of new research ideas for funding or R&D investment
- Collaborative rates for data access to OPRI-OPC data assets
- Encouraging OPRI as a research institute for real-world research and impact

Our **Senior Researcher Heath Heatley** presented 3 key studies pertaining to our funded and academic work:

- 1. Does GLP-1 RA treatment improve asthma outcomes in patients with obesity and high-risk asthma?
- 2.Can we describe the exacerbation history in patients prior to their COPD diagnosis and count the numbers of exacerbations that they have on their medical records prior to the COPD diagnosis?
- 3. Determine the level of OCS prescriptions in patients with asthma and eosinophilic granulomatosis with polyangiitis (EGPA)

A discussion was held after to discuss the faculty's individual research ideas. We discussed several ideas relating to patient wellbeing, treatment, and potential future research based on our Asthma and COPD datasets.











16 - 19 NOVEMBER 2023 SUNTEC SINGAPORE CONVENTION & EXHIBITION CENTRE

The Potential Value of Quality Improvement in Difficult-to-Treat and Severe Asthma in Australia; an opportunity analysis

Presenter: Professor David Price

Summary of Key Messages:

- The DTT Asthma Quality Improvement (QI) program in Australia aims to standardize the clinical management of difficult-to-treat (DTT) and Severe Asthma (SA), focusing on enhancing the recording of key standardized clinical data.
- Analysis of de-identified Electronic Medical Records (EMR) and clinical letters from 56
 patients revealed strong recording of spirometry, exacerbations, biomarkers, and asthma
 management plans. However, gaps exist in the documentation of long-term oral
 corticosteroid (OCS) doses, adherence assessments, and inhaler technique assessments.
- While key clinical data is well-recorded in Australian secondary care, the reliance on clinical letters highlights the need for standardized clinical templates to improve data capture and enhance the overall management of DTT and SA.

Click <u>here</u> to view the poster presentation











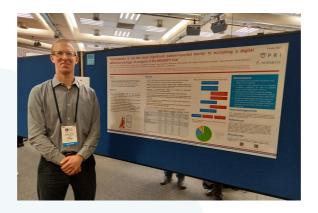
Technophobia is not the most significant patient-reported barrier to accepting a digital adherence package: an analysis of the MAGNIFY trial

Presenter: Dr Andrew Dickens

Summary of Key Messages:

- The MAGNIFY trial in the UK is investigating the impact of a digital adherence support package on health outcomes amongst exacerbating COPD patients with poor adherence to inhaled maintenance therapy.
- Baseline analysis of trial data explored patient-reported barriers to accepting the digital adherence support package.
- Patients were unable/unwilling to accept the package due to not having a compatible smartphone, unwillingness to change inhaler or accept any adherence support, and, agerelated difficulties.
- Solutions to increase uptake of digital adherence support should address concerns about therapy change and deprivation- and age-related difficulties, not just technophobia.

This study is funded by the Observational and Pragmatic Research Institute, Singapore, and Novartis Pharma AG, Switzerland.





OPRIFACULTY

OPRI Welcomes Shelly Pathak, Research Operations Manager

I joined OPRI at the beginning of September, ready to navigate the operations of the research team.



I have a background in Medical Genetics, obtaining my PhD from the University of Leeds in 2020. With my combined experience in both Academia and Industry, I am keen to bring my leadership, communication, and scientific skills to the already fabulous team.

Working with real-life data in order to improve patient outcomes and provide high-quality research is the key motivation for me to be joining OPRI. Together, we can also improve our internal operations for a smoother experience for our faculty and research colleagues

@Shelly Pathak on LinkedIn

OPRI Welcomes Sarah McGrory, Senior Epidemiologist

I studied Psychology at the University of Edinburgh. After completing my Ph.D.

I worked as a research fellow investigating whether the retina can provide reliable biomarkers for future risk of dementia and sensitive biomarkers of disease progression of either cognitive decline or brain vessels degeneration.



Following this I worked as a research lead at Medisoft Limited, using real-world data to assess ophthalmological treatment patterns and outcomes.

I am joining OPRI as a Senior Epidemiologist and am keen to apply my strong research background and real-world data experience to contribute to the improvement in patient outcomes through the delivery of high-quality epidemiological research outputs.

@Sarah McGrory on LinkedIn



OPRI FACULTY ACHIEVEMENTS



We are excited to introduce **Harika Gosala**, our newest addition to the OPRI team, joining as our ISAR Project Assistant!

@Harika Gosala on LinkedIn

We extend our heartiest congratulations to **Vanessa Grove**, who has been promoted to ISAR Project Manager! A huge thank you to Vanessa for her ongoing dedication, positive influence on the team, and the pivotal role she plays in contributing to our shared objectives



@Vanessa Grove on LinkedIn



We extend our heartfelt congratulations to **Chantal Le Lievre**, our OPCA Research and Operations Manager, for hitting the impressive five-year mark of dedicated service! A huge thank you for Chantal's continuous efforts, positive impact on the team, and the significant role you play in achieving our collective goals.

We extend our heartiest congratulations to Peggy for hitting the impressive five-year mark of dedicated service!







CONTACT US



info@opri.sg



(+65) 3105 1489



22 SIN MING LANE #06-76, MIDVIEW CITY, 573969

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