

ISAR NEWSLETTER

September 2020

UPCOMING ISAR EVENTS

Virtual ISAR Collaborator Meeting – 15th September 2020

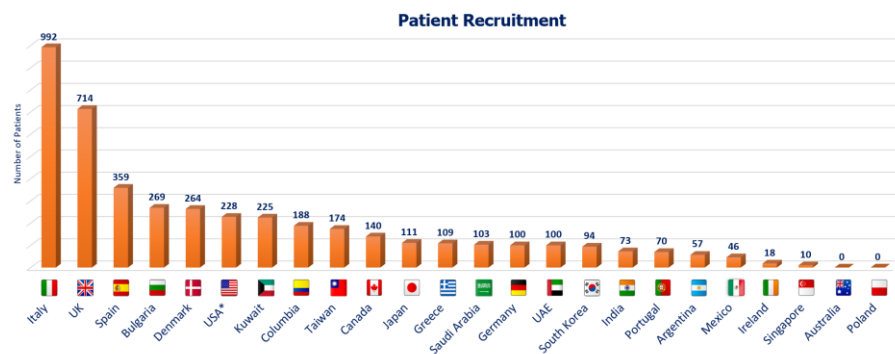
On behalf of Professor David Price and the ISAR team, we are delighted to invite our collaborators to our virtual bi-annual ISAR Collaborator meeting on the **15th of September 2020 at 1:00PM - 2:00PM GMT**. Calendar invites have been sent out, and the meeting will be an opportunity to provide updates on:

- Research project status and publications expected from the initiative in 2020
- Status of country and patient recruitment in 2020
- Enrichment and sustainability objectives for the ISAR database

Please click [here](#) to view the calendar invite, and you may find the Zoom meeting link [here](#). We look forward to speaking with you all soon!

ISAR COUNTRY UPDATES

The International Severe Asthma Registry (ISAR) now holds prospective data from 4,444 patients (out of a total of 9,401 patients) with severe asthma from 22 countries. We are delighted to have recently welcomed our home base, Singapore to the ISAR family. In 2020, ISAR plans to expand further with the execution of 3 additional country agreements with Sweden, Poland, and Brazil.



*USA: Retrospective data from 4,957 patients not illustrated.

ISAR Patient Recruitment Numbers: Prospective data correct as of 2nd September 2020.

We are thrilled to see our prospective patient recruitment numbers quickly recovering with hopes of being back on track in September despite the delays due to the COVID-19 pandemic earlier this year! ISAR looks forward to an even brighter and busier future and hopes that our research conducted with valuable data from countries all around the world will benefit the lives of severe asthma patients tremendously.

COVID-19 CONTINGENCY

As the world grapples with the devastating impact of COVID-19, patient recruitment across most sites have also halted. To assist affected sites in collecting patient data remotely and to increase their recruitment efficiencies for the sustainability of ISAR during this challenging period, the ISAR data team has created a patient response questionnaire which can be found [here](#), and this includes COVID-19 variables for ISAR to continue to develop and evolve within the changing global respiratory environment.

International Severe Asthma Registry (ISAR)

Additionally, the pandemic is a unique opportunity for ISAR and our collaborators to collect data on this unprecedented virus that is known to cause respiratory infections in humans. ISAR has introduced an optional bolt-on questionnaire to collect data on COVID-19, assess how it affects patients with severe asthma, and how their treatment and care has been impacted; the results for which are highly anticipated. The COVID-19 questionnaire has been included within the patient response questionnaire [here](#), but can also be implemented as a stand-alone bolt-on.



ISAR STEERING COMMITTEE MEETING VIA ZOOM

The annual REG meeting scheduled to take place in Barcelona, Spain was cancelled due to COVID-19. However, this did not stop the ISAR team with over 24 international severe asthma experts coming together for our annual research prioritization exercise!

Our third ISAR closed Steering Committee Meeting, chaired by Professor David Price, was held virtually via Zoom on March 19th, 2020.

ISAR PUBLICATIONS SNAPSHOT IN 2020

ISAR continues to focus its efforts on the delivery of high-quality publications, with at least 7 due for submission or publication in 2020! We would like to extend our deepest gratitude to all ISAR authors, contributors and collaborators who have invested valuable time and resources to ensure each ISAR publication is of the highest calibre.

1. International Severe Asthma Registry (ISAR): protocol for a global registry
2. Potential severe asthma hidden in UK primary care
3. Begone, dull asthma: characterization and comparison of eosinophilic and non-eosinophilic phenotypes in a global real-life severe asthma cohort
4. Real world biologic use and switch patterns in severe asthma: data from CHRONICLE and the International Severe Asthma Registry
5. Global access to biologics for the treatment of severe asthma: a challenge to personalised medicine
6. Cluster analysis of inflammatory biomarker expression in the International Severe Asthma Registry (ISAR)
7. The impact of exacerbations on lung function trajectory in a broad asthma population

All currently available ISAR publications are available on the ISAR website's [publications tab](#)!



ATS 2020

Where today's science meets tomorrow's care™

ISAR ABSTRACTS AT THE ATS 2020 VIRTUAL CONFERENCE

We are delighted to announce that 6 ISAR e-Posters were presented at the ATS 2020 Virtual Conference! You may find the e-Posters uploaded to the ISAR website [here](#), and you may click on the links below to view our published abstracts in the *American Journal of Respiratory and Critical Care Medicine*.

[The Impact of Exacerbation Burden on Lung Function Trajectory in a Broad UK Asthma Population: A Large Longitudinal Cohort Study](#)

Long term lung function declines significantly faster in asthma patients experiencing exacerbations compared to those who do not.

[A Global Survey of Blood Eosinophil Distribution in Severe Asthma Patients: Data from the International Severe Asthma Registry \(ISAR\)](#)

The majority of patients in this severe asthma cohort from 11 countries had a high BEC, and these patients are more likely to have nasal polyps, adult onset asthma and be on long term oral corticosteroids.

[Global Access for Biologics in the Treatment of Severe Asthma: A Challenge to Personalized Medicine](#)

Access to biologics depends on patients' geographic location and is dependent upon country specific biological availability, reimbursement and prescription criteria.

[Characterization of Eosinophilic and Non-Eosinophilic Severe Asthma Phenotypes and Proportion of Patients with These Phenotypes in the International Severe Asthma Registry \(ISAR\)](#)

A clinical algorithm was developed to improve the identification of EOS and non-EOS phenotypes in a real-world severe asthma population. Majority of patients seen across severe asthma centers globally have eosinophilic disease.

[Biologic Utilization Patterns: Data from the International Severe Asthma Registry \(ISAR\)](#)

Although the majority of severe asthma patients managed around the world continue with their first prescribed biologic therapy, a minority either stop or switch therapy.

[Biomarker Relatability in the International Severe Asthma Registry](#)

Most patients were positive for at least one potentially actionable biomarker at baseline, and the overlap appeared to be greater between eosinophil and FeNO positivity than with IgE positivity.

RESEARCH UPDATES

In March 2020, 13 ISAR collaborator research proposals were voted on and ranked to determine the 2020 prioritized research projects. We are pleased to announce that the top 3 most voted projects which will be fully delivered by the ISAR team are:

Define responders and non-responders to biologics and describe their characteristics overall and per biologic.

- Objective 1: To operationally define responders and non-responders of biologics by clinical outcomes, such as time spent on biologic after initiation/switch, magnitude of OCS reduction, months of biologic use with asthma controlled, etc.
- Objective 2: To describe the demographic and clinical characteristics of the responder and non-responders overall, by biologic class and by race/ethnicity.

Describe clinical outcomes before and after biologic treatment by biologic class, by individual biologic, and by subgroups of baseline characteristics.

- Objective 1: To describe the proportions of patients by biologic class and drug.
- Objective 2: To describe clinical outcomes before and after biologic initiation.
- Objective 3: To describe clinical outcomes before and after biologic initiation for demographic/clinical subgroups (e.g. early/late age of onset, nasal polyps).

What is the impact of co-morbidities in severe asthma?

- Objective 1: To illustrate the baseline prevalence, demographic and clinical characteristics of severe asthma patients with comorbidities.
- Objective 2: To investigate the effects of comorbidity (e.g. sleep apnea, nasal polyps) on severe asthma clinical outcomes.

CURRENT ONGOING PROJECTS IN ISAR

PROJECT TITLE	RESEARCH OBJECTIVES	PROJECT LEAD
Effectiveness across severe asthma biologic classes (Anti-IL-5 vs Anti IgE) in patients eligible for both	To describe the effectiveness of initiating Anti-IL5 versus Anti-IgE in patients with severe asthma.	Professor David Price (SG)
Biologics in Severe Asthma: Utilization Patterns, Causes for Discontinuation and Switching and Adverse Outcomes	To chart biologic availability around the world and to highlight country-specific differences in prescription criteria of biologics.	Professor Andrew Menzies-Gow (UK)

International Severe Asthma Registry (ISAR)

Impact of Initiating Biologics in Patients Receiving Long-term OCS or Frequent Rescue Systemic Steroids versus Those Not Receiving Biologics	To describe the demographic and clinical features of adult severe asthma population with high systemic corticosteroids (SCS) use, and to examine benefits of initiating biologic therapy in these patients.	Professor Mohsen Sadatsafavi / Dr Wenjia Chen (CA)
Identify Predictors (e.g. biomarkers) of Response to Biologics	To identify independent predictors of clinical response (no/partial/high) to biologic therapy and to evaluate baseline biomarkers that predict a response to biologics.	Professor Mark Hew (Australia)
Hidden Severe Asthma within the COPD Population	To identify hidden & treatable severe asthma population within a global cohort of patients with COPD.	Professor Chin Kook Rhee (South Korea)
Onset of Asthma in Severe Asthma Patients	To distinguish severe asthma phenotypes by asthma-onset.	Dr Enrico Heffler (Italy) / Professor Sinthia Bosnic-Anticevich (AU)
Relationship between Socioeconomic Status (SES) and Asthma Outcome	To evaluate the association between adult SES and asthma control in severe asthma.	Professor Liam Heaney (UK)

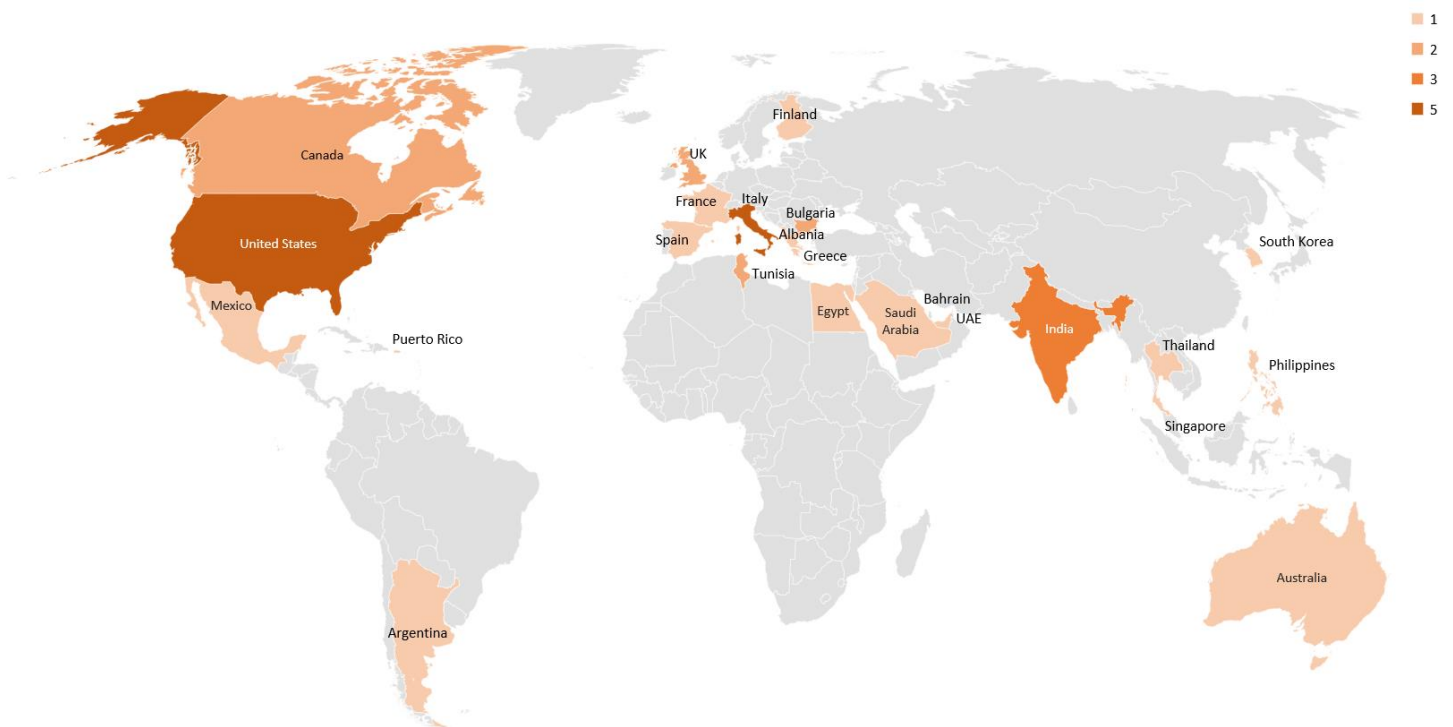
We would also like to take this opportunity to welcome all collaborators and partners to join us in our ongoing open research projects. Please register your interest through our [website](#), or contact your country lead for further details!

JOIN THE REGISTRY

REQUESTS TO JOIN THE REGISTRY

ISAR has received a total of 39 requests from international collaborators, with a quarter of those from the U.S. and Italy. Additionally, half of the total requests were a registered interest in joining ISAR as a participating country!

International Severe Asthma Registry (ISAR)



World map illustrating the countries that submitted a request to the ISAR website.

SPREAD THE WORD AND STAY IN TOUCH

Please feel free to disseminate this newsletter to ISAR collaborators and colleagues to increase awareness and to provide them with updates in the ISAR initiative!

CONTACT US

International Severe Asthma Registry (ISAR)

5 Coles Lane, Oakington, Cambridge CB24 3BA, UK

+44 123 967855

info@isaregistries.org

<http://isaregistries.org/>