A multi-centre, large-scale registry of severe asthma patients has been set up in Singapore.

A first of its kind in the country, the Singapore Severe Asthma Registry (SSAR) was established by a research network comprising Nanyang Technological University Singapore, the Lee Kong Chian School of Medicine, and three hospitals under SingHealth: Changi General Hospital, Singapore General Hospital, and Tan Tock Seng Hospital.

**WHAT IT'S ABOUT**

According to a press release, the SSAR seeks to improve the understanding of severe asthma, collect evidence of treatment effectiveness and safety, and identify predictors of treatment success. To date, it has collected data from 139 severe asthma patients with an aim to register 200 patients more by yearend. It has collected anonymised data, including demography, medical history, exacerbation history, treatment plan, and biomarkers such as lung spirometry test results, full blood count and other clinical parameters.
It is said that the real-world evidence gathered from this registry can potentially inform policy decision-making and guideline implementation.

The SSAR will be managed by The Academic Respiratory Initiative for Pulmonary Health (TARIPH), a research network led by NTU's LKCMedicine. The organisation will tap on SSAR data to address research questions around severe asthma, especially about treatment options. It will also focus its research on determining the predictors of treatment success, outcomes of personalised therapies, the use of biologics for treatment, and studying undiagnosed severe asthma in primary care.

In addition, the SSAR has been linked to the International Severe Asthma Registry (ISAR), a global partnership of researchers from 26 countries. It has national registries sharing their data for research in understanding how severe asthma affects patients differently in various geographical populations. By being part of ISAR, TARIPH can access data from other countries to compare patient characteristics and responses to treatment in Singapore with patients abroad.
**WHY IT MATTERS**

In Singapore, one in five children and at least 5% of the population have asthma with severe cases affecting one in 20 asthmatic individuals. In general, this condition contributes $1.5 billion in economic burden to the country.

As patients with severe asthma experience higher treatment burden and have different clinical trajectories, “[t]he formation of SSAR will not only enable us to find better ways to deliver more personalised, targeted, and effective treatment plans for patients, but we will also better understand the burden of severe asthma in Singapore and introduce interventions to address issues at a systemic level,” said Associate Professor Mariko Koh, a senior consultant at SGH’s Department of Respiratory and Critical Care Medicine, who also chairs the SSAR workgroup within TARIPH.

“The [SSAR] will go a long way towards identifying asthma patients who are at high risk, and providing us with deeper insights from bench to bedside in improving the care and management of these patients,” added Assoc. Prof. John Arputhan Abisheganaden, TARIPH co-chair and head consultant at TTSH’s Department of Respiratory and Critical Care Medicine.

Through SSAR, researchers will also be able to compare data of Asian patients with non-Asian patients from other countries. According to Assoc. Prof. Sanjay H. Chotirmall, TARIPH co-chair and LKCMedicine assistant dean, current guidelines for severe asthma treatment have been derived from evidence mostly coming from non-Asian patients.

“There is emerging evidence from a range of lung diseases that Asian and non-Asian patients respond differently to treatment and have lung diseases that behave differently,” he said, adding that this is likely due to genetic differences, environmental exposures, health-seeking behaviours, and practices in health systems.

Meanwhile, Assoc. Prof. Chotirmall also noted the advantage of joining the ISAR, saying that “being part of an international registry gives us rich data upon which to improve outcomes for Singaporeans with severe asthma”.

“With data from 12,772 patients from 26 countries, ISAR has offered real-life findings and insights that clinical trials have missed. By joining ISAR, SSAR will enter a mutually beneficial relationship where it can add to and benefit from ISAR’s research,” claimed Prof. David Price, director of the Observational and Pragmatic Research Institute in Singapore, an institute which also supports the ISAR.

THE LARGER TREND

Latest data science initiatives around Asia-Pacific include a long-term study in New Zealand that is tracking anonymised data from over 550,000 people to determine the impact of multiple morbidities on the risk of hospitalisation or death from cardiovascular diseases.

Another project is building a registry of senior Australians to form a whole picture of the ageing pathway to understand emerging issues and research on major and still unknown residential aged care impacts.

ON THE RECORD

“As our public hospitals become more involved in improving the population health of Singaporeans, new insights gathered from this collaboration will be useful in managing patients with severe asthma in the community. Registry data of this prevalent disease will help enhance detection and personalise effective asthma treatments to enhance the quality of life of people with severe asthma,” Augustine Tee, deputy chairman of the CGH Medical Board, commented.

Share this news on your Fb, Twitter and Whatsapp

Singaporean hospitals set up severe asthma registry to improve outcomes - Times News Express

Related Posts:
1. Conifer hack compromises patient data from 6 hospitals
2. Royal Perth Hospital first to issue e-prescriptions among public Australian hospitals
3. Te Whatu Ora MidCentral adopts new solution to improve clinical documentation
4. Vitamin B12: The taste that may signal a ‘severe’ deficiency