Transforming care in severe asthma: our job is not yet done

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During my career, I've witnessed incredible improvements in asthma treatment over the last two decades and it's exciting to see even more promising research breakthroughs on the horizon – however, despite this progress, we must not become complacent in ensuring everyone living with severe asthma benefits from scientific advances.

Severe asthma is a debilitating disease that affects up to 34 million people worldwide, resulting in frequent exacerbations and significant limitations on lung function and quality of life.[1-5] Patients with severe, uncontrolled asthma are at an increased risk of mortality and account for twice as many asthma-related hospitalisations.[6-8] Not knowing when your next asthma attack may occur and if it could result in hospitalisation takes a toll on patients and must be a truly terrifying experience.

But this continues to be the daily reality for as many as 50% of severe asthma patients, who do not have their symptoms adequately controlled despite receiving asthma controller medicines or the use of oral corticosteroids (OCS).[9-11] This challenge is further compounded by the fact that severe asthma patients often experience long waits to access specialist care while suffering from asthma attacks – sometimes up to seven years.[12,13] Approximately 48% of patients never see a specialist because there is a perception that asthma is something that can be managed at the primary care level.[14]

Managing severe asthma is challenging because airway inflammation is complex, heterogeneous and dynamic.[1] Patients often present with more than one type of inflammation, complicating their treatment.[1,15-17]

Solving the complex biology of severe asthma

We are at a critical turning point in severe asthma as we are now truly beginning to understand this disease's complex underlying biology. Severe asthma is a heterogeneous condition with multiple underlying inflammatory drivers contributing to an individual's disease that can also change over time – for example in a study of over 18,000 asthma patients, it was found that almost half of them had overlapping eosinophilic and allergic phenotypes.[1,15-18]

Scientific innovation, including the discovery of several biologic therapies, has provided much-needed solutions for many severe, uncontrolled asthma patients with certain phenotypes. However, many more patients with severe asthma have an inadequate response to, or are ineligible for, currently available biologics, and fail to achieve asthma control.[15-18] Research has shown 35% of severe asthma patients on biologic treatment for a year continued to experience exacerbations or require chronic systemic corticosteroid therapy.[19]

I believe there is a need to explore targets across multiple pathways of inflammation, with the aim that a toolkit of treatments can be made available that would include therapies that target key individual inflammatory pathways or that work broadly across multiple inflammatory pathways. I hope that through this approach more patients with severe asthma will have treatment options that work for them, regardless of their type of inflammation.

The ultimate goal: treatments for all patients

While we have made significant progress in the scientific understanding and management of asthma, the challenge is far from over while so many patients remain underserved.[2,9]

In the short-term we need to raise patients' expectations to demand the level of speciality care they deserve – early specialist referral and diagnosis will only become more important as developments in science continue and our subsequent understanding of disease states evolve. Healthcare providers must continue to follow the latest science and guidelines to ensure as many patients as possible can reach their treatment goals with appropriate medication – while also advocating to help increase understanding with government and healthcare policymakers that asthma is not yet solved.

In the long term, we need to set the treatment bar higher and aim for complete asthma remission for all patients on treatment. By remission, I mean full control over symptoms and inflammation as well as optimum lung function. Until this treatment outcome is considered the norm, we must continue advancing the research to enable us to uncover how we can address this unmet need going forward.

We all have a role to play if we are to continue transforming care for patients with severe asthma and allow them to live full and healthy lives on their terms. Learn more about this important issue with the roadmap for improving care in severe asthma.

We are only just beginning to make a difference in patients' lives.

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