Rethinking asthma control: Why 'stable' isn't always enough

Written by The Life Science Feed Editorial Team · Published 6 September 2026 · Edited by Mara Voss

> Asthma management has long focused on symptom control, but the emphasis is shifting. Clinicians now recognize that the speed and durability of treatment response are paramount, moving beyond mere symptom reduction to a more proactive strategy against disease progression. This evolution in understanding highlights the need for therapies that deliver both immediate relief and lasting stability for patients.

KEY TAKEAWAYS

- The Pivot: The focus in asthma management has broadened from symptom control to achieving rapid and sustained efficacy to prevent disease progression.
- The Data: Early and consistent intervention reduces the frequency and severity of exacerbations, preserving lung function over time.
- The Action: Prioritize therapies that offer quick onset of action and durable control, tailoring treatment to individual patient phenotypes for optimal long-term outcomes.

Asthma, a chronic inflammatory airway disease, affects millions globally, characterized by recurrent episodes of wheezing, breathlessness, chest tightness, and coughing. These symptoms, often worse at night or in the early morning, are typically associated with widespread, but variable, airflow obstruction within the lung that is often reversible either spontaneously or with treatment. The underlying airway inflammation contributes to bronchial hyperresponsiveness, a hallmark of the disease. While bronchodilators offer symptomatic relief, the persistent inflammatory process necessitates ongoing management to prevent exacerbations and preserve lung function. The goal is not simply to alleviate acute distress but to establish long-term disease control, minimizing the impact on daily life and preventing irreversible airway remodeling.

Standard-of-care for asthma typically involves a stepped approach, guided by symptom severity and frequency. Inhaled corticosteroids (ICS) form the cornerstone of maintenance therapy, often combined with long-acting beta-agonists (LABA) for better symptom control. For patients with severe asthma, particularly those with specific inflammatory phenotypes, biologic therapies targeting pathways like IgE, IL-5, or IL-4/IL-13 have become increasingly important. These advanced treatments aim to reduce exacerbation rates and improve lung function in those who remain symptomatic despite high-dose ICS/LABA. The challenge remains to identify the right therapy for the right patient, and to initiate it quickly enough to alter the disease trajectory.

The Urgency of Early Intervention

The concept of time in asthma management extends beyond the immediate relief of an acute attack. It encompasses the speed at which control is achieved and, importantly, how long that control can be maintained. Delayed or inadequate control allows chronic inflammation to persist, leading to airway remodeling and a progressive decline in lung function. This is particularly relevant for patients with severe asthma, where the inflammatory burden is higher and the risk of irreversible changes is greater. Early, effective intervention can mitigate these long-term consequences, preserving lung health and reducing the cumulative impact of the disease.

Rapid onset of action is not merely a convenience; it is a clinical imperative. Patients experiencing frequent symptoms or exacerbations require therapies that can quickly bring their disease under control. This immediate impact can break the cycle of inflammation and hyperresponsiveness, reducing the likelihood of subsequent attacks. But speed alone is insufficient. The efficacy must also be sustained, preventing symptom recurrence and maintaining stable lung function over extended periods. This dual requirement for rapid and sustained control drives much of the current research and development in asthma therapeutics, pushing for agents that can deliver both.

Understanding Sustained Efficacy

Sustained efficacy in asthma means more than just a temporary reprieve from symptoms. It implies a durable reduction in exacerbation rates, a stable or improved lung function, and a significant enhancement in quality of life. This requires therapies that address the underlying inflammatory processes effectively and consistently. For instance, some biologics have demonstrated their ability to provide long-term control by targeting specific inflammatory mediators, thereby reducing the frequency of severe asthma attacks and the need for oral corticosteroids. This sustained benefit is what truly transforms patient lives, allowing for greater participation in daily activities and reducing the burden of chronic disease.

The mechanisms contributing to sustained efficacy are diverse. They can involve direct anti-inflammatory effects, modulation of immune responses, or prevention of airway remodeling. For example, therapies that block specific cytokines involved in type 2 inflammation can lead to a lasting reduction in eosinophilic airway inflammation, a key driver of severe asthma. This persistent suppression of inflammation translates into fewer symptoms and exacerbations. The clinical utility of such agents is often assessed not just by short-term improvements but by their ability to maintain these benefits over years, as seen in real-world cohort data for dupilumab.

The Role of Patient Phenotypes

Asthma is not a monolithic disease; it encompasses various phenotypes, each with distinct underlying inflammatory pathways. Recognizing these phenotypes is essential for tailoring treatment to achieve rapid and sustained efficacy, as it directly impacts patient outcomes. For instance, patients with eosinophilic asthma respond well to therapies that target IL-5 or IL-4/IL-13 pathways, while those with allergic asthma may benefit more from anti-IgE treatments. Identifying the dominant inflammatory pathway allows clinicians to select therapies that are more likely to provide both quick and lasting control, optimizing patient outcomes and minimizing trial-and-error prescribing.

Biomarkers play a vital role in this personalized approach. Blood eosinophil counts, fractional exhaled nitric oxide (FeNO), and serum IgE levels can help classify asthma phenotypes and predict response to specific biologic therapies. For example, high eosinophil counts often indicate a good response to anti-IL-5 agents. This precision medicine approach ensures that patients receive the most appropriate treatment from the outset, accelerating the path to control and enhancing

the durability of the therapeutic effect. The ongoing evolution of our understanding of severe asthma beyond airway focus continues to refine these strategies.

Challenges in Achieving Durable Control

Despite advances, achieving durable control in all asthma patients remains a challenge. Adherence to maintenance therapy is a significant factor; inconsistent use of inhaled medications can lead to suboptimal control and increased exacerbation risk. Patient education and simplified treatment regimens can help improve adherence. But even with perfect adherence, some patients continue to experience symptoms or exacerbations, highlighting the need for further therapeutic innovation. These are the patients who often cycle through multiple therapies, seeking a solution that offers both rapid relief and sustained stability.

The complexity of asthma also means that some patients may have overlapping conditions, such as chronic rhinosinusitis with nasal polyps (CRSwNP) or COPD, which can complicate management and impact treatment efficacy. Addressing these comorbidities is essential for achieving comprehensive and lasting asthma control. For a deeper dive into respiratory conditions, the Oxford Handbook of Respiratory Medicine offers a concise reference for pulmonology practice. The relationship between these conditions and asthma pathophysiology is an active area of research, with insights emerging on epithelial cytokines linking severe asthma, CRSwNP, and COPD.

The Future of Asthma Management

The future of asthma management will likely see an even greater emphasis on personalized medicine, driven by a deeper understanding of disease endotypes and the development of novel targeted therapies. The goal will be to identify patients who are most likely to benefit from specific treatments, ensuring rapid and sustained control from the earliest stages of their disease. This proactive approach aims to prevent the long-term consequences of uncontrolled asthma, such as irreversible lung damage and reduced quality of life. The development of new biologics and small molecule inhibitors continues to expand the therapeutic arsenal, offering hope for patients who have historically struggled to achieve durable control.

But the focus is not solely on new drugs. Optimizing the use of existing therapies, improving adherence, and integrating digital health solutions for monitoring and education will also play important roles. The aim is to create a comprehensive management strategy that empowers patients and provides clinicians with the tools to deliver both rapid symptom resolution and sustained disease stability. This holistic approach, combining precision medicine with patient-centered care, represents the next frontier in asthma management, moving towards a future where uncontrolled asthma becomes a rarity.

> **CLINICAL IMPLICATIONS**
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> The shift towards rapid and sustained efficacy in asthma management is not merely academic; it demands a re-evaluation of our prescribing habits. Waiting for patients to fail multiple lines of therapy before escalating to advanced treatments is no longer tenable, given the evidence on long-term lung function preservation. We must identify those who will benefit most from early, targeted intervention.
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> For clinicians, this means a greater reliance on phenotyping and biomarker-guided therapy. Blood eosinophil counts and FeNO levels are not just interesting data points; they are actionable insights that should inform

> treatment decisions earlier in the disease course. The goal is to match the right patient to the right biologic, or even triple therapy, with minimal delay.
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> The industry must continue to develop therapies that offer both quick onset and durable control, but also simplify administration and reduce the treatment burden. Adherence remains a persistent problem, and complex regimens only exacerbate it. A therapy that works quickly but is difficult for patients to sustain will ultimately fall short.
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> Patients, in turn, stand to gain significantly from this evolving approach. Fewer exacerbations, better lung function, and an improved quality of life are the tangible benefits of early, sustained control. This moves asthma management from a reactive cycle of crisis and recovery to a proactive strategy focused on long-term health.

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