Assessing the current and future impact of biologics on pediatric asthma

Researchers have performed a comprehensive review of the current state and future potential of using biologic medications to treat asthma in children. They evaluated a broad scope of approved biologics, the available information for each, and whether predictive or monitoring biomarkers are available for each biologic drug, presenting that information in an article published in *Pediatric Allergy, Immunology, and Pulmonology*.

In the article entitled “Current State and Future of Biologic Therapies in the Treatment of Asthma in Children,” Elissa
Abrams, MD and Allan Becker MD, University of Manitoba, and Stanley Szefler, MD, University of Colorado School of Medicine and Children’s Hospital Colorado, state that more personalized approaches to asthma therapy in children are opening the door to biologic therapies and in particular those targeting the “allergic,” T-helper (2) pathway.

The researchers reviewed at least a dozen biologics, including the anti-IgE medications Omalizumab and Ligilizumab, the anti-IL-5 medications Mepolizumab, Reslizumab, and Benralizumab, and anti-IL4 and anti-IL3 medications. Future goals focus on using these biologic therapies to decrease the burden of asthma severity in children and moving toward disease modification and prevention strategies that can prevent and even improve pulmonary function through the reversal of airway remodeling.

“While severe asthma comprises only a small portion of patients with asthma, it poses a significant burden on the healthcare system with high resource utilization and direct costs. As more is learned about asthma phenotypes, there has been increasing interest in the use of biologic therapies in children with moderate to severe asthma,” says Pediatric Allergy, Immunology, and Pulmonology Editor-in-Chief Mary Cataletto, MD, Professor of Clinical Pediatrics, Stony Brook University School of Medicine. “The article by Abrams et al. focuses on the development, use, and potential future of biologics in this select group of children and explores biomarkers that may be helpful in selecting and monitoring appropriate candidates for treatment.”

Explore further:
Is a written asthma action plan for children necessary?

More information:
Elissa M. Abrams et al, Current State and Future of Biologic Therapies in the Treatment of Asthma in Children, Pediatric