

Preface



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Guest Editor

Asthma diagnosis and management has traditionally utilized clinical symptoms and lung function assessment. This approach, although sound, has significant limitations, including the lack of objective criteria to directly assess airway inflammation, symptom control, and prediction of therapeutic response. Additionally, this approach lacks the ability to characterize individual patient differences of a heterogenous disease when relying solely on clinical criteria and lung function.

Biomarkers are objective measures associated with the presence and, in some instances, the severity of a disease process. They may also reflect or predict response to therapeutic interventions. In an attempt to improve and objectify asthma diagnosis and management, many potential biomarkers have been studied, including genetic polymorphisms, measures of airway physiology, and inflammatory mediators found in urine, blood, sputum, tissue, exhaled gas, and breath condensate. The development of these tools will provide a basis for phenotypic and genotypic characterization of patients who have asthma and subsequently allow appropriate individualized therapeutic approaches. This issue provides a comprehensive review

of the current state of these various biomarkers and their role in the diagnostic and therapeutic algorithm.

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