



Science and innovation at the service of specialty

Ciência e inovação a serviço da especialidade

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It is with great enthusiasm and a renewed sense of purpose that we present this year's first issue of *Arquivos de Asma, Alergia e Imunologia (AAAI)*, the official journal of both the Associação Brasileira de Alergia e Imunologia (ASBAI) and the Sociedad Latinoamericana de Alergia, Asma e Inmunología (SLAAI). This publication plays a central and strategic role in ASBAI's commitment to promoting excellence in care, education, and research in the areas of Allergy and Immunology. Its significance extends far beyond the dissemination of scientific articles – it serves as an instrument for integration, continuous updating, and the advancement of our specialty.

Over the years, AAAI has consolidated its position as a leading national scientific forum for Brazilian specialists, focusing on evidence-based medicine applied to clinical practice. It is a channel for free access to continuing medical education, democratizing and updating knowledge. The journal is indexed in the LILACS platform and can be accessed via Google Scholar.

In pursuit of producing and disseminating knowledge, ASBAI, through its scientific departments and committees and often in collaboration with other professional associations,

has developed evidence-based guidelines, consensus statements, and recommendations tailored to the Brazilian context, all of which are published in AAAI.

This issue of AAAI features the *Update on Food Allergy 2025: Joint Position Statement of the Brazilian Association of Allergy and Immunology and the Brazilian Society of Pediatrics*, which will serve as a reference for allergists, pediatricians, gastroenterologists, nutritionists, and dietitians. In view of the increasing prevalence of food allergies, the diversity of clinical presentations, and the growing number of involved foods, this document provides an update on clinical manifestations and immunological mechanisms (both IgE- and non-IgE-mediated), while also addressing new diagnostic methods and therapeutic proposals.¹

Another prominent article in this issue examines climate change and its impact on the school environment, drawing on three recent reports that explore different aspects of the effects of climate change. This pertinent topic has many implications for both health and education,² and this article demonstrates how research is evolving toward the development of tools that allow the aggregation and correlation of data from multiple sources, as

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well as how machine learning and deep learning techniques can be used to generate predictive estimates about a given outcome.³

We are living in a time of intense transformations in medicine, driven by new technologies and the growing incorporation of artificial intelligence into clinical practice. Although not a replacement for medical judgment, artificial intelligence is emerging as a powerful tool to support decision-making, capable of increasing safety, improving diagnostic efficiency, and providing personalized patient care.

Within the field of Allergy and Immunology, the first tangible benefits of this revolution are already evident. Predictive models based on machine learning have been successful in anticipating the results of oral provocation tests with foods such as milk, eggs, and peanuts, using variables such as specific immunoglobulin E, clinical data, and skin tests. Recent studies have demonstrated accuracy rates exceeding 90%, reducing the need for risk exposure in a controlled environment.⁴ Another study found artificial intelligence to be very useful in screening more severe cases of asthma in primary care, allowing timely referral to specialists through the analysis of clinical and spirometric data.^{5,6} In light of this imminent future, ASBAI created the Technology, Innovation, and Artificial Intelligence Committee this year to make these developments more accessible to our members and to explore their practical applications.

AAAI also provides a platform for the dissemination of multicenter studies and national research, increasing the visibility of Brazilian scientific production and strengthening our own epidemiological data, which are essential for the development of public policies and clinical guidelines appropriate for our population. This issue also includes a descriptive study on ocular allergy, an underexplored condition in epidemiological terms, underscoring the risk for potential ocular sequelae.⁷ In addition, this edition presents a case report of hereditary angioedema successfully managed with C1 esterase inhibitor prophylaxis during a dental procedure, highlighting the value of sharing practical experiences from different groups when treating more difficult cases.⁸

In this scenario of rapid scientific evolution, AAAI continues to play a critical role: disseminating scientific and technological advances in accessible language while fostering integration between clinical practice and both national and international research. With each issue, our goal is to make AAAI the bridge between science and the medical practice and between innovation and the continuing education of specialists, stimulating research and opening doors for new authors and multicenter research groups.

We invite the entire ASBAI community to contribute to this journal – as readers, authors, peer reviewers, and promoters of technical and scientific debate. We believe that, like artificial intelligence, shared knowledge holds the power to transform the future.

Hope you enjoy your reading.

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