

## IMPACT OF ALLERGEN IMMUNOTHERAPY ON ASTHMA ACUTE EXACERBATIONS: A RETROSPECTIVE STUDY IN CROATIA

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**Objective:** 

Introduction: Even a century after the initial study on allergen immunotherapy (AIT), it remains a crucial treatment for altering the course of allergies. In Croatia, a historical setback in local allergen production led to a decade-long absence of this crucial therapy, relying on sporadic treatments mostly in private clinics. The inauguration of the Allergy Centre at the Special Hospital for Pulmonary Diseases marked a resurgence in providing subcutaneous AIT to adults with persistent moderate-severe allergic rhinitis and allergic asthma (GINA I-IV).



Aim: This study aims to assess the effectiveness of AIT (Diater, Spain), in reducing the number of asthma acute exacerbations (AE).

## Methods:

Material and methods: Data from 11 patients were analyzed by comparing the number of asthma AE one year before initiating AIT with the number one year after commencement. Asthma AE was defined by An Official American Thoracic Society/European Respiratory Society Statement. The Wilcoxon signed-rank test was employed for statistical analysis.

## **Result:**

Results: revealed a significant (p < 0.0078) reduction in the number of asthma AE one year after commencing AIT (0.27) compared to the one year before AIT (1.09).

## **Conclusion:**



Conclusion: allergen immunotherapy demonstrates effectiveness in reducing asthma exacerbations, emphasizing the importance of making this treatment accessible to the entire population of Croatia. This study contributes to the growing body of evidence supporting the positive impact of AIT on asthma outcomes, promoting its widespread availability for improved respiratory health in the country.

Keywords: Allergen immunotherapy, asthma acute exacerbations, allergic rhinitis, respiratory health, Croatia.