of dupilumab treatment, consistent with results in adults and adolescents. These data suggest that no routine laboratory monitoring for hematology/chemistry parameters is required in adolescents with AD prior to or during dupilumab treatment.

Many patients report allergic reactions to this antibiotic, but amoxicillin allergy range between 1-10%. However, clinicians hesitate to prescribe it when a suspected, but unproven, allergy exists. Our aim is to confirm amoxicillin allergy in children with clinical suspicion.

This study was done between January 2018 and December 2020, in children younger than 18 years, admitted to the emergency room with suspicion of clinical allergic reaction to amoxicillin. According to the protocol of our hospital, they were referred for pediatric allergy appointment to perform prick tests and afterwards oral provocation test.

A total of 57 cases were referred for evaluation. The average age was 8.4

(1-17) years old, and 53% were female. The suspicion was based on late rash reaction presented in 68.4%, urticarial exanthema in 19.3%, edema in 8.8%, vomit in 8.8%, cutaneous rash in 7% and dyspnea in 2.1%. In 18 patients, specific IgE screening for amoxicillin was performed, but all results were negative. All children did a prick test for amoxicillin and oral provocation test. There were no positive results for prick tests, but two positive results in the oral provocation test (3.5%).

Confirmation of amoxicillin allergy, before deciding to use it is or not, is an important tool for antimicrobial stewardship and, consequently, to decrease the rate of antibiotic resistance. So far, in our hospital, there were only two positive results.

### 162
CHARACTERIZATION OF PEDIATRIC PATIENTS UNDER ALLERGEN-SPECIFIC IMMUNOTHERAPY AT A LEVEL II HOSPITAL

Catarina M Francisco*, JF Ribeiro, A Monteiro, P Guerra, RS Oliveira, Sousa Martins Hospital

10.1136/archdischild-2021-europaediatrics.162

Allergen-Specific Immunotherapy (ASI) is being used on the treatment of respiratory allergies for over a century, aiming to reduce individual hypersensitivity to specific allergens, and is proven to be very effective on the long term.

**Goal** Evaluation of the patients followed in the Paediatric Allergology clinic at a level II Hospital treated with ASI.

- Retrospective and descriptive study of the efficiency of ASI in patients attending our Allergology inpatient clinic between 2016 and 2020.

  - The sample was characterized according to patients’ gender, age, initial diagnosis, method of allergy testing (blood IgE or Skin Prick Testing) and the type of ASI used.

  During the estimated period, a total of 44 patients were treated with ASI.

  - Of these, 27 (61%) are male, with a median age of 11 years old on the first day of treatment (minimum age: 6 years old, maximum age: 17 years old).

  - As to the diagnosis: 34 (77%) have Allergic Rhinitis, 20 (46%) have Allergic Asthma, 9 (21%) Allergic Conjunctivitis, 3 (7%) Urticaria, and 2 (5%) Atopic Dermatitis. The majority of patients have more than one condition identified.

  - All the patients underwent Skin Prick Testing and 60% also did blood tests.

  - Grasses and domestical mites were the agents more frequently identified as inducers of Hypersensitivity, and 36% of the patients received monotherapy.

  - Subcutaneous administrations was the prefered method in 2/3 of the patients.

  - There were no adverse effects observed until today.

  - ASI is the only treatment modality known to effectively change the natural course of Allergic disease.

  - However, it is essential to thoroughly select the patients that can qualify for the treatment, as to the specific allergen extracts being used, so that we can optimize therapy benefits.

### 164
SERUM PERIOSTIN AS A POTENTIAL BIOMARKER FOR ASTHMA SYMPTOMS IN CHILDREN WITH HISTORY OF RESPIRATORY SYNCTIAL VIRUS INFECTION

Helena Tresar Cnikovic*; Romana Gjergja Jura; Mirjana Turkalj; General County Hospital Põžega; Faculty of Medicine, J.J. Strossmayer University of Osijek

10.1136/archdischild-2021-europaediatrics.164

Periostin is a matricellular protein upregulated in response to IL-4 and IL-13, that have a role in development of allergic diseases. Previous studies reported that periostin can be a non-invasive biomarker of T2-driven inflammatory response in asthma in adults, with inconsistent results in children. None of the studies examined the association of serum periostin levels with asthma symptoms in children who have been infected with respiratory syncytial virus (RSV) in the first two years of life. The aim of this study was to determine the usefulness of serum periostin levels as a potential biomarker for asthma, especially recent asthma symptoms in children.

This prospective study observed 72 children from birth. RSV infection was confirmed with positive serum specific RSV Immunoglobulin G (IgG) at one and/or two years of age. Asthma was diagnosed according to International Study of Asthma and Allergies in Childhood (ISAAC) questionnaire at 10 years of age. Fractional exhaled nitric oxide (FeNO), lung function, skin prick test and blood samples for analysis of specific immunoglobulin E (sIgE) on standard pallet of inhalt allergens, total IgE (tIgE) and periostin were provided.

At 10 years of age, asthma was diagnosed in 23 (31.9%) of the observed children. In 15 (20.8%) of them who reported asthma symptoms during the last 12 months, median serum periostin levels were 40.04 ng/ml. In 57 (79.2%) children who were free of asthma symptoms in the last 12 months, mean serum periostin levels were 30.57 ng/ml. Serum periostin levels correlated significantly

### 163
AMOXICILLIN ALLERGY IN CHILDREN... COMMON OR UNCOMMON? (#151 WITH CHANGES)

Iris Santos Silva*, Catarina Maucedo Francisco, Joana Filipê Ribeiro, João Virtuoso, Pedro Guerra, Rita S Oliveira, ULS Guarda

10.1136/archdischild-2021-europaediatrics.163

β-Lactam antibiotics are safe and cost-effective antibiotics, being amoxicillin the most common antibiotic used among the paediatric population.