



# PAAM 2019

17 – 19 October 2019  
Florence, Italy



- Jorge was a 13 years-old boy.
- After a few minutes of the first dose of a course amoxicillin (previously tolerated) he felt mouth swelling with respiratory distress, generalized erythema (but no pruritus), swelling of feet and fingers, with feeling of weakness and difficulty speaking.
- A medical team was required that transferred Jorge to the hospital with no treatment and spontaneous improvement.
- At the hospital he was treated with an antihistamine and steroids, being observed for 24 h with progressive improvement, although he had two presyncopal episodes after getting out of bed in the first hours.
- His mother is allergic to penicillin.



## ALLERGOLOGICAL WORKUP:

- Skin tests negative for usual food and aeroallergens.
- Specific IgE (kU/L): **amoxicillin 2,47**, cefaclor 0,69, penicillin V 0,36, ampicillin 0,07, penicillin G 0,05, látex 0,05.
- Skin tests (prick and intradermal):
  - **positive for amoxicillin**
  - negative for PPL, MDM, penicillin G, cefuroxime and cefotaxime.
- Oral graded challenge with cefuroxime: TOLERATED.



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- Ivan is a 10 years-old boy.
- When he was 3 years-old he had an episode of urticarial and facial angioedema 30 minutes after administration of amoxicillin for faringitis. It resolved with antihistamines in one day.
- He had had amoxicillin before, but not after this episode.
- He has symptoms of allergic rhinitis.



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## ALLERGOLOGICAL WORKUP:

- Skin tests positive for house dust mites.
- Specific IgE (kU/L) or skin test with penicillins: **not performed**.
- Oral graded challenge with amoxicillin (5, 50 and 500 mg every 1 hour): TOLERATED.
- He has been prescribed amoxicillin after this study.



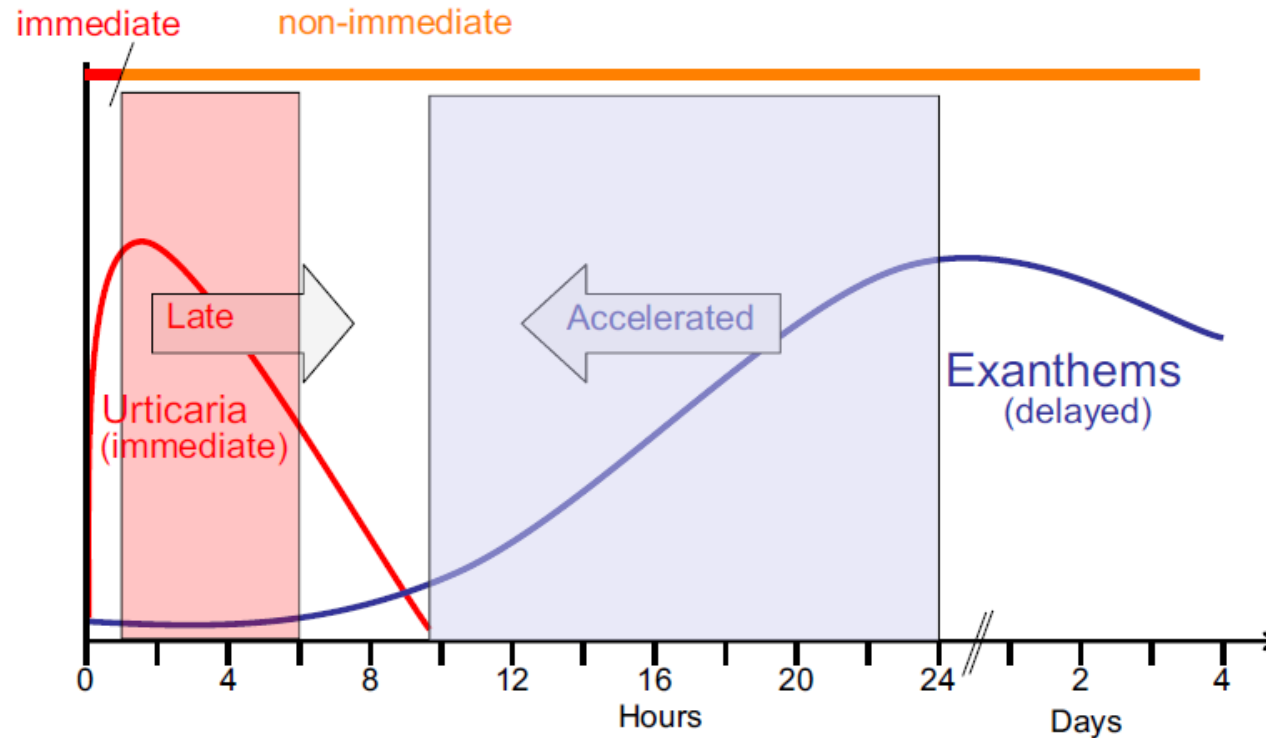
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## Drug hypersensitivity reactions: Inconsistency in the use of the classification of immediate and nonimmediate reactions

J ALLERGY CLIN IMMUNOL  
JANUARY 2012

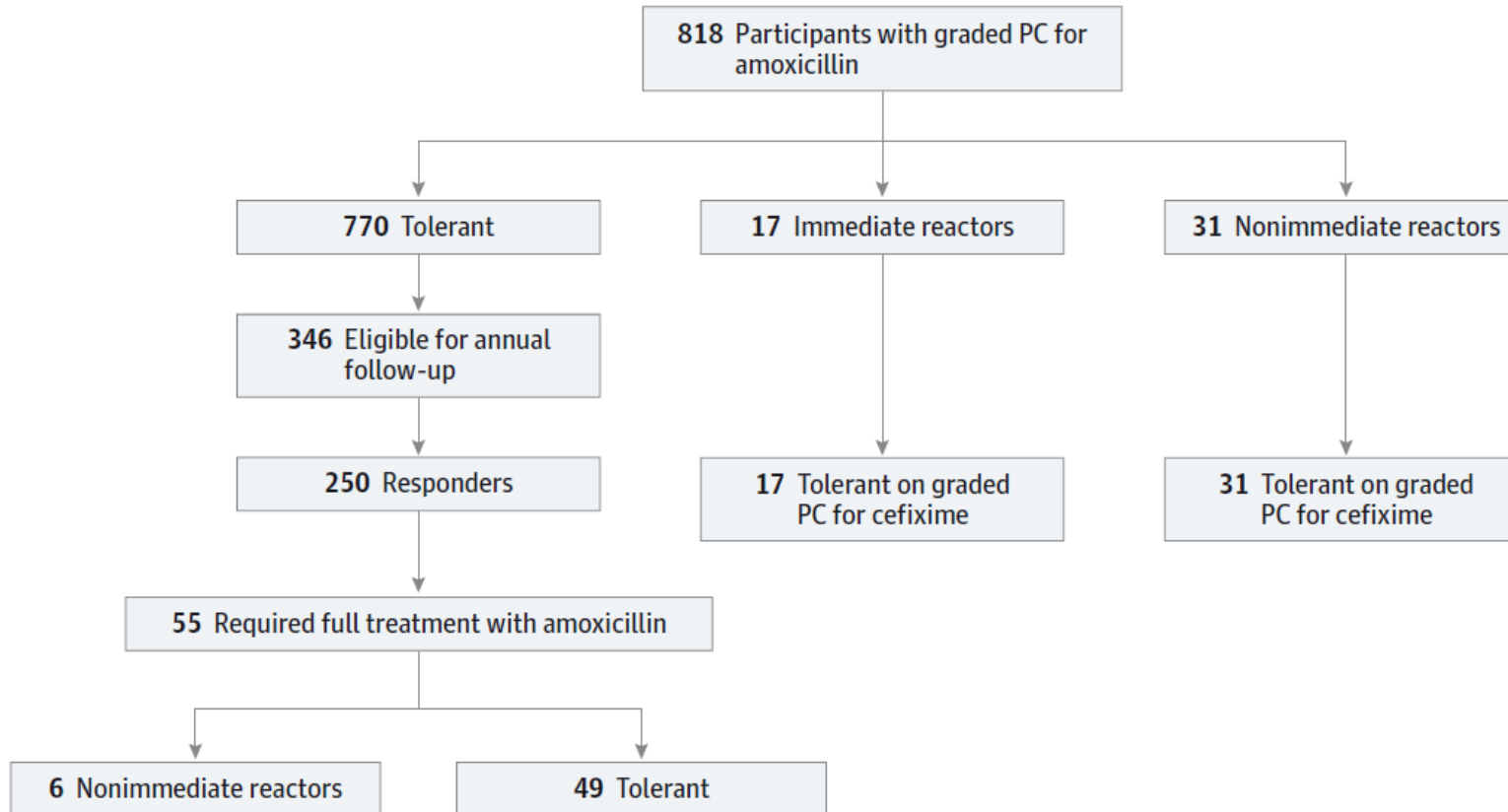


# Assessing the Diagnostic Properties of a Graded Oral Provocation Challenge for the Diagnosis of Immediate and Nonimmediate Reactions to Amoxicillin in Children



Christopher Mill, MPH; Marie-Noël Primeau, MD; Elaine Medoff, MD; Christine Lejtenyi, MD; Andrew O'Keefe, MD; Elena Netchiporouk, MD; Alizee Dery, BSc; Moshe Ben-Shoshan, MD, MSc

JAMA Pediatrics June 2016 Volume 170, Number 6



Among 818 patients, 94.1% were tolerant to the graded PC for amoxicillin, 2.1% reacted immediately (within 1 hour), and 3.8% had nonimmediate reactions. Of those tolerating the PC for amoxicillin and requiring subsequent full treatment with amoxicillin, 89.1% tolerated the full treatment.




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## Oral challenge without skin tests in children with non-severe beta-lactam hypersensitivity: Time to change the paradigm?

Luis Moral<sup>1</sup>  | Jean-Christoph Caubet<sup>2</sup>

*Pediatr Allergy Immunol.* 2017;28:724-727.

3 | SAFETY OF OPT FOR SUSPECTED BLH



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Original Article

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## Comparing Direct Challenge to Penicillin Skin Testing for the Outpatient Evaluation of Penicillin Allergy: A Randomized Controlled Trial

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J ALLERGY CLIN IMMUNOL PRACT  
SEPTEMBER/OCTOBER 2019

S. Shahzad Mustafa, MD<sup>a,b</sup>, Kelly Conn, PhD, MPH<sup>c</sup>, and Allison Ramsey, MD<sup>a,b</sup> *Rochester, NY*

Patients 5 years or older with a cutaneous-only or unknown reaction (>1 year ago for those aged 5-17 years, >10 years ago for those 18 years or older) were randomized 1:1 to PST or 2-step DC.

A total of 159 patients were randomized to DC (49.7%) or PST (50.3%). PST result was negative in 70 of 80 (87.5%) patients. All 70 patients had a negative amoxicillin challenge. DC was negative in 76 of 79 (96.2%) patients; positive DC reactions were minor.

Compared with PST, DC may also take less time, cost less money, and lead to fewer penicillin allergy evaluations with false-positive results.





## Factors increasing Positive Predictive Values

<b>(M):</b> Exanthem	–	Urticaria	–	Anaphylaxis
<b>(T):</b> Late	–	Immediate	–	Sudden
<b>(D):</b> Dissimilar	–	Cross reactive	–	Same

(M): Manifestations

(T): Timing

(D): tested Drug