

# Evaluation of allergies during validation of pharmacological therapy according to EAHP statements

P. Polidori , E. Di Martino , A. Provenzani  
IRCCS ISMETT, Clinical Pharmacy – Palermo, Italy

## Background

Drug-Induced Allergic Reactions (DIAR) are associated with high patient morbidity, which can be easily prevented with appropriate strategies.

## Aim of the study

The aim of this study is to ensure a favorable risk/benefit ratio in patients of a 100 beds research institute through the DIAR surveillance by the Clinical Pharmacist (CP) as a key tool to reduce the prescribing errors during validation of medical prescriptions.

## Materials and Methods

The CP verified and classified all allergies reported in the Electronic Medical Record (EMR) from June 2016 to June 2017, paying attention to the pharmaceutical classes that induced allergies and the type of clinical manifestation.

## Conclusions

Validation of therapies and evaluation of DIAR by the CP minimize the occurrence of allergic reactions allowing better prescriptive appropriateness and patient safety.

## Results

- 30 prescriptions have been cancelled for allergic reaction (27 direct hypersensitivities and 3 cross-reactions) by CP and 15 allergic skin diseases have been reported in the National Pharmacovigilance Network.
- Out of a total of 652 allergies examined, 71% (463/652) were attributed to drugs, 2.9% (19/652) to food, 2.8% (18/652) to environmental factors, while 23% (152/652) were of unknown origin.
- The prevalence of drugs that caused DIAR was 42.1% (195/463) for antibiotics, 19.2% (89/463) for nonsteroidal anti-inflammatory drugs, 13.2% for contrast media, 8.6% for cardiovascular drugs, 3% (12/463) for antipyretics, 2.6% (14/463) for opioids, 2.2% (10/463) for gastrointestinal drugs, 1.7% (8/463) for steroidal anti-inflammatory drugs, 1.1% (5/463) for favism, antimuscarinics and drugs for the nervous system, 0.9% (4/463) for anti-gout agents, 0.6% (3/463) for iron and immunosuppressants, 0.4% for iodine and platinum compounds, 0.2% for antihistamines, insulin, acetylcysteine and sodium chloride.
- The type of manifestation was reported in 43% (280/652) of DIAR and attributed to skin disorders (erythema, eczema, rash, itching) in 64.3% (180/280), to respiratory diseases (asthma, short breath, cough) in 24.3% (68/280), to gastrointestinal disorders (diarrhea, vomiting, cramps) in 5.7% (16/280), to congestion in 1.1% (3/280) and to fever, headaches and dizziness in 1.1% (3/280).
- 11.3% (74/652) of allergies were reported by the patients, 1% (7/652) were observed and confirmed by the physician, 0.8% (5/652) were reported as suspicious, while 86.8% (566/652) detection were not confirmed.

30 prescription cancelled for allergic reactions by CP

15 allergic skin diseases reported by CP

