# DESENSITIZATION PROTOCOL FOR PEMETREXED HYPERSENSIVITY: A CASE REPORT

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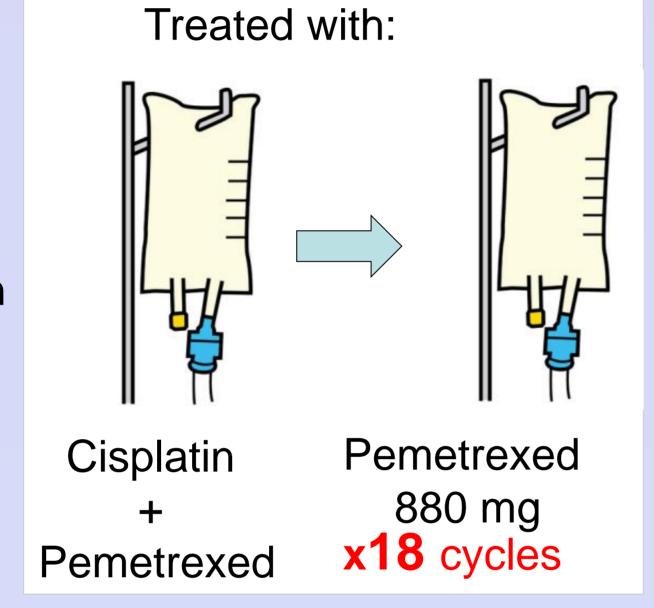
# **Objectives**

To describe the pemetrexed desensitization protocol and our experience in one patient with a previous anaphylactic reaction to pemetrexed.

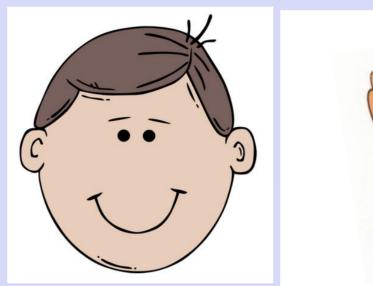
### Material and methods



43 year-old-man
Stage IV lung
adenocarcinoma







Face and hand erythema with urticaria

Resolved with dexchlorpheniramine + hydrocortisone

Skin testing with: Pemetrexed 25 mg/ml

Intradermal testing. Dilutions 1/10.000 to 1/10

Published standardized desensitization protocol by Castells et al (J Allergy Clin Immunol. Sept 2008) was adapted to pemetrexed desensitization.

### Results:

#### **PREMEDICATION**

#### **Before admission:**

Cetirizine 10mg + Ranitidine 150 mg + Montelukast 10 mg + Acetylsalicylic acid 300 mg + dexamethasone 20 mg

#### On admission:

iv premedication: ranitidine 50mg + dexchlorpheniramine 5 mg + dexamethasone 8 mg

# Administration in the Medical Intensive Care Unit



# 3 sequential pemetrexed solutions (rate of infusion):

1st 1/100 dilution: 0,0352 mg/ml (2, 5, 10 y 20 ml/hour in 15 minutes each one)

2nd 1/10 dilution: 0,352 mg/ml (5, 10, 20 y 40 ml/ hour in 15 minutes each one)

3rd dilution 1/1: 3,520 mg/ml (10, 20, 40 ml/ hour in 15 minutes each one and 75 ml/hour until reaching total amount of 880mg)

Continuous monitoring was performed during desensitization; no reactions ocurred. The patient did not receive anymore pemetrexed.

## Conclusions:

The protocol was safe and well tolerated by our patient.

Desensitization protocols stand out as an alternative to a standard continuous treatment in patients who are allergic to their chemotherapy agents.

