



Hospital General Universitario Gregorio Marañón







# **EVALUATION OF CARDIOTOXICITY BY OSIMERTINIB IN CLINICAL PRACTICE**

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# **BACKGROUND AND IMPORTANCE**

- → Osimertinib is a tyrosine kinase inhibitor (TKI) indicated for the treatment of epidermal growth factor receptor mutated non-small cell lung cancer (NSCLC)
- → Despite a <u>better safety profile</u> than other TKIs for the same indication, osimertinib could produce some <u>potentially fatal</u> <u>cardiotoxicity</u>
- → There are scarce evidence on cardiotoxicity in clinical practice with osimertinib

### AIM AND OBJECTIVES

To analyze the incidence of cardiotoxicity associated with osimertinib in the real clinical practice

# MATERIALS AND METHODS

### STUDY CHARACTERISTICS

- Observational
- Cross-sectional
- In a third-level hospital

#### **INCLUSION CRITERIA**

 All patients diagnosed with NSCLC treated with osimertinib between february 2018 and may 2021

#### DATA COLLECTION AND SOURCE OF DATA

- Sociodemographic and treatment characteristics
- Cardiac history and cardiac events during treatment
- Comorbidities

### RESULTS

33 patients

were included:

- Median age of 72.5 (IQR=62.2-81.0) years
- 63.6 % were women
- 32 (96.9 %) were diagnosed with metastatic lung adenocarcinoma, 1 (3.0%) with epidermoid non-small cell lung cancer
- 60.6 % of patients received osimertinib in a second line or successive

57.6%

of the patients had cardiovascular comorbidities

- 48.5 % had arterial hypertension
- 36.4 % had dyslipidemia
- 12.1 % had diabetes mellitus
- 3.0 % had heart failure
  21.2% of patients had previous cardiac examinations before starting osimertinib treatmen
- Median time in treatment with osimertinib was 11 (IQR=4.6-17)

12.1%

of patients developed cardiac toxicity

- 2 (6.1%) suffered a decrease in the Left Ventricular Ejection Fraction (LVEF)
- 1 (3.0%) experienced atypical chest pain
- 1 (3.0%) developed an increase in the D-dimer and hyperfibrinogenemia

One of the patients with LVEF decreased required hospitalization and invasive management. The rest of the cardiotoxicities were managed with dose reduction and conservative measures.

# **CONCLUSION AND RELEVANCE**

More than 10% of osimertinib-treated patients had cardiotoxicity. Of these, 25% required hospitalization. Oncologists should always assess cardiac function at the start of osimertinib and during the follow-up.

### **CONTACT DATA**



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