

## **Carboplatin plus pemetrexed as first-line treatment of patients with malignant pleural mesothelioma: a phase II study.**

[Katirtzoglou N](#), [Gkiozos I](#), [Makrilia N](#), [Tsaroucha E](#), [Rapti A](#), [Stratakos G](#), [Fountzilas G](#), [Syrigos KN](#).

### **Source**

Oncology Unit, 3rd Department of Medicine, Sotiria General Hospital, Athens School of Medicine, Athens, Greece.

### **Abstract**

#### **INTRODUCTION:**

Malignant pleural mesothelioma (MPM) is a rapidly progressive tumor that is increasing in frequency worldwide. Treatment options are limited, and response to chemotherapy is poor. The aim of this phase II study was to evaluate the activity of the carboplatin/pemetrexed combination as first-line chemotherapy in patients with unresectable MPM.

#### **PATIENTS AND METHODS:**

Chemotherapy-naive patients with histologically confirmed MPM and an Eastern Cooperative Oncology Group performance status of 0-2 were enrolled. Treatment consisted of pemetrexed 500 mg/m<sup>2</sup> and carboplatin area under the concentration-time curve of 5 mg/mL/min, both administered on day 1 of a 21-day cycle. The treatment continued until 6 cycles were completed or until unacceptable toxicity or disease progression were observed.

#### **RESULTS:**

A total of 62 patients were enrolled. Of these patients, 18 (29%) had a confirmed partial response, whereas the disease remained stable in 34 patients (54.9%) and progressed in 10 patients (16.1%). The median overall survival (OS) was estimated at 14 months (95% CI, 11.8-16.2 months), and the median time to progression was 7 months (95% CI, 5.8-8.2 months). The difference in median OS between the epithelial histologic subtype (16 months) and the sarcomatoid subtype (11 months) was statistically significant.

#### **CONCLUSION:**

This study confirmed the activity of the carboplatin/ pemetrexed combination in the first-line treatment of patients with MPM. It is a viable option, especially in cases in which side effects are generally anticipated.