





# **PROGNOSTIC FACTORS IN LUNG METASTASES OF SARCOMA**

## Elisabeth Martínez-Téllez

Thoracic Surgery Department. Hospital de Sant Pau-Campus Salut Barcelona

## INTRODUCTION

Patients with a primary tumor of sarcomatous origin may present distant metastases in up to 50% of cases, being the lung the main target organ. The selection of the subset of patients who underwent surgical resection is crucial. There are well-established criteria for pulmonary metastasectomy, but multiple factors will influence the patient's outcome and, also, these factors will play as prognostic factors for recurrence and survival.

The design of the study was observational, descriptive, and prospective of patients affected by lung metastases from sarcoma and who underwent pulmonary metastasectomy from June 2014 to January 2021. We analyzed different subgroups according to the histological subtype of sarcoma, surgical approach, type of lung resection, disease synchronicity, lymph node involvement, and disease free time. Better to concentrate cases in centres with highly specialised multidisciplinary teams and high volume

### RESULTS

57 patients were included. 34 men and 23 women with a mean age of 52.8 +/- 14 years. A total of 80 pulmonary metastasectomy were performed. In the multivariate analysis, we identified prognostic factors that improve overall survival (OS): performing a complete resection (R0), disease-free time longer than one year, the number of metastases resected less than 3, and the non-existence of lymph node involvement. The median overall survival was 33.2 months (95% CI 25.1 ; - ). Overall survival one year after surgery was 84%, 43% at 3 years, and 20% at 5 years, respectively.

### CONCLUSIONS

In our series, we have identified several prognostic factors that influence the OS of patients with lung metastases from sarcoma: performing a complete resection, disease-free time longer than twelve months before lung resection, the number of metastases resected less than 3 and the non-existence of lymph node involvement.

In selected patients, overall survival after sarcoma metastasectomy is reasonable but recurrences are frequent. Is better to concentrate cases in centres with highly specialised multidisciplinary teams and high volume.