

## **Cavitating squamous cell lung carcinoma-distinct entity or not? Analysis of radiologic, histologic, and clinical features.**

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### **Source**

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### **Abstract**

#### **INTRODUCTION:**

Patients with cavitating squamous lung carcinoma (cSLC) are believed to harbor aggressive, chemoresistant disease with distinct features and fare poorly. We retrospectively analyzed radiologic, histologic, and clinical features of patients with cSLC and solid SLC (sSLC) from the patient registry of four Hellenic Cooperative Oncology Group (HeCOG) cancer centres in an effort to detect distinct characteristics of cSLC.

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

37 cSLC and 212 sSLC patients, most of them male smokers, aged more than 60, treated with resection and/or chemotherapy/radiotherapy were included in the analysis. Disease stage, histologic differentiation and lymphatic/vascular invasion, pre-diagnosis symptoms and their duration, tumor size, site and associated features, metastatic sites, chemotherapy administered, responses and duration as well as time to treatment failure, and overall survival were analyzed for significant differences between the two patient groups.

#### **RESULTS:**

Statistically significant differences (two-sided  $P < 0.05$ ) in patients with cSLC were found for: locally advanced (IIIB) or metastatic (IV) disease (76.5%) at presentation, longer duration of pre-diagnosis symptoms (mean 10 months), more frequent manifestation of fever, cough, weight loss, poor tumor differentiation, lower lobe primary, absence of atelectasis and satellite lesions. Objective response rates (33% for cSLC versus 32% for sSLC) and response duration (median 6 versus 5 months) were no different in the two patient groups. Median time to treatment failure (TTF) and overall survival (OS) were 10 and 13 months for cSLC patients, whereas 12 and 18 months for sSLC patients. Two-year TTF and OS rates were 18.5% and 33.5% for cSLC, while they were 19.3% and 40% for sSLC. No statistically significant differences were observed in any survival curves.

#### **CONCLUSION:**

Patients with cSLC present with high grade tumors that may initially simulate infectious processes, leading to late diagnosis despite long standing symptoms and presentation with advanced disease. In view of lack of evidence for differential disease course, increased chemoresistance and inferior outcome in comparison to sSLC patients, the definition of cavitating pulmonary carcinoma as a distinct clinical subentity cannot be supported.