

IMPACT OF THE NEW IMMUNOHISTOCHEMICAL PANEL FOR THE DIAGNOSIS OF LUNG CANCER ON OVERALL PATIENT OUTCOME

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BACKGROUND

The availability of targeted therapies created the need for precise subtyping of lung cancers. The aim of the study is to analyse the impact of the new immunohistochemical diagnostic panel on incidence and survival of lung cancer patients by histotypes.

METHODS

Patients were selected from the Ticino Cancer Registry and categorized into the four WHO-defined histotypes. Two-year overall survival (OS) was performed for patients with a 24-month complete follow-up (incidence period 1996-2008). Trend analysis of survival probability was computed.

RESULTS

2467 lung cancers were selected: 40.4% adenocarcinoma; 21.2% large cell carcinoma (LCC), 15.3% small cell carcinoma, 23.1% squamous cell carcinoma (SqCC). We observed an increasing trend of two-year OS of all cases, and an improved and decreased OS in SqCC and LCC, respectively.

CONCLUSIONS

The introduction of an immunohistochemical panel could have influenced not only the incidence of different lung cancer subtypes, but also the short-term outcome of patients, suggesting the need for cautious interpretations of previous studies and clinical trials where the diagnosis of lung cancers was based on histological evaluation without ancillary immunohistochemical studies.