Quality indicators for lung cancer care in canton Ticino (southern Switzerland), 2015-2016

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Background

Lung Cancer (LC) is one of the most common cancers in the world and is the leading cause of cancer mortality worldwide. Stage and morphology of LC are of fundamental importance in the therapeutic decision making. Aim of this study is to analyse evidence-based quality indicators (QIs) for LC care in a population-based setting in order to provide important feedback to providers, regulators and purchasers of care.

Methods

All patients diagnosed with LC in canton Ticino (southern Switzerland) during the period 2015-2016 are selected. Lymphomas, carcinoids and NOS neoplasms are excluded from the analysis. QIs are defined according to the ESMO Clinical Practice Guidelines for LC (2017) and are computed for available information as proportion with corresponding 95% confidence interval (95% CI).

Results

420 LC are diagnosed in canton Ticino during the study period: 87% of them are non-small-cell LC (NSCLC) and 13% small-cell LC (SCLC). Average age at diagnosis is 70.3±6.8 years. LC stage distribution is the following: 19% stage I, 8% stage II, 19% stage III, 50% stage IV and the remaining 4% are not classifiable. Patients with non-metastatic (M0) LC have a pre-treatment pathological diagnosis before curative treatment in 84% (95% CI: 79%; 90%) of cases (Q1). 88% (95% CI: 82%; 94%) of stage III NSCLC patients undergo surgery within 4 months from the date of diagnosis (Q2), while the proportion of NSCLC patients (all stages) undergoing surgery with free margins (R0) is 94% (95% CI: 90%; 99%) (Q3). Metastatic SCLC are treated with chemotherapy in 83% (95% CI: 70%; 95%) of cases (Q4).

Conclusions

Although improvements are possible, results for LC in canton Ticino are generally positive and encouraging. Further national and international population-based data are needed for comparative analysis.