Lung Cancer and Prognosis in Taiwan, A Population-Based Cancer Registry

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Purpose:
Lung cancer is the leading cause of cancer death in Taiwan. This study investigated the prognostic factors affecting survival of patients with lung cancer in Taiwan.

Materials and Methods:
Data were obtained from the National Health Insurance Research Database published in Taiwan. Clinicopathologic profiles and prognostic factors of 33,919 lung cancer patients were analyzed between 2002 and 2008 in this retrospective review. The impact of the clinicopathologic factors on overall survival was assessed.

Results:
Nearly two thirds of the patients were men. The 5-year survival rate was 15.9%, with a median survival of 13.2 months. The clinical staging of the patients included stage I (n = 4254; 12.5%), stage II (n = 1140; 3.4%), stage III (n = 10,161; 30.0%), and stage IV (n = 18,364; 54.1%). In the multivariate analysis, age more than 65 years, sex, cell type, histologic grade, and primary tumor location were identified as independent prognostic factors.

Conclusion:
In additional to tumor-nodes-metastasis (TNM) staging system, patient sex and age, tumor location, cell type, and differentiation were independent prognostic factors. We recommend incorporation of these factors to subclassify lung cancer patients.