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LUNG ALERT

What factors are predictive of survival in patients with non-small-cell lung cancer treated with gefitinib?

▲ Satouchi M, Negoro S, Funada Y, *et al*. Predictive factors associated with prolonged survival in patients with advanced non-small-cell lung cancer (NSCLC) treated with gefitinib. *Br J Cancer* 2007;**96**:1191–6.

This study identified factors associated with prognostic benefit from gefitinib chemotherapy. Japanese patients who had received gefitinib monotherapy between 2002 and 2005 at the Hyogo Medical Centre for Adults in Japan (n = 221) were included in the study. Their clinical parameters were retrospectively examined for potential predictive factors of survival.

Median survival time was better in females, 13.3 vs 6.8 months ($p = 0.036$); patients with adenocarcinoma, 9.3 vs 3.6 months ($p = 0.137$); never smokers, 14.5 vs 6.5 months ($p < 0.001$); those with favourable performance status, 11.1 vs 2.1 months ($p < 0.001$); and patients with epidermal growth factor receptor (EGFR) mutation, 24.9 vs 7.4 months ($p < 0.001$). The lower the smoking exposure (Brinkman Index: cigarettes per day \times years smoked) the longer the mean survival time ($p < 0.001$). Multivariate analysis showed that positive EGFR mutation status and performance status 0–1 were independent predictors of a favourable prognosis.

Prognosis was significantly different according to EGFR mutation status (with the same smoking status), but not according to smoking status (with the same EGFR mutation status). The authors suggest that although smoking is not a direct predictor of prognosis, it may be useful as a surrogate marker for EGFR mutation status. They concluded that EGFR mutation status is the most important independent predictor of survival benefit with gefitinib treatment.

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