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Lung alert

The inhibition of anaplastic lymphoma kinase in non-small cell lung tumours with the ALK rearrangement may result in tumour shrinkage

In this study, the therapeutic efficacy of inhibiting anaplastic lymphoma kinase (ALK) in oncogenic fusion genes consisting of EML4 and ALK was explored in an early-phase clinical trial of crizotinib. Tumour samples from 1500 patients with non-small cell lung cancer (NSCLC) were screened for the presence of ALK rearrangements and 82 patients with advanced ALK positive disease were identified. They were started on crizotinib 250 mg twice daily in 28-day cycles.

Results showed that patients with ALK rearrangements were younger than those without the rearrangements and most patients had little or no exposure to tobacco.

At the mean treatment duration of 6.4 months, the overall response rate was 57% and 33% had stable disease. A total of 63 of the 82 patients continued to receive crizotinib at the time of data cut-off, and the estimated probability of a 6-month progression-free survival was 72%.

The inhibition of ALK in lung tumours with the ALK rearrangement resulted in tumour shrinkage or stable disease in most patients, providing a case for genotyping in lung cancer. However, this arrangement is only seen in 5% of NSCLC.

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