

Targeting epidermal growth factor receptor in lung cancer: Perspective from the Asia–Pacific region

劉興璟

Liu HE;Lim KH;Huang MJ;Huang BS

摘要

Abstract

The epidermal growth factor receptor (EGFR) is a receptor tyrosine kinase of the ErbB family that is frequently overexpressed in non-small cell lung cancer (NSCLC), and has been identified as a novel therapeutic target for lung cancer. The development of small molecule EGFR-tyrosine kinase inhibitors (TKI) such as gefitinib and erlotinib has resulted in paradigm shift in the treatment of advanced NSCLC. The impact of EGFR-TKI in the treatment of NSCLC is even greater in Asia–Pacific region because one of the greatest clinical benefits of EGFR-TKI has been seen in patients of East Asian ethnicity. The discovery of somatic mutations in EGFR-tyrosine kinase domain has so far answered some, but not all, of the questions regarding the clinical response to EGFR-TKI in NSCLC. In addition, other molecular profiles such as KRAS mutations have also been found to play an important role in EGFR targeted therapy. In this article, we review EGFR targeted therapy in NSCLC with the focus on perspective from the Asia–Pacific region.