Gefitinib versus erlotinib as first-line treatment in EGFR mutant advanced lung adenocarcinoma

Chai Chee Shee, Liam Chong Kin, Pang Yong Kek, Kow Keng Siong, Poh Mau Ern, Wong Chee Kuan, Tan Jiunn Liang
European Respiratory Journal 2016 48: OA3341; DOI: 10.1183/13993003.congress-2016.OA3341

Abstract

**Background** Gefitinib and erlotinib are superior to chemotherapy in terms of progression-free-survival (PFS), objective response rate (ORR) and disease control rate (DCR) in patients with epidermal growth factor receptor (EGFR) mutant advanced lung adenocarcinoma. However, studies comparing the treatment efficacy of gefitinib versus erlotinib are lacking.

**Aims** To compare the PFS, overall survival (OS), ORR and DCR of patients with EGFR mutant advanced lung adenocarcinoma receiving first-line gefitinib versus erlotinib in a real-world setting.

**Methods** A retrospective study of patients with EGFR mutant advanced lung adenocarcinoma treated with first-line gefitinib 250 mg once daily versus erlotinib 150 mg once daily at the University of Malaya Medical Centre from 1st August 2010 to 31st July 2014.

**Results** 80 patients (81.6%) received gefitinib and 18 patients (18.4%) received erlotinib as first-line treatment. There was no significant difference in terms of PFS [7.13 versus 6.03 months (HR, 0.73; 95% CI, 0.39 - 1.38; p=0.335)] or OS [10.97 versus 8.67 months (HR, 0.57; 95% CI, 0.27 – 1.22; p=0.148)] between the two treatment groups. Patients on first-line gefitinib had better ORR [45.0% versus 33.3% (OR, 1.94; 95% CI, 0.63 - 6.00; p=0.251)] but worse DCR [76.3% versus 94.4% (OR, 0.23; 95% CI, 0.03 - 1.93; p=0.175)] compared to patients on first-line erlotinib, but the differences were not statistically significant.

**Conclusions** In a real-world setting, patients with EGFR mutant advanced lung adenocarcinoma treated with first-line gefitinib or erlotinib appeared to have similar PFS, OS, ORR and DCR. However, the apparent lack of
differences could have been due to the small sample size.

We recommend

Genetic profiling and epidermal growth factor receptor-directed therapy in nonsmall cell lung cancer.
J Cadranel et al., European Respiratory Journal, 2010

Erlotinib versus carboplatin and paclitaxel in advanced lepidic adenocarcinoma: IFCT-0504.
Jacques Cadranel et al., European Respiratory Journal, 2015

Lung adenocarcinoma patients of young age have lower
Shang-Gin Wu et al., ERJ Open Res, 2017

Impact of second-line treatment on overall survival of advanced lung adenocarcinoma patients
Chai Chee Shee et al., European Respiratory Journal, 2016

Afatinib (A) vs erlotinib (E) as second-line treatment of patients (pts) with advanced squamous cell carcinoma (SCC) of the lung: LUX-Lung 8 (LL8), a phase III trial
Shirish Gadgeel et al., European Respiratory Journal, 2015

Improved Survival Following TKI in Advanced NSCLC--Holy Grail?
Ludger Sellmann et al., Medscape

Comparing First-Line TKI Options for EGFR-Positive NSCLC
H. Jack West et al., Medscape

Cranial Irradiation in EGFR-Mutant NSCLC Brain Metastases
T. Jonathan Yang et al., Medscape

EGFR Heterogeneity and Mixed Response to EGFR TKIs of NSCLC
Jordi Remon et al., Medscape

Does Afatinib Top Erlotinib in EGFR+ Lung Cancer?
H. Jack West et al., Medscape

Powered by TrendMD

Vol 48 Issue suppl 60 Table of Contents

Table of Contents
Index by author
Table of Contents (issuefull)