Afatinib versus erlotinib as second-line treatment of patients with advanced squamous cell carcinoma of the lung: final analysis of the global Phase III LUX-Lung 8 trial

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Background

In the primary analysis of LUX (data cut-off April 2015), second-line afatinib improved outcomes vs erlotinib in patients with SCC of the lung:

- Progression-free survival (PFS) was significantly longer (HR 0.74, 95% CI 0.61–0.91, p=0.004)
- Overall survival (OS) was significantly longer (HR 0.82, 95% CI 0.70–0.96, p=0.019)

Methods

This randomized, Phase II trial enrolled patients with stage IB/IIIB lung SCC who had progressed on ≥4 cycles of platinum-based CT

- Primary end point: PFS (independent review)
- Key secondary endpoints: OS, other endpoints included in SCC of the lung long-term disease control

Results

Baseline characteristics

- 795 patients were included (398 on afatinib; 397 on erlotinib)
- ErbB mutation-positive tumours vs ErbB wild-type tumours

Efficacy

- Overall PFS (independent review) was significantly longer for afatinib vs erlotinib (Fig. 1 and 2)

Safety

- Overall AEs profile was comparable between arms (afatinib vs erlotinib)
- Adverse events: G1: 53% vs 46%, G2: 26% vs 23%, G3/G4: 13% vs 11%

Patients with long-term disease control (≥12 months’ treatment) vs afatinib

- Overall survival (OS) was significantly longer with afatinib (median OS 7.8 vs 6.8 months; HR 0.84, p=0.019)
- The tolerability profile was comparable across arms and AEs were manageable

Conclusions

- These data position afatinib as a treatment option for patients with SCC of the lung progressing on chemotherapy, particularly those with ErbB family genetic aberrations
- Afatinib has a well established, predictable pharmacology and is manageable with supportive care and tolerability-guided dose reductions, and long-term treatment is well tolerated

References