Impact of ERBB mutations on clinical outcomes in afatinib- or erlotinib-treated patients with SqCC of the lung

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Introduction

In the Phase II LUX-Lung 8 (LL8) trial, second-line afatinib significantly improved overall survival (OS; median 4.2 vs 3.1 months; HR [95% CI] 0.81 [0.69–1.00]; p=0.0523) over erlotinib in patients with EGFR T790M– negative or erlotinib-sensitive advanced non–small cell lung cancer (NSCLC).

In the Phase III LUX-Lung 8 (LL8) trial, second-line afatinib significantly improved overall survival (OS; median 7.9 vs 6.8 months; HR [95% CI] 0.81 [0.69–0.96]; p=0.0103) vs erlotinib in patients with lung SqCC of the lung (SCLC).

Median PFS, months

<table>
<thead>
<tr>
<th>EGFR mutation status</th>
<th>TGA subset</th>
<th>LL8 overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGFR wild-type (WT)</td>
<td>6.5</td>
<td>5.5</td>
</tr>
<tr>
<td>EGFR mutation</td>
<td>4.6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

In afatinib-treated patients, PFS and OS were longer in those with ERBB family mutations than those without and were numerically longer than erlotinib in both subsets.

Conversely, in the erlotinib arms, PFS and OS were similar in patients with and without ERBB mutant status.

The results of this study were presented at the 2018 ASCO Annual Meeting and published in the Journal of Clinical Oncology.