ALINA: efficacy and safety of adjuvant alectinib versus chemotherapy in patients with early-stage ALK+ non-small cell lung cancer (NSCLC)


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Background

- Around 30–40% of patients with non-small cell cancer (NSCLC) are diagnosed with resectable disease. Despite treatment, the risk of disease recurrence remains high (45–70%), depending on stage.
- Analytical lymphoma (ALK) rearrangements are found in 4–5% of patients with NSCLC. ALK NSCLC is typically seen in younger patients (median age at diagnosis ~55 years).
- More common in non-smokers.
- Associated with a high risk of brain metastases (~50–60% of patients over the course of their disease).

Objective

To describe the results from a preplanned interim analysis of the phase III, open-label, randomized ALINA trial (NCT03456076), assessing the efficacy and safety of adjuvant alectinib versus chemotherapy in patients with completely resected ALK+ NSCLC.

Methods

- The study design of the ALINA trial is presented in Figure 1
- Data-cutoff (DCO) for the interim analysis was 26 June 2022

Results: Efficacy

- 257 patients were randomized to receive alectinib (n=127) or chemotherapy (n=130).
- Baseline characteristics were well balanced between therapy arms (data not shown).
- The median survival follow-up period at DCO was 27.8 and 26.4 months in the alectinib and chemotherapy arms, respectively.
- A significant DFS benefit was observed in patients with complete resection.
- Stage IIIA: HR 0.24 (95% CI: 0.13–0.43; p<0.0001).
- The DFS benefit was maintained across all subgroups (Figure 3).
- The alectinib arm demonstrated improved CNS-DFS benefit in the ITT population compared with the chemotherapy arm (Figure 4).
- In both the alectinib and chemotherapy arms, most patients did not experience disease recurrence in CNS-DFS, with a higher proportion in the alectinib arm (Figure 5).
- The most frequent type of disease recurrence was local/regional.

Results: Safety

- Adverse events (AEs) leading to treatment withdrawal
- Multiple occurrences of the same AE in one individual are counted only once in each category

Table 1. Site(s) of distant recurrence

<table>
<thead>
<tr>
<th>Site(s) of distant recurrence</th>
<th>Alectinib (n=124)</th>
<th>Chemotherapy (n=119)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/regional (n=9)</td>
<td>20%</td>
<td>60%</td>
</tr>
<tr>
<td>Distant (n=13)</td>
<td>12%</td>
<td>30%</td>
</tr>
<tr>
<td>New primary (n=4)</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Lymph node (n=1)</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Brain (n=1)</td>
<td>0.8%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Table 2. Safety summary

<table>
<thead>
<tr>
<th>Safety metric</th>
<th>Alectinib (n=124)</th>
<th>Chemotherapy (n=119)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment-related serious AEs</td>
<td>38%</td>
<td>45%</td>
</tr>
<tr>
<td>AEs leading to treatment withdrawal</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Treatment-related serious AEs leading to death</td>
<td>2%</td>
<td>1%</td>
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</tbody>
</table>

References


Acknowledgements

ALINA is the first and only positive phase III trial of an ALK inhibitor in resected, stage IB-IIIA NSCLC.

Conclusions

ALINA represents an important new treatment strategy for patients with resected stage IB-IIIA, ALK+ NSCLC.

Disclosures

No conflicts of interest reported. All authors are employees of F. Hoffman-La Roche Ltd. and have participated in an advisory role for various pharmaceutical companies (AbbVie, AstraZeneca, Boehringer-Ingelheim, Bristol Myers Squibb, Eli Lilly ChongKeunDang, Janssen, MSD, Novartis, Ono Pharmaceuticals, Pfizer, Roche, ST Cube, AstraZeneca, BMS, F. Hoffman-La Roche Ltd, Innate Pharmaceuticals, Merck, Mirati and Pierre Fabre).

The current authors were involved in the planning, design, conduct, data analysis, and interpretation of the ALINA trial. F. Roehr is responsible for treatment of the ALINA trial and is acting in an advisory role for AbbVie, AstraZeneca, Boehringer-Ingelheim, Bristol Myers Squibb, Eli Lilly ChongKeunDang, Janssen, MSD, Novartis, Ono Pharmaceuticals, Pfizer, Roche, ST Cube, AstraZeneca, BMS, F. Hoffman-La Roche Ltd, Innate Pharmaceuticals, Merck, Mirati and Pierre Fabre. F. Roehr declares no financial conflicts of interest. F. Roehr received research funding from Amgen, AstraZeneca, BMS, F. Hoffman-La Roche Ltd, Innate Pharmaceuticals, Merck, Mirati, and Pierre Fabre. F. Roehr has received advisory board fees from Amgen, AstraZeneca, BMS, F. Hoffman-La Roche Ltd, Innate Pharmaceuticals, Merck, Mirati, and Pierre Fabre. F. Roehr has received speaking fees from Amgen, AstraZeneca, BMS, F. Hoffman-La Roche Ltd, Innate Pharmaceuticals, Merck, Mirati, and Pierre Fabre.

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