**PURPOSE**

- HERTHENA-Lung01 evaluated the efficacy and safety of patritumab deruxtecan (HER3-DxD) in patients with advanced EGFR-Mutated NSCLC after progression with EGFR TKI therapy and platinum-based chemotherapy.

**RESULTS**

- HERTHENA-Lung01 is an ongoing phase 2 trial in patients with advanced EGFR-Mutated NSCLC who had prior treatment with EGFR TKI therapy and platinum-based chemotherapy (Figure 2).
- HERTHENA-Lung01 is a phase 3 trial of HER3-DxD vs platinum-based chemotherapy in patients with HER3-expressing metastatic NSCLC (n=165) following EGFR TKI therapy and platinum-based chemotherapy, for whom available treatment options provide only limited efficacy.

**Ongoing Trials**

- A phase 3 trial of HER3-DxD vs platinum-based chemotherapy in EGFR-Mutated NSCLC after progression with EGFR TKI therapy (HERTHENA-Lung02; NCT05336870)
- A phase 1 trial of HER3-DxD in combination with cetuximab in EGFR-Mutated NSCLC after progression on 1L-EGFR TKI or in previously untreated patients (NCT04674677)

**Abbreviations**

- BCR: Biomarker Committee for Response
- CR: Complete Response
- DOR: Duration of Response
- DTD: Days To Dose
- ECOG: Eastern Cooperative Oncology Group
- Ex19del: EGFR exon 19 deletion
- FOLFOX: 5-FU, Leucovorin, and oxaliplatin
- HERTHENA: HER3-DxD in EGFR-Mutated NSCLC Following EGFR TKI and Platinum-Based Chemotherapy
- IASLC: International Association for the Study of Lung Cancer
- L1: First Line
- L2: Second Line
- L3: Third Line
- LNS: Lymph node sampling
- LTR: Long Term Remission
- M: Metastatic
- NSCLC: Non-Small Cell Lung Cancer
- ORR: Objective Response Rate
- PD: Progression of Disease
- PCa: Prostate Cancer
- PFS: Progression-Free Survival
- PR: Partial Response
- PS: Performance Status
- QW: Every 2 weeks
- R: Randomized
- RECIST: Response Evaluation Criteria in Solid Tumors
- TKI: Tyrosine Kinase Inhibitor
- TTO: Time To Treatment Failure
- TTR: Time To Response
- W: Weeks

**Table 1. Baseline Characteristics**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>HERTHENA-Lung01</th>
<th>HERTHENA-Lung02</th>
</tr>
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<tbody>
<tr>
<td>Age, median (range), years</td>
<td>69 (28-83)</td>
<td>65 (23-85)</td>
</tr>
<tr>
<td>Performance status, median PS (range)</td>
<td>0 (0-2)</td>
<td>0 (0-2)</td>
</tr>
<tr>
<td>Prior EGFR TKI therapy</td>
<td>88/99 (90.1)</td>
<td>89/99 (90.8)</td>
</tr>
<tr>
<td>Prior platinum[12]</td>
<td>88/99 (90.1)</td>
<td>89/99 (90.8)</td>
</tr>
<tr>
<td>Prior immunotherapy[13]</td>
<td>37/47 (74.7)</td>
<td>39/47 (83.1)</td>
</tr>
<tr>
<td>Prior molecular (CNS 15)</td>
<td>37/47 (74.7)</td>
<td>39/47 (83.1)</td>
</tr>
<tr>
<td>Prior brain metastasis[12]</td>
<td>53/63 (87.5)</td>
<td>56/63 (89.3)</td>
</tr>
</tbody>
</table>

**Figure 1. HER3-DxD Structure**

- HER3-DxD is an ADC composed of 3 parts: a fully human anti-HER3 antibody (pseudotyped), a topoisomerase I inhibitor payload (DXd), and a tumor-selective, lentiglobin-based chloraline linker that forms the other component[16] (Figure 1).

**Figure 2. HERTHENA-Lung01 Study Design**

- HERTHENA-Lung01 is an ongoing phase 2 trial in patients with advanced EGFR-Mutated NSCLC who had prior treatment with EGFR TKI therapy and platinum-based chemotherapy (Figure 2).

**Figure 3. Overall Continued Responses and Survival and Confirmed Responder Frequencies in Different Subgroups**

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**Figure 4. Association of Baseline Tumor HER3 Membrane H-Score With Confirmed BOR by BCR (N=225)**

- HERTHENA-Lung01 is an ongoing phase 2 trial in patients with advanced EGFR-Mutated NSCLC who had prior treatment with EGFR TKI therapy and platinum-based chemotherapy (Figure 4).

**Figure 5. Tumor Reduction Across Diverse Mechanisms of EGFR TKI Resistance**

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**Figure 6. Intracranial Response by CNS BCR per CNS RECIST and Example Scans**

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**Figure 7. Most Common TEAEs in ≥15% of Patients (N=225)**

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