A phase 1/2 study of the highly selective EGFR inhibitor, BLU-701, in patients with EGFR-mutant non-small cell lung cancer (NSCLC)

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Summary of key inclusion and exclusion criteria

Key inclusion criteria

- ≥18 years of age
- Pathologically confirmed metastatic NSCLC
- EGFR mutation profile determined locally using either tumor tissue (preferably from a progressing lesion) and/or ctDNA in plasma

Key exclusion criteria

- Disease that is suitable for local therapy administered with curative intent
- Tumors that harbor EGFR T790M mutation or any additional known driver alterations
- Have NSCLC with mixed cell histology or a tumor with known histologic transformation
- Received the following therapy prior to first dose of study drug:
  - Any third-generation EGFR TKI ≤7 days
  - Any previous therapy with first- or second-generation EGFR TKIs ≤1 month
  - Prior platinum-based chemotherapy for advanced or metastatic disease
  - Immuno-therapy or other antibody therapy ≤21 days
  - Radiotherapy to a large field or including a vital organ ≤14 days, or ≤7 days if vital organ not included
- CNS metastases or spinal cord compression associated with progressive neurological symptoms or require increasing doses of corticosteroids
- Asymptomatic CNS and leptomeningeal disease is allowed, and symptomatic neurological symptoms or require increasing doses of corticosteroids
- Cardiovascular parameters, including QTcF

Study objectives and design

- The HARMONY trial (NCT05153408) is an ongoing, global phase 1/2, open-label, first-in-human study designed to evaluate the safety, tolerability, pharmacokinetics (PK), pharmacodynamics (PD), and antitumor activity of BLU-701 as a monotherapy dose-escalation. BLU-701 is administered in combination with osimertinib in patients with EGFR-mutant NSCLC.

- The phase 1 dose escalation part of this study is conducted using a Bayesian optimal interval (BOIN) design to determine the maximum tolerated dose (MTD) of BLU-701, recommended phase 2 dose (RP2D), and safety of BLU-701 in monotherapy (Part 1A), BLU-701 in combination with osimertinib (Part 1B), and BLU-701 + carboplatin and pemetrexed combinations (Part 1C) (Figure 2).

- Phase 2 dose expansion will initiate upon completion of Part 1A, and will investigate the safety and efficacy of BLU-701 monotherapy at the RP2D (Figure 2).

Enrollment and status

- The phase 1 dose-escalation portion of the study is ongoing
- The study is planned for approximately 30 centers in North America, Europe, and Asia

Anticipated study locations

- Enroll and status
- The study is planned for approximately 30 centers in North America, Europe, and Asia
- Anticipated study locations
- North America: 2 centers
- Europe: 15 centers
- Asia: 13 centers

References

1. NCT05153408. 2. NCT03659951. 3. NCT03891057. 4. NCT04926034. 5. NCT05153408. 6. NCT03659951. 7. NCT03891057. 8. NCT04926034. 9. NCI Cancer Atlas. 10. NCI Cancer Atlas.

Disclosures

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