Updates in HER2 (ERBB2)-Mutant Metastatic Non-small Cell Lung Cancer Treatment:

Small Population, Big Unmet Need



53.3% improved by

Cycle 5

Sustained improvements

through Cycle 9

30% of patients

improved by Cycle 5

Patient benefit

53.3% improved

physical function

The FDA has now approved zongertinib, a kinase inhibitor indicated for the treatment of adult patients with unresectable or metastatic non-squamous NSCLC whose tumors have HER2 (ERBB2) tyrosine kinase domain activating mutations, as detected by an FDA-approved test, and who have received prior systemic therapy.* For U.S. Healthcare Professionals, please see full Prescribing Information.

The publication of this infographic was funded by **Boehringer Ingelheim.** Oncol AMJ. 2025; https://doi.org/10.33590/oncolamj/PZLG8562

The clinical challenge in HER2 (ERBB2)-mutant mNSCLC¹⁻³

> 100% patients with NSCLC

2-4% HER2 (ERBB2) mutations

Most in active site of TKD (48% in exon 20)

> Progression after prior systemic treatment

Unmet needs in HER2 (ERBB2)-mutant mNSCLC²⁻⁴



Limited treatment options, with significant toxicities



Poor prognosis



Need for HER2-targeted therapy

Beamion LUNG-1 Phase 1b Study 5,6



HER2 TKD activating mutations

Cohorts:

Previously treated with chemo +/- IO (n=69) + HER2 mAb (N=71)

Previously treated with chemo ± IO and subsequent HER2directed ADC (N=34)

Zongertinib:



- 120 mg once daily (two 60 mg tablets) for patients <90 kg 180 mg once daily (three 60 mg
- tablets) for patients ≥90 kg

Clinical activity in previously treated patients with TKD activating mutations^{5,6}

Response rate and durability



Previously treated with chemo +/- IO (N=71)

75%

DOR ≥6 months

complete response

partial response

Previously treated with chemo ± IO and subsequent HER2-directed ADC (N=34)

ORR

months median DOR

complete response partial response

Safetv^{t,‡}



Low discontinuation rate

due to AEs

Minimal dose reductions

of patients

Manageable

drug-related AEs

Low rate of Grade 3:

Rash (1%) Diarrhea (1%)

Grade 5 **AEs occurred**

Intracranial activity





60% intracranial ORR in patients with measurable CNS metastases by BICR and had not received RT to the brain within 2 months prior to treatment as measured by RANO-BM (n=3 of 5)

Patient perspective[†]

Clinical response translates to patient benefit⁷



60% improved by Cycle 5



>50% reported no coughing at Cycles 5 and 9 (versus **25%** baseline)

Patient satisfaction⁶



80-90% of patients "not at all" or "a little" troubled by AEs



50% never experienced diarrhea post-baseline



QOL maintained regardless of response type

Conclusion

In previously treated patients with HER2 (ERBB2)-mutant mNSCLC, zongertinib demonstrated:

- Early and durable responses
- Intracranial activity in patients with CNS metastases
- Manageable safety profile with low discontinuation rates
- Sustained improvements in symptoms and functioning, and minimal reported treatment burden

Zongertinib addresses multiple dimensions of therapeutic benefit⁵⁻⁷

Clinical response + patient benefit = positive patient experience

60% improved symtoms Clinical response

75% ORR 58% DOR ≥6 months Manageable safety and treatment continuation

Low discontinuation rates: 2.9% due to AEs Minimal dose reductions: 7% of patients

No Grade 5 adverse reactions

Abbreviations:

ADC: antibody-drug conjugate: AE: adverse event: BICR: blinded independent central review; chemo; chemo; chemotherapy; CNS: central nervous system; DOR: duration of response; EGFR: epidermal growth factor receptor; EORTC QLQ-C30: 30-item European Organisation for Research and Treatment of Cancer-Quality of Life Group; HER2: human epidermal growth factor receptor 2; IO: immuno-oncology; mAb: monoclonal antibody; mNSCLC: metastatic non-small cell lung cancer; NSCLC: non-small cell lung cancer; NSCLC-SAQ: NSCLC Symptom Assessment Questionnaire; ORR: objective response rate; PFS: progression-free survival; QOL: quality of life; RANO-BM: Response Assessment in Neuro-Oncology for Brain Metastases; RT: radiotherapy; TKD: tyrosine kinase domain

Footnotes:

- *This indication is approved under accelerated approval based on objective response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial.
- [†]Assessed in 75 patients with TKD activating mutations and previously treated with chemotherapy ± IO. [‡]The safety profile of zongertinib was similar across cohorts.

References:

- 1. Nützinger J et al. Lung Cancer. 2023;186:107385.
- 2. Hong L et al. NPJ Precis Oncol. 2024;8(1):217.
- 3. Robichaux JP et al. Cancer Cell. 2019;36(4):444-57.e7. 4. Wilding B et al. Cancer Discov. 2025;15(1):119-38.
- 5. Heymach JV et al. N Engl J Med. 2025;392(23):2321-33. 7. Sabari JK et al. J Clin Oncol. 2025;43(Suppl 16):8620.
- 6. Boehringer Ingelheim Pharaceuticals, Inc. Zongertinib (HERNEXEOS) tablets. Prescribing information. Available at: https://www.accessdata.fda.gov/drugsatfda docs/ label/2025/219042s000lbl.pdf. Last accessed: 18 August 2025