



VRN110755, a Mutant-Selective CNS-Penetrant EGFR TKI, Demonstrates Superior Antitumor Activity over Osimertinib in EGFR-Mutant NSCLC Models

Youngyi Lee, Hong-ryul Jung, Donghyun Park, Songye Han, Sangho Jeon, Yeonsil Kim, Somi Lee, Sunghwan Kim, Daekwon Kim

Voronoi Inc., Yeonsu-gu, Incheon, South Korea

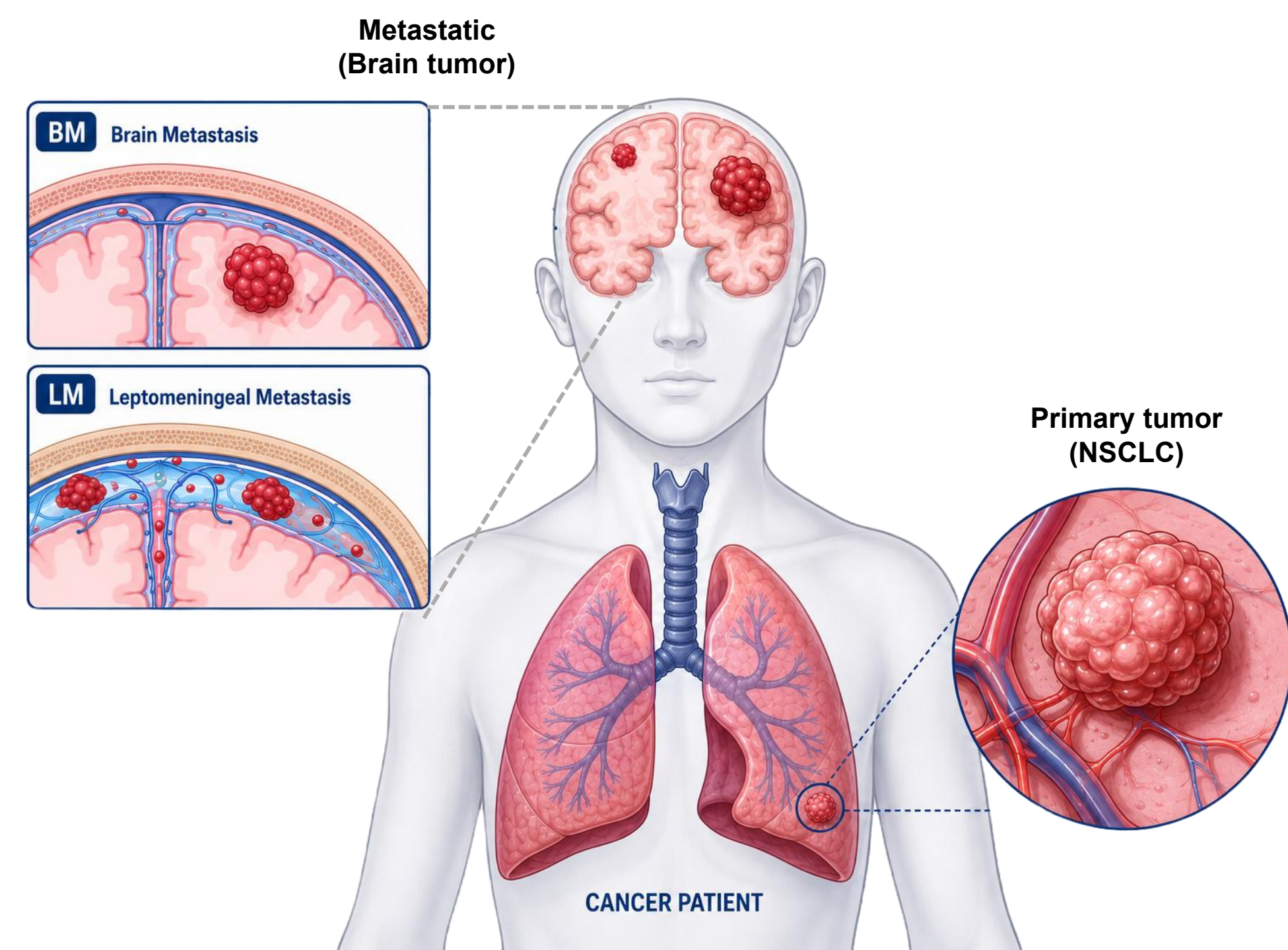


IASLC 2026 World
Conference on Lung Cancer

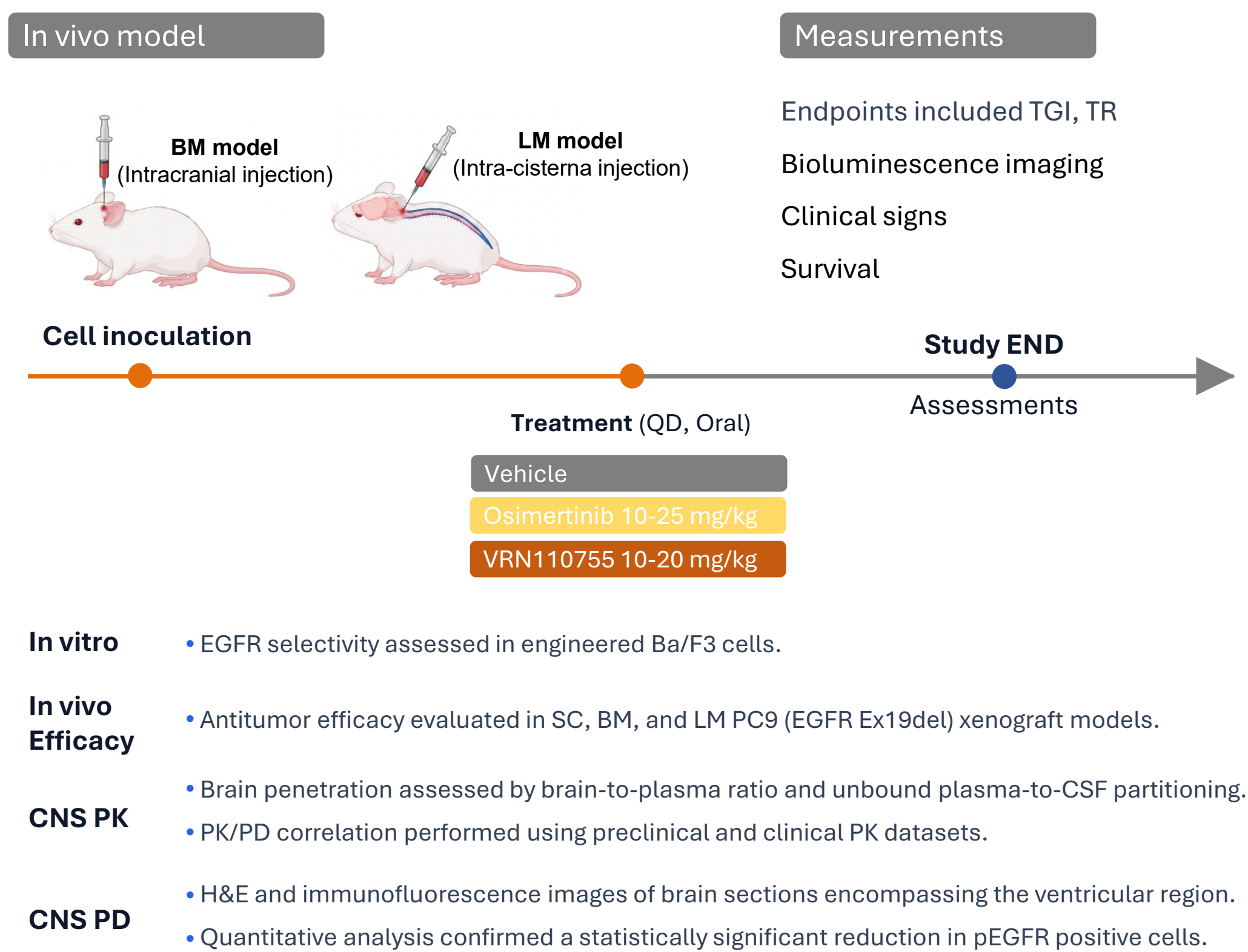
SEPTEMBER 12 - 15, 2026
SEOUL, REPUBLIC OF KOREA

INTRODUCTION

- Third-generation EGFR tyrosine kinase inhibitors (TKIs) have improved progression-free survival (PFS) and overall survival (OS) in patients with EGFR-mutant non-small cell lung cancer (NSCLC)
- However, their clinical utility is limited by dose-dependent ERBB-mediated toxicities, including rash and diarrhea.
- Furthermore, although osimertinib demonstrates intracranial activity, patients with brain metastasis (BM) continue to experience shorter PFS than those without CNS disease, indicating a need for agents with enhanced CNS penetration.
- VRN110755 (VRN11) is a novel mutant-selective, brain-penetrant EGFR TKI designed to increase target engagement against mutant EGFR while minimizing the inhibition of wild-type (WT) ERBB family members.
- Here we evaluated the preclinical efficacy and CNS penetration of VRN110755 compared with osimertinib in EGFR-mutant NSCLC models.



METHODS



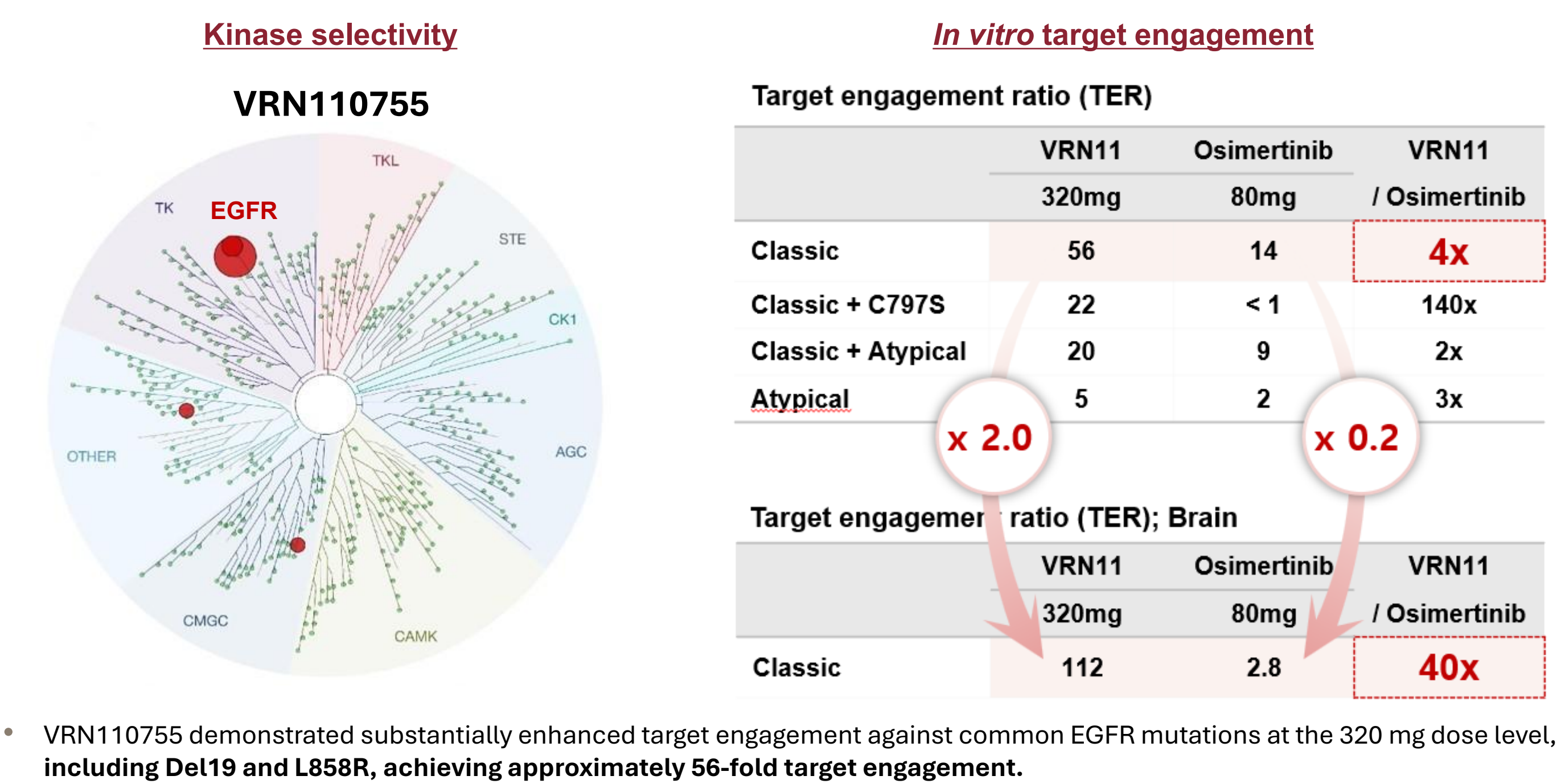
Contact ahn@voronoi.io (BD)
y.zhang@voronoi.io (CMO)

DISCUSSION AND CONCLUSION

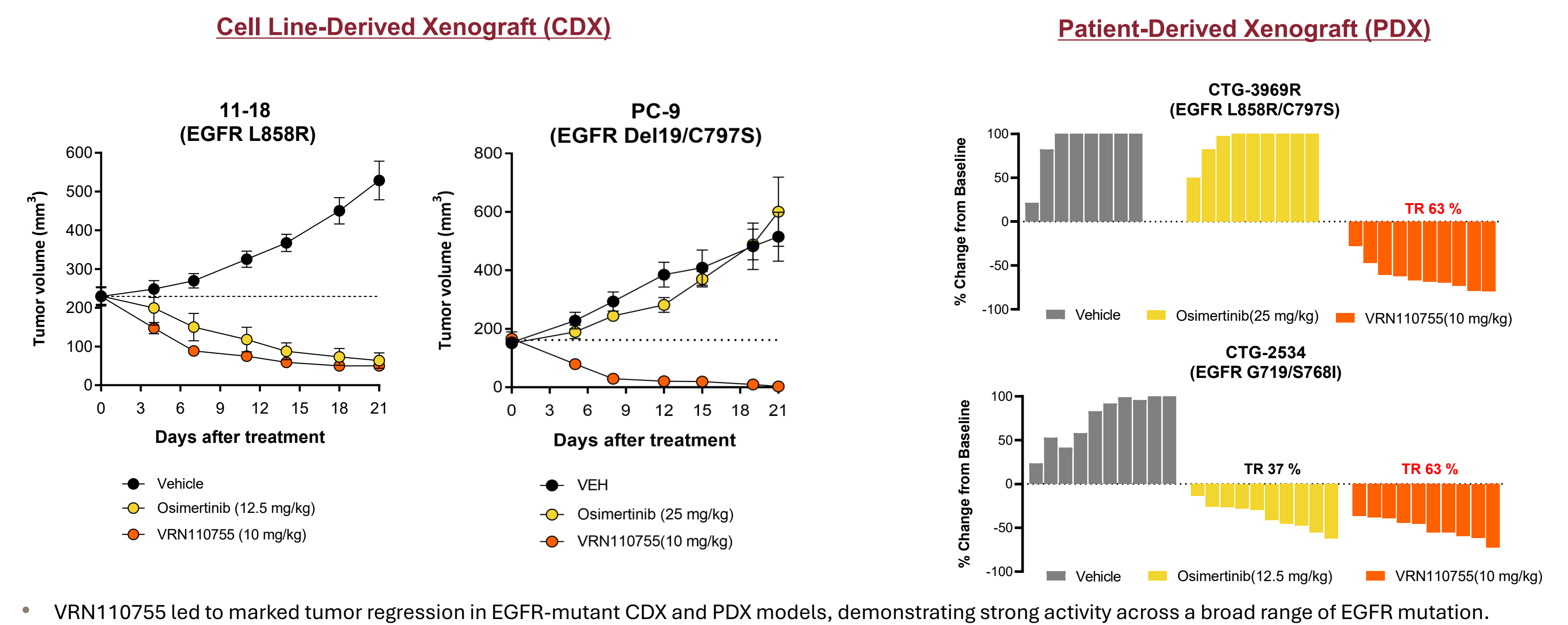
Key Findings and Conclusion

- VRN110755 is a potent, next-generation, mutant-selective EGFR TKI that demonstrates a wider therapeutic window with respect to WT ERBB family inhibition and enhanced CNS penetration compared with osimertinib in preclinical models.
- Its greater intracranial efficacy in BM and LM models, combined with deeper tumor responses in SC xenografts, positions VRN110755 as a promising candidate for the treatment of EGFR-mutant NSCLC, particularly in patients with CNS disease.
- These findings provide a preclinical rationale for the ongoing and future clinical evaluation of VRN110755.

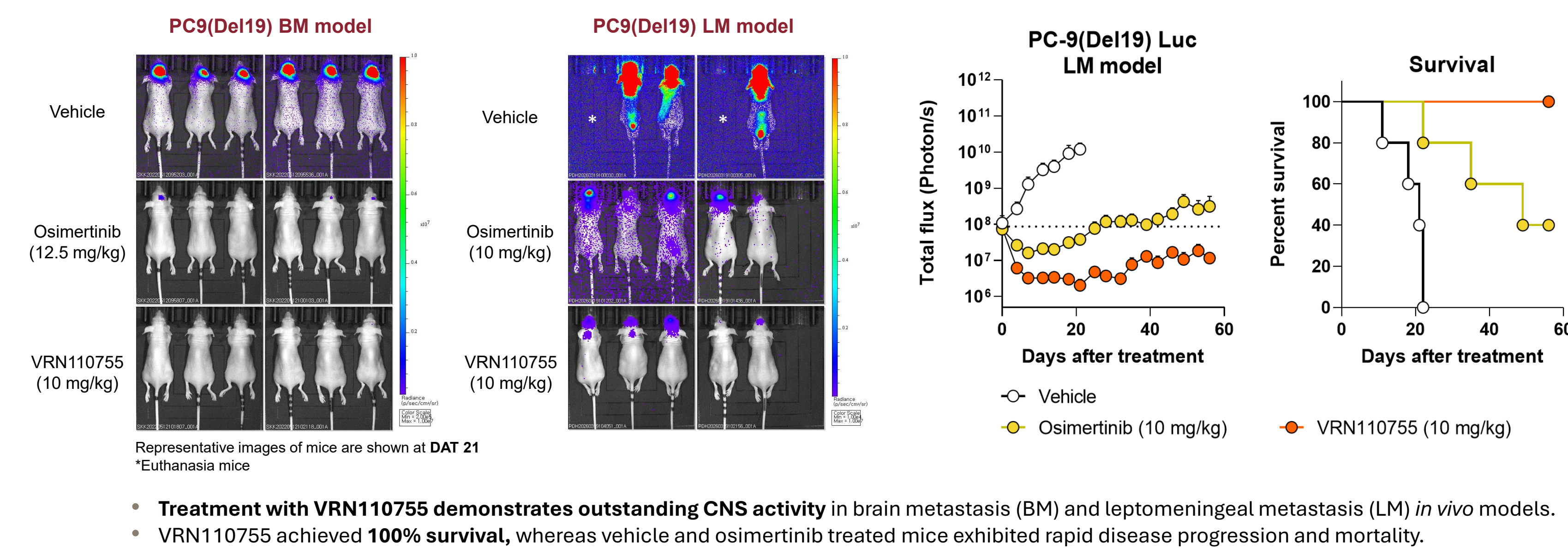
VRN110755 is a potent and selective in EGFR NSCLC



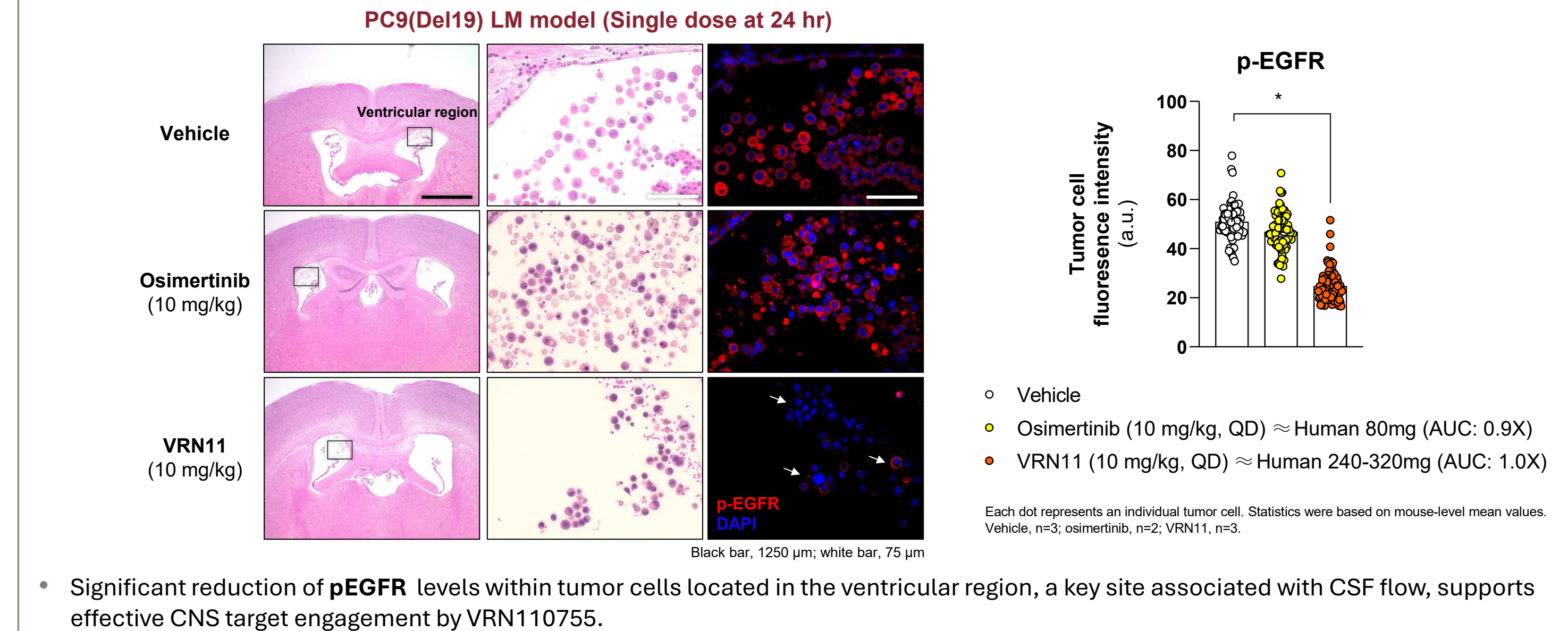
Pre-clinical antitumor activity in EGFR-mutation NSCLC



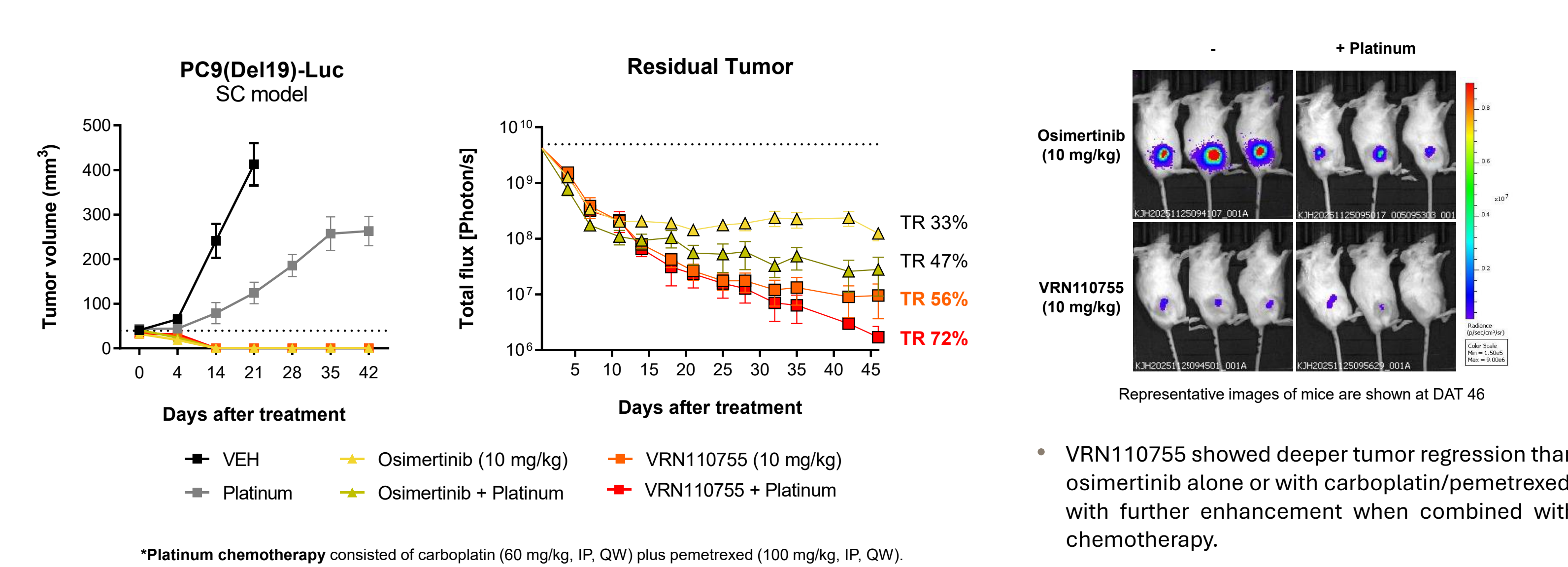
In vivo efficacy in Intracranial Metastasis models (LM & BM)



CNS target engagement



Antitumor activity in the PC9(Del19) SC Xenograft model with Chemotherapy



Preclinical to clinical evidence of potent activity in EGFR mutant NSCLC

