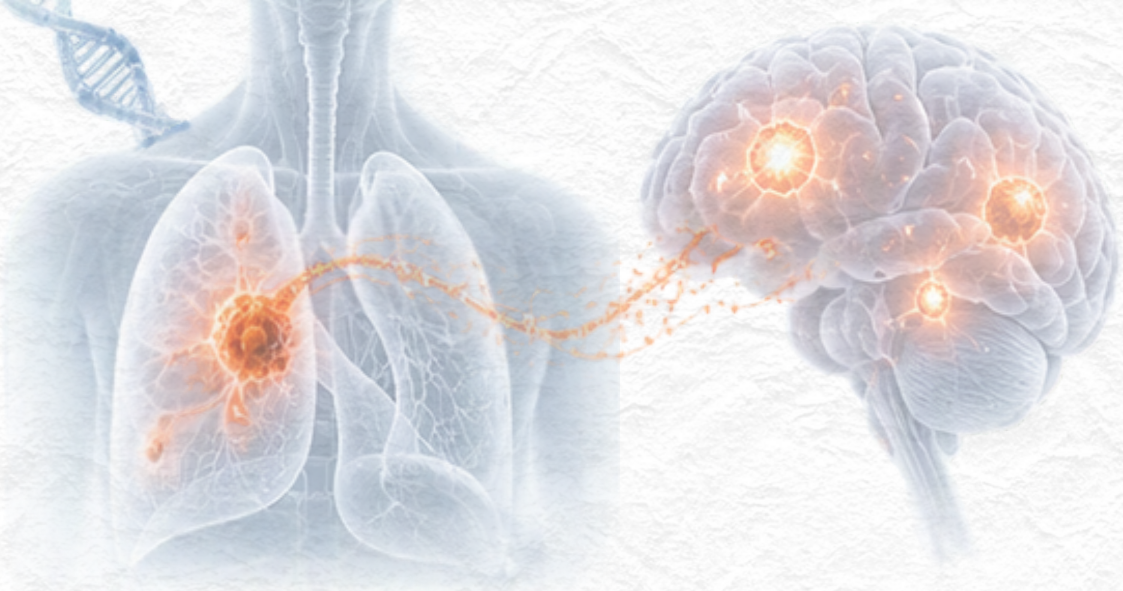
REPOSE

A phase II study assessing the safety and efficacy of repotrectinib in patients with ROS1-rearranged non-small cell lung cancer with active brain metastases.



1 THE UNMET NEED

Active brain metastases remain a major challenge in ROS1-positive NSCLC

CNS is a common site of progression, particularly during crizotinib treatment.

Prospective trials have generally selected patients with asymptomatic or clinically stable brain metastases.

Prospective evidence specifically addressing active brain metastases remains limited

? Can a CNS-active targeted therapy provide meaningful intracranial disease control in patients with active brain metastases?

2 STUDY DESIGN

International Multicentre · **Open-label** · **Single-arm** → **Phase II**

Population
Adults with ROS1-rearranged NSCLC and active, measurable brain metastases

Sample size
Up to 20 patients

Design
Simon two-stage design

TREATMENT SCHEDULE

Repotrectinib
Orally at 160 mg once daily for 14 days

↓

160 mg twice daily until progression, unacceptable toxicity, death or discontinuation

Primary endpoint

Investigator-assessed intracranial objective response rate (IC-ORR) according to RANO-BM criteria

Key secondary outcomes

Duration of intracranial response, PFS, safety, neurological function, and quality of life.

3 HOW REPOSE ADDRESSES THE EVIDENCE GAP

Previous ROS1 TKI trials	REPOSE
Broader ROS1-positive NSCLC populations	Patients with active brain metastases
↓	↓
Intracranial efficacy assessed in selected CNS subgroups	Dedicated prospective evaluation with IC-ORR as the primary endpoint

4 PATIENTS

- ROS1-rearranged metastatic NSCLC.
- Active brain metastases, symptomatic or asymptomatic, either newly diagnosed or progressing after prior local therapy.
- No indication for immediate neurosurgery or brain radiotherapy.
- ⩾1 measurable brain lesion (⩾10mm by RANO-BM)
- ECOG-PS ⩽2.
- Up to one prior line of ROS1 TKI allowed; no limit on prior chemotherapy, immunotherapy, or non-ROS1 TKIs.



A clinically underrepresented population

5 POTENTIAL IMPACT IF REPOSE IS POSITIVE

Strengthen evidence for repotrectinib in active brain metastases

Assess response durability, safety, neurological function, and quality of life

Inform multidisciplinary discussions in carefully selected patients

Guide future research on systemic and local treatment sequencing

Generating prospective CNS-specific evidence in a clinically underrepresented population.

ADVANCING CARE FOR ROS1-POSITIVE NSCLC

REPOSE | NCT06315010

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