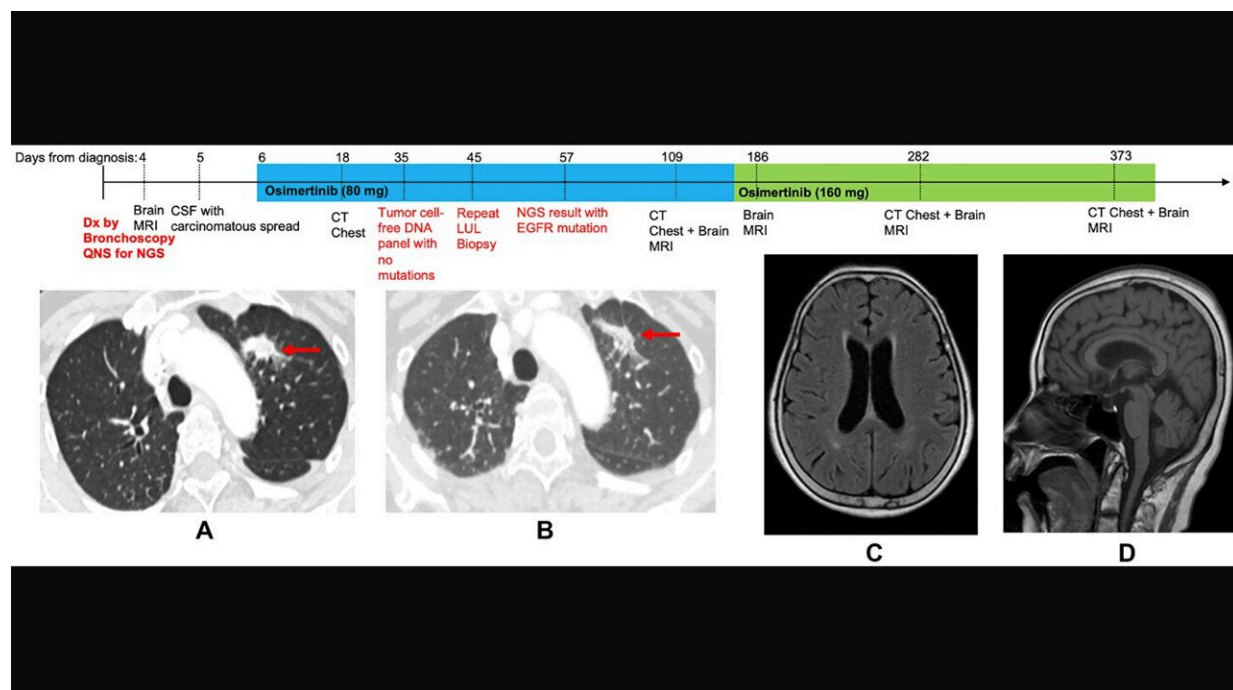


# Lazarus effect in a patient treated with osimertinib for non-small cell lung cancer with leptomeningeal disease

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Treatment timeline with chest computed tomography (CT) and brain magnetic resonance images (MRI) on osimertinib. (A) Pretreatment CT chest, demonstrating 18 mm spiculated mass in the left upper lobe (LUL). (B) CT chest following 12 days of Osimertinib treatment, showing decreased size of LUL mass. (C) Pretreatment brain MRI showing no acute abnormalities (axial). (D) Pretreatment brain MRI showing no acute abnormalities (sagittal). Credit: *Oncotarget* (2024). DOI: 10.18632/oncotarget.28550

A new case report titled "Lazarus effect in a patient initially empirically treated with osimertinib for EGFR L858R mutant non-small cell lung cancer with leptomeningeal disease: a case report" has been [published](#) in *Oncotarget*.

Osimertinib has been shown to be effective for patients with [non-small cell lung cancer](#) (NSCLC) with activating EGFR mutations. These patients are also at risk for leptomeningeal disease (LMD). LMD is characterized by central nervous system metastases with spread to the cerebrospinal fluid or leptomeninges. In patients with NSCLC with EGFR activating mutations, there is an increased occurrence of LMD, which occurs in 9% of patients.

In this new report, researchers Shreya Bhatia, Manuel G. Cortez, Spencer Lessans, and Wade T. Iams from Vanderbilt-Ingram Cancer Center present a patient of East Asian descent whose initial presentation included severe, progressive leptomeningeal carcinomatosis and a small lung mass, with limited tissue available for molecular testing. She responded to empiric, urgent initiation of [osimertinib](#), repeat tissue sampling revealed an EGFR L858R mutation, and she has experienced durable disease improvement for 18 months on osimertinib monotherapy.

"Our case demonstrates the nuances of decision-making in starting osimertinib in urgent clinical settings. Given our patient's progressively worsening functional status and spread of disease to her CNS upon presentation, there was a need to begin treatment imminently. Time constraints, financial constraints, and lack of sufficient tissue for analysis ultimately led to the empiric use of osimertinib. Through the urgent initiation of appropriate anti-cancer therapy, she experienced both a life saving improvement in functional status and improvement in her LUL primary tumor one month into treatment," the researchers report.

**More information:** Shreya Bhatia et al, Lazarus effect in a patient initially empirically treated with osimertinib for EGFR L858R mutant non-small cell lung cancer with leptomeningeal disease: a case report, *Oncotarget* (2024). [DOI: 10.18632/oncotarget.28550](https://doi.org/10.18632/oncotarget.28550)

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