# Updates: MET targeted therapy for EXON 14 mutations in lung cancer

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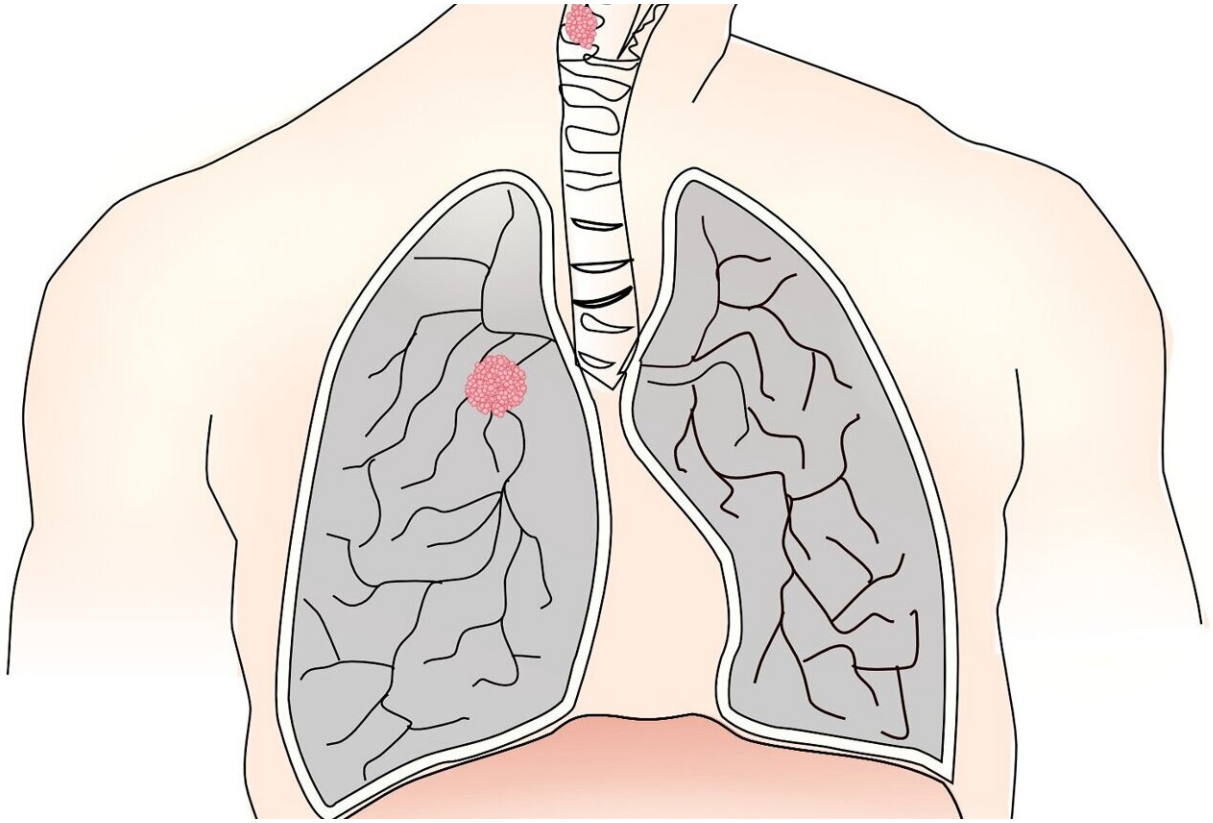

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A new editorial paper titled "Latest updates on MET targeted therapy for EXON 14 mutations in lung cancer" has been published in *Oncotarget*.

In their new editorial, researchers Mira Al Jaberi, Wolfgang Clough and Samir Dalia from Mercy Hospital discuss the MET gene. Several alterations in the MET gene have been identified as targetable oncogenic changes leading to non-small cell lung cancer (NSCLC). These include genomic amplifications, exon 14 skipping mutations and fusion.

Since May 2020, capmatinib has been considered by the USFDA as a first-line treatment for patients with NSCLC carrying a MET exon 14 skipping mutation. A study newly published in early 2023 showed that crizotinib, a tyrosine kinase inhibitor, was also effective for MET fusions, which occur rarely in 0.2–0.3% of patients with lung cancer. A major challenge arising after the introduction of tyrosine kinase inhibitors is limited clinical benefit, which is due to primary and potential secondary acquired drug resistance.

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Several structurally different MET tyrosine kinase inhibitors (TKIs) have been developed or are under clinical evaluation. TKIs are categorized into type I TKIs (type Ia: crizotinib; type Ib: savolitinib, capmatinib) and type II TKIs (cabozantinib, glesatinib, merestinib). Combination therapy reduces resistance and enhances clinical outcomes.

"These clinical trials along with others will show us if other MET inhibitors or combination therapy may be better than the current standard of care," the researchers say.

**More information:** Mira Al Jaberi et al, Latest updates on MET targeted therapy for EXON 14 mutations in lung cancer, *Oncotarget* (2023). DOI: 10.18632/oncotarget.28419