

**Tumor Board Tuesday – Dr. Charu Aggarwal & Dr. Aakash P. Desai, 07/12/2022:  
Management of Patients With *EGFR Exon 20* Insertion Lung Cancer**

Posttest Rationale

**1. What testing method would you select to identify targetable driver mutations for a patient in whom broad panel testing did not identify targetable driver mutations?**

- a. FISH
- b. IHC
- c. NGS (RNA)
- d. PCR

**Rationale:** The NCCN guidelines recommend consideration of RNA-based NGS to maximize the detection of fusion events when there are no driver oncogenes identified with broad panel testing.

**Reference:** National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Non-Small Cell Lung Cancer (v3.2022). Updated March 16, 2022. Accessed April 13, 2022. [https://www.nccn.org/professionals/physician\\_gls/pdf/nscl.pdf](https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf)

**2. What targeted treatment option would you select for a patient with *Exon 20 insertion* mutation in the first line?**

- a. Amivantamab-vmjw
- b. Capmatinib
- c. Crizotinib
- d. Platinum-based chemotherapy

**Rationale:** Platinum-based chemotherapy, with or without a PD-1/PD-L1 inhibitor, is the current recommended first-line systemic therapy for patients with *EGFRex20* NSCLC. Amivantamab-vmjw is a subsequent therapy options for these patients. Both capmatinib and crizotinib are first-line and subsequent therapy options for patients with *METex14* skipping mutation-positive NSCLC.

**Reference:** National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Non-Small Cell Lung Cancer (v3.2022). Updated March 16, 2022. Accessed April 13, 2022. [https://www.nccn.org/professionals/physician\\_gls/pdf/nscl.pdf](https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf)

**3. What treatment would you select for a patient with *EGFR exon 20 insertion* NSCLC who progressed during treatment with platinum-based chemotherapy?**

- a. Amivantamab-vmjw
- b. Capmatinib
- c. Crizotinib
- d. Pembrolizumab

**Reference:** Amivantamab-vmjw or mobocertinib are guideline-recommended subsequent therapy options for patients with *EGFRex20* NSCLC. Single-agent pembrolizumab may be considered as a subsequent therapy option for patients with NSCLC and PD-L1 expression  $\geq 1\%$ . Both capmatinib and crizotinib are first-line and subsequent therapy options for patients with *METex14* skipping mutation-positive NSCLC.

**Reference:** National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Non-Small Cell Lung Cancer (v3.2022). Updated March 16, 2022. Accessed April 13, 2022. [https://www.nccn.org/professionals/physician\\_gls/pdf/nscl.pdf](https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf)