Commentary Chang

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## Commentary: Anatomic resection after neoadjuvant TKI therapy— To be forewarned

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In this case report, Chudgar and Jones<sup>1</sup> describe findings encountered in 2 patients undergoing thoracoscopic pulmonary lobectomy after completing induction therapy with the third-generation tyrosine kinase inhibitor (TKI) osimertinib for locally advanced EGFR-mutant adenocarcinoma. Although cases involving the use of TKI therapy in the neoadjuvant setting have been reported previously, <sup>2,3</sup> this case report includes well-described video documentation of the hilar fibrosis encountered and the meticulous, sharp dissection that might be needed for safe mobilization and anatomic resection. Such a fibrotic reaction, as demonstrated in the accompanying video clips, might be expected among patients who have completed preoperative radiation therapy but appears out of proportion to what might be expected with induction chemotherapy alone. Recent studies evaluating the role of immune checkpoint inhibition in the neoadjuvant setting suggest that similar tissue fibrosis is encountered, leading to a greater rate of thoracotomy. Notably, although the NADIM<sup>4</sup> and LCMC3<sup>5</sup> trialists demonstrated that neoadjuvant immune checkpoint inhibition with either nivolumab or atezolizumab, respectively, is well tolerated, earlier reports of surgical experiences following nivolumab neoadjuvant therapy have noted that there may be a greater need for open resection.

As the authors indicate, the decision to include novel, targeted therapy in the neoadjuvant preoperative setting should be undertaken after multidisciplinary review and

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## **CENTRAL MESSAGE**

This case report describes intraoperative findings in 2 patients undergoing thoracoscopic lobectomy after they had completed induction tyrosine kinase inhibitor therapy.

discussion, preferably under the auspices of a clinical trial, until the safety and long-term efficacy can be validated. Whether or not the intraoperative findings reported by the authors might indicate an idiosyncratic reaction, related to dosing regimen or duration of treatment or some other cause, their case report serves as a good visual reminder that attention to surgical technique remains paramount for the thoracic surgical oncologist.

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