

CORRESPONDENCE

Letter re: Neoadjuvant chemoradiotherapy is superior to chemotherapy alone in surgically treated stage III/N2 non-small-cell lung cancer: a retrospective single-center cohort study



We read with great interest the article published by Professor Sinn et al.¹ which provided an encouraging safety and efficacy of neoadjuvant chemoradiotherapy in surgically treated stage III/N2 non-small-cell lung cancer (NSCLC). We have, however, several concerns.

The results provided by the authors demonstrated extremely exciting pathological complete responses in the chemotherapy/radiotherapy (CHT/RT) group, in line with superior survival outcomes, whereas there was no pathological complete response in the CHT group. We wonder about the high rate of pathological complete responses for the lung cancer, except for the nodal downstaging after addition of neoadjuvant RT. Whether the RT was applied to both target pulmonary tumor and positive N2 lymph node or not remains unclear. If so, radiation pneumonitis is another issue interesting us from a surgical perspective.

Although the authors declared that lobectomy was the most frequently carried out resection type, Table 1¹ showed that pneumonectomy accounted for 50% of all resections in the neoadjuvant CHT/RT group. As mentioned above, neoadjuvant CHT/RT provided an excellent pathological complete response, which might not be able to explain such a high incidence of pneumonectomy. Meanwhile, whether pneumonectomy provided higher non-cancer-related mortality remained unclear.

Professor Sinn showed their brilliant experiences on the management of pneumonectomy, especially about dealing with the bronchial stamp, which are worth learning from. As a randomized, multicenter, phase III trial, the WJTOG9903 study² has shown that induction treatment with concurrent chemoradiotherapy conferred better local control than that in induction chemotherapy, without compromising safety, consequently prolonging the survival in patients with stage IIIA (N2) NSCLC. Several studies based on data from the National Cancer Database suggested that neoadjuvant chemoradiation therapy was associated with increased mortality without an overall survival benefit,³ and pneumonectomy for clinical stage IIIA NSCLC patients receiving neoadjuvant chemoradiotherapy could not improve survival.⁴ We believed that different studies shared different backgrounds. As per our experience, neoadjuvant RT could improve the resectability for locally advanced lung cancer in selected patients, along with a slight increase in surgical

complications, which should not be ignored by the surgeon. With the current boom in neoadjuvant immunotherapy (including immunotherapy in combination with CHT or RT), thoracic surgeons need to pay attention to treatment-related adverse effects for targeted patients. How to correctly identify the beneficiaries of different treatment options should be the key point of clinical research.

We highly appreciated what Professor Sinn and colleagues have done. After all, neoadjuvant RT is not an alternative every thoracic surgeon wants.

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DISCLOSURE

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REFERENCES

1. Sinn K, Mosleh B, Steindl A, et al. Neoadjuvant chemoradiotherapy is superior to chemotherapy alone in surgically treated stage III/N2 non-small-cell lung cancer: a retrospective single-center cohort study. *ESMO Open*. 2022;7(2):100466.
2. Katakami N, Tada H, Mitsudomi T, et al. A phase 3 study of induction treatment with concurrent chemoradiotherapy versus chemotherapy before surgery in patients with pathologically confirmed N2 stage IIIA nonsmall cell lung cancer (WJTOG9903). *Cancer*. 2012;118(24):6126-6135.
3. Jaradeh M, Vigneswaran WT, Raad W, Lubawski J, Freeman R, Abdelsattar ZM. Neoadjuvant chemotherapy vs chemoradiation therapy followed by sleeve resection for resectable lung cancer. *Ann Thorac Surg*. 2022. <https://doi.org/10.1016/j.athoracsur.2022.03.037>. Online ahead of print. In press.
4. Broderick SR, Patel AP, Crabtree TD, et al. Pneumonectomy for clinical stage IIIA non-small cell lung cancer: the effect of neoadjuvant therapy. *Ann Thorac Surg*. 2016;101(2):451-458.