has led to an accurate staging in 92 patients, corresponding to a sensitivity of 78%, totally in accordance with the literature findings. Indeed, only persistent pN2 were not correctly preoperatively staged by invasive staging, and patients for whom a pathological proof was not obtained were all finally pN2.

In conclusion, to the best of our knowledge, our study is the first one to consider the LNR and mediastinal downstaging as prognostic factors in persistent N+ after induction treatment. Our observation supports the idea that mediastinal downstaging is not a sufficient prognostic factor, as pN1 patients with a high LNR had the same OS as pN2 patients with a low LNR. However, long-term survival can be achieved for low LNR pN1 patients. Because routinely used preoperative thoracic imaging does not allow one to accurately evaluate the LNR, N1 patients should not be excluded from surgery. Postoperative LNR may thus help to decide which adjuvant treatment to perform, with more aggressive treatments for higher LNRs. In particular, adjuvant RT, probably combined with chemotherapy, may be helpful in patients with high LNRs, as previously reported by Urban et al. [12]. However, our study suffers from the limitations listed above; consequently prospective studies are necessary to confirm these data.

Conflict of interest: none declared.

REFERENCES


eComment. Does resected lymph-node number influence survival in non-small cell lung cancer?

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We read with great interest the article by Renaud et al., analyzing the relationship between the lymph-node ratio (LNR) and survival in a cohort of 152 potentially
Resectable cN2 patients undergoing induction therapy for non-small cell lung cancer (NSCLC) [1]. So far, the nodal status is currently considered the most important independent predictor for survival in NSCLC patients [2]. On the contrary, some authors have argued that pathological nodal involvement may be replaced by more accurate variables such as LNR or number of metastatic nodes (MNs). Recently, Jonnalagadda et al. reported a strong correlation between the number of MNs and survival in series of 3399 N1 patients [3]. Similarly, Lee et al. reviewed a cohort of 1081 patients undergoing surgery and reported a worse outcome among those cases with a higher number of MNs [4]. In this setting, the abovementioned studies strongly support the need for a radical systematic lymphadenectomy in order to assess the real number of involved nodes. This evidence is further confirmed by our analysis on a series of 415 surgically-treated NSCLC patients [5]: in particular, we found a significant correlation between the number of resected nodes (#RNs) and outcome. In fact, on statistical analysis, patients with #RNs higher than 10 (identified as the optimal cut-off) had a statistically significant overall survival (P = 0.02) and disease-free survival (P = 0.0005) benefit. Moreover, in the subset of node-positive patients, LNR lesser than 9% significantly correlated with better outcome, confirming the results reported by the Authors [1]. In addition, by combining high (stage, N-status, age and #RNs) and intermediate risk factors (sex, grading and histology), we have defined three risk classes with highly significant difference (P < 0.0001) in terms of overall, cancer-specific and disease-free survival. In our opinion, this risk stratification may provide a powerful tool for individualized outcome and for tailoring adjuvant therapy. Moreover, the two novel variables introduced in our study (#RNs and LNR) are clearly more potent than the other considered N-descriptors (N-status, n.7 station involvement, >4 nodal stations involved). However, further studies with greater number of cases are needed to validate these predictors.

Based on the data reported, we would really appreciate the Authors’ reflections and reaction on the impact of #RNs on outcome in their series of 152 patients undergoing neo-adjuvant therapy.

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References


