

Is post-operative radiotherapy of any benefit after R0 resection for N2 disease?

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This is another paper in a recent and growing trend of papers that takes a very large database and by the sheer basis of numbers tries to answer what is a very common posed question (1). Importantly, this particular question may not be answerable using a smaller more granular or detailed database.

Perhaps the three most important questions that are asked in tumor conference when a patient is to be considered for adjuvant radiotherapy after undergoing a completed-resected pathologically N2 non-small cell lung cancer is: (I) how many N2 stations were involved? (II) Is the cell type adenocarcinoma or squamous cell carcinoma? And (III) were the lymph nodes completely removed or only biopsied (sampled)?

Unfortunately, none of these particular data points are contained in the National Cancer Data Base. However, I do not think this fact detracts from the study for several reasons. First, the number of N2 and/or N1 stations is often biased by the surgeon or by his operative technique. Even the accuracy of lymph node count is dubious. Second, the definition of “complete thoracic lymphadenectomy” compared to “sampling” are mains unclear despite the fact that I argue adamantly for the former every day.

Given these caveats then a more detailed database may not shed any more light on the answer to this question. The sheer number of patients in the study may allow for the conclusions to remain valid. And, if so, then it is of significant clinical importance since it is a commonly posed question for patients. This study has a chance to have significant impact and be commonly cited.

Finally, the authors are from a group that is well-known for delivering both high quality surgery and complicated statistical analyses of surgical data. This provides even more

credence for the paper’s conclusions. It is refreshing to have some science and data provided to a common question that is too often answered with opinions and dogma that we often hear at our tumor boards, i.e., “more than one N2 stations we radiate, if there is only one N2 station positive for cancer then we do not—and we radiate only those with squamous cell cancer.”

Furthermore, these conclusions make sense since another large study using the SEER database (2) have shown a benefit of PORT for those with III A (N2) disease as opposed to harm with PORT for those with N1. Since the LUNGART study is several years away from completion, this study is our best data and for now may persuade many of us to recommend PORT for those with completely resected N2.

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Dr. Robinson and colleagues are to be congratulated for presenting an interesting paper.

Footnote

Conflicts of Interest: The authors disclose the following relationships: Intuitive Surgical—teacher, Ethicon—teacher, Covidien—teacher and Community Health Systems—consultant, KCI—teacher.

Comment on: Robinson CG, Patel AP, Bradley JD, *et al.* Postoperative radiotherapy for pathologic N2 non-small-cell lung cancer treated with adjuvant chemotherapy: a review of the National Cancer Data Base. *J Clin Oncol* 2015;33:870-6.

References

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