

Reply to ‘Addressing the challenge of proper delineation of lymph node stations in modern radiotherapy for lung cancer’

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Dear Editor,

We thank Dr Lucyna Kępka and Dr Joanna Socha for their letter regarding our article ‘The Japan Lung Cancer Society–Japanese Society for Radiation Oncology consensus-based computed tomographic atlas for defining regional lymph node stations in radiotherapy for lung cancer’ [1, 2] and are pleased to respond to their questions and comments.

It should be said at the outset that our study neither recommended elective nodal irradiation (ENI) nor defined the area of ENI. Our atlas simply described the locations of individual lymph node stations on CT images, and was only intended to be used as a guide for assisting in the contouring of lymph node stations for the treatment of lung cancer.

Kępka and Socha state that the utility of the above atlas would be low because ENI is not currently recommended. However, this atlas was developed not only for ENI, but also for preoperative and post-operative irradiation. Furthermore, there is currently no evidence for the superiority or inferiority of involved field radiation therapy

compared with ENI. In addition, ENI has been performed as one of the standard treatments in Japan. This atlas could support CT-based treatment planning for lung cancer, as in head and neck cancer [3, 4] or cervical cancer [5]. Therefore, we think our atlas has a certain clinical value.

This atlas was based on the global consensus-based map [6] developed by the International Association for the Study of Lung Cancer (IASLC). As Kępka and Socha point out, it was indeed challenging to set a border between Stations 5 and 10. So, to build a consensus about the definition of some of the ambiguous boundaries between neighboring lymph node stations, the committee (consisting not only of radiation oncologists, but also thoracic surgeons and thoracic radiologists) held a number of meetings. This atlas should be thought as a proposal for the definition of regional lymph node stations of lung cancer from Japan.

Their letter compared this atlas with the Michigan Atlas [7], which was published before the establishment of the IASLC map

and defines the location of each lymph node differently from the IASLC map. Because our atlas is based on the IASLC map, it is not our intention whatsoever to directly compare it with the Michigan Atlas. On the other hand, the differences between the interpretation of the IASLC map by us and that of Lynch *et al.* [8] should be discussed thoroughly.

In the Discussion section of our paper, we pointed out the possibility that the irradiation field including Station 2 or Station 7 according to this atlas might be larger than the conventional field setting. Likewise, Station 10 should also be considered for the field setting according to the case.

Your sincerely,

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