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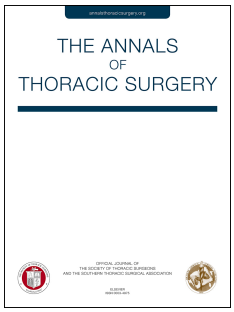

Clarification needed regarding anti-topoisomerase I as a biomarker for non-small cell lung cancer (Reply)

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Clarification needed regarding anti-topoisomerase I as a biomarker for non-small cell lung cancer (Reply)

Reply to the Editor:

We thank Drs Chan and Andrade for their comments [1] on our article [2]. Patients with systemic sclerosis (SSC), as a summary by Zeineddine *et al*, had a high risk of developing lung cancer when compared to the general population [3]. However, anti-SCL-70 autoantibodies, a hallmark of SSC, were not associated with the occurrence of various types of cancer including non-small cell lung cancer (NSCLC) [4].

In our recent report to the *Ann Thorac Surg*, none of the 127 NSCLC patients had SSC, and we actually measured a specific autoantibody against a novel tumor-associated antigen (TAA) rather than the anti-SCL-70 autoantibodies [2].

We have thoroughly illustrated the novel TAA and its specific autoantibody in a study published in the *British Journal of Cancer* [5]. The novel TAA with a molecular weight around 48 KD was identified as a fragment derived from human DNA topoisomerase I (TOP I), which corresponded to the 329–765 amino acid sequence of the protein. We also found that the novel TAA could induce its specific autoantibody with a high prevalence in some of the most common types of cancer including NSCLC.

Although the anti-SCL-70 autoantibodies could partially cross-react with the novel TAA, it is definitely distinct from the autoantibody against the novel TAA. This is because the immune reactions of the anti-SCL-70 autoantibodies from SSC