Robotic-assisted thoracoscopic surgery: a promising surgical method

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Provenance: This is an invited article commissioned by the Section Editor Jianfei Shen, MD (Department of Cardiothoracic Surgery, Taizhou Hospital of Zhejiang Province, Wenzhou Medical University, Taizhou, China).

Response to: Lin J. Robotic lobectomy: Revolution or evolution? J Thorac Dis 2017;9:2876-80.

Submitted Sep 25, 2017. Accepted for publication Oct 13, 2017. doi: 10.21037/jtd.2017.10.57 View this article at: http://dx.doi.org/10.21037/jtd.2017.10.57

We appreciate the thoughtful and constructive comments by Dr. Jules Lin on our article "*Robotic-assisted thoracoscopic surgery: right inferior lobectomy*" (1). Your comments were valuable and helpful in improving our paper. We have studied your comments carefully and have made the suggested corrections, which we hope will meet with your approval. Our responses to your comments are below.

- (I) I regret that we did not mention the use of carbon dioxide insufflation in our manuscript because it is an essential step in robot-assisted thoracic surgery (RATS). In our center, we usually placed the working ports in the 5th or 6th intercostal space we considered the 6th intercostal space to be more suitable, but in patients with smaller intercostal spaces, the 5th intercostal space may be more appropriate.
- (II) Currently in China, RATS is significantly more costly than video-assisted thoracic surgery (VATS), but as robot technology becomes more popular, the costs is likely to gradually decrease.
- (III) Young *et al.* recently performed a review analyzing postoperative pain following uniportal VATS (UVATS) and conventional VATS. This study was unable to demonstrate that UVATS conferred less postoperative pain than conventional VATS (2). Nevertheless, we believe that a prospective study is required to compare postoperative pain from RATS and VATS.
- (IV) Louie et al. described the dissection of many N1-

level lymph nodes (LNs) using RATS, and this report gave surgeons greater confidence to dissect N1-LNs adjacent to the pulmonary artery (3). Cerfolio *et al.* and Veronesi *et al.* showed that dissections of LNs using RATS were comparable to thoracotomies (4,5). We found that RATS has the advantage of allowing an LN dissection to be performed at any angle of visual field because the arms of the robotic system are flexible.

Acknowledgements

We would like to acknowledge David Tian, Senior Editor of AME Publishing Company, for editing support.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

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Cite this article as: Yang S, Li H. Robotic-assisted thoracoscopic surgery: a promising surgical method. J Thorac Dis 2017;9(10):E960-E961. doi: 10.21037/jtd.2017.10.57

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