

Robotic-assisted thoracoscopic surgery: cost and lymph node dissection

Jie Xiang, Hecheng Li

Department of Thoracic Surgery, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai 200025, China

Correspondence to: Professor Hecheng Li. Department of Thoracic Surgery, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, 197 Ruijin 2nd Road, Shanghai 200025, China. Email: lihecheng2000@hotmail.com.

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, Zhejiang, China).

Response to: Turner SR, Molena D. Robotic-assisted left upper lobectomy: facing the challenge head-on. *J Thorac Dis* 2017;9:2323-4.

Submitted Sep 25, 2017. Accepted for publication Oct 13, 2017.

doi: 10.21037/jtd.2017.10.46

View this article at: <http://dx.doi.org/10.21037/jtd.2017.10.46>

We appreciate the thoughtful and constructive comments by Dr. Turner and Dr. Molena (1). All of 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) The use of carbon dioxide insufflation allows for more working room, better visualization, and improved mediastinal stability, and this technique is routinely performed in our center;
- (II) Currently in China, robotic-assisted thoracoscopic surgery (RATS) is significantly more costly than video-assisted thoracoscopic surgery (VATS), but as robot technology becomes more popular, the costs are likely to gradually decrease;
- (III) 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 (2). Cerfolio *et al.* and Veronesi *et al.* showed that dissections of LNs using RATS were comparable to thoracotomies (3,4). We found that RATS has the advantage to perform the LN dissection at any angle of the visual field on account of the flexible arms of the robotic system;
- (IV) The approach described by Dr. Turner and Dr. Molena is also excellent and appropriate for most patients. Thank you for your suggestions.

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.

References

1. Turner SR, Molena D. Robotic-assisted left upper lobectomy: facing the challenge head-on. *J Thorac Dis* 2017;9:2323-4.
2. Louie BE, Farivar AS, Aye RW, et al. Early experience with robotic lung resection results in similar operative outcomes and morbidity when compared with matched video-assisted thoracoscopic surgery cases. *Ann Thorac Surg* 2012;93:1598-604; discussion 1604-5.
3. Cerfolio RJ, Bryant AS, Skylizard L, et al. Initial consecutive experience of completely portal robotic pulmonary resection with 4 arms. *J Thorac Cardiovasc Surg* 2011;142:740-6.
4. Veronesi G, Galetta D, Maisonneuve P, et al. Four-arm robotic lobectomy for the treatment of early-stage lung cancer. *J Thorac Cardiovasc Surg* 2010;140:19-25.

Cite this article as: Xiang J, Li H. Robotic-assisted thoracoscopic surgery: cost and lymph node dissection. *J Thorac Dis* 2017;9(10):E967. doi: 10.21037/jtd.2017.10.46