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B.W. is a proctor for Intuitive Surgery.

(left thoracotomy) = 9.8 [−72–24]. $P = .17$, Mann–Whitney test). However, alpha error is possible because of low power. The right lung (larger lung) operation may be more prone to hypoxia than left lung (smaller lung) operation regardless of the AOI technique.

For your other questions, preoperative split lung perfusion studies were not available in most cases. Patients with severe lung disease or pneumonectomy receive preoperative perfusion scans in our institution. We did not check actual catheter depth in each individual and used predetermined catheter length (AOI catheter were 1 cm beyond the opening of endobronchial lumen or 2 cm beyond the opening of endotracheal lumen, depending on the nonventilated side). We also agree with you that actual catheter position in the bronchus can affect the efficacy of AOI technique.

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OXYGEN INSUFFLATION DURING 1-LUNG VENTILATION

Reply to the Editor:

In the July 2017 issue of the *Journal*, Jung and colleagues¹ presented the results of a randomized trial addressing hypoxemia during 1-lung ventilation. By randomizing 90 patients (45 in each group) to oxygen insufflation to the operative side or placebo, the authors were able to show that oxygen insufflation prevented hypoxemia in patients with relatively preserved pulmonary function tests who underwent pulmonary surgery. In the present issue of the *Journal*, Dr Frank Baciewicz raises several excellent questions regarding this trial by Jung and colleagues.¹ The first question asked is if there was a difference in results

depending on the side of the procedure. Although relevant, with only 45 patients per group, it is likely that the trial was underpowered to detect differences between insufflation on the right and left sides of the body. However, 38% of patients in the insufflation group had right-sided surgeries, and there were no incidences of hypoxemia (oxygen saturation <90%) in this group, suggesting that if differences exist, they may not be clinically relevant. Dr Baciewicz also asked if any of the patients differed in their lung perfusion distribution from typical lung functional parameters, wherein 55% to 60% of lung function is right-sided. The authors did not indicate that preoperative split-lung perfusion studies were performed, making analysis of the effect of perfusion on the effectiveness of oxygen insufflation impossible. Finally, Dr Baciewicz asked how the authors ensured that the insufflation catheter was within the respective bronchus. The position of the insufflation catheter was determined before intubation by inserting the catheter in the lumen and having it out of the lumen for 1 cm beyond the bronchial lumen or 2 cm beyond the tracheal lumen and then marking the catheter entry point in the endotracheal tube. This ensured a uniform placement of the catheter in all patients.

The trial by Jung and colleagues¹ should be followed with a study on the effectiveness of oxygen insufflation in patients with compromised lung function, potentially including some of the interesting questions raised by Dr Baciewicz, perhaps studying the relationship of preoperative split lung function and the effectiveness of oxygen insufflation.

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Reference

1. Jung DM, Ahn HJ, Jung SH, Yang M, Kim JA, Shin SM, et al. Apneic oxygen insufflation decreases the incidence of hypoxemia during one-lung ventilation in open and thoracoscopic pulmonary lobectomy: a randomized controlled trial. *J Thorac Cardiovasc Surg.* 2017;154:360–6.

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