Authors have nothing to disclose with regard to commercial support.

4. Vogelmeier CF, Criner GJ, Martinez FJ, Anzueto A, Barnes PJ, Bourbeau J, et al. Global strategy for the diagnosis, management, and prevention of chronic obstructive lung disease 2017 report. GOLD executive summary. *Am J Respir Crit Care Med*. 2017;195:557-82.

<https://doi.org/10.1016/j.jtcvs.2018.10.087>

TAKING UP THE CHRONIC PULMONARY OBSTRUCTIVE DISEASE GAUNTLET

Reply to the Editor:

The letter to editor by Medalion and colleagues provides important additional insights in regard to the article by Viceconte and colleagues.¹ The authors have identified potential perioperative confounding factors, especially pain, which could influence forced expiratory volume in 1 second and forced vital capacity assessment the time points studied. This is perhaps a more likely scenario on the second postoperative day; however, it is unclear whether pain would have sufficient impact on postoperative day 5 and beyond, as patients do tend to report lesser pain issues over time.² In future studies, in addition to the inclusion of a more comprehensive measure of pulmonary function, we would recommend the use of a valid measure of pain to coincide with postoperative assessments.

The authors of the letter to editor have previously reported long-term mortality in patients with chronic pulmonary obstructive disease to be lower several years after cardiac surgery.³ This serves to highlight the need to longitudinal follow-up in prospective studies for this patient population. Further, the inclusion of data on pre- and postoperative frailty would provide valuable insight of additive morbidity and mortality in patients severe chronic pulmonary obstructive disease and decreased left ventricular ejection fraction after cardiac surgery.^{4,5} Finally, although the traditional metrics of survival and rehospitalization are essential endpoints, we and others have also advocated for the use of longitudinal health-related quality of life assessments as a key patient-centered outcome, particularly in the older, frail adult patient.^{4,5} What the “ideal” long-term health-related quality of life tool(s) that is accurate and clinically feasible, however, requires further study.

We support the statement by Medalion and Katz on the timeliness of this paper as a “call to arms” on the need to

Dr Arora has received an unrestricted educational grant from Pfizer Canada, Inc, and honoraria from Mallinckrodt Pharmaceuticals and Abbott Nutrition for work unrelated to the manuscript. All other authors have nothing to disclose with regard to commercial support.

develop more detailed enhanced recovery protocols for these complex patients. We would further also advocate for the ongoing close collaboration between the pulmonologist and cardiac surgeon to extend beyond perioperative planning and include the transition to the community phase of the patient journey in this vulnerable population.

Zubair Luqman, MD
Rakesh C. Arora, MD, PhD, FRCSC
Department of Surgery
Max Rady College of Medicine
University of Manitoba
Winnipeg, Manitoba, Canada
Cardiac Sciences Program
St Boniface Hospital
Winnipeg, Manitoba, Canada

References

1. Viceconte M, Rocco IS, Pauletti HO, Vidotto M, Arena R, Gomes WJ, et al. Chronic obstructive pulmonary disease severity influences outcomes after off-pump coronary artery bypass. *J Thorac Cardiovasc Surg*. 2018;156:1554-61.
2. Matute-Jiménez P, Roca-Obrador J, Valero-Castell R, Gomar-Sancho C. Pain locations in the postoperative period after cardiac surgery: chronology of pain and response to treatment (abstract). *J Cardiothorac Vasc Anesth*. 2017;31:S45.
3. Medalion B, Katz MG, Cohen AJ, Hauptman E, Sasson L, Schachner A. Long-term beneficial effect of coronary artery bypass grafting in patients with COPD. *Chest*. 2004;125:56-62.
4. Yanagawa B, Graham MM, Afilalo J, Hassan A, Arora RC. Frailty as a risk predictor in cardiac surgery: beyond the eyeball test. *J Thorac Cardiovasc Surg*. September 5, 2018 [Epub ahead of print].
5. Lytwyn J, Stammers AN, Kehler DS, Jung P, Alexander B, Hiebert BM, et al. The impact of frailty on functional survival in patients 1 year after cardiac surgery. *J Thorac Cardiovasc Surg*. 2017;154:1990-9.

<https://doi.org/10.1016/j.jtcvs.2018.12.017>

IT'S THE LUNGS, NOT THE PUMP: CHRONIC OBSTRUCTIVE PULMONARY DISEASE SEVERITY AND OUTCOMES AFTER OFF-PUMP CORONARY

ARTERY BYPASS GRAFTING

Reply to the Editor:

In this issue of the *Journal*, Medalion and Katz¹ made some observations on the recent study by Viceconte and colleagues,² in which they examined the effects of the