The authors reported no conflicts of interest.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

BILATERAL INTERNAL THORACIC ARTERY GRAFTING IN ELDERLY PATIENTS MAKES

SENSE INDEED

To the Editor:

We thank Sun and colleagues for their important comments on our recent article. As we stated, we adopted bilateral internal thoracic artery (BITA) grafting in elderly patients in our routine practice in 2003 in more than 95% of our patients with multivessel coronary artery disease and focused on the therapeutic influence of this approach in patients older than age 70 years in our report.¹ We are fully aware that the length of the study period could have influenced the final results; however, that would be the expected evolution of a department trying to provide and adapt the best therapeutic approach in coronary surgery over time.

The limitation of our study—its Achilles heel—is the observational design and retrospective nature of our protocol due to the influence of unmeasured confounders. We used 2 different statistical methods to adjust for preoperative imbalances (ie, propensity score matching and multivariate Cox regression) in an effort to account for all measurable confounders, but the bias produced by unmeasured confounders may persist. After adjusting for measurable confounders, the use of BITA grafting had beneficial effects on survival in patients aged 70 years and older. These results are consistent with several authors who reported the benefits of BITA grafting even in older patients.²

Randomized trials provide the most powerful form of clinical evidence; however, selection bias and crossover from 1 therapeutic arm to the other always occurs over time. Despite its great contribution, the Arterial Revascularization Trial was a disappointment to many so-called artery advocates: 36% of the patients enrolled did not receive the assigned treatment (crossover), and 22% of the patients in the single internal thoracic artery group received a second arterial graft in the form of a radial-artery graft, which could explain the lack of statistically significant results at 10 years.³

Furthermore, the Arterial Revascularization Trial had no power to analyze subgroups because its sample size was

calculated for 10-year mortality in the entire cohort. Our study, after rigorous matching, ended up with a group of 486 patients older than age 70 years, which is representative for a reliable retrospective analysis.

Finally, coronary artery bypass grafting (CABG) is still a strong and valid therapeutic option due to its efficacy in the treatment of coronary artery disease. As surgeons, we are in charge of potentiating its beneficial effects and, at the same time, turning it to a simpler procedure. Off-pump CABG can be performed by any surgeon despite being more technically demanding. Off-pump CABG using BITA grafting could be an ideal therapeutic option, with fewer postoperative events and better long-term survival; it also a more patient-friendly procedure: fewer skin incisions, extubation in the operating room, shorter hospital length of stay, and faster return to a normal life. Go for it!

Daniel Navia, MD

Juan Espinoza, MD

Mariano Vrancic, MD

Fernando Piccinini, MD

Mariano Camporrotondo, MD

Department of Cardiac Surgery

ICBA Instituto Cardiovascular

Buenos Aires, Argentina

References

1. Navia D, Espinoza J, Vrancic M, Piccinini F, Camporrotondo M, Dorsa A, et al. Bilateral internal thoracic artery grafting in elderly patients: any benefit in survival? *J Thorac Cardiovasc Surg*. October 3, 2020 [Epub ahead of print].
2. Pettinari M, Sergeant P, Meuris B. Bilateral internal thoracic artery grafting increases long-term survival in elderly patients. *Eur J Cardiothorac Surg*. 2015;47:703-9.
3. Taggart DP, Benedetto U, Gerry S, Altman DG, Gray AM, Lees B, et al. Bilateral versus single internal-thoracic-artery grafts at 10 years. *N Engl J Med*. 2019;380:437-46.

<https://doi.org/10.1016/j.jtcvs.2020.12.093>

REPLY: PURSUING THE EXCELLENCE, SHARING THE STANDARD

Reply to the Editor:

We are grateful for the opportunity to have constructive discussions with Navia and colleagues¹ on an interesting and important issue in the field of coronary surgery. We believe that such debates and discussions have always nourished the body of knowledge in our cardiovascular surgery community. Navia and colleagues¹ reported a comparative result between bilateral and single internal thoracic artery uses in patients aged 70 years or older. We value the authors' efforts; they utilized the best available methods to address the selection biases in their institutional retrospective data, but still with uncorrectable confounders.

Despite many agreeable points in the report by Navia and colleagues,² we would like to point out several aspects with