including those affected by type A dissection. Deep hypothermic circulatory arrest to a rectal temperature of 17°C without specific cerebral perfusion protocol was also used. Although Ariyaratnam and colleagues,¹ did not provide any data on circulatory arrest length, and arch replacement occurred in just 2.9% of the cases, current data suggest that antegrade cerebral perfusion and mild-to-moderate systemic hypothermic circulatory arrest can be safely applied to complex thoracic aortic surgery, ameliorating postoperative outcomes.⁵

So although Ariyaratnam and colleagues¹ set out to demonstrate the need to adopt a US-style supercenter model for TAD, it appears that their analysis underestimates the effects of an optimized patient management on the hospitalization outcome, especially in regional centers.

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<http://dx.doi.org/10.1016/j.jtcvs.2014.11.061>

IMPROVING OUTCOMES IN EUROPE

Reply to the Editor:

I appreciate the opportunity to reply to the letter by Mariani and Mariscalco about our original article published in print in the October 2014 issue of the *Journal*.¹

The use of intra-aortic balloon pumps (IABPs) in aortic surgery is a controversial issue.² I agree with Mariani and Mariscalco that our IABP usage rate may seem unusually high at first. I would like, however, to make two points. First, the data that we presented was from a retrospective analysis of our database going back for some 14 years. During that period, our practice has changed considerably to reflect advances in evidence-based medicine. Thus

although our overall IABP usage rate approached 50% for both emergency and nonemergency thoracic aortic surgery, it was around 60% for the first 8 years but has been reduced to less than 25% during the last 5 years. The second point is that although IABP use was a significant factor in the univariate analysis of in-hospital mortality, it was not a significant factor in the multivariate analysis.

With regard to circulatory arrest time, for all those operations that precluded safe crossclamping before the innominate artery, the mean circulatory arrest time was 19.85 minutes (± 10.37 minutes). This also was not a significant predictor of outcome.

Supercenters, such as those in the United States, excel not only because of (as Mariani and Mariscalco rightly mention in their letter) the high volume of specialist surgery conducted but also because of a consistent delivery of care from diagnosis to follow-up in a multidisciplinary setting. This patient-specific approach includes intraoperative strategies.

There are, of course, obstacles in imitating our partners across the Atlantic, not least because training in the United States is different from that in the United Kingdom.³ For example, US thoracic aortic surgeons traditionally train in both vascular and cardiac surgery, whereas this is not necessarily required of UK-based cardiac surgeons. Such differences, however, should not detract from critically exploring which successful strategies used in more specialist centers across the world would improve patient care in our own population. That is, after all, how we evolve.

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Notices of Correction

Re: Benedetto U, Raja SG, Soliman RFB, Albanese A, Jothidasan A, Ilsley CD, Amrani M; Harefield Cardiac Outcomes Research Group. Minimally invasive direct coronary artery bypass improves late survival compared with drug-eluting stents in isolated proximal left anterior descending artery disease: A 10-year follow-up, single-center, propensity score analysis. *J Thorac Cardiovasc Surg*. 2014;148:1316-22.

In the above-noted article, Dr Soliman's second affiliation was inadvertently omitted. The corrected author list and affiliations are printed below.

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Re: Raja SG, Benedetto U, Husain M, Soliman R, De Robertis F, Amrani M; Harefield Cardiac Outcomes Research Group. Does grafting of the left anterior descending artery with the in situ right internal thoracic artery have an impact on late outcomes in the context of bilateral internal thoracic artery usage? *J Thorac Cardiovasc Surg*. 2014;148:1275-81.

In the above-noted article, Dr Soliman's second affiliation was inadvertently omitted. The corrected author list and affiliations are printed below.

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