The authors reported no conflicts of interest.

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"HOW TO BIMA?" IS IN FACT THE QUESTION

To the Editor:

We read with interest the Commentary by Schwann and colleagues[1] written in response to our original manuscript.[2] We do not agree with the authors, who place the emphasis entirely on bilateral internal mammary artery (BIMA) use, and state that the configuration of BIMA grafts has no relevance. Although we are firm believers in the benefits of BIMA grafting, the optimal configuration of BIMA grafts still remains a matter of controversy. It was not our goal to compare BIMA versus single internal mammary artery grafting (SIMA), and 100% of patients in both comparator groups were BIMA recipients. Therefore, it is perfectly normal that our study will not "move the BIMA utilization needle" and "offers no compelling reasons to consider the BIMA strategy preferentially over the current left internal mammary artery/saphenous vein graft approach." In our opinion, the optimal BIMA configuration is a key unknown that may explain why no group has been able to prospectively show the superiority of BIMA versus SIMA, with some authors showing a greater adjusted mortality with BIMA compared with SIMA.[3]

Our mediastinitis rate of 2.4% was incriminated by the authors as unusually high, but this is very similar to recent trial data[4] and many previous retrospective studies. The risk of sternal complications post-BIMA depends on the patient's risk profile, patient selection, and how far the surgeon wants to go to perform BIMA grafting. Mediastinitis was as high as 5.5% in the CATHolic University EXtensive BIMA Grafting Study registry,[5] or 3.5% in the Arterial Revascularization Trial (ART),[4] and is not simply a result of "surgeon experience and skeletonization" as Schwann and colleagues proclaim.

In summary, "How to BIMA?" *is* in fact the question, and a key question at that, to optimize outcomes post-coronary artery bypass grafting. To claim that conduit configuration is of no prognostic importance is to deny the incredibly nuanced complexity of contemporary coronary surgery, which depends on many different factors, including degree of coronary stenosis, the size and quality of target vessels, and distal run-off, and not only on the type of conduits used.

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https://doi.org/10.1016/j.jtcvs.2020.06.029

REPLY: BILATERAL

INTERNAL MAMMARY ARTERY GRAFTING: SO MANY QUESTIONS. SO FEW ANSWERS

Reply to the Editor:

Marzouk and colleagues[1] recently reported that patients who underwent bilateral internal mammary artery (BIMA) grafting with both utilized as in situ grafts had better long-term survival than those in whom the second IMA was used as a free graft. In a related commentary, Schwann

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and Gaudino[2] seem to take exception to the study's focus on how, rather than when, to perform BIMA grafting. They describe the 2.5% incidence of mediastinitis in the study as both "disturbingly high" and "consistent with the overwhelming majority of other BIMA reports" and suggest that those not inclined to perform BIMA grafting can interpret the study's findings as further reason to avoid harvesting the second artery.

In response, Kalavrouziotis and Mohammadi[3] note that the study included only patients who underwent BIMA grafting and therefore could not address whether 2 IMA grafts are better than 1, and reaffirm their belief that "how to BIMA" is not simply a different issue, but rather a key issue. They unfairly ascribe to Schwann and Gaudinos[2] statements "that that the configuration of BIMA grafts has no relevance," and "is of no prognostic importance" and postulate the inability to demonstrate the superiority of BIMA grafting stems from failure to identify the "optimal BIMA configuration," which their study suggests requires the use of both IMA conduits as in situ grafts. Unfortunately, as noted previously,[4] this finding was based on a relatively small number of free grafts performed for various reasons over a prolonged timeframe and did not account for, in the words of the authors themselves, the "many different factors, including degree of coronary stenosis, the size and quality of target vessels, and distal run-off" upon which "the incredibly nuanced complexity of contemporary coronary surgery" most certainly does depend.[2]

Surgeon experience and technical proficiency, not only in performing the grafts, but also in deciding where and how to place them, are likely more important factors than whether or not an IMA should be used as a free versus in situ graft. Furthermore, use of a pedicled right IMA graft does not preclude the possibility of poor decision making or a technical mishap. How far will it safely reach? Should it cross the midline or pass through the transverse sinus? Or, is it best utilized as a free graft? If so, where should it go, and considering its proximal anastomosis as an additional confounder, from whence does it come?

The evidence to date strongly support placing an in situ IMA—preferably the left—to the left anterior descending artery, whenever possible. Beyond that, everything else is less certain, including consensus for which patients should undergo BIMA grafting. If <10% of patients is too few, what then is the appropriate percentage? Why is it that no prospective randomized study has shown the superiority of BIMA grafting?[5] Maybe it just is not. Or perhaps the various surgeon-, patient-, conduit-, and target-related factors cannot adequately be accounted for. Whatever they intended, the study by Kalavrouziotis and colleagues[3] most certainly did not answer any of these questions.

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https://doi.org/10.1016/j.jtcvs.2020.06.098

REPLY: IN BE-"TWIX": A BIMA ARGUMENT

Reply to the Editor:

There is a confectionery with 2 candy bars contained in a single package. The video advertisement for this product humorously implies that the "left" bar is manufactured in the "left bar factory" separately from the "right" bar, and the manufacturing secrets are jealously guarded from each other. It is obvious that the 2 bars are the same, which is the basis for the ridiculousness. So too is the left internal mammary artery (LIMA) the same as the right internal mammary artery (RIMA). The RIMA releases the same vasoactive substances, has the same composition, and reacts to stimuli the same as the LIMA. If either were used as an in situ graft to the same target, there would is no reason to suspect their fates would differ. Given that the LIMA is such a good conduit and no different than the RIMA, why do we not use the RIMA more often as an additional arterial conduit? The argument might be that the target vessel or the patient is unworthy of such a good conduit, or that it cannot reach the target, or that it would induce mediastinal infection in excess of the