Discussion to: Residual or Recurrent Mitral Regurgitation Predicts Mortality Following Transcatheter Edge-to-Edge Mitral Valve Repair

Presenter: Stephen H. McKellar, MD, MSc
Invited Discussant: Stephanie L. Mick, MD

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Disclosures: Dr. Mick serves as a consultant for Medtronic, Artivion, and Johnson & Johnson.
Dr. Stephanie L. Mick (New York, NY):

Thank you for the opportunity to discuss this and for providing me with the manuscript in advance. This is obviously a very hot topic, this whole TEER and mitral valve surgery kind of constellation of questions, and I expect Dr. Chikwe will talk about the recent changes to the PRIMARY trial endpoint and also some of the data that she and Dr. Raj Makkar were able to get together on the subject of TEER outcomes with moderate regurgitation following purely degenerative MR.

You pointed out in your study that these were two very, very different groups of patients. And so, you couldn’t really compare the two, but what you did see in the TEER group was that in the predominantly functional MR group, moderate or more MR was predictive of worse outcomes. I wondered what your plans are for future analysis to isolate out the degenerative population in the TEER group and sort of reconsider this question, especially in light of some of the data that we will be hearing from Dr. Chikwe.

Dr. Stephen H. McKellar (Salt Lake City, UT):

Yes, I think it’s important. I think it’s a cleaner apples-to-apples comparison—age, medical complexity aside. It’ll be interesting to see how those tease out once we get rid of all the functional MR. In this cohort, about 50% of those in the TEER group were functional, and the other roughly half were a prohibitive risk for surgery over that time period. So, I think it’s a rich cohort to see what we can learn from. I agree.

Dr. Mick:

As a follow-up question, if you do consider that degenerative MR population in the TEER group, it could be a useful group to consider the anatomic characteristics of mitral valves that failed after TEER. Because in the lunch session, we were talking about the potential for anatomic creep as we try to-- so whatever the trials end up showing, TEER versus surgery, there’s this concern about potentially these results being applied to different anatomic pathologies than the trials had considered. So, in your future inquiries, are you thinking about maybe characterizing the anatomic lesions that were characterized by failed TEER?

Dr. McKellar:

That’s a great question; thank you very much. I think complexity is a huge part. I mean, at least in the TEER trials, there’s anatomy that’s just never even considered there, but in the real world, what are people going to do? And, of course, we see that every week in our multi-disciplinary valve meeting as well. So yes, it’s something we’re keeping track of on a more granular level moving forward. I think our center is where other TEER centers refer their complex patients to,
so my guess is our cohort is probably a little bit more enriched with that cohort, and that may reflect a one-in-four incidence of moderate or greater mitral regurgitation, but it’s tough for us to know what other groups-- those who are referring their patients as too complex for them, how much simpler their anatomy is. Something we need to sort out, for sure.

Dr. Mick:
Thank you, and congratulations.

Dr. McKellar:
Thank you.