complete myocardial revascularization. However, in the era of transcatheter therapy, valve-in-valve procedures to manage a degenerated mitral BP are increasing.⁹ This could overcome the operative risk of conventional redo surgery^{10,11} and therefore the prosthesis choice should be driven also on the potential valve-in-valve therapy criterion. Based on the results of the study by Bernard and colleagues,⁸ we conclude that BP has to be the first choice in patients with severe CIMR when mitral repair is not advisable.

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Commentary: Valve options for ischemic mitral regurgitation in an era of new technologies: ViV(a) la bioprosthesis

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Bernard and colleagues¹ have presented their findings that prosthetic valve selection does not influence long-term survival in patients undergoing mitral valve replacement for ischemic mitral regurgitation; however, bioprosthetic valves appear to be associated with less morbidity. Guidelines on valve selection have generally cited patient age

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CENTRAL MESSAGE

Prosthetic valve selection should include criteria of patient age and suitability for anticoagulation, as well as patient preference, disease process, life expectancy, and future valve-in-valve options.

and suitability for lifelong anticoagulation, tempered by patient preference, as the dominant criteria for making recommendations. Evidence can be found to support bioprosthetic as well as mechanical valve use.^{1,2} With no

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Disclosures: Dr Accola is a consultant and speaker for Edwards Lifesciences. The other author 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.

Received for publication Feb 19, 2021; revisions received Feb 19, 2021; accepted for publication Feb 22, 2021; available ahead of print Feb 26, 2021.

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J Thorac Cardiovasc Surg 2023;165:646-7
0022-5223/\$36.00

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<https://doi.org/10.1016/j.jtcvs.2021.02.076>

definitive evidence of superiority, in recent years there has been a shift in favor of bioprosthetic valve use, even in younger patients.³ This trend initially was related to lifestyle preferences with respect to avoidance of anticoagulation, and until recently this included an acceptance of the possibility of an eventual conventional reoperation. Current trials with selected mechanical prostheses suggest the potential of lower anticoagulation requirements or possible alternative anticoagulation strategies. More recently, the potential for transcatheter valve-in-valve implantation has certainly entered the valve selection calculus as well.

Current valve selection guidelines do not discuss the evolution of transcatheter valve-in-valve therapies as a factor to be considered in primary prosthetic valve selection. Commentaries on this issue have raised concerns over valve size and gradients, uncertain longevity of transcatheter valves, and the potential need for subsequent procedures. Recently, a multicenter study of 1529 patients who underwent mitral valve-in-valve implantation demonstrated remarkable results in terms of technical success as well as 30-day and 1-year mortality.⁴

In the study by Bernard and colleagues,¹ the 10-year survival following mitral valve replacement for ischemic mitral regurgitation was <50%. At 15 years, only about 3% of patients had undergone reintervention. The reintervention rate was slightly higher in the mechanical valve group, although the bioprosthetic group was somewhat younger. This suggests that quality of life without management and potential complications of anticoagulation may be more germane considerations than mortality in valve

selection for ischemic mitral regurgitation. This population is distinct from other valve replacement populations in that the pathology relates to ventricular ischemic dysfunction rather than a primary degenerative valvular issue. The understanding of this distinction has led to an evolution of treatment from annuloplasty remodeling to replacement.⁵ The ischemic insult combined with ventricular dysfunction is undoubtedly a factor limiting patient survival. It may be that this limited survival potential negates the benefit of a mechanical prosthesis with increased durability.

Considering evolving bioprosthesis technology, with the potential of subsequent transcatheter approaches, it may be time to revise the guidelines to include consideration of valve-in-valve therapies into future strategies.

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