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**REPLY: NOT ALL
INCOMPLETE
REVASCULARIZATIONS
ARE CREATED EQUAL**



Reply to the Editor:

Complete revascularization is achieved more commonly with coronary artery bypass grafting than with percutaneous coronary intervention¹ and should be the default revascularization strategy. The reason for much of the debate about completeness of revascularization is that there is no magic formula to define it or quantify its impact on patient outcomes.^{2,3} Not every diseased vessel should or can be bypassed, but experience over the years has taught us that bypassing important coronary vessels with durable arterial grafts achieves the best possible long-term outcomes.⁴

Our definition of an important target vessel is that which reaches more than 75% from the base toward the apex of the ventricle or a shorter vessel with branches supplying a substantial myocardial territory.⁴ The negative effects of forgoing the bypass of less-important vessels on nonmajor adverse clinical outcomes such as angina and quality of life are opaque.

We agree with Zhou and colleagues⁵ that there are physiologic and anatomic scenarios that may preclude achieving complete revascularization, but left ventricular dysfunction is not one of them. We believe that every effort should be made to achieve complete revascularization of all important coronary targets in patients with left ventricular dysfunction because they have little or no myocardial reserve when it comes to safe recovery from the stress of surgery, and any residual myocardial ischemia may be poorly tolerated.⁶

Another important issue raised by Zhou and colleagues is the impact of multiarterial grafting and whether it can blunt or neutralize the adverse outcomes associated with incomplete revascularization. The likely answer is that multiarterial grafting has an additive benefit when all important vessels are completely revascularized.⁴

In conclusion, the totality of evidence suggests that complete revascularization and multiarterial grafting should, when possible, go hand-in-hand. In addition, some coronary targets are more critical than others and should be reliably and durably bypassed to maximize the benefits of coronary artery bypass grafting.

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