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EDITORIAL COMMENTARY

To block or not to block? That is the question

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See related article on pages 1036-40.

In 1948, a pharmacologist at the Medical College of Georgia identified the adrenergic family of signaling systems. Shortly thereafter, he distinguished α - and β -adrenergic receptor

sites. The formidable significance of this revolutionary series of discoveries has weathered a stormy history of investigative turmoil. In a beautifully designed clinical study, Mangano and colleagues¹ recorded a decrease in late mortality in noncardiac surgical patients treated with β -blockers; however, the survival benefit appeared only long after the medication had been discontinued. Lindenauer and colleagues² conducted a huge retrospective study of perioperative β -blocker therapy; however, low-risk patients were included in the β -blocker group only after they had already had a cardiovascular event. Poldermans and coworkers³ reported a dramatic reduction in mortality with perioperative β -blockers for high-risk vascular patients; however, this work has been saddled with allegations of fraud. Finally, the Perioperative Ischemic Evaluation Study (POISE) group⁴ published their disappointing experience when they prescribed as much as 8 times the recommended starting dose to

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drug-naïve patients before surgery. They were then surprised by the frequencies of bradycardia, hypotension, and stroke.

Finally, in this issue of the *Journal*, Korkmaz and colleagues⁵ have achieved the holy grail of scientific investigation with a “hypothesis-driven, mechanistically based, clinically relevant” study. All cardiac surgeons believe that autologous arterial grafts are superior to veins. The Achilles’ heel of these conduits, however, is spasm. These Turkish scientists have now provided an iron-clad rationale for the use of β -blockers in the vast majority of patients undergoing coronary artery bypass grafting with at least one arterial graft—and they have shown that labetalol is the best of the best. As the great American philosopher Mae West once opined, “Too much of a good thing—is wonderful.”

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