perfusion cannula. Generally we agree with Mariani and colleagues: a full percutaneous approach can lower cannulation site complications, especially bleeding, during perfusion. However, in situations where a safe (ie, ultrasound or angiographically controlled) insertion of a distal perfusion cannula is not possible or if the perfusion provided by such is not sufficient, the presented surgical technique can be helpful. We do not agree with the statement that the open technique would bear higher risks for dissection, laceration, thrombosis, embolization, arteriovenous fistula compared with the percutaneous technique. In our experience, the contrary is the case. This is the reason we insist on a safe and controlled puncture and insertion for both primary and distal perfusion cannulas. Infection of the prosthesis could theoretically be an issue, however the rather short duration of arteriovenous perfusion and the subsequent removal of the long prosthesis minimize this risk. In any case, the cannulation site is monitored by standardized clinical protocols several times a day.

Both techniques described in our technical reports^{1,2} should be perceived as additional elements in the armamentarium of a cardiovascular surgeon. The more alternatives we have, the better we can serve our patients, especially in critical situations.

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SHOULD THE GENDER AND AGE OF AN ANIMAL BE CONSIDERED FOR STUDIES ON POSTCONDITIONING?

To the Editor:

We have read the great article by Oosterlinck and colleagues,¹ which showed that ischemic postconditioning (IPostC) reduces the infarct size and left ventricular impairment in C57BL/6J mice. The protective effect of IPostC may be reduced in a mouse model of the obese diabetic or metabolic syndrome.¹ In their research, the investigators used 3 different types of mice to measure the short-term effect of IPostC, but the gender of the animals was not described. Several studies showed that the efficacy of IPostC was different between male and female mice.² In addition, because the infarct size was smaller in female rats than in male rats under the same ischemic conditions,³ it might be confusing to evaluate the effect of IPostC. Because of this, gender should be considered in a study for evaluating IPostC. We believe that the gender of the mice used in this study should be given.

The age of an animal can also affect the IPostC effect.^{2,3} Even a minor age difference in the mice from 14 to 16 weeks to 18 to 20 weeks can negatively affect the outcome of IPostC.² Oosterlinck and colleagues¹ used mice at 24 weeks to evaluate the short-term efficacy of IPostC and mice at 12 weeks for evaluating long-term effects. We understand that the purpose of the study was not to compare the efficacy in the short term and long term, but we wonder why the investigators used 2 different age groups of animals to study the short-term and long-term effects of IPostC.

To show the effect of IPostC on left ventricular remodeling, the investigators used cine magnetic resonance imaging (cMRI). They compared the results of cMRI between C56BL/6J

and DKO mice at 1 and 10 weeks after ischemia. Because the myocardial infarction area after ischemia may differ in individual animals, we believe that the results of cMRI should be compared at 1 and 10 weeks in the same animal. Comparing the results of cMRI in the same animal at different times after ischemia would yield more accurate results without any bias caused by differences in the initial size of the myocardial infarction area.

In conclusion, we ask 3 questions. First, whether the investigators used animals of the same gender? Second, why did the investigators use different age groups of animals to evaluate the short-term and long-term effects of IPostC? Third, did the investigators compare the cMRI results at different time intervals in the same animal, not between the groups?

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