TABLE 1

Outcome	OPCAB (%)	PCI (%)	OR (95% CI)	I ² (%)	P value for effect
Death, in hospital	1.1	0.4	1.88 (0.56–6.36)	0	.31
AMI, in hospital	2.7	2.8	1.04 (0.48–2.25)	0	.92
Stroke, in hospital	0.5	0.21	1.11 (0.35–2.49)	0	.64
Stroke, 1-5 y	0	1.3	0.34 (0.05–2.38)	0	.4
Angina recurrence, 1-5 y	11.7	22.8	0.44 (0.24–0.83)	38	.01
Reintervention, in hospital	2.3	3.4	0.74 (0.35–1.55)	0	.42
Reintervention, 1-5 y	5.3	19.1	0.23 (0.15–0.38)	0	<.0001

OPCAB, Off-pump coronary artery bypass; PCI, percutaneous coronary intervention; OR, odds ratio; CI, confidence interval; AMI, acute myocardial infarction.

indexed on Medline at the time of our search, or it may have been available on Medline but indexed incorrectly. Either way, it highlights the limitations of electronic searches for the purpose of identifying all relevant trials for meta-analyses. One can never be certain that all trials have been identified, and empiric evidence suggests that up to 50% of relevant articles may be missed despite vigilance in searching.³

As suggested by Takagi and colleagues, we have added this trial to our meta-analysis and would like to share the results to provide readers with the most current estimates of clinical outcomes. Adding this trial of MIDCAB versus PCI (n = 100) resulted in increased power and narrower confidence intervals for the outcomes of reintervention, death, stroke, angina recurrence, and myocardial infarction. The updated results are provided in Table 1. Overall, none of the conclusions changed.

Regarding the suggestion that the trial by Eefting and associates⁴ may introduce heterogeneity, we performed a sensitivity analysis by excluding this trial from the analysis to determine the impact on results. The results were not materially changed by excluding Eefting. This may be because similar results are achievable, whether the procedure is delivered through OPCAB or MIDCAB and whether single or multiple vessels are anastomosed. On the other hand, it may simply be that the analysis is underpowered to detect important differences between subgroups. When the confidence intervals around the nonsignificant outcomes are examined, it is clear that important differences in outcomes have not been ruled out, and further research will be required to enlighten any potential differences among subgroups. As Takagi and colleagues have highlighted, the results of this analysis should not be automatically

assumed to apply to OPCAB performed on multivessel disease, inasmuch as this group was underrepresented.

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Leave the left atrial appendage untouched for stroke prevention!

To the Editor:

We read the article by Kamohara and colleagues¹ regarding the short-term and mid-term effects of left atrial appendage (LAA) occlusion on left atrial (LA) function with great interest. An atrial exclusion device

was applied by means of thoracotomy in 19 mongrel dogs in sinus rhythm, and hemodynamic, as well as echocardiographic, data were recorded immediately and after 7 and 90 days. The authors found that LAA exclusion might affect LA reservoir function. We would like to congratulate the authors for their important study. However, there still remain the following questions:

1. When measuring the LA area by means of planimetry before LAA exclusion, was the LAA area included or excluded? If it was included, this might well explain the decrease in LA volume and area after LAA exclusion, as listed in Table 1. If the LAA area was not included, how do the authors then explain the decrease in LA area and volume?
2. There is a great variation in human LAA size.² We do not know whether this is also true for the canine LAA. What was the size of the excluded LAAs, and was there any association between LAA size and the hemodynamic or Doppler measurements?
3. The LAA is known as an important site of natriuretic peptide secretion.³ Were serum levels of natriuretic peptides measured before the procedure and during follow-up? Did the authors observe weight gain caused by fluid retention after LAA occlusion?
4. It is known that in guinea pigs LAA exclusion leads to a decrease in cardiac output.⁴ If the investigated dogs are still alive, it would be very interesting to continue follow-up, measure cardiac output and functional parameters, and compare them with those from control dogs with the LAA left intact.

5. All hemodynamic and Doppler parameters were obtained in healthy dogs in sinus rhythm at rest. Because LAA occlusion is considered in patients with heart disease in atrial fibrillation, an increase in heart rate during exercise might well result in an inappropriate increase of the LA pressure because of impaired LA reservoir function.

In conclusion, there is still no proof that LAA occlusion prevents stroke,⁵ but hemodynamically, this procedure might even do harm and should therefore not be performed in patients with atrial fibrillation.

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Reply to the Editor:

We appreciate the response of Drs Stöllberger, Schneider, and Finsterer to our work¹ and thank them for their comments. Here are our responses to their specific questions:

1. The left atrial appendage (LAA) area was not included when measuring the

left atrial (LA) area. Slight changes in LA area and volume measurements might be expected due to the effect of the LA body shape change caused by occlusion of the LAA orifice. However, we have not detected any statistically significant decreases in the LA area or volume after LAA exclusion.

2. Although we did not measure the size of the LAA in this series, we did measure it in a more recent series of 16 dogs. The width and thickness of the LAA orifice were 27.1 ± 4.8 mm (mean $\pm$ standard deviation) and 12.2 ± 4.3 mm, respectively. As indicated by relatively small standard deviations, there is not a great variation in the LAA size in dogs.
3. Although we did not measure natriuretic peptide levels in this series, we did measure atrial natriuretic peptide and B-type natriuretic peptide levels in a more recent series. There were no significant changes in atrial natriuretic peptide level (32 ± 20 pg/mL at baseline and 41 ± 34 pg/mL after 30 days, $P = .60$) or B-type natriuretic peptide level (always <5 pg/mL). We did not observe any weight gain caused by fluid retention.
4. The investigated dogs were all killed on the day of the terminal study. During our follow-up period, we did not observe any significant decrease in stroke volume.
5. The effects of LAA occlusion on hemodynamics in patients with heart disease and in atrial fibrillation have to be carefully investigated in the future.

We disagree with their conclusion that hemodynamically LAA occlusion might even do harm and should therefore not be performed in patients with atrial fibrillation. There is no solid evidence to suggest that exclusion of the LAA in patients with atrial fibrillation does harm. In fact, there is good evidence suggestive to the contrary^{2,3}; much of this has been gathered from patients undergoing mitral valve surgery or surgical ablation. However, it is also clear that surgical LAA ligation with current techniques and technology is sometimes incomplete. Such incomplete ligation might be responsible for an increased risk of thromboembolic events after attempted ligation.⁴ Our focus is on the development of a method for reliable, complete, and simple occlusion

of the LAA. With such an approach, we will have the ability to study the clinical effects of LAA exclusion. At this time, we believe that such effects have not been fully elucidated.

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Selection of dialysis patients for bilateral thoracic artery grafts

To the Editor:

I enjoyed the recent brief communication "Gastric conduit staple line after esophagectomy: To oversew or not?"¹ This work detailed two patients who had a minimally invasive esophagectomy. During the procedure, the gastric conduit staple line was not oversewn or inverted. The first patient's staple line leak occurred on postoperative day 1 and may have been related to a stapler malfunction. The second staple line leak occurred during the second postoperative week and was probably due to multiple factors.

I routinely oversew gastric staple lines because of an experience with a young patient with renal failure, insulin-dependent diabetes, intravenous drug use, and supra-