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### Authors' reply

We thank Nikki Pluymaekers and colleagues, David Vinson and colleagues, and Ian DeSouza for their thoughtful comments on the results of the RAFF2 study.<sup>1</sup>

Pluymaekers and colleagues highlight differences in management of acute atrial fibrillation between Europe and Canada. We have shown the safe and successful use of intravenous procainamide for acute atrial fibrillation in several studies over a 20-year period.<sup>2-4</sup> These have shown rapid cardioversion in half of appropriately selected patients with acute atrial fibrillation, thus avoiding electrical cardioversion. In the RAFF2 study,<sup>1</sup> 94% of patients were sent home in sinus rhythm with no need for a return visit the next day. Adverse events were almost all mild and were usually transient hypotension. When cardioverted outside of a research protocol, patients managed with cardioversion can usually be discharged from the emergency department within 3 h of initial assessment.

We know of very few hospitals that can arrange next-day cardiology consultation, 7 days a week. In Canada, patients with acute atrial fibrillation are treated immediately by emergency physicians who rarely consult cardiologists in the emergency department for such cases. We do, however, fully understand the need for appropriate use of oral anticoagulants following pharmacological or electrical cardioversion.

In response to Vinson and colleagues, we note that of patients who required electrical cardioversion, only 15% required more than one shock, and almost all received a maximum of 200 J. Biphasic cardioversion of acute atrial fibrillation is generally very effective, regardless of pad position. Although we did not show drug-shock (intravenous procainamide) to be more effective than shock only (96% vs 92%;  $p=0.066$ ), we did manage to avoid resource-intensive electrical cardioversion in one half of patients. The decision whether to cardiovert with

drugs or electricity should be shared between physician and patient, and our trial informs this discussion.

We agree with de Souza that guidelines for prescribing oral coagulation after acute cardioversion have changed substantially in recent years, although the level of evidence is low. In summary, for patients at low risk (0 or 1 CHA<sub>2</sub>DS<sub>2</sub>-VASc criteria) and those not at low risk (2 or more CHA<sub>2</sub>DS<sub>2</sub>-VAScDS-65 criteria), we have the following two recommendations.<sup>5,6</sup>

First, cardioversion for non-valvular patients with acute atrial fibrillation who are not anticoagulated and have not had a stroke or transient ischaemic attack (in the past 6 months) should be restricted to those who either present within 12 h of onset if they are not at low risk, unless they can be cleared by transoesophageal echocardiography, or present within 48 h of onset if they are at low risk, unless they can be cleared by transoesophageal echocardiography.

Second, anticoagulation after cardioversion should be prescribed indefinitely for patients who have 2 or more CHA<sub>2</sub>DS<sub>2</sub>-VASc criteria, or it might be considered for a 4-week period for patients who have 0 or 1 CHA<sub>2</sub>DS<sub>2</sub>-VASc criteria after careful consideration of risks and benefits and a shared decision making process with the patient.

We declare no competing interests.

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- 1 Stiell IG, Sivilotti MLA, Taljaard M, et al. Electrical versus pharmacological cardioversion for emergency department patients with acute atrial fibrillation (RAFF2): a partial factorial randomised trial. *Lancet* 2020; **395**: 339–49.
- 2 Stiell IG, Clement CM, Symington C, Perry JJ, Vaillancourt C, Wells GA. Emergency department use of intravenous procainamide for patients with acute atrial fibrillation or flutter. *Acad Emerg Med* 2007; **14**: 1158–64.
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- 6 Stiell IG, McMurtry MS, McRae A, et al. The Canadian Cardiovascular Society 2018 guideline update for atrial fibrillation—a different perspective. *CJEM* 2019; **21**: 572–75.

### Department of Error

NCD Risk Factor Collaboration (NCD-RisC). *Worldwide trends in blood pressure from 1975 to 2015: a pooled analysis of 1479 population-based measurement studies with 19.1 million participants*. *Lancet* 2017; **389**: 37–55—In this Article, spelling of author Niels Wedderkopp's name was incorrect. This correction has been made to the online version as of Sept 24, 2020.

Fisher D, Teo YY, Nabarro D. *Assessing national performance in response to COVID-19*. *Lancet* 2020; published online July 15. [https://doi.org/10.1016/S0140-6736\(20\)31601-9](https://doi.org/10.1016/S0140-6736(20)31601-9)—In this Comment, the first sentence has been changed to use the words “several countries had their preparedness for pandemics assessed via”. An additional sentence and margin text have been added to the start of the second paragraph and the words “in implementing these measures is key to relaxing lockdowns and opening of” have been added to the new second sentence of the second paragraph. These corrections have been made to the online version as of July 17, 2020.

Bisson GP, Bastos M, Campbell JR, et al. *Mortality in adults with multidrug-resistant tuberculosis and HIV by antiretroviral therapy and tuberculosis drug use: an individual patient data meta-analysis*. *Lancet* 2020; **396**: 402–11—In this Article, spelling of authors Petros Isaakidis and Parvaneh Baghaei's names was incorrect. These corrections have been made to the online version as of Sept 24, 2020.



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