To the Editor:
A number of methodological and interpretive concerns need to be discussed in the context of the authors’ study1 and in comparison with the only previous work in this area.2
First, contrary to the authors’ interpretation of our previous publication,2 we assessed peak cardiac output in 7 of 10 subjects, not 4 as the authors stated. The authors question our finding that cardiac output truly was different at peak exercise between patients with stroke and control subjects. Further corroborating our finding that cardiac output was lower in patients with stroke, we found that a lower peak VO₂ was associated with slower cardiac output truly was different at peak exercise between participants between studies or is it an effect of the different exercise protocols used by Jakovljevic et al?1 We suspect it is the latter.

The authors estimated cardiac output with different methods between the groups (ie, bioreactance versus CO₂ rebreathe).1 Despite the inherent error of each method, the study design “benefit” of systematic error from using only one method that would be present in both groups is lost. The authors’ findings and conclusions are confounded by using different methods for cardiac output estimation. Subsequently, the authors’ recommendation for rehabilitation strategies “targeting muscle oxygen uptake” in light of their statement that “cardiac function and pumping capability are maintained”1 warrants caution, because we have found that peak and reserve cardiovascular function may indeed be impaired in patients with chronic stroke.2

We strongly suggest that stroke rehabilitation should integrate exercise therapy that targets cardiorespiratory, peripheral vascular, and skeletal muscle function (not just skeletal muscle function as the authors’ suggest1) to improve peak VO₂ and functional ability.

Disclosures
None.

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Letter by Tomczak and Haykowsky Regarding Article, "Discrepancy Between Cardiac and Physical Functional Reserves in Stroke"

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