REPLY

We thank Dr. Nacif and colleagues for their interest in our paper (1) and for pointing out a referencing error for which we humbly apologize. Reference 18 was to the Society for Cardiovascular Magnetic Resonance standardized *imaging* protocols but should have been to the Society for Cardiovascular Magnetic Resonance standardized *reporting* guidelines (2).

Nacif et al. suggest the guidelines recommend an unspecified threshold somewhere at or above 2-SD from remote. The guidelines state: "The amount of intense signal >2 SD above the average of normal myocardium should be reported for the area within each segment." We leave it to the reader to decide the relative ambiguity of this statement. Nevertheless, 2-SD is a widely used metric.

There is a more important point. Guidelines serve 2 purposes: 1) to guide clinical practice; and 2) to stimulate research. We were moved to perform this study in response to the guidelines; thus, they therefore admirably served that purpose.

Since this paper was written, further methods have been proposed, such as Otsu thresholding, which may be an improvement. We have developed a macro based in ImageJ software (National Institutes of Health, Bethesda, Maryland) that implements all SD cutpoints, full width at half maximum, and Otsu. We are happy to share this with interested parties.

Furthermore, the whole concept of using 1 threshold is beginning to be challenged. In the June issue of *iJACC*, a paper by Matsumoto et al. (3) and the accompanying editorial by Arai (4) highlight that in acute myocardial infarction, the enhanced area may have 2 zones, the area at risk (less bright, seen best on early contrast enhancement) and the infarcted zone (brighter and seen best late after contrast). In an important extension of this concept, Dr. Arai proposed in his seminal lecture at the European Society of Cardiology Congress 2011 that it may be appropriate to emphasize 1 threshold for 1 purpose (e.g., 2-SD for the area at risk) and a higher threshold for another purpose (infarct extent).

It is clear that there is more work to be done on this important area, including interstudy reproducibility, infarct evolution, histology, and patient outcomes.

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