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Reply

We thank Drs. Ntim and Hundley for their interest in our paper (1) and their comments regarding the role of cardiac magnetic resonance (CMR) in the evaluation of cardiac complications of cancer therapy. We agree that CMR has a well-defined and expanding role in the evaluation and management of cardiac disease in general, with specific value in cardiovascular structure, function, and physiology (2). The use of CMR in cardiotoxicity, however, has only been evaluated in a preliminary fashion. One study (3) with a limited number of patients and without biopsy correlation, suggested that CMR could be used as a prognosticator of future cardiomyopathy. A 10-patient case series evaluated the value of CMR in confirming the presence of left ventricular dysfunction and demonstrated late gadolinium enhancement in patients with cardiomyopathy. Delayed enhancement CMR was also used to demonstrate abnormalities in patients with late-onset cardiomyopathy in isolated case reports (4,5).

The ability of delayed gadolinium enhancement CMR to diagnose myocardial pathology makes it an attractive method to evaluate patients at risk for antineoplastic cardiotoxicity. However, as of yet there have been no studies correlating findings of CMR to endomyocardial biopsies, which is the gold standard. In addition, the total number of patients studied to this day remains very small. Because of this lack of data we do not routinely use CMR at M. D. Anderson Cancer Center for the purpose of screening or following patients with cardiotoxicity.

In conclusion, whereas we felt it would be premature to include CMR in a state-of-the-art paper, we feel strongly that this technology merits further investigation and certainly has the potential to benefit patients with cardiotoxicity related to cancer treatment.

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