In Reply—Giant Cell Arteritis: The Place of 18F-FDG PET/CT and Serum Haptoglobin Level

To the Editor: We agree with Dr Yildiz1 regarding the ongoing need for identifying readily available, quantifiable blood biomarkers and noninvasive imaging modalities that provide validated assessment strategies to determine disease activity in large-vessel vasculitis, specifically in patients receiving tocilizumab. The findings by Unizony et al2 described by Dr Yildiz are noted and provide an area worthy of further investigation and confirmation. We chose to exclude guidance or suggestion of exploratory biomarkers in the recommendations of management because some proposed biomarkers are not commercially available to the practicing clinician. Serum haptoglobin is clinically available but has not yet been validated. Replicability of novel biomarkers across different giant cell arteritis cohorts has been a significant challenge, resulting in several preliminary and promising biomarkers from being used broadly.3 Thus, the overall utility of serum haptoglobin in the assessment of disease activity in patients with large-vessel vasculitis outside of the GiACTA trial is yet to be known and requires further investigation before routine use can be recommended.

The authors agree that 18F-fluorodeoxyglucose positron emission tomography/computed tomography (PET/CT) can provide additional information about the presence of arterial hypermetabolism in the large vessels of patients with giant cell arteritis. The diagnostic accuracy of PET/CT in the diagnosis of large-vessel vasculitis has a pooled sensitivity of 83.3% and specificity of 89.6%4; however, the diagnostic value for monitoring activity while treatment is being received is lower, with a sensitivity of 77% and specificity of 71%.5 Whereas groups have reported that arterial hypermetabolism in some patients portends a higher risk of subsequent aortic complications,6 hypermetabolism can also be noted in patients with hypercholesterolemia7 as well as in vascular remodeling resulting from prior aortic injury8; therefore, interpretation of detectable arterial hypermetabolism in patients without clinical symptoms of disease activity must be done with caution. Large-scale prospective studies using systematically obtained noninvasive imaging are needed to understand the clinical applicability of advanced arterial imaging in the long-term management of patients with large-vessel vasculitis. Until such time, we agree with the current consensus recommendations that arterial imaging (such as PET/CT) is reasonable to use in patients for whom relapse is suspected, if imaging can assist in the confirmation of or exclusion of flare; however, advanced arterial imaging is not routinely recommended for patients in clinical and biochemical remission.9

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