June 25, 2020

Dear Editor:

Mesguich et al. (J Nucl Med 2020) commented on our publication that reported on the long-term outcome of patients with advanced stage Hodgkin lymphoma undergoing interim FDG-PET (after 2 cycles of chemotherapy; PET2) and PET2 response-adapted change in therapy in the SWOG S0816 trial. 1,2 Their letter emphasizes the importance of the end-of-treatment PET (PET3). Of the 270 patients with a negative PET2 scan that we reported on the S0816 study, 244 patients (90%) underwent PET3, and 35 of these 244 patients (14%) had a positive PET3 scan. Unfortunately, our study did not mandate biopsy after positive PET3, so we are not able to confirm that all 35 of these patients actually had residual disease. At the time of positive PET3, 13 of the 35 patients were officially categorized as disease progression. Nineteen of the 35 patients initiated salvage therapy shortly after the PET3 scan. Therefore, it remains possible that some of the positive PET3 scans represent a false positive result. However, we agree with the assessment that the PET3 scan can be a useful tool to identify primary refractory patients requiring expedited salvage therapy. Nevertheless, PET2 remains very important in the early detection of high-risk patients treated with standard chemotherapy regimens, who are unlikely to show a complete response to therapy, which may justify intensification of treatment at that time, contributing to improved survival. In addition, we note that when novel targeted agents such as brentuximab vedotin and nivolumab are used in combination with standard chemotherapy agents, PET2-based responses are not used to alter therapy. As such the ongoing national SWOG S1826 study compares brentuximab vedotin or nivolumab in combination with adriamycin, vinblastine, and dacarbazine, and does not modify therapy based on the PET2 scan results (NCT03907488).

On behalf of the authors,

Deborah M. Stephens Heiko Schoder Hongli Li Jonathan Friedberg

- 1. Press OW, Li H, Schoder H, et al: US Intergroup Trial of Response-Adapted Therapy for Stage III to IV Hodgkin Lymphoma Using Early Interim Fluorodeoxyglucose-Positron Emission Tomography Imaging: Southwest Oncology Group S0816. J Clin Oncol 34:2020-7, 2016
- 2. Stephens DM, Li H, Schöder H, et al: Five-year follow-up of SWOG S0816: limitations and values of a PET-adapted approach with stage III/IV Hodgkin lymphoma. Blood 134:1238-1246, 2019