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LETTER TO THE EDITOR

Reply to comments by Laffon et al.: Liver SUV versus stage in Hodgkin's lymphoma: the total amount of uptake may play a role in the inverse relationship

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Dear Sir,

We read with great interest the letter from Laffon et al. [1] in which the authors refer to a recently published paper of our group that evaluates the factors affecting 2-deoxy-2-(^{18}F)-fluoro-D-glucose (^{18}F-FDG) uptake in the liver and mediastinum during chemotherapy (CHT) in Hodgkin's lymphoma (HL) [2]. Laffon et al. suggest that the total amount of uptake in malignant tissues of cancer patients may play a role in the reduction of ^{18}F-FDG uptake in the liver at staging in HL (as shown in the report previously cited) [2, 3]. For this reason, the authors suggest that the measurement of the total ^{18}F-FDG that is irreversibly trapped in a pathological tissue (as measured by a formula suggested by Laffon et al. [3]) could help in the explanation of this phenomenon and could be useful when evaluating positron emission tomography/computed tomography (PET/CT) scans of patients with cancer.

We agree with the hypothesis of Laffon and colleagues. We performed a further analysis of the data already published [2], and here we report a graphical representation of the relationship between the maximum standardized uptake value (SUV_{max}) in the mediastinum and the stage of the disease (Fig. 1) that led to results similar to those observed in the liver [2]. In particular, in our study cohort, the SUV_{max} in the mediastinum is significantly related to the extension of HL according to Ann Arbor criteria with a lower SUV_{max} in the mediastinum being related to a higher stage of the disease (p= 0.0385, Fig. 1) [2]. In agreement with Laffon et al., we can conclude that when a tissue shows an intense tracer uptake, the amount of tracer available to another tissue is reduced (to be specific, the circulating ^{18}F-FDG in the blood as detectable by means of mediastinum SUV_{max}) [4]. We would like to thank Laffon et al. for their detailed comments and suggestions that have greatly improved the results of our study.

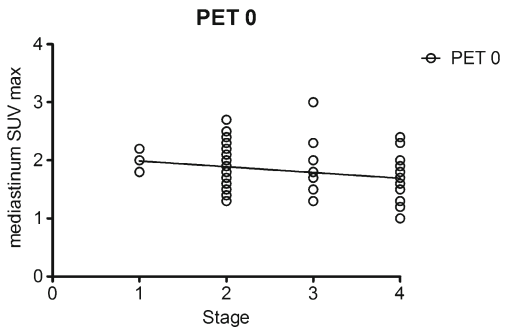

Fig. 1 Graphical representation of the linear regression analysis that investigated the relationships between mediastinum SUV_{max} and the stage of HL. Further details can be found in the text and in reference [2]

References

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