although evidence based, is an inexact science, different from other objective sciences such as engineering or mathematics, and is not to be considered based on algebraic results but on an integration of these results in light of clinical reasoning, comprehensive of all clinical matters; for example, the same measurement (SUV_{max}, T/L SUV ratio and any other cut-off or semiquantitative analysis) could have a different meaning and could need a different interpretation in different tumors and different cases. Each tumor and its metabolic pattern are different from one another and every metabolic pattern of the same type of tumor could be slightly different in each patient. We would finally comment saying that measuring is the right direction, a great opportunity, a necessary tool for modern nuclear medicine to be up to date with and further studies are desirable and needed to go on along this way in light of an evidence-based concept. In contrast, we have to be conscious that numbers are not certainty, which must be considered as a part of a wider and more complex context and that the entirety of clinical matters is more than the simple sum of all its elements and parameters.

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Response to the letter to the editor entitled 'Fluorodeoxyglucose positron emission tomography/computed tomography standardized uptake value in discriminating benign versus malignant adrenal lesions: an open and debated issue'

Pelin Ozcan Kara[a], Taylan Kara[b] and Gonca Kara Gedik[a], [a]Department of Nuclear Medicine, Selcuklu Medical Faculty, Selcuk University and [b]Department of Radiology, Beyhekim Hospital, Selcuklu, Konya, Turkey

Correspondence to Pelin Ozcan Kara, MD, Department of Nuclear Medicine, Selcuklu Medical Faculty, Selcuk University, Selcuklu, Konya, Turkey
Tel: +90 332 2237787; fax: +90 332 2416065;
e-mail: ppelinozcan@gmail.com

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We thank Dr F. Bertagna and Dr Raffaele Giubbini for their interest in our recent study [1]. We appreciate their comments and it is with great pleasure that we answer their comments with regard to our article.

The adrenal gland is one of the most common sites of metastases after the lungs, liver and bone. Discrimination of adrenal benign lesions versus malignant masses is essential, especially in patients with cancer, for choosing the appropriate treatment approach and assessing prognosis. A recent study by Okada *et al.* [2] reported 89% sensitivity and 94% specificity with an standardized uptake value $(SUV)_{max}$ cutoff value of 2.5 in 35 adrenal lesions in 30 patients. However, in our cancer patient population, who had fluorodeoxyglucose-positron emission tomography/computed tomography (^{18}F-FDG-PET/CT) examination, we observed that malignant adrenal lesions often have higher SUV_{max} values. Therefore, we thought that the SUV_{max} cutoff value should be higher than 2.5. That is why the aim of our study was to compare all methods proposed in the literature [SUV_{max} value, tumour/liver SUV (T/L SUV) ratio, visual analysis, size and the Hounsfield unit values on CT scanning] to discriminate benign adrenal lesions versus malignant masses and to find the best index between all these semiquantitative parameters. On the basis of receiver operating curves, a SUV_{max} cutoff value of 4.2 (88.6 sensitivity; 88.2% specificity) and T/L SUV ratio of 1.68 (90% sensitivity; 91.1% specificity) have been identified, confirming the usefulness of these parameters in differentiating benign from malignant lesions. Combined information obtained from PET/CT scan ($SUV_{max} \geq 4.2$, T/L ratio ≥ 1.68 and visual analysis) and unenhanced CT scan (size, CT HU ≥ 26.5) is recommended for better differentiation for the first time in the literature.

Differentiation of malignant from benign lesions is a critical issue in clinical practice. Therefore, ^{18}F-FDG is not tumour specific. It is true that SUV or T/L SUV ratios *per se* are semiquantitative parameters that reflect metabolic activity, but are not specific markers of malignancies. As the uptake of ^{18}F-FDG in malignancies is expected to increase over time, as underlined by Drs Bertagna and Giubbini, dual time point acquisition could be potentially useful in partially overcoming the relatively low specificity of the SUV_{max} value. Recently, many studies have found interesting and sometimes confusing results using dual time point acquisition of ^{18}F-FDG PET and PET/CT scanning for the differentiation of benign from malignant conditions [3–9]. But, our study was retrospectively planned, which is why we could not use the imaging data necessary for dual time point acquisition. Although this newly described dual time point imaging of ^{18}F-FDG PET/CT seems to be an effective

method for distinguishing benign from malignant lesions, no other study has attempted to adapt this technique for the differentiation of adrenal benign versus malignant lesions. Further prospective studies are needed to investigate whether dual time point ^{18}F-FDG-PET/CT scanning could differentiate benign from malignant adrenal lesions for various malignant diseases.

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Response to the paper entitled clinical and therapeutic impact of ^{18}F-FDG PET/CT whole-body acquisition including lower limbs in patients with malignant melanoma

Jennifer Davidson and Francis Sundram, Department of Nuclear Medicine, Southampton University Hospitals Trust, Hampshire, UK

Correspondence to Jennifer Davidson, MBBS, Department of Nuclear Medicine, Southampton University Hospitals Trust, Hampshire, UK
Tel/fax: +44 7894076939; e-mail: jdavidson@doctors.org.uk

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We read with interest the paper by Querellou *et al.* [1] on the clinical and therapeutic impact of fluorodeoxyglucose-PET/computed tomography (FDG-PET/CT) whole-body acquisition in patients with melanoma and the value of imaging the lower limbs in this group. Our centre is among the busiest in the UK national mobile PET/CT South procurement programme. Since this service commenced in April 2008, just over a thousand patients have been scanned in the 30-month period to date. The Trust is also a tertiary referral centre for melanoma.

With particular relevance to the recent study, we undertook a retrospective review of our FDG-PET/CT studies in patients with a primary diagnosis of malignant melanoma. Over a 30-month period, there were a total of 33 scans in 30 patients. All studies were whole-body acquisitions, scanning from vertex of skull to feet. The indications for FDG-PET/CT included: staging (12 scans), recurrence (20 scans), response to treatment (one scan). Eight scans (seven patients) had a known primary in a lower limb. Of the remaining 25 scans, there were three that showed abnormal FDG uptake in the lower limbs. These areas included the buttock, an inguinal node and adjacent to the medial femoral condyle. The first two lesions would have been detected in these patients if the standard half-body scan from base of skull to upper thighs had been undertaken. The remaining one patient underwent fine needle aspiration of the subcutaneous lesion adjacent to the medial femoral condyle. This showed a small number of cells, some of which contained granular cytoplasmic pigment, and in conjunction with the history, this was thought to most likely represent a melanoma metastasis. However, after wire-guided excision, the histology confirmed giant cell tumour of tendon sheath, a slow growing benign entity.

It is well established that FDG-PET/CT has significant advantages over conventional cross-sectional imaging, with the findings influencing subsequent clinical management of patients [2–4]. There are a number of suggested protocols for the indications of FDG-PET/CT in the staging, diagnosis and response assessment of malignant melanoma [5]; however, these are all based on whole-body imaging. To the best of our knowledge, there are no guidelines specifying when and whether it is appropriate to perform half-body FDG-PET/CT acquisitions in melanoma.

Therefore, from our experience of FDG-PET/CT in malignant melanoma, there were no significant lesions identified from imaging the lower limbs. This concurs with the findings of the investigators of the study. We, therefore, wonder whether it would be acceptable if half-body, instead of whole-body imaging, should be considered for patients with melanoma in whom there is no known or strongly suspected lower limb primary.

This would seem to have several advantages. First, it would reduce the CT radiation dose as it would omit exposure from upper thighs to feet. In the vast majority of patients, the distance from base of skull to upper thighs is similar to that from upper thighs to feet. It can thus be inferred that, potentially, the patient would receive approximately half the dose. Second, the PET acquisition depends on a number of overlapping bed positions [1]. Similarly, as only approximately half the bed positions would be used for a half-body versus a