Letter to the Editor

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Letter to the Editor

Dear editor, prof. dr. Stahel

With great interest, we read the paper entitled 'Cachexia – sarcopenia as a determinant of disease control rate and survival in non-small lung cancer patients receiving immune – checkpoint inhibitors' in Lung Cancer. Treatment with immune checkpoint inhibitors (ICI), with or without chemotherapy, is currently the standard medical care for patients with metastatic non – small cell lung cancer (NSCLC) [2]. However, not all patients benefit. For optimal cost – effective implementation of this relatively new treatment, it is important to identify clinical characteristics and biomarkers, which can predict ICI effectiveness. We agree that cachexia is one of the interesting features worth to explore in this setting.

Previous studies identified cachexia (i.e. unintended weight loss and muscle wasting) or sarcopenia (low muscle mass and muscle weakness) as predictors of chemotherapy outcome in NSCLC [3–5]. In this retrospective cohort study, Roch et al. [1] explored if the so called cachexia – sarcopenia syndrome was associated with clinical outcomes for NSCLC patients treated with ICI. A world health organization performance score (WHO - PS) > 1, albumin levels < 32 g/L, low muscle mass measured at lumbar level 3 (defined as "sarcopenia") and muscle mass loss > 5% during eight weeks of treatment (defined as "evolving sarcopenia") were shown to be strong prognostic factors for poor progression free survival (PFS). Pre-treatment weight loss of > 5% in three months prior to therapy start (defined as "cachexia"), albumin levels < 32 g/L and evolving sarcopenia were strong prognostic for poor overall survival (OS). For proper translation of these results to daily clinical practice, we would like to raise the following questions and discussion points.

As mentioned before, treatment with ICI, with or without chemotherapy, is indeed standard care for all patients with metastatic NSCLC without driver mutation. However, in all registration studies for ICI to date, patients with a poor WHO - PS (> 1) were excluded, as a high WHO – PS is related with poor outcomes [2], independent from age [6]. Therefore, it is surprising that in this retrospective cohort study, 33.8 % of the patients had a WHO – PS of > 1. As poor PS is also one of the characteristics of cachexia [7], and 58.9 % of the patients had > 5% weight loss at baseline, we wonder whether the authors tested the interaction between PS and weight loss in their model. In addition, it would be interesting to see the results for patients with WHO – PS 0 – 1.

Next to that, we noted that the authors use a new and to us confusing term "cachexia – sarcopenia syndrome", which in the manuscript refers to a state of pre-treatment weight loss, weight loss during therapy and loss of muscle mass before- and during treatment. To disentangle the relative contribution of weight loss and muscle wasting per se or combined, we suggest to adhere to the currently well defined definitions of cachexia and sarcopenia [7].

Transparency document

The Transparency document associated with this article can be found in the online version.

Declaration of Competing Interest

The authors report no declarations of interest.

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