

COMMENTARY



Letter to the editor regarding the article 'Are older patients with non-small cell lung cancer receiving optimal care? A population-based study'

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We read with great interest the recently published article by Willén et al. [1] on the optimal care of non-small cell lung cancer (NSCLC) in elderly patients. The optimal systemic treatment of adjuvant and palliative settings is of keen interest to medical researchers in elderly patients. Some researchers have emphasized that biological age is important along with chronological age in treatment decisions [2,3]. In this situation, geriatric assessment tools to detect frail patients, are very important to evaluate the eligible older patients for treatment. In this study, the authors suggested that overall and cause-specific survival decreased with increasing age in patients with a stage IA-IIIA disease and there was no age difference in survival in patients with stage IIIB-IV NSCLC [1]. We congratulate the authors for this work. Although it is of utmost importance in its concept, we want to provide some inferences regarding this study.

We would expect the relationship between overall and cause-specific survival and body mass index (BMI) in early (adjuvant setting) and late-stage disease (palliative setting) to also have been evaluated in this study. The relation between treatment outcomes and BMI in cancer patients is controversial. Obesity is an important risk factor for some cancer [4,5]. However, the normal and underweight colorectal cancer patients have higher mortality compared with overweight patients [6]. This situation is defined as a 'paradoxical effect of obesity' like the 'reverse metabolism' [7]. In elderly patients, the relationship between mortality and BMI is like a U-shaped curved [7]. Cancer and cancer treatments, including surgery, radiation therapy, and systemic chemotherapy, are catabolic states. The excess adipose tissue may be effective in reducing mortality by providing energy storage and because it has strong immunological functions in this catabolic process. Overweight or obese BMI patients may have more tolerability of treatment modalities and may complete the treatment process. Sarcopenia is often even higher in older adults with cancer and is related to adverse outcomes and with chemotherapy toxicity and mortality [8]. Cancer patients are predominantly elderly patients. Elderly cancer patients tend to be vulnerable and frail to adverse outcomes because of both age-related sarcopenia and cancer-related cachexia [9]. BMI alteration

(increased by more than 1.4%) during treatment with immune checkpoint inhibitors and chemotherapy has been reported to be significantly associated with clinical outcomes in NSCLC [10]. Based on this, we suggest that BMI may be an independent factor in predicting mortality. Muscle loss is associated with mortality, an excess of body fat in cancer patients is thought to be protective. However, this may produce different results in the adjuvant and palliative settings.

In conclusion, the recent study represents a reliable report for the treatment modalities of early and late-stage lung cancer in elderly patients. Especially in elderly cancer patients, randomized prospective studies are needed to understand the relation between BMI and mortality.

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