

**The Author's Response:**

ASA Physical Status Classification in Surgical Oncology and the Importance of Improving Inter-Rater Reliability

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We appreciate for a valuable comment by Araujo and Theobald.

Numerous studies have been supported the prognostic role of comorbidity/performance indices in many cancer including urological malignancies such as prostate, bladder, and renal cell carcinoma (1-3).

We also concede that other comorbidity indices such as Charlson comorbidity index (CCI), Adult Comorbidity Evaluation-27 (ACE-27), Eastern Cooperative Oncology Group performance status (ECOG-PS), and Karnofsky performance status (KPS) are more appropriate for decision of chemotherapy eligibility and prediction of cancer related survival than American Society of Anesthesiologists physical status (ASA-PS) (4).

Previous frontier study by Berod et al. (5) showed the correlation between ASA classification and cancer-specific survival (CSS) after radical nephroureterectomy (RNU) in upper tract urothelial carcinoma (UTUC) patients. Without doubt, the aim of our study is not to evaluate the application of ASA-PS in decision on chemotherapy eligibility, but to explore the background of prognostic value of ASA-PS in UTUC patients after RNU.

Although no significant survival impact of ASA-PS score on overall survival (OS) or CSS in patients with localized UTUC was observed in subgroup analysis, high ASA-PS groups with locally advanced disease probably reflects a worse physical status directly related to the cancer itself as your comment (6).

Unfortunately, our multi-institutional data did not include any information about PS and we could not adequately adjust for PS. Further co-operated study is needed to clarify the relationship among ASA-PS and cancer related survival in UTUC patients after RNU.

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