### LETTER

# Septic patients with cancer: Do prehospital antibiotics improve survival? Do not forget the underlying status influence!

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Dear editor,

In the February 2020 issue of this journal, Nannan Panday et al. reported a significant reduction in 30-day readmissions but no overall survival improvement with prehospital antibiotics in septic patients with cancer.

The authors should be complimented for this very interesting study concerning a subgroup of particularly fragile patients due to immunosuppression associated with cancer.<sup>2</sup> This subgroup is probably one of those benefiting from early antibiotherapy,<sup>3</sup>

However, their interpretation of their results requires caution because of some methodological issues.

First, the authors do not report the ratio of included patients, independent of the treatment allocation group (usual or intervention group) with a previous 'do not resuscitate' status related to cancer and/or metastatic cancer. Second, the variables included in the multivariate analysis are not reported, and thus we do not know how they were considered potential cofounders of the in-hospital phase for the statistical analysis. These two points are major confounders of overall mortality (28-day, 90-day, and in-hospital mortality) because they affect a

physician's decision.<sup>4</sup> Consequently, during the hospital stage, patients, especially immunosuppressed patients, have a higher risk of limitation of care and/or nosocomial infection occurrence.<sup>5</sup>

Beyond these limitations, we fully agree that early identification of sepsis is the subgroup of sepsis patients where cancer remains a real challenge, particularly in the prehospital setting because of similarities between systemic inflammatory response syndrome related to sepsis and systemic inflammatory response related to cancer. Prehospital emergency medical service intervention, excluding the most caricatural sepsis forms, and early identification of sepsis and severity assessment over the telephone to the emergency medical service dispatch center is a challenge, but remains a prerequisite to determine the appropriate level of care dispatched at the scene (advanced life support vs. basic life support) for an individual patient.

# DISCLOSURES

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