

Much work remains to be done in the intensive care of patients with malignant haemopathies

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To the Editor,

As intensivists of the Groupe de recherche respiratoire en Onco-Hématologie (<http://www.grrroh.com/>), we have read the review by Kusadasi et al.¹ First of all, we must congratulate the authors on the quality of their work covering a wide range of topics in the management of patients with haematological malignancy (HM) admitted to the intensive care unit (ICU). However, some aspects in the review require clarification or discussion. First, the differentiation between oncology and HM patients seems fundamental. Indeed, the reasons for admission to the ICU, the pathology, the existence of neutropenia, and the prognosis (short and medium term) are not the same.² Another major aspect differentiating these patient populations is that administration of chemotherapy in the ICU seems quite reasonable for HM patients, whereas it provides very poor results in patients with solid tumours.^{3,4} The terms ‘cancer patients’ or ‘oncological patients,’ which are frequently used even in recent studies or reviews, must be banned. This aspect remains unclear in Kusadasi’s review, which cites an old study on the reasons for non-admission to the ICU, concerning only patients with metastatic solid tumours (Garrouste-Orgeas et al., 2005, as cited by Kusadasi).¹ The frequent mention of allogeneic bone marrow or stem cell recipients in the review is another aspect that is unclear. In these patients, the policy and the reasons for admission to the ICU, the type of immunosuppression, the pathologies encountered (hepatic sinusoidal obstruction syndrome, graft-versus host disease, thrombotic microangiopathy, etc.), and the prognosis are also probably different from those in other HM patients. Regarding acute respiratory failure (ARF), the leading cause of admission of HM patients to the ICU, we think that more than the ventilatory mode, which is

certainly important, the research and the determination of an aetiology seems to be the main prognostic factor of short- or medium-term survival. This was not discussed by the authors but has been demonstrated by Contejean et al.⁵ Using multivariable analysis in 604 HM patients with ARF admitted in the ICU, one of the main factors associated with in-hospital mortality was an undetermined ARF aetiology (odds ratio: 2.92 [95% confidence interval: 1.71–5.07]; $p < 0.005$). In this sense, intensivists must not only be organ-support technicians but also be able to make a diagnosis with the help of other specialists (radiologists, pulmonologists, and haematologists). This recommendation is also of value for understudied pathologies, such as digestive or neurological ones, in critically ill HM patients. Further studies should be conducted for critically ill HM patients.

REFERENCES

1. Kusadasi N, Muller MCA, van Westerloo DJ, Broers AEC, Hilken M, Blijlevens. On Behalf Of The Hema-Icu Study Group NMA. The management of critically ill patients with haematological malignancies. *Neth J Med.* 2017;75:265-71.
2. Taccone FS, Artigas AA, Sprung CL, Moreno R, Sakr Y, Vincent JL. Characteristics and outcomes of cancer patients in European ICUs. *Crit Care.* 2009;13:R15.
3. Benoit DD, Depuydt PO, Vandewoude KH, et al. Outcome in severely ill patients with hematological malignancies who received intravenous chemotherapy in the intensive care unit. *Intensive Care Med.* 2006;32:93-9.
4. Zerbib Y, Rabbat A, Fartoukh M, et al. Urgent Chemotherapy for Life-Threatening Complications Related to Solid Neoplasms. *Crit Care Med.* 2017;45:e640-e8.
5. Contejean A, Lemiale V, Resche-Rigon M, et al. Increased mortality in hematological malignancy patients with acute respiratory failure from undetermined etiology: a Groupe de Recherche en Réanimation Respiratoire en Onco-Hématologique (Grrr-OH) study. *Ann Intensive Care.* 2016;6:102.