Comment on: Monotherapy versus combination therapy for sepsis due to multidrug-resistant Acinetobacter baumannii: analysis of a multicentre prospective cohort

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Sir,

We read the article published by López-Cortés et al.1 with interest. The authors concluded that their study did not demonstrate clinical or statistically significant differences between monotherapy (MT) and combination therapy (CT) in the treatment of infections caused by multidrug-resistant Acinetobacter baumannii (MDRAB). We think that some issues need to be considered before reaching a definite conclusion regarding MT versus CT for infections due to MDRAB.

In the study conducted by López-Cortés et al.,1 only 33 patients who received CT were included, out of a total of 101 patients. The CT group included 12 different combination regimens that were allocated to only one or two patients in the majority of the different regimen groups. Although the authors have mentioned this small sample size among the study limitations, we believe that the β error coefficient of the analysis needs to be disclosed in the Results section in order to inform the readers correctly. We are concerned about the power of this study because of the small sample size allocated to each combination group.

MT and CT, which were administered for different antibacterial therapy indications for infections in various body sites, were stated as having a statistically non-significant difference with respect to 30 day mortality. However, both the antimicrobial agents used for MT or CT and the infection types (at least five different sources) were highly heterogeneous. For instance, although tigecycline would work well when used for the treatment of skin and soft tissue infections,2 this therapy regimen might fail for a patient with urosepsis.3,4

Moreover, it has not been clarified in the paper which CT was used for which indication as the CT was made up of multiple different combinations. There is no information about the control of the source of infection (such as the removal of infected catheters, drainage of intra-abdominal abscess, etc.), which would influence the success of the antimicrobial therapy.

To obtain valuable data, this study and analysis would have been better conducted in a homogeneous group of patients with a specific type of infection (e.g., all patients with bacteraemia or a group of patients with pneumonia). In addition, it would be more rational to compare different MT groups with each other, or different CT groups with each other.

We think that there are many factors confounding the results of the study by López-Cortés et al.1 Based on the results of this study, we are not convinced whether there is a lack of significant difference, clinically or statistically, between MT and CT in terms of 14 day, 30 day or crude mortality rates.

References


Monotherapy versus combination therapy for sepsis due to multidrug-resistant Acinetobacter baumannii: analysis of a multicentre prospective cohort—authors’ response

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