

## Reply to: "The possible role of anti-methicillin-resistant *Staphylococcus* aureus antimicrobial agents in spontaneous bacterial peritonitis"

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## Dear Editor,

we thank Drs. Fiore and Andreana for their comments about our paper.<sup>1</sup> However, we agree only in part with the majority of considerations proposed by the authors as regards to the choice to use daptomycin for the treatment of a patient with spontaneous bacterial peritonitis (SBP) due to methicillin-resistant *Staphylococcus aureus* (MRSA).

First of all, our patient showed at admission a severe thrombocytopenia (platelet count of 39×10<sup>9</sup>/L) and the use of linezolid (LZD) cannot be encouraged in these cases. As matter of fact, a recent study revealed significant intergroup differences in duration of LZD treatment prior to thrombocytopenia and it has been reported also within 8 days of therapy.<sup>2</sup> Furthermore, among patients with acute or chronic liver failure a low baseline platelet count has been identified as an independent risk factor for development of severe thrombocytopenia during LZD therapy.<sup>3</sup> The available data and the clinical judgment do not suggest to recommend LZD as first choice in patients with chronic liver failure or cirrhosis and low baseline platelet count.

Moreover, we disagree with comments about the comparison of daptomycin and LZD therapy for the treatment of vancomycin-resistant enterococci infection. Compared to LZD, it is well known that daptomycin has a reduced activity against enterococci and it is not considered a first-line option in patients with enterococcal infection. But we think that this observation is not appropriate for our case since we were treating a SBP due to MRSA. It is not necessary to review in this paper the body of evidence supporting the use of daptomycin in patients with MRSA infection.<sup>4</sup> Furthermore, we presented a summary of data (Table 2 of our publication)<sup>1</sup> suggesting a role for daptomycin in primary or secondary bacterial peritonitis. These observations seem to be confirmed by the randomized clinical trial of Piano and coworkers, who demonstrated a high efficacy of daptomycin combined to meropenem for the treatment of nosocomial SBP.<sup>5</sup>

Finally, since we have contributed with clinical and pharmacological studies to the assessment of the better daptomycin dosage in critically ill patients,<sup>6-8</sup> we strongly agree that a high dose of daptomycin should be considered in these situations. However, we have to outline that our patient had an acute kidney failure and daptomycin dosage should be adapted in these cases (recommendation is to use daptomycin every 48 hours if creatinine clearance is less than 35 mL/m). Thus the dosage we decided to administer was significantly high in the former cases.

In conclusion, there is growing evidence of an effective role of daptomycin in SBP episodes in cirrhotic patients. Considering the importance to ensure a broad-spectrum antibiotic therapy in cirrhotic patients with healthcare-associated infections,<sup>9,10</sup> daptomycin may be considered a potential option in these cases.

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