Author's response to reviews

Title: Discrepancy between Effects of Carbapenems and Flomoxef in Treating Nosocomial Hemodialysis Access-Related Bacteremia Secondary to Extended Spectrum Beta-lactamase Producing Klebsiella pneumoniae in Patients on Maintenance Hemodialysis

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Aug 26, 2012

Philippa Harris on behalf of
Dr. Silvia F. Costa
BMC Infectious Diseases
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236 Gray’s Inn Road
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Re: MS: 5953918475798609
Discrepancy between Effects of Carbapenems and Flomoxef in Treating Nosocomial Hemodialysis Access-Related Bacteremia Secondary to Extended Spectrum Beta-lactamase Producing *Klebsiella pneumoniae* in Patients on Maintenance Hemodialysis

Dear Ms. Harris and Dr. Costa:

Enclosed please find the revised copy of our manuscript for consideration for publication in the *BMC Infectious Diseases*.

We thank for the helpful comments and suggestions. We have modified the manuscript accordingly, and we hope to have addressed all your concerns.

Please do not hesitate to inform us of any remaining errors or concerns in the revised manuscript.

Thank you for your consideration.

Yours sincerely,

Chih-Chao Yang, MD
**Minor revisions**

1. **Please ensure that the title of table 2 mentions that it contains multivariate analysis results.**

**Response:** We have made this modification in the title and footnote of table 2, which is as follows:

**In the title:** “Variables with a $p$-value<0.1 by univariate analysis were subjected to multivariate analysis.”

**In the footnote:** “Variable with a $p$-value<0.05 by multivariate analysis.”

2. **Please clarify your reasons for only analyzing 42 of the patients (1) and fully discuss the inclusion/exclusion criteria for this (2).**

**Response:** We have made the necessary clarifications and discussions as follows:

(1) **Results:** (2nd paragraph)

“In addition to antibiotic treatment, surgical interventions (wound debridement and/or removal of infected fistula or graft) were performed in 7 of 15 patients with fistula or graft infection. All HD catheters related to ESBL-Kp bacteremia in 42 patients were removed after the onset of bacteremia. The extent and perioperative risk of surgery may affect survival of patients with fistula or graft infection but their effects were difficult to estimate. We believe bias and confounding factors could be reduced if we only analyzed 42 patients, all with catheter-related bacteremia.”

(2) **Methods:** (Study population and design section)

“…..who developed a nosocomial HD access-related infection secondary to ESBL-Kp were included. The eligibility criterion was HD access, including arteriovenous fistula or graft- or catheter-related ESBL-Kp bacteremia. Only adult patients with flomoxef-susceptible ESBL-Kp bacteremia who were treated with either flomoxef or a carbapenem (meropenem or imipenem) were included. For each included patient, the prescribed flomoxef or a carbapenem was administered for at least 2 days, starting within 5 days after receiving finalized blood culture results. The use of either flomoxef or a carbapenem was left to the discretion of the attending physician in each case. Details of the patients’ clinical course, biochemical data, sites of ESBL-Kp infection (blood, HD catheter tip, pus from HD catheter exit site, and pus from fistula or graft
wounds), and outcome were obtained from medical charts. Individual patient without blood culture that grew ESBL-Kp was excluded because, in the absence of concurrent blood cultures from the peripheral vein, there is a risk of enrolling patients simply representing colonization. Severely ill patients who died rapidly without receiving a carbapenem or flomoxef for at least two days were also excluded.”