Reviewer’s report

Title: Evaluation of Intravenous Voriconazole in Patients with Compromised Renal Function

Version: 1 Date: 18 July 2012

Reviewer: George Thompson

Reviewer’s report:

Lilly et al performed a retrospective evaluation of the potential effects of IV voriconazole on patient renal function compared to two other antifungal agents. This data is an important addition to the antifungal literature and adds to their prior presentation at ICAAC a few years back and others recent results in AAC.

My comments are all minor:

In patient matching by comorbidity what criteria were used? Charlson’s scoring? I do not see this information in the manuscript and see only DM and cardiovascular disease.

Were patient median or nadir blood pressure results available? This may be an easy variable that helps to explain the nephrotoxicity behind candidemia treatment vs the vori treated group which was primarily aspergillosis.

I am unable to determine if contrasted imaging studies were more commonly obtained in one particular group over another. Intuitively those with candida more likely have intraabdominal infections than those with aspergillosis and may have received more contrasted imaging studies as a result confounding the variables evaluated. Please clarify if this was evaluated.

Pages 7 and 8 are of great importance and this paper undoubtedly benefits from the “behind the scenes” look at the development of voriconazole the authors are able to provide given past affiliations with Pfizer and likely long experience with the development of IV vori, however it reads promotional in some ways. The sentence preceeding reference 12 on page 7 should be altered to say something close to, “However at the time of FDA approval….” etc.

P values should be included in the results portion of the text where appropriate.

When comparing three groups it is not typical to list a P value for “overall difference”. The authors should consider further expanding their explanation of this in the text instead.

Others have recently performed similar studies and these results should be included in the authors discussion and referenced: Oude Lashof AM, et al. Safety and tolerability of voriconazole in patients with baseline renal insufficiency and candidemia. Antimicrob Agents Chemother. 2012 Jun;56(6):3133-7.
Figures 1 and 2 were duplicated in the manuscript I received for review

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have received research support from Pfizer.
No other declarations.