Reviewer's report

Title: Cost analysis of voriconazole versus liposomal amphotericin B for primary therapy of invasive aspergillosis among patients with haematological disorders in Germany and Spain

Version: 2
Date: 2 June 2014

Reviewer: Giovanni Tarantino

Reviewer's report:

Major revisions
Incidence of voriconazole hepatotoxicity during intravenous and oral treatment for invasive fungal infections has not been evaluated.

Invasive aspergillosis (IA) is a life-threatening infection and is almost exclusively seen in the severely immunocompromised host, who are generally signed by reduced hepatic function. It typically occurs in patients treated for haematological malignancies (5–20% in high-risk groups) especially during prolonged neutropenia, after allogeneic stem cell transplantation and in the context of graft versus host disease.

Recently, treatment options for IA have improved with the availability of voriconazole, a broad-spectrum triazole, with a better efficacy and safety profile than amphotericin B. One of the most common side effects during voriconazole therapy is an increase in liver enzyme concentrations. In clinical trials with voriconazole, the incidence of hepatotoxicity varied considerably. This may be explained by differences in the study population (adult patients with AIDS, immunocompromised children), the indication (empirical therapy versus treatment for proven IA) or the formulation [intravenous versus oral] and dosage of voriconazole/amphotericin in that was used.

therapy of probable, proven and suspected IA.

Authors should register hepatotoxicity in all patients treated with voriconazole during the oral voriconazole treatment for an invasive fungal infection and compare these data with the incidence in patients treated intravenously.

Authors should also emphasize the unpredictability of DILI quoting the following: Drug-induced liver injury: is it somehow foreseeable?


Level of interest: An article of importance in its field

Quality of written English: Acceptable
**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests.