Reviewer's report

**Title:** Immunomodulatory intervention in sepsis by multidrug-resistant Pseudomonas aeruginosa with thalidomide: an experimental study

**Version:** 1  **Date:** 8 February 2005

**Reviewer:** Klaas Poelstra

**Reviewer's report:**

General

The paper of Evangelos et al is a concise report of a nice study that deals with the effect of thalidomide on survival and serum parameters reflecting inflammation in rats inoculated with multi-drug resistant Ps. aeruginosa. The study is relevant and well performed using a large number of animals and the data show a significant beneficial effect of treatment.

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**Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)**

It is mentioned that a total of 115 rats were enrolled in the study (page 3), yet the total number of Group A, B and C adds up to only 109 rats. Were there any rats excluded from the study? If so, what was the reason for this?

The authors mention that all animals had positive blood cultures for P. aeroginosa (Results section page 6). Were there any differences between the experimental groups? I know from my own experience that the variations in this parameter can be high.

Since the oral administration of only seed oil already affected the survival (group B), it is necessary to indicate the volume of administration of this vehicle. Why does it reduce survival? Do the animals suffer from diarrhea?

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**Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)**

The grammar and style of several sentences need some corrections. This is illustrated by the following sentences:

Abstract: "LPS, MDA and IFN did not differ.." should be "Plasma levels of LPS etc"
Introduction: "Its mode of action ... so as to be applied nowadays" is not a correct sentence. The same is true for "If thalidomede were effective for sepis.."

Methods: "Unsoluble" = insoluble, "It was diluted to commercial seed oil" should be "in commercial seed oil"

Results: "All animals .. had positive blood cultured for ..," incorrect sentence
Discussion: "sepsis challenged by endotoxins" should be "induced by endotoxins" "all groups of treatment were presented with bacteraemia .." is an incorrect sentence.

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**Discretionary Revisions (which the author can choose to ignore)**
I think that the peak levels of TNFα are reached well before $t=5$ hr, whereas the peak levels of NO are well after $t=5$ hr. I do understand that the authors should make a compromise (not all time points can be analyzed), but this issue might be addressed in the discussion section. Why was $t=5$ hrs chosen as a relevant time point?

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.