Reviewers report

Title: Performance of Interleukin-6 and Interleukin-8 serum levels in pediatric oncology patients with neutropenia and fever for the assessment of low-risk

Version: 1 Date: 18 April 2007
Reviewer: Greg Hodge

Reviewers report:

General

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

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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)

Comments: The new methodology which allows immediate measurements of plasma cytokines is a significant advancement over previous methods such as ELISA and CBA techniques. A comment on the reproducibility, precision and accuracy of this technique would be worthwhile- have the investigators tested this themselves or relied on manufacurer's data.

IL-6 is listed as "under development" on the Immulite web site and IL-8 is not listed. Are tests for these analytes commercially available yet?

As IL-6 results were similar for culture positive and > 5 day febrile groups a speculative comment in the discussion regarding the insensitivity of blood culture as the current "gold standard" for determining bacteremia/sepsis and the possibility that elevated IL-6 levels may define a "possible" group with bacteremia would be appropriate.

It is not clear in the discussion as to what novel findings were found in this study. Rather than list findings of previous studies it would be more helpful for the reader to point out what makes this study different from previous studies.

Page 1, second paragraph- "The inflammatory response reflects an ongoing collaboration between tissue macrophages and mast cells, vascular endothelial cells and circulating phagocytes."

T, B and NK lymphocytes and platelets are also involved in the inflammatory response.

Minor grammatical errors: Page 1, line 26- Il6: IL-6
line 24- responsem
line 25- cells. IL-6 (fullstop)

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Discretionary Revisions (which the author can choose to ignore)

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, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests.