Reviewer’s report

Title: Comparative study of Interleukin-18 (IL-18) Serum levels in Adult Onset Still's Disease (AOSD) and Systemic Onset Juvenile Idiopathic Arthritis (sJIA) and its use as a Biomarker for Diagnosis and Evaluation of Disease Activity.

Version: 0 Date: 25 May 2018

Reviewer: Giulio Cavalli

Reviewer's report:

The present study is methodologically sound, but the proposed use as a biomarker for diagnosis and evaluation of disease activity is neither novel nor realistic. Such use has been proposed for nearly a decade; however, this approach has not yet entered the clinical arena as previous, similar studies yielded inconclusive or conflicting results. A recent article by Brachat and al. (2017) described results from the most rigorous assessment of this cytokine in patients with SoJIA published so far. In this article, serial determinations of IL-18 levels over a long period of time and in a large cohort of SoJIA patients treated with canakinumab in the context of two RCT revealed that IL-18 levels show no association with disease activity, response to treatment, and disease severity (i.e. development of MAS).

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript
Quality of written English
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Acceptable

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