Reviewer's report

Title: Impact of comorbidities on gout and hyperuricaemia: an update on prevalence and treatment options

Version: 0 Date: 16 Apr 2017

Reviewer: Mariano Andres

Reviewer's report:

The authors provided a thoughtful and updated review on the complexity of hyperuricemia, gout, and cardiovascular and renal disease. The manuscript is well written and accessible for the average reader. I only have minor comments/suggestions:

- Page 4, paragraph 2 (Cardiovascular and renal comorbidities in gout): To clarify the lower incidence of gout in DM, the authors explain the relationship between glycosuria and urine urate excretion. This might be a possible explanation but there can also be others. For example, metformin, a widely used and first-line antidiabetic agent, acts intracellularly through PPAR-gamma modifications, that has been also reported as preventing gouty attacks. Please revise.

- Page 5, paragraph 2, lane 46: Formatting, please use just one decimal throughout the manuscript (but for p-values).

- Page 7, paragraph 2: as this journal is not aimed at Genetics, please provide a brief explanation of what Mendelian randomisation is. I see the effort in lines 31 and 32, In my opinion needs to be explain clearer.

- Page 9, paragraph 1, lane 27: please use "two" instead of "2"

- Page 16, paragraph 2: please include a mention of low-dose aspirin and its relationship with uricemia, as the majority of patients with CV and/or renal disease are treated with it.

- Page 17, paragraph 4, lane 56: SCARs stands for "serious cutaneous adverse reactions" (please modify).
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