Reviewer's report

**Title:** Does decreasing serum uric acid level prevent hypertension? --A nested randomised controlled trial in cohort study: Rationale, methods and baseline characteristics of study cohort

**Version:** 2 **Date:** 26 February 2013

**Reviewer:** Francesca Viazzi

**Reviewer's report:**

In the present study protocol, authors propose to randomize to either a health educational package group or a control group 2495 hyperuricemic subjects in order to investigate whether reduction of serum uric acid levels decreases the risk of hypertension during a 5 year follow-up.

Unfortunately, the manuscript is poorly written and needs extensive editing of the English form.

Albeit the argument is very interesting, there are several major issues that should be addressed before the manuscript can be considered for publication.

**Major Compulsory Revisions**

1. In the methods section Hyperuricemia is defined as a serum uric acid value above 6.0 mg/dl for males and above 7.0 mg/dl for females. Authors should specify the reason for these cut-off values which, certainly, are not in line with the literature. In fact, since serum uric acid is normally higher in men than in women, hyperuricemia is typically defined for higher serum uric acid levels in males.

   This is a critical issue, since the independent association between hyperuricemia and pre-hypertension in females but not in males reported by Authors in the manuscript could simply be due to the selection of females patients with a more severe hyperuricemia.

2. The protocol does not provide sufficient information about dietary intervention and lifestyle recommendations the authors are going to propose to the participants.

3. Moreover, a detailed description of tools used to evaluate compliance to recommendation is not provided. This reviewer believe that measuring urinary 24 hour sodium excretion might give important information about the state of the volume and the adherence to diet.

4. Table 2 lack any data about renal function. Again, this is instrumental to analyze and discuss in a constructive way the findings of this RCT.

5. It is not clear to me how the Authors are going to handle those patients who may possibly start to assume uric acid lowering treatment because
symptomatic for hyperuricemia during the study follow-up.

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

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have no competing interests to declare