Reviewer's report

**Title:** Long-term renal outcome in patients with malignant hypertension: a retrospective cohort study

**Version:** 1 **Date:** 14 March 2012

**Reviewer:** pietro castellino

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This is an interesting paper that provide clinically relevant information on an area of internal medicine and nephrology - malignant hypertension - which is often overlooked and that is most often exclude from analysis in clinical studies because of its negative clinical outcome. This sistematic exclusion may have generated in the medical comunity the incorrect feeling that malignant hypertension is of no clinical relevance in modern medicine. The results of the paper by Amraoui et al. provide sound evidences on the natural hystory and of the clinical outcome of patients that were first evaluated and diagnosed at the emergency department of a large teaching Hospital in Holland. The poor outcome of these patients with malignant hypertension is clearly demonstrated.

In my opinion the major limitation of the study are the following:

1) The study is retrospective in nature and the recruitment period is quite large (20 years). During this extended time range the clinical approach to hypertension treatment has significantly changed, but clinical impact of these changes cannot be evaluated because of the retrospective nature of the present work.

2) The impact of ratial and social differences on clinical presentation and outcome is somewhat stated but not satisfactorally clarified.

3) Similarly, adehrence to therapy and type of medications seem to be a significant component of the outcome and this should be discussed in more details.

In particular the data of table 2 show a reported mean BP of 146-90 mmHg, but with 50% of patients off target, less than 70% of patients on active treatment and apparently no patient on combined or triple therapy. These data are of interest but should be discussed more extensively.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**
No competing interest