Reviewer's report

**Title:** Assessment of Arterial Stiffness Using Pulse Wave Velocity in the First Year Post Kidney Transplant: a Prospective Cohort Study

**Version:** 2  
**Date:** 28 March 2015

**Reviewer:** Filippo Mangione

**Reviewer's report:**

Authors hypothesize that aortic stiffness, measured as carotid-femoral pulse wave velocity, may improve at one year after kidney transplantation. PWV is an accepted surrogate marker of cardiovascular morbidity and mortality, even in chronic kidney disease patients.

It has been already indirectly demonstrated that PWV could be ameliorated after kidney Tx compared to PWV measured in dialysis patients, at least in children (see Cseprekál O, Kis E, Schäffer P, Othmane Tel H, Fekete BC, Vannay A, Szabó AJ, Remport A, Szabó A, Tullassay T, Reusz GS: Pulse wave velocity in children following renal transplantation. Nephrol Dial Transplant 2009;24:309-315.). However, the present paper has the great advantage of a prospective assessment of PWV in the same cohort of transplanted patients.

- **Major Compulsory Revisions**

1. Selection of the population: did the authors select a population of well-functioning kidney graft, or transplant recipients were consecutively included? Distribution of serum creatinine values are very close to normal; no acute rejection or primary graft non-function or other early complications were reported. Overall, the enrolled population should be considered at low-risk for renal and cardiovascular outcomes post-transplantation. I think that this observation should be specified in the paper.

2. Conclusions, row 195 “we showed that there was no change in aortic PWV over the first year post kidney transplant, suggesting arterial stiffness does not progress during this time period”: again, I would stress the fact that the enrolled population was at low risk for cardio-renal outcomes (and no CV or renal events have been registered, indeed) and that results are referred only to well functioning kidney grafts.

- **Minor Essential Revisions**

1. Affiliations must be checked: avoid repeating the same affiliation for different authors;

2. Please consider to use estimated GFR instead of or in addition or serum creatinine in results and table 1.

- Discretionary revisions
1. Consider to avoid publication of figure 1B: is it really useful?

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests