Reviewer’s report

Title: PREVALENCE AND CORRELATES OF NON-ADHERENCE TO IMMUNOSUPPRESSANTS AND TO HEALTH BEHAVIOURS IN PATIENTS AFTER KIDNEY TRANSPLANTATION IN BRAZIL - THE ADHERE BRAZIL MULTICENTRE STUDY: A CROSSSECTIONAL STUDY PROTOCOL

Version: 1 Date: 18 May 2017

Reviewer: Holly Mansell

Reviewer's report:

The paper describes a protocol for an observational, cross-sectional multicenter study in Brazil, aimed to assess the prevalence of non-adherence and examine correlates. The topic is timely and clinically relevant. While it is not novel in terms of methodology, as it employs the same methodology as the BRIGHT study, this study will be undertaken in kidney transplant recipients, whereas the aforementioned study was conducted in heart transplant recipients.

Strengths:

A multicenter study in Brazil consisting of 20 centers will also the evaluation of meso level factors, in addition to macro level factors

The study aims to evaluate adherence to other health behaviours such as smoking, alcohol, physical activity and medical appointments

Questions for the authors:

The sample size calculation was based off of a non-adherence rate of 50%. While I realize this prevalence of non-adherence was identified in a study previously undertaken by the authors in Brazil, the authors state that the study was single center. Compared to previous literature (which the authors also quote) this prevalence rate seems quite low, and I think the study would be more robust if it used a more prudent estimate, especially since the authors acknowledge that there is a large amount of regional diversity in Brazil.

The multilevel correlates of nonadherence to immunosuppressants are collected by investigator-developed self-report questionnaire. Is it possible to obtain some of this data from chart review rather than patient recall? (ex: Number of treated acute rejection episodes, creatinine, estimated glomerular filtration rate, re-hospitalizations may be difficult for patients to answer).

The exclusion criteria states that patients will be excluded if the immunosuppression is based on drugs that the blood monitoring is not available or not covered by Brazil's health system (eg.
Mycophenolates). Just to clarify, does mean that any patient on mycophenolate will be excluded or does this mean that patients only on mycophenolate will be excluded? (I assume it is the later, but I think this should be clarified in the paper).

Thank you for the opportunity to review this protocol.

**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.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
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