Reviewer's report

**Title:** Enhanced catecholamine transporter binding in the locus coeruleus of patients with early Parkinson disease.

**Version:** 9  **Date:** 27 May 2011

**Reviewer:** Jian Wang

**Reviewer's report:**

- **Major Compulsory Revisions**
  1. The big concern for this study is the sensitivity of the FP-CIT in the locus coeruleus. The ligand was widely used for imaging dopamine transporters in striatum, but not sensitive and specific for imaging NE transporter.
  2. The authors mentioned the few study about imaging locus coeruleus in PD, which showed a reduced binding of 11C-RTI-32 in locus coeruleus in depressed PD patients, and a normal NE activity in most early non-depressed PD patients and an enhanced pattern in few of them (Remy 2005). Since the results in this study were largely inconsistent with the previous report and a high prevalence of depression in early PD, the authors need to stratify those 94 PD patients into depressed and non-depressed subgroups, and then do the comparison among the groups.
  3. The discussion and conclusion was too speculative.

- **Minor Essential Revisions**
  1. The bibliography of the reference need to be organized better, for example, in the 24th reference, "neurobiology of disease" should be changed to "Neurobiol dis".
  2. There are format errors which need to be fixed, like that in 30th reference "########### r".

- **Discretionary Revisions**
  none.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

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

**Declaration of competing interests:**

I declare that I have no competing interests