Reviewer's report

Title: Dynamics of cinacalcet use and biochemical control in hemodialysis patients: A Retrospective New-User Cohort Design

Version: 2 Date: 16 August 2015

Reviewer: Cristina Capusa

Reviewer's report:

Major compulsory revisions
1. The most recent dose of cinacalcet prior to discontinuation seems to be a predictor of this (at 90mg/day, HR was 1.15 with 95%CI 1.03 to 1.29). Consequently, comments about the impact of daily dose should be added to both the Results and Discussion sections.

2. I agree with the comment added in the revised version regarding the precise cause of discontinuation. However, it does not change my initial observation about the speculative nature of the statement related to the patients’ adherence to chronic medications (lines 286-288). Since it is possible that the discontinuation was the result of a medical decision (due to the excessive reduction of calcium or iPTH, for example) it can not be defined entirely as “patient’s poor adherence” to a prescribed drug. Please try to rephrase the sentences in order to clarify this potential misunderstanding (maintain the term of adherence only to describe the patient’s self choice).

Minor essential revisions
1. The presentation modality of studied variables is not a matter of preference. It is imposed by the type of variable’s distribution. Therefore, the serum iPTH (which appears as a non-parametric variable based on the level of SD greater than one third of the mean), and possible other biochemical parameters (if the statistical normality tests would prove their non-uniform distribution) should be expressed by non-parametric descriptive statistics, i.e. by median. Please make all the appropriate changes in the manuscript.

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

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I have received speaker fees and financial support for attending scientific meetings from Amgen, Abbvie, Fresenius, Sanofi-Aventis, Vifor Pharma