Reviewer's report

Title: Conversion to lanthanum carbonate monotherapy effectively controls serum phosphorus with a reduced tablet burden: a multicenter open-label study

Version: 1 Date: 3 November 2010

Reviewer: Patrick C D'Haese

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In their interesting paper Vemuri et al based on a study in a 2763 patients from 223 US dialysis centres present further evidence for conversion to lanthanum carbonate monotherapy to effectively control serum phosphate with a reduced tablet burden. This paper is of substantial importance for the nephrology community.

The paper is well written and the study set up is straightforward and methods are appropriate and well described. In view of the high number of participating centres the risk for bias of the results of this industry-sponsored study is limited although it can’t be excluded as correctly stated by the authors.

The discussion is based on sound data and is written in a balanced way. The limitations of the study are clearly stated and reference has adequately been made to existing literature data.

Minor remarks

Page 5: It should be clearly mentioned who took off the interviews and completed questionnaires (nurse, nephrologist, specialized interviewers …). Who prepared the questionnaires?

Page 6, para 3: “… alkaline phosphatase …’ Did they measure total alkaline phosphatase or the liver isoenzyme?

Page 7: How did the investigators check compliance of therapy?

Page 8: ‘… stomach sickness …’ Although not significant (?) was the incidence of this adverse event lower or higher in the lanthanum carbonate group?

Page 9: The investigators noticed a significant reduction in tablet burden when using lanthanum carbonate. Perhaps they should comment in the discussion on what the impact of this might have on the cost-price for treatment.

Page 10: Did the authors measure ionized calcium. If so these data should be reported as this directly relates to the significant increase in PTH.

Page 11, para 1: Was the incidence of AE’s with lanthanum carbonate different from that observed with their previous medication?

Page 11, para 2: Again it is not clear whether the authors measured the liver isoenzyme of alkaline phosphatase. If not the rise in total alkaline phosphatase seen at weeks 12 and 16 could have been due to an increase in the bone alkaline phosphatase fraction which is reasonable in view of the increase in PTH,
in other words a normalization of the bone formation rate. Perhaps this could be mentioned in the discussion?