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Theme : Anemia, Metabolism, Phosphate Control and Parathyroid Hormone

Comparative Effects Of Sevelamer Hydrochloride (Renagel®) And Calcium Acetate For The Control Of Serum Phosphorus In Peritoneal Dialysis Patients

Evenepoel, P.¹, Selgas, R.², Duggal, A.³, Kelly, A.³, Fan, S.L.S.⁴; Universitaire Ziekenhuizen, Leuven, Belgium¹, Hospital Universitario La Paz, Madrid, Spain², Genzyme Europe Research, Cambridge³, The Royal London Hospital, London⁴, United Kingdom

Introduction and aims:

A randomised, open label, parallel design study was conducted in peritoneal dialysis (PD) patients to compare the effects of phosphate binder therapy with Renagel versus calcium acetate with regards to control of serum phosphorus (P) levels, safety and tolerability.

Methods:

Adult patients established on PD for at least 8 weeks, with serum P levels >1.76 mmol/L and serum Calcium adjusted for albumin within normal limits (2.10-2.60 mmol/L) after 2 weeks washout were included. There were 5 study visits over 12 weeks with a follow up of one week. Medication was titrated at each visit to achieve K/DOQI recommended target of serum P < 1.76 mmol/L (5.50 mg/dL). At each visit blood was drawn for analysis of a number of parameters including serum P, Ca, lipids and plasma biomarkers.

Results:

This is the largest study conducted to evaluate phosphate binder therapies in the PD patient population. A total of 253 patients were screened from 17 sites in 7 EU countries, with 143 randomised in a 2: 1 fashion to Renagel (n=96) or calcium acetate (n=47). Demographic data shows the two treatment groups were well balanced. The mean post washout value of serum P was 2.39 mmol/L (+ 0.455).

The results expected in June will seek to confirm safety and efficacy of serum phosphorus control of Renagel compared to calcium acetate. In addition it should help and improve the understanding of other biochemical characteristics in PD.