

LANTHANUM CARBONATE (LC) TREATMENT DOES NOT AFFECT 25-HYDROXYVITAMIN D (25-OH D) AND 1,25-DIHYDROXYVITAMIN D (1,25-(OH)₂ D) LEVELS IN PATIENTS WITH CKD STAGES 3 AND 4: A RANDOMIZED TRIAL

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There is increasing awareness of the detrimental consequences of vitamin D deficiency and the need for oral vitamin D therapy in patients with chronic kidney disease (CKD). As some phosphate binders may affect the absorption of oral vitamin D, we assessed whether treatment with LC impacted on 25-OH D and 1,25-(OH)₂ D levels.

Patients with two consecutive serum phosphorus measurements of > 4.6 mg/dL received double-blind treatment: LC initiated at 750 mg/day and titrated to a maximum of 3000 mg/day over an 8-week period, or matching placebo (PLB). Of the 121 patients randomized to treatment, 33 patients (LC = 17, PLB = 16) were identified as having received either ergocalciferol (*n* = 13), calcitriol (*n* = 9), doxercalciferol (*n* = 6) or paricalcitol (*n* = 5).

At baseline, mean (± SE) 25-OH D levels in the LC (*n* = 17) and PLB (*n* = 13) groups were 16.4 ± 1.4 ng/mL and 17.6 ± 2.3 ng/mL, respectively. 1,25-(OH)₂ D levels were 21.1 ± 3.2 pg/mL (LC: *n* = 15) and 25.7 ± 5.7 pg/mL (PLB: *n* = 13). The difference in change from baseline to end of study in 25-OH D levels (LS mean ± SE) was not statistically significant between the groups (LC: 2.6 ± 2.4 ng/mL; PLB: 1.9 ± 2.7 ng/mL). Similarly, there was no statistically significant difference in the change from baseline in 1,25-(OH)₂ D levels between the groups (LC: -1.9 ± 2.0 pg/mL; PLB: -4.0 ± 2.1 pg/mL). In addition, the difference between the groups in the change from baseline in serum calcium levels was not statistically significant (LC: 0.06 ± 0.11 mg/dL; PLB: -0.01 ± 0.12 mg/dL).

LC does not affect 25-OH D or 1,25-(OH)₂ D levels in patients with CKD Stages 3 and 4, and thus can be given concomitantly with oral vitamin D agents.