

Supplementary Figure 1. Serum PTH levels (PTH0-Baseline; PTHF-final) stratified by baseline serum 25(OH)D subcategories. The whiskers show the highest and lowest values, the top line indicates the 75<sup>th</sup> percentile, the middle line indicates the median, and the bottom line indicates the 25<sup>th</sup> percentile. The points above the whiskers represent outliers. Baseline serum 25(OH)D status categorized as "Deficient" [ $\leq$  30 nmol/L], "Suboptimal" [31-50 nmol/L], "Adequate" [ $\geq$  51 nmol/L]. In the high dose group, serum PTH levels decreased by 24% in subjects with baseline serum 25(OH)D  $\leq$  30nmol/L, 7% decrease for those with baseline serum between 31-50nmol/L, and 5% decrease for those with serum 25(OH)D  $\geq$  50nmol/L. Paired t-test between baseline and final serum PTH levels by serum 25(OH)D subcategory, significant differences denoted by \*P<0.05.