

Supplementary Table S7 Comparison of change in dense or non-dense areas of breast tissue on mammogram after the one-year intervention between arms receiving vitamin D₃ with placebo – Post-hoc analysis

	Placebo (n=96)	Vitamin D ₃			Linear trend in change in breast tissue ^b	
		1,000 IU/d (n=96)	2,000 IU/d (n=99)	3,000 IU/d (n=100)	β (95% CI)	P-value
Change in breast density^a						
<i>Change in dense area (cm²)</i>						
Mean ± SE	-6.7 ± 0.9	-5.9 ± 0.9	-5.9 ± 0.9	-3.8 ± 0.9		
Difference from placebo (95% CI)	0.0	0.8 (-2.2, 3.8)	0.8 (-2.1, 3.8)	2.9 (-0.1, 5.8)	0.87 (0.11, 1.63)	0.03
P-value		1.0	1.0	0.06		
<i>Change in non-dense area (cm²)</i>						
Mean ± SE	7.8 ± 1.2	7.4 ± 1.2	10.2 ± 1.2	6.2 ± 1.2		
Difference from placebo (95% CI)	0.0	-0.3 (-4.5, 3.9)	2.4 (-1.7, 6.5)	-1.6 (-5.7, 2.6)	-0.21 (-1.28, 0.86)	0.70
P-value		1.0	0.49	1.0		

^a The difference between breast tissue on mammogram (dense or non-dense areas, cm²) at the end of the one-year intervention and that at baseline. Mean ± SE of change in breast tissue, differences in the mean of change in breast tissue comparing study arms receiving vitamin D₃ with placebo, 95% confidence interval and P-values, are estimated from ANOVA and adjusted for sites and for multiple comparisons (Bonferroni correction).

^b β (95% confidence interval) and P-value for linear trend are estimated from regression models and adjusted for sites. Study arm is treated as a continuous variable, and β represents mean difference in change in breast tissue for increments of 1,000 IU/d vitamin D₃.