

**Supplementary Table 1. Proportion of Patients with Vitamin D Insufficiency**

Vitamin D insufficiency in pre-treatment (baseline)	Vitamin D insufficiency in post-treatment	Wk 8				Wk 16			
		ALN/D5600 (n=136)	ALN (n=132)	Total (n=268)	Difference [95% CI]	ALN/D5600 (n=136)	ALN (n=132)	Total (n=268)	Difference [95% CI]
Yes	Yes, n (%)	1 (2.17)	23 (53.49)	24 (26.97)	-51.31 [-66.81~	2 (4.08)	23 (52.27)	25 (26.88)	-48.19 [-63.96~
	No, n (%)	45 (97.83)	20 (46.51)	65 (73.03)	-35.82]	47 (95.92)	21 (47.73)	68 (73.12)	-32.43]
No	Yes, n (%)	0 (0.00)	14 (16.28)	14 (8.09)	-16.28 [-24.08~	0 (0.00)	32 (36.36)	32 (18.29)	-36.36 [-46.41~
	No, n (%)	87 (100.00)	72 (83.72)	159 (91.91)	-8.48]	87 (100.00)	56 (63.64)	143 (81.71)	-26.31]

ALN/D5600, alendronate containing 5600 IU of vitamin D<sub>3</sub>; ALN, alendronate; CI, confidence interval.

Vitamin D insufficiency [Yes: 25(OH)D <15 ng/mL, No: 25(OH)D ≥15 ng/mL]. Missing data at week 8-ALN/D5600 (3 subjects), ALN (3 subjects).