

**Supplemental Table 5: Change from baseline after 12 months (delta value, 12-month value minus baseline value) for serum DBP, total 25(OH)D, calculated free 25(OH)D and directly measured free 25(OH)D**

		Sex		BMI group			Age group			
		Females	Males	< 25 kg/m <sup>2</sup>	25 – 29.9 kg/m <sup>2</sup>	> 30 kg/m <sup>2</sup>	< 50 years	50 – 59 years	60 – 69 years	> 70 years
<b>Number of subjects (placebo / vitamin D)</b>		93 / 86	143 / 150	27 / 23	101 / 105	108 / 108	30 / 27	57 / 44	101 / 129	48 / 36
<b>Serum delta DBP (µmol/L)</b>	<b>Placebo</b>	- 0.2 ± 0.6	- 0.2 ± 0.5	- 0.2 ± 0.5	- 0.3 ± 0.5	- 0.2 ± 0.6	- 0.3 ± 0.5	- 0.2 ± 0.6	- 0.3 ± 0.5	- 0.3 ± 0.5
	<b>Vitamin D</b>	- 0.2 ± 0.5	- 0.2 ± 0.6	- 0.1 ± 0.6	- 0.3 ± 0.5	- 0.1 ± 0.5	- 0.4 ± 0.5	- 0.1 ± 0.5	- 0.2 ± 0.5	- 0.3 ± 0.6
<b>Serum delta total 25(OH)D (nmol/L)</b>	<b>Placebo</b>	2.0 ± 17.1	4.6 ± 16.9	4.6 ± 22.8	1.9 ± 15.5	5.0 ± 16.7	- 1.2 ± 14.2	2.3 ± 17.3	5.2 ± 18.0	4.6 ± 15.9
	<b>Vitamin D</b>	46.4 ± 26.2	45.4 ± 22.6	60.4 ± 32.9	46.9 ± 24.2	41.5 ± 20.5 *	43.1 ± 25.7	52.4 ± 27.0	45.8 ± 22.4	39.3 ± 22.5
<b>Serum delta calculated free 25(OH)D (pmol/L)</b>	<b>Placebo</b>	2.0 ± 6.0	2.8 ± 5.7	2.67 ± 10.7	2.3 ± 5.5	2.6 ± 5.4	1.2 ± 4.9	1.9 ± 5.5	3.0 ± 6.6	2.9 ± 4.9
	<b>Vitamin D</b>	16.9 ± 9.4	17.6 ± 8.7	20.7 ± 10.7	18.5 ± 8.7	15.6 ± 8.4 †	17.7 ± 10.4	19.3 ± 9.7	17.0 ± 8.0	16.1 ± 9.9
<b>Serum delta directly measured free 25(OH)D (pmol/L)</b>	<b>Placebo</b>	- 0.6 ± 3.5	- 0.4 ± 3.3	- 0.1 ± 4.7	- 0.9 ± 3.4	- 0.2 ± 2.9	- 0.7 ± 2.7	- 1.1 ± 4.0	- 0.0 ± 3.3	- 0.5 ± 3.0
	<b>Vitamin D</b>	8.5 ± 5.2	9.1 ± 4.5	12.4 ± 6.0	9.3 ± 4.6	7.8 ± 4.2 *	9.1 ± 5.3	9.6 ± 5.5	8.7 ± 4.5	8.6 ± 4.6

DBP, vitamin D binding protein; 25(OH)D, 25-hydroxyvitamin D; BMI, body mass index

\*  $P < 0.001$ . †  $P < 0.05$ . Linear trend across BMI groups.