

**Supplementary Table 1.** Comparison of changes of early osteoclast precursors

	Denosumab (N=11)	Zoledronate (N=12)	Total (N=23)	<i>P</i> -value <sup>a)</sup>
Baseline	1.30 (1.20-1.45)	1.00 (0.75-2.45)	1.30 (0.95-1.65)	0.339
Week 4	1.40 (0.95-2.65)	1.20 (0.60-1.90)	1.20 (0.75-2.00)	0.478
Change from baseline	0.30 (-0.30-0.85)	-0.05 (-0.80-0.10)	0.00 (-0.50-0.50)	0.240
%Change from baseline	23.68 (-22.40-59.89)	-5.00 (-29.96-10.00)	0.00 (-29.96-28.74)	0.406
<i>P</i> -value (baseline - week 4) <sup>b)</sup>	0.312	0.226	0.791	
Week 24	1.20 (0.70-1.40)	1.25 (0.55-1.60)	1.20 (0.60-1.60)	0.943
Change from baseline	-0.10 (-0.50-0.30)	-0.05 (-0.60-0.20)	-0.10 (-0.50-0.20)	0.887
%Change from baseline	-6.67 (-35.71-23.68)	-5.56 (-27.22-20.00)	-6.67 (-35.71-20.00)	0.887
<i>P</i> -value (baseline - week 24) <sup>b)</sup>	0.855	0.176	0.359	
Week 48	0.60 (0.40-1.40)	0.65 (0.30-1.55)	0.60 (0.30-1.40)	0.775
Change from baseline	-0.20 (-1.00-0.30)	-0.55 (-1.65-0.25)	-0.30 (-1.10-0.30)	0.749
%Change from baseline	-28.57 (-72.73-20.00)	-51.08 (-70.23-20.00)	-40.00 (-72.73-20.00)	1.000
<i>P</i> -value (week 0 - week 48) <sup>b)</sup>	0.142	0.108	0.048	

<sup>a)</sup>*P*-values were derived from Student's *t*-test in analyzing between groups.

<sup>b)</sup>*P*-values were derived from Wilcoxon signed-rank test in analyzing within groups.