

**Table S1.** Source of the immunoenzymatic assay kits, sensitivity, precision, least significant change (LSC) and reference values from healthy individuals.

Marker (Unit) Commercial name (Source)	Detection limit	Min–Max intraassay CV (%)	Min–Max interassay CV (%)	LSC (%)	Mean ± SEM		
					Female (postmenopausal)	Female (premenopausal)	Male
CTX (µg L <sup>-1</sup> ) Serum Crosslaps (Immunodiagnostic systems Limited, Boldon, UK)	0.02	1.8–3.0	2.5–10.9	16.6	0.64 ± 0.36 0.44 0.12–1.35 14.53 ± 4.21	0.38 ± 0.19 0.29 0.11–0.74 9.0 ± 2.98	0.39 ± 0.19 0.29 0.12–0.75 13.13 ± 3.8
BAP (µg L <sup>-1</sup> ) Ostase BAP (Immunodiagnostic systems Limited)	0.7	2.6–6.5	3.7–6.1	15.6	13.2 8.0–22.4	8.78 4.0–14.30	12.3 7.0–20.1
PINP (pg L <sup>-1</sup> ) Human Procollagen I N-terminal Peptide (Cusabio Technology LLC, Aachen, Germany)	18.75	8	10	29.8		22.6 ± 1.7 <sup>1</sup> 20.1 15.4–40.8	
TRACP5b (U L <sup>-1</sup> ) Bone TRAP (Immunodiagnostic systems Limited)	0.5	6.0–6.6	5.8–7.2	21.1	3.19 ± 0.85	2.59 ± 0.78	3.06 ± 0.88

<sup>1</sup> Reference values have not been differentiated by gender and age.

