

Table 2. BIA-ACC® vs. Hologic, QDR discovery results

	Total sample (n=84) (SD)	Normal bone density (n=22) (SD)	Osteopenia (n=38) (SD)	Osteoporosis (n=24) (SD)	P & statistical tests (SD)
BIA-ACC					
Fat mass kg	26.7 (8.2)	30.1 (7.8)	26.7 (8.9)	23.5 (6.3)	$F(2,82) = 3.974$; $p = 0.023$
Fat mass BW%	38.2 (6)	39.7 (4.9)	38.29 (6.6)	36.5 (5.9)	ns
Fat free mass kg	41.37 (5.8)	44.77 (5.52)	40.96 (4.64)	38.9 (6.43)	ns
Fat free mass BW%	61.72 (5.94)	60.27 (4.97)	61.42(6.28)	63.5 (5.97)	ns
Intramuscular fat mass BW%	2.5 (0.38)	2.53 (0.32)	2.51 (0.4)	2.45 (0.39)	$F(2,81) = 0.346$; $p = 0.708$
Intramuscular fat mass kg	1.73 (0.5)	1.93 (0.47)	1.72 (0.54)	1.55 (0.38)	$F(2,81) = 3.576$; $p = 0.032$
Bone mass kg	2.8 (0.5)	3.2 (0.6)	2.7 (0.4)	2.6 (0.4)	$F(2,81) = 6.768$; $p = 0.002$
Bone minerals kg	1.5 (0.29)	1.7 (0.3)	1.5 (0.2)	1.4 (0.2)	$F(2,81) = 6.378$; $p = 0.003$
Skeletal muscle kg	12.2 (3.4)	14.3 (4.1)	11.7 (2.80)	11.1 (2.6)	$F(2,81) = 6.526$; $p = 0.002$
Skeletal muscle FFM%	28.8 (4.3)	31.4 (4.9)	28.3 (3.7)	27.4 (3.8)	$F(2,81) = 6.093$; $p = 0.003$
Fat mass kg/ Skeletal muscle mass kg ratio	2.21 (0.5)	2.16 (0.44)	2.27 (0.5)	2.17 (0.55)	ns
<i>Sarcopenia presence</i>					
No presence	6 – 7.1%	4 – 18.2%	1 – 2.6%	1 – 4.2%	Pearson $\chi^2 = 9.646$, $df = 4$, $p = 0.047$
Class I	20 – 23.8%	8 – 36.4%	8 – 21.1%	4 – 16.7%	
Class II	58 – 69%	10 – 45.4%	29 – 76.3%	19 – 79.2%	
<i>Risk factors</i>					
Bone					
Yes	66 – 78.6%	12 – 54.5%	33- 86.8%	21 – 87.5%	Pearson $\chi^2 = 10.223$, $df = 4$, $p = 0.006$
No	18 – 21.4%	10 – 45.5%	5 – 13.2%	3 – 12.5%	
Hologic, QDR discovery DXA					
Fat mass kg	30.2 (7.9)	33.3 (7.3)	30.2 (8.8)	27.5 (5.9)	$F(2,81) = 3.186$; $p = 0.047$
Fat mass BW%	43.4 (5)	43.9 (4.5)	43.7 (5.6)	42.5 (4.6)	ns
Fat free mass kg	38.5 (5.46)	41.88 (5.68)	37.61 (5.23)	36.79 (4.32)	$F(2,81) = 6.686$; $p = 0.002$
Fat free mass BW%	56.5 (5.07)	56 (4.48)	56.22 (5.6)	57.45 (4.67)	ns

ns: No statistically significant difference.