

Supplementary Tables

Supplementary Table 1. Multivariate adjusted[†] associations between sex-specific quartiles of total hip aBMD and hip JSN and osteophyte worsening among adults without hip ROA, the Johnston County Osteoarthritis (JoCo OA) Project

	Hip JSN N=921			Osteophyte Worsening [‡] N=921		
	Number of Incident Cases	HR (95% CI)	P-trend [¶]	Number of Incident Cases	HR (95% CI)	P-trend [¶]
Quartiles total hip BMD			0.426			0.085
1 (low aBMD)	28	Ref		34	Ref	
2 (intermediate low aBMD)	27	0.93 (0.55, 1.57)		64	1.61 (0.998, 1.57)	
3 (intermediate high aBMD)	20	0.73 (0.37, 1.44)		71	1.61 (0.90, 2.89)	
4 (high aBMD)	20	0.78 (0.37, 1.44)		58	1.67 (0.98, 2.85)	

Abbreviations: aBMD, areal bone mineral density; BMI, body mass index; ROA, radiographic osteoarthritis; sROA, symptomatic radiographic osteoarthritis; JSN, joint space narrowing.

[†]All models adjusted for age, sex, race, education, BMI, smoking history, physical activity, history of knee injury, steroid use, and bisphosphonate use. Ns differed from analytic samples because of missing covariate values.

[‡] JSN and osteophyte worsening in the hip were defined as at least a 1-grade increase in either the medial or lateral acetabular and/or femoral part of the hip joint.

[¶]A test of linear trend across quartiles of aBMD was performed based on the ordinal value for each quartile

Supplementary Table 2. Multivariate adjusted[†] associations between sex-specific quartiles of total hip aBMD and knee JSN and osteophyte worsening among adults without knee ROA, the Johnston County Osteoarthritis (JoCo OA) Project

	Knee JSN N=969			Osteophyte Worsening [‡] N=969		
	Number of Worsening Cases	HR (95% CI)	P-trend [¶]	Number of Worsening Cases	HR (95% CI)	P-trend [¶]
Quartiles total hip aBMD			0.173			0.090
1 (low aBMD)	49	Ref		99	Ref	
2 (intermediate low aBMD)	70	1.40 (0.98, 1.99)		116	0.94 (0.71, 1.25)	
3 (intermediate high aBMD)	76	1.50 (1.05, 2.13)		124	1.23 (0.93, 1.63)	
4 (high aBMD)	59	1.29 (0.87, 1.92)		95	1.23 (0.87, 1.75)	

Abbreviations: aBMD, areal bone mineral density; BMI, body mass index; ROA, radiographic osteoarthritis; sROA, symptomatic radiographic osteoarthritis; JSN, joint space narrowing.

[†]All models adjusted for age, sex, race, education, BMI, smoking history, physical activity, history of knee injury, steroid use, and bisphosphonate use. Ns differed from analytic samples because of missing covariate values.

[‡]JSN and osteophyte worsening in the knee were defined as at least a 1-grade increase in either the medial or lateral compartment of the tibiofemoral joint at follow-up.

[¶]A test of linear trend across quartiles of aBMD was performed based on the ordinal value for each quartile. Values are bolded to indicate statistical significance.