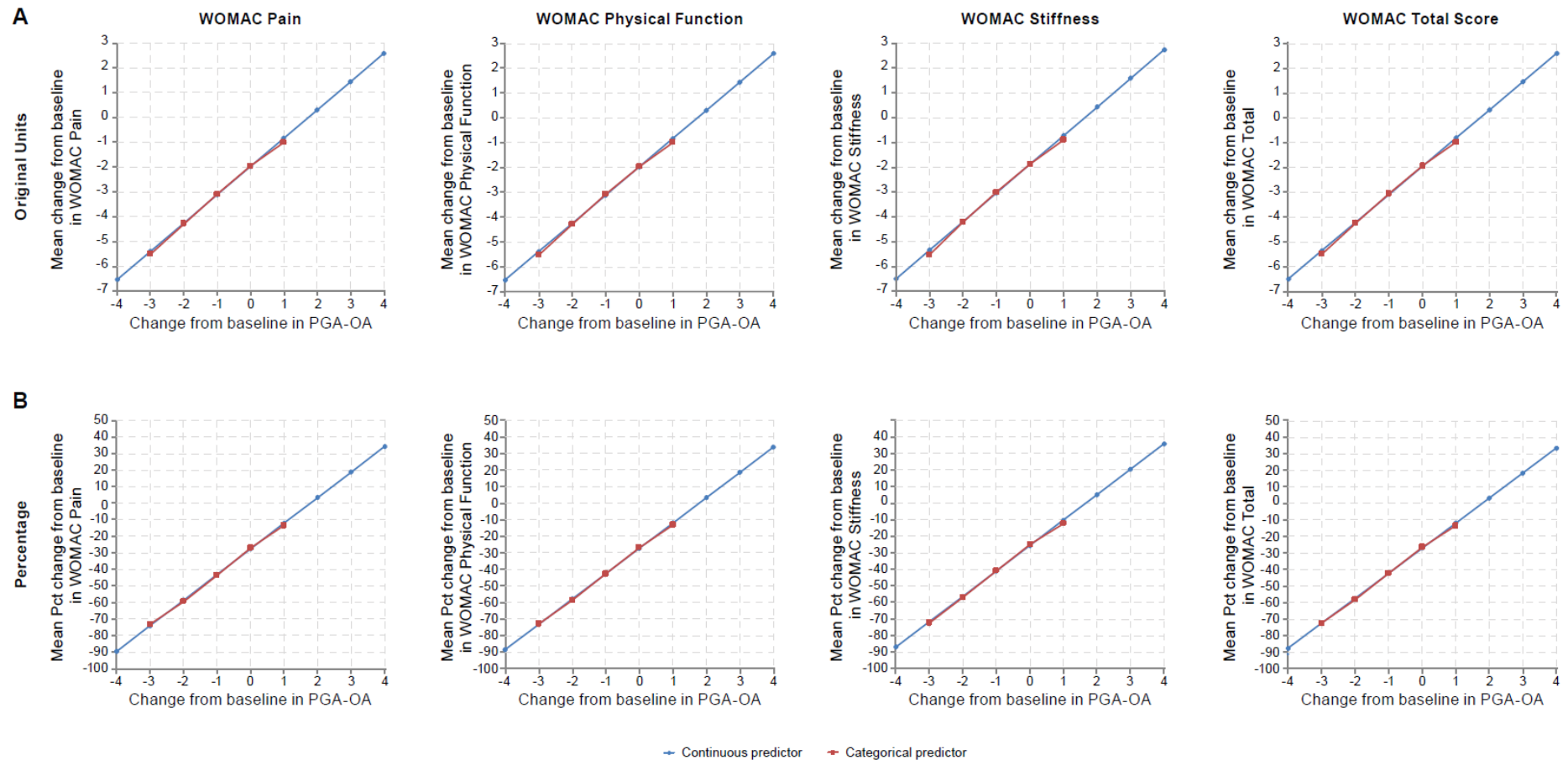


Supplementary Table 1. Categories of the PGA-OA.

Category	Description
1 – Very Good	Asymptomatic and no limitations of normal activities
2 – Good	Mild symptoms and no limitations of normal activities
3 – Fair	Moderate symptoms and limitations of some normal activities
4 – Poor	Severe symptoms and inability to carry out most normal activities
5 – Very Poor	Very severe symptoms which are intolerable and inability to carry out all normal activities

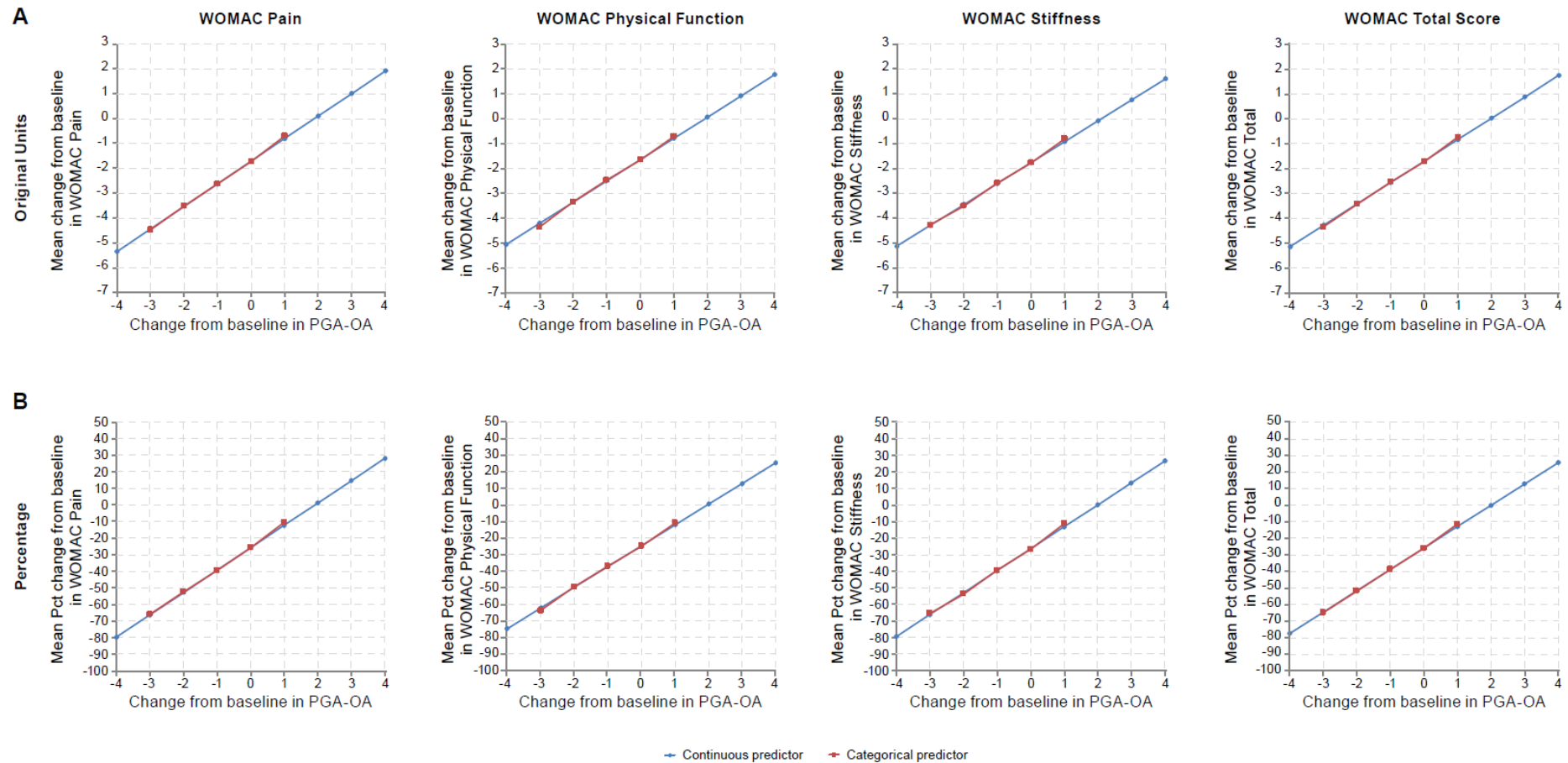
PGA-OA: Patient Global Assessment of Osteoarthritis.

Supplementary Figure 1. Relationship between change in WOMAC domains and PGA-OA in study 1.



Using PGA-OA as a continuous variable (blue lines) or as a categorical variable (red lines) revealed an approximately linear relationship with all WOMAC domains in study 1. This relationship is observed when change in WOMAC is reported in original units

(A) or as a percentage (B). A negative change represents an improvement in both measures. Pct: percent; PGA-OA: Patient Global Assessment of Osteoarthritis; WOMAC: Western Ontario and McMaster Universities Osteoarthritis Index.

Supplementary Figure 2. Relationship between change in WOMAC domains and PGA-OA in study 2.

Using PGA-OA as a continuous variable (blue lines) or as a categorical variable (red lines) revealed an approximately linear relationship with all WOMAC domains in study 2. This relationship is observed when change in WOMAC is reported in original units

(A) or as a percentage (B). A negative change represents an improvement in both measures. Pct: percent; PGA-OA: Patient Global Assessment of Osteoarthritis; WOMAC: Western Ontario and McMaster Universities Osteoarthritis Index.

Supplementary Table 2a. Estimates of meaningful within-patient change by WOMAC domain for each category of PGA-OA change in study 1 in original units.

Category change in PGA-OA	Pain			Physical Function			Stiffness			Total		
	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit
-4	-6.54	-6.75	-6.32	-6.53	-6.74	-6.32	-6.51	-6.75	-6.26	-6.49	-6.70	-6.28
-3	-5.40	-5.56	-5.23	-5.39	-5.56	-5.23	-5.35	-5.54	-5.16	-5.35	-5.52	-5.19
-2	-4.26	-4.39	-4.12	-4.25	-4.38	-4.12	-4.19	-4.34	-4.05	-4.22	-4.35	-4.09
-1	-3.12	-3.23	-3.00	-3.11	-3.23	-3.00	-3.04	-3.16	-2.91	-3.08	-3.20	-2.97
0	-1.98	-2.10	-1.85	-1.97	-2.10	-1.85	-1.88	-2.02	-1.74	-1.95	-2.07	-1.82
1	-0.84	-1.00	-0.67	-0.83	-0.99	-0.67	-0.73	-0.91	-0.55	-0.81	-0.97	-0.65
2	0.30	0.10	0.51	0.31	0.10	0.51	0.43	0.19	0.66	0.33	0.13	0.53
3	1.44	1.19	1.70	1.45	1.19	1.70	1.58	1.28	1.88	1.46	1.21	1.71
4	2.58	2.27	2.89	2.59	2.28	2.89	2.74	2.38	3.10	2.60	2.30	2.90

PGA-OA: Patient Global Assessment of Osteoarthritis. Upper and lower limits of 95% confidence intervals shown for each value.

Supplementary Table 2b. Estimates of meaningful within-patient change by WOMAC domain for each category of PGA-OA change in study 2 in original units.

Category change in PGA-OA	Pain			Physical Function			Stiffness			Total		
	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit
-4	-5.35	-5.53	-5.16	-5.06	-5.23	-4.88	-5.13	-5.35	-4.91	-5.14	-5.32	-4.97
-3	-4.44	-4.58	-4.30	-4.20	-4.34	-4.07	-4.29	-4.46	-4.12	-4.28	-4.42	-4.15
-2	-3.53	-3.63	-3.42	-3.35	-3.45	-3.25	-3.45	-3.57	-3.32	-3.42	-3.52	-3.32
-1	-2.62	-2.71	-2.53	-2.50	-2.58	-2.41	-2.60	-2.70	-2.51	-2.56	-2.65	-2.48
0	-1.71	-1.80	-1.61	-1.64	-1.73	-1.55	-1.76	-1.87	-1.65	-1.70	-1.79	-1.61
1	-0.80	-0.92	-0.67	-0.79	-0.91	-0.67	-0.92	-1.07	-0.77	-0.84	-0.96	-0.72
2	0.11	-0.05	0.28	0.07	-0.09	0.22	-0.08	-0.28	0.12	0.02	-0.13	0.18
3	1.02	0.81	1.23	0.92	0.72	1.11	0.76	0.51	1.02	0.89	0.69	1.08
4	1.93	1.67	2.19	1.77	1.53	2.01	1.61	1.29	1.92	1.75	1.51	1.99

PGA-OA: Patient Global Assessment of Osteoarthritis. Upper and lower limits of 95% confidence intervals shown for each value.

Supplementary Table 2c. Estimates of meaningful within-patient change by WOMAC domain for each category of PGA-OA change in study 3 in original units.

Category change in PGA-OA	Pain			Physical Function			Stiffness			Total		
	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit	Estimate	Lower limit	Upper limit
-4	-6.63	-6.72	-6.53	-6.58	-6.67	-6.48	-6.60	-6.70	-6.49	-6.53	-6.62	-6.43
-3	-5.48	-5.55	-5.40	-5.44	-5.52	-5.37	-5.46	-5.54	-5.38	-5.40	-5.48	-5.33
-2	-4.33	-4.38	-4.27	-4.31	-4.37	-4.25	-4.32	-4.39	-4.26	-4.28	-4.33	-4.22
-1	-3.18	-3.23	-3.13	-3.18	-3.23	-3.13	-3.19	-3.24	-3.13	-3.15	-3.20	-3.10
0	-2.03	-2.08	-1.97	-2.05	-2.10	-1.99	-2.05	-2.11	-1.99	-2.03	-2.08	-1.97
1	-0.88	-0.95	-0.80	-0.91	-0.98	-0.84	-0.92	-1.00	-0.84	-0.90	-0.97	-0.83
2	0.28	0.18	0.37	0.22	0.13	0.31	0.22	0.11	0.32	0.22	0.13	0.31
3	1.43	1.31	1.54	1.35	1.24	1.46	1.35	1.22	1.49	1.35	1.24	1.46
4	2.58	2.44	2.72	2.48	2.35	2.62	2.49	2.33	2.65	2.47	2.34	2.61

PGA-OA: Patient Global Assessment of Osteoarthritis. Upper and lower limits of 95% confidence intervals shown for each value.

Supplementary Table 3. Estimates of meaningful within-patient change for patients with an index hip by WOMAC domain and study in original units.

WOMAC Domain	Study					
	1		2		3	
	1-Category Change in PGA-OA	2-Category Change in PGA-OA	1-Category Change in PGA-OA	2-Category Change in PGA-OA	1-Category Change in PGA-OA	2-Category Change in PGA-OA
Pain	1.00 (0.83-1.16)	1.99 (1.66-2.32)	1.02 (0.89-1.14)	2.03 (1.78-2.28)	1.29 (1.21-1.36)	2.57 (2.42-2.73)
Physical Function	0.93 (0.77-1.10)	1.87 (1.54-2.19)	0.89 (0.76-1.01)	1.77 (1.53-2.01)	1.22 (1.14-1.29)	2.43 (2.29-2.57)
Stiffness	1.09 (0.90-1.27)	2.17 (1.80-2.54)	0.94 (0.78-1.10)	1.87 (1.56-2.19)	1.14 (1.06-1.23)	2.29 (2.13-2.46)
Total	0.99 (0.84-1.45)	1.99 (1.68-2.29)	0.94 (0.82-1.06)	1.88 (1.64-2.11)	1.21 (1.13-1.28)	2.41 (2.27-2.55)

PGA-OA: Patient Global Assessment of Osteoarthritis; WOMAC: Western Ontario and McMaster Universities Osteoarthritis Index.

95% confidence intervals shown for each value.

Supplementary Table 4. Estimates of meaningful within-patient change for patients with an index knee by WOMAC domain and study in original units.

WOMAC Domain	Study					
	1		2		3	
	1-Category Change in PGA-OA	2-Category Change in PGA-OA	1-Category Change in PGA-OA	2-Category Change in PGA-OA	1-Category Change in PGA-OA	2-Category Change in PGA-OA
Pain	1.16 (1.10-1.22)	2.32 (2.19-2.44)	0.89 (0.83-0.94)	1.78 (1.67-1.89)	1.13 (1.10-1.16)	2.25 (2.20-2.31)
Physical Function	1.17 (1.11-1.23)	2.34 (2.21-2.46)	0.85 (0.80-0.90)	1.69 (1.59-1.80)	1.12 (1.09-1.15)	2.24 (2.18-2.29)
Stiffness	1.16 (1.09-1.24)	2.33 (2.18-2.48)	0.82 (0.76-0.89)	1.65 (1.51-1.78)	1.13 (1.10-1.17)	2.27 (2.20-2.33)
Total	1.16 (1.09-1.22)	2.31 (2.19-2.43)	0.85 (0.80-0.90)	1.69 (1.59-1.80)	1.11 (1.08-1.14)	2.22 (2.17-2.28)

PGA-OA: Patient Global Assessment of Osteoarthritis; WOMAC: Western Ontario and McMaster Universities Osteoarthritis Index.

95% confidence intervals shown for each value.