

**Online Supplementary Table 2A:** Summary of Phase 2 results and subsequent modifications of the overall hand OA criteria in Phase 3.

Criteria and categories	Exact (0-100)	Rescaled (0-15)	Rounded to 0.5 (0-15)	Whole numbers (0-15)
Age				
• Below 45 years	0	0	0	0
• 45-54 years	8.1	1.22	1	1
• 55-64 years	13.0	1.95	2	2
• 65 years and above	18.3	2.75	3	3
Duration or morning stiffness in DIPs, PIPs, IP1 and thumb base joints				
• Long (31-59 minutes)	0	0	0	0
• None	7.7	1.16	1	1
• Short (30 minutes or less)	14.7	2.21	2	2
Number of DIPs, PIPs, IP1 and CMC1 joints with osteophytes				
• None	0	0	0	0
• 1-2 joint(s)	12.4	1.86	2	2
• 3-5 joints	21.8	3.27	3.5	3
• 6 or more joints	28.0	4.00	4	4
Number of DIPs, PIPs, IP1 and CMC1 joints with JSN				
• None	0	0	0	0
• 1-2 joint(s)	9.3	1.40	1.5	1
• 3-5 joints	15.1	2.27	2	2
• 6 or more joints	20.3	3.05	3	3
Symptom-structure concordance *				
• No	0	0	0	0
• Yes	18.7	2.81	3	3

OA=osteoarthritis; DIPs=distal interphalangeal; PIPs=proximal interphalangeal; IP1=first interphalangeal; CMC1=first carpometacarpal; JSN=joint space narrowing. \* Radiographic OA (osteophytes or JSN) in at least 50% of the joints (DIPs, PIPs, IP1 and CMC1), in which the person has experienced pain, aching and/or stiffness on most days of the previous six weeks.

**Online Supplementary Table 2B:** Summary of Phase 2 results and subsequent modifications of the interphalangeal OA criteria in Phase 3.

Criteria and categories	Exact (0-100)	Rescaled (0-15)	Rounded to 0.5 (0-15)	Whole numbers (0-15)
Age				
• Below 45 years	0	0	0	0
• 45-54 years	6.7	1.01	1	1
• 55-64 years	11.4	1.71	1.5	2
• 65 years and above	15.2	2.28	2.5	3
Duration or morning stiffness in DIPs, PIPs and IP1 joints				
• Long (31-59 minutes)	0	0	0	0
• None	6.2	0.93	1	1
• Short (30 minutes or less)	11.1	1.67	1.5	2
Number of DIPs, PIPs and IP1 joints with osteophytes				
• None	0	0	0	0
• 1-2 joint(s)	13.6	2.04	2	2
• 3-5 joints	22.6	3.39	3.5	3
• 6 or more joints	30.6	4.59	4.5	4
Number of DIPs, PIPs and IP1 joints with JSN				
• None	0	0	0	0
• 1-2 joint(s)	10.2	1.53	1.5	1
• 3-5 joints	17.5	2.63	2.5	2
• 6 or more joints	23.5	3.53	3.5	3
Symptom-structure concordance *				
• No	0	0	0	0
• Yes	19.5	2.93	3	3

OA=osteoarthritis; DIPs=distal interphalangeal; PIPs=proximal interphalangeal; IP1=first interphalangeal; JSN=joint space narrowing. \* Radiographic OA (osteophytes or JSN) in at least 50% of the joints (DIPs, PIPs and IP1), in which the person has experienced pain, aching and/or stiffness on most days of the previous six weeks.

**Online Supplementary Table 2C:** Summary of Phase 2 results and subsequent modifications of the thumb base OA criteria in Phase 3.

Criteria and categories	Exact (0-100)	Rescaled (0-15)	Rounded to 0.5 (0-15)	Whole numbers (0-15)
Age				
• Below 45 years	0	0	0	0
• 45-54 years	9.4	1.41	1.5	1
• 55-64 years	14.6	2.19	2	2
• 65 years and above	19.3	2.90	3	3
Duration or morning stiffness in thumb base joints				
• Long (31-59 minutes)	0	0	0	0
• None	6.2	0.93	1	1
• Short (30 minutes or less)	13.1	1.97	2	2
Number of CMC1 joints with osteophytes				
• None	0	0	0	0
• 1 joint	15.2	2.28	2.5	2
• 2 joints	25.4	3.81	4	4
Number of CMC1 joints with JSN				
• None	0	0	0	0
• 1 joint	12.2	1.83	2	2
• 2 joints	22.5	3.38	3.5	3
Symptom-structure concordance *				
• No	0	0	0	0
• Yes	19.7	2.96	3	3

OA=osteoarthritis; CMC1=first carpometacarpal; JSN=joint space narrowing. \* Radiographic CMC1 OA (osteophytes or JSN) in the thumb base joints with pain, aching and/or stiffness on most days of the previous six weeks