

Appendix E-1 HEALTH and FAITH Trial Investigators

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Hypotheses for Evaluating the Construct Validity of the WOMAC Instrument

1. The WOMAC pain score was expected to correlate strongly ($r > 0.6$) with the SF-12 pain and EQ pain scores since they were expected to measure the same construct.

2. A moderate correlation ($r < 0.6$) was therefore predicted between WOMAC pain and all other scores since they assess different or less specific constructs.

3. A weak correlation ($r < 0.3$) was expected for the specific WOMAC stiffness and all other outcomes.

4. WOMAC function was predicted to correlate strongly with SF-12 PCS, SF-12 pain, SF-12 total score, EQ pain, EQ-US, and EQ-VAS.

5. A moderate to weak correlation was expected between WOMAC function and the SF-12 MCS.

6. The WOMAC total score was predicted to have a moderate correlation with SF-12 MCS and a strong correlation with all other outcomes. ■

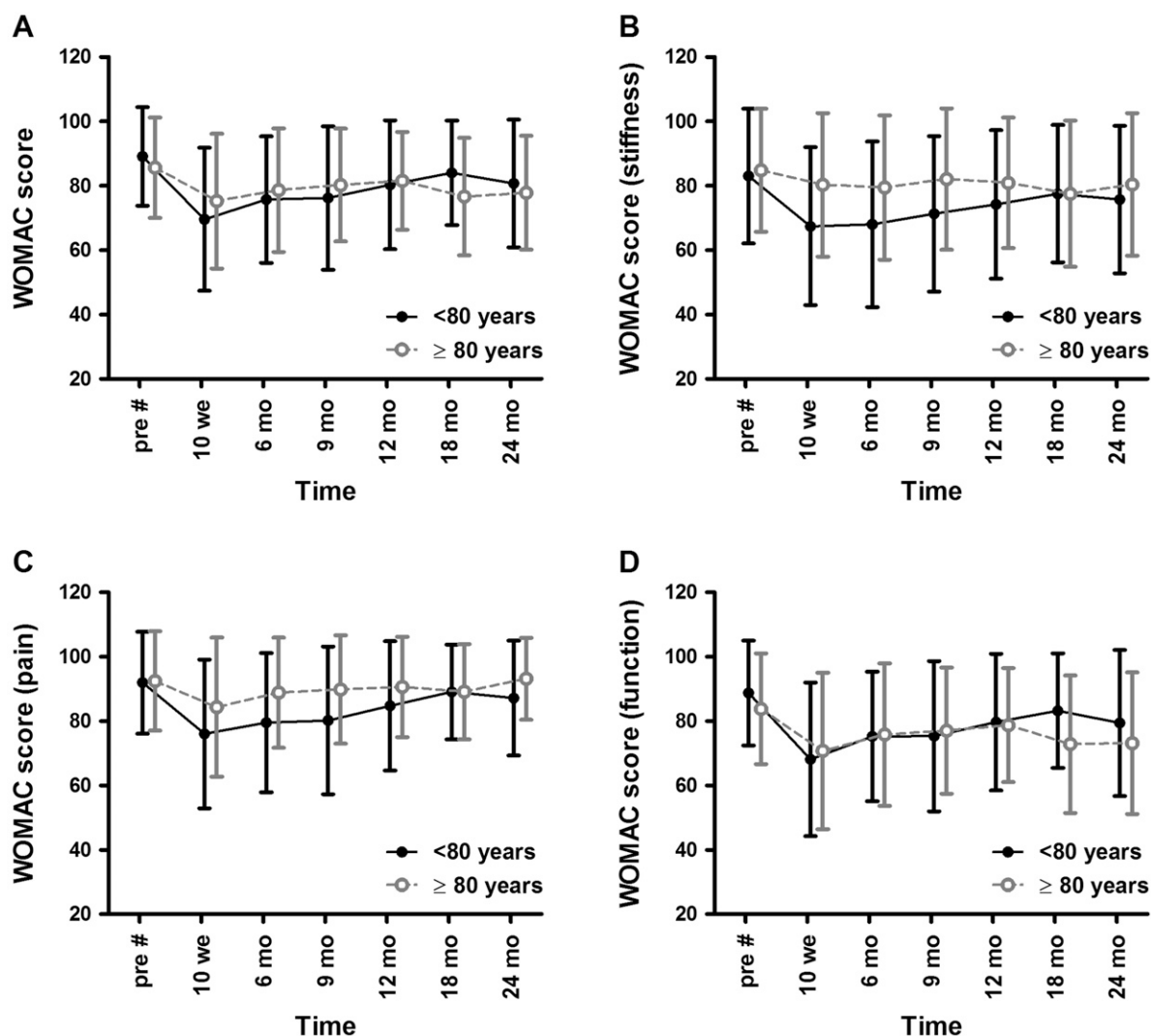


Fig. E-1

Figs. E-1A through E-1D Changes in functional outcome scores over time, according to age group. The values are given as the mean and the standard deviation for the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) total score (**Fig. E-1A**), WOMAC stiffness score (**Fig. E-1B**), WOMAC pain score (**Fig. E-1C**), and WOMAC function score (**Fig. E-1D**), according to the time of follow-up. Higher scores represent better functional outcomes.

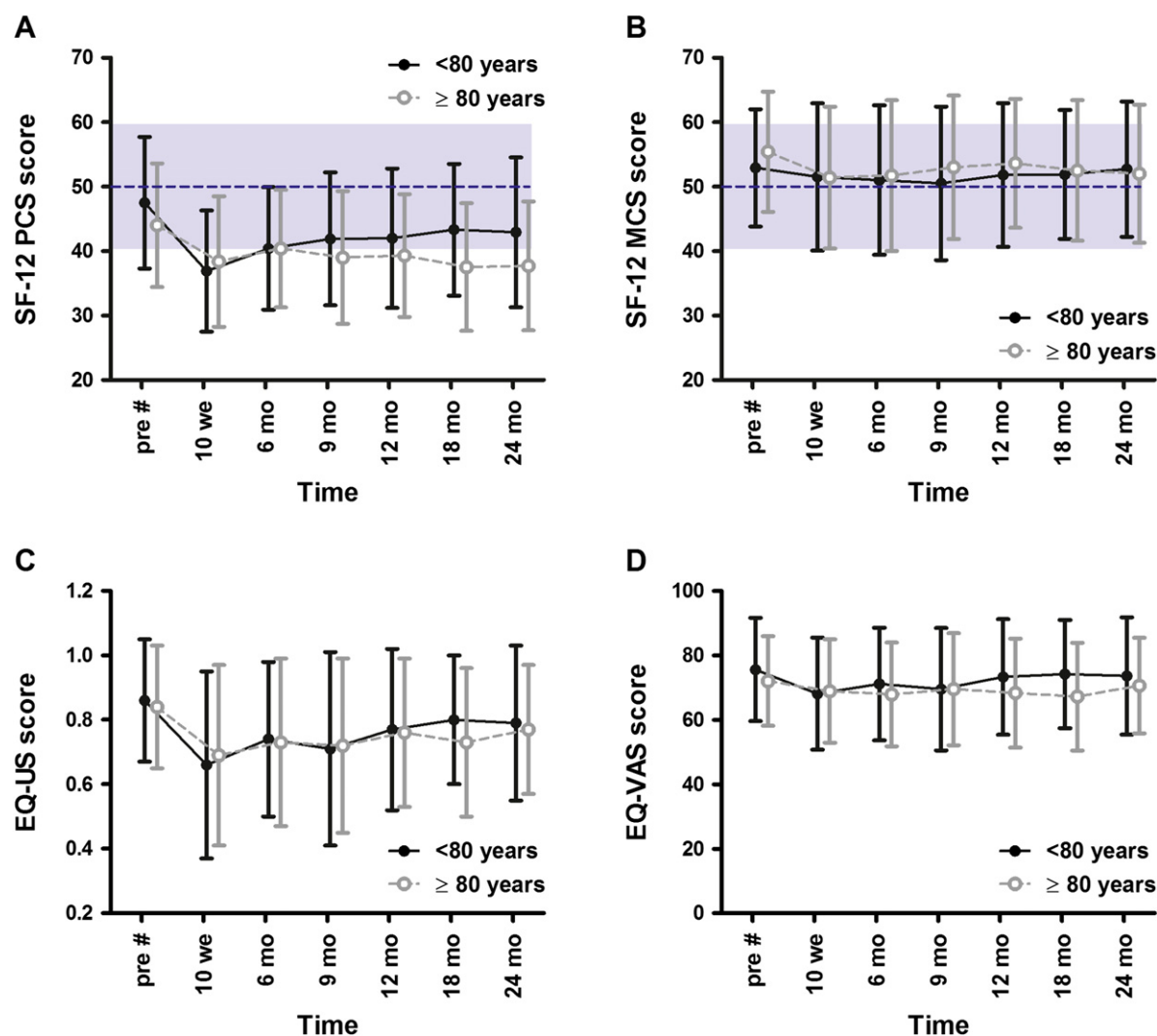


Fig. E-2

Figs. E-2A through E-2D Changes in quality-of-life scores over time, according to age group. The Short Form-12 Physical Component Summary (SF-12 PCS) (**Fig. E-2A**) and SF-12 Mental Component Summary (MCS) (**Fig. E-2B**) are from the Short Form-12 (SF-12) instrument; the EQ-US (EuroQol Utility Score) (**Fig. E-2C**) and EQ-5D VAS (EuroQol Visual Analog Scale) (**Fig. E-2D**) are from the EQ-5D score. Higher scores represent a better quality of life. The values are given as the mean and the standard deviation according to the time of follow-up. For the SF-12, the dotted line shows the standardized mean (50 points) of the general population; the shaded area is the area within one standard deviation from this mean (10 points).

TABLE E-1 Outcome Scores of the Study Population According to Age Group

Instrument	Age Group*					
	<80 Yr (N = 275)			≥80 Yr (N = 125)		
	Prefracture	10 Wk	2 Yr	Prefracture	10 Wk	2 Yr
WOMAC						
Stiffness	83 (21)	67 (24)	76 (23)	85 (19)	80 (23)	80 (22)
Pain	92 (15)	76 (23)	87 (18)	92 (15)	84 (22)	93 (13)
Function	89 (16)	68 (24)	79 (23)	84 (17)	71 (24)	73 (22)
Total score	89 (15)	70 (22)	81 (20)	86 (16)	75 (21)	78 (18)
SF-12 PCS	47 (10)	37 (9)	43 (12)	44 (10)	38 (10)	38 (10)
SF-12 MCS	53 (9)	51 (11)	53 (11)	55 (9)	51 (11)	52 (11)
EQ-US	0.86 (0.19)	0.66 (0.29)	0.79 (0.24)	0.84 (0.19)	0.69 (0.28)	0.77 (0.20)
EQ-VAS	76 (16)	68 (17)	74 (18)	72 (14)	69 (16)	71 (15)
*The values are given as the mean, with the standard deviation in parentheses.						

TABLE E-2 Eligibility Criteria for the HEALTH and FAITH Trials

Inclusion Criteria		Exclusion Criteria
HEALTH	Adults with an age of ≥50 years. A displaced femoral neck fracture. A low-energy fracture without other major trauma. Able to walk before the fracture (with or without aid)	Patients unsuitable for arthroplasty*. A suspected pathological fracture. An associated major injury of the lower extremities. Retained hardware or infection around the hip. A bone metabolism disorder other than osteoporosis. Cognitive impairment†. Dementia or Parkinson disease. Not likely to be able to complete follow-up
FAITH	A femoral neck fracture‡. Apart from fracture type, the same inclusion criteria as for the HEALTH Trial apply	A fracture unsuitable for internal fixation§. All other exclusion criteria as for HEALTH apply
*Inflammatory arthritis, rheumatoid arthritis, or severe osteoarthritis of the hip. †Assessed by the Mini-Mental Status Examination. ‡Either an undisplaced fracture or a displaced fracture in patients categorized as ASA (American Society of Anesthesiologists) classification 1 or 2, who are fifty to eighty years old with a fracture that could have a closed reduction. §Pathological fracture, rheumatoid arthritis, or osteoarthritis.		