

Table, Supplemental Digital Content 3. Primary and secondary outcomes by study arm and assessment time

	n	Randomized Participants			
		VLPS	External Fixation	Percutaneous Pinning	Casting
Overall MHQ Score, injured hand, mean (95% CI)^a					
6 weeks	273	54 (49-59)	36 (31-41)	45 (39-50)	47 (44-51)
3 months	254	72 (66-77)	61 (55-67)	68 (63-74)	68 (65-72)
6 months	226	80 (74-85)	73 (67-78)	76 (70-81)	76 (72-89)
12 months	203	83 (78-88)	81 (76-86)	84 (80-89)	82 (77-87)
MHQ Pain Score, injured hand, mean (95% CI)^b					
enrollment	293	70 (63-76)	63 (57-70)	62 (55-69)	56 (51-60)
2 weeks	268	56 (50-62)	54 (48-60)	55 (48-62)	48 (44-52)
6 weeks	273	44 (37-50)	53 (47-59)	48 (40-55)	42 (37-46)
3 months	254	29 (23-35)	37 (30-44)	31 (24-37)	30 (26-34)
6 months	226	22 (15-28)	24 (18-30)	25 (18-32)	22 (18-26)
12 months	203	20 (14-27)	21 (15-27)	20 (13-26)	16 (11-21)
MHQ Function Score, injured hand, mean (95% CI)					
6 weeks	273	53 (48-58)	34 (28-39)	40 (34-47)	43 (39-47)
3 months	254	67 (62-72)	55 (48-61)	62 (56-68)	64 (61-68)
6 months	233	78 (73-84)	70 (65-75)	67 (61-74)	70 (66-74)
12 months	203	79 (73-85)	77 (72-82)	78 (72-84)	76 (70-82)
MHQ Activities of Daily Living Score, injured hand, mean (SD)					
6 weeks	273	48 (41-55)	24 (18-30)	30 (22-37)	32 (28-37)
3 months	254	75 (69-81)	63 (57-70)	68 (60-75)	71 (66-75)
6 months	233	86 (80-91)	77 (70-83)	79 (73-85)	81 (77-86)
12 months	203	84 (79-90)	83 (77-88)	88 (84-92)	85 (79-91)
MHQ Work Score, mean (95% CI)^c					
6 weeks	273	46 (39-52)	28 (21-35)	40 (32-49)	38 (33-43)
3 months	254	71 (64-77)	55 (46-63)	65 (57-72)	61 (56-67)
6 months	232	81 (74-88)	73 (65-81)	75 (67-82)	77 (72-82)
12 months	203	79 (72-87)	82 (75-89)	84 (77-90)	83 (77-88)
MHQ Aesthetics Score, injured hand, mean (95% CI)					
6 weeks	273	68 (61-74)	51 (44-59)	65 (58-72)	70 (65-74)
3 months	254	82 (76-87)	74 (67-81)	83 (78-88)	78 (74-82)
6 months	233	82 (77-88)	74 (66-81)	86 (81-92)	82 (78-87)
12 months	203	86 (81-91)	83 (77-89)	85 (78-92)	83 (78-89)

eTable 3. Primary and secondary outcomes by study arm and assessment time (continued)

	n	Randomized Participants			
		VLPS	External Fixation	Percutaneous Pinning	Casting
MHQ Satisfaction Score, injured hand, mean (95% CI)					
6 weeks	273	54 (47-61)	30 (24-36)	40 (33-48)	43 (38-48)
3 months	254	65 (58-73)	55 (47-63)	64 (56-72)	65 (60-70)
6 months	233	75 (68-83)	67 (59-75)	69 (61-78)	72 (67-77)
12 months	203	79 (72-87)	76 (69-83)	80 (73-88)	78 (71-85)
SF-36 Physical Component Score, mean (95% CI)^e					
enrollment	292	34 (31-36)	33 (30-35)	36 (33-39)	35 (33-37)
2 weeks	268	36 (34-38)	33 (31-35)	35 (33-38)	37 (35-39)
6 weeks	268	41 (39-43)	36 (34-38)	40 (37-43)	39 (37-41)
3 months	252	45 (42-47)	44 (42-46)	46 (43-49)	44 (42-46)
6 months	231	48 (45-51)	45 (42-48)	47 (44-50)	45 (43-48)
12 months	202	46 (43-49)	46 (43-49)	48 (44-51)	47 (44-50)
SF-36 Mental Component Score, mean (95% CI)					
enrollment	292	48 (45-52)	50 (46-53)	51 (48-55)	49 (47-52)
2 weeks	268	48 (44-51)	49 (45-52)	50 (45-54)	49 (45-54)
6 weeks	269	52 (49-55)	48 (44-52)	51 (47-54)	52 (49-55)
3 months	252	55 (52-58)	52 (48-55)	55 (52-58)	55 (66-77)
6 months	231	55 (52-57)	52 (48-55)	55 (53-58)	56 (54-58)
12 months	202	54 (51-56)	53 (50-57)	55 (53-58)	57 (55-59)
Grip strength, injured hand as a percentage of uninjured hand, mean (95% CI)					
6 weeks	214	34% (28%-40%)	18% (11%-26%)	22% (15%-28%)	21% (16%-26%)
3 months	246	55% (49%-60%)	42% (35%-50%)	41% (35%-48%)	41% (36%-45%)
6 months	217	74% (68%-79%)	64% (57%-72%)	69% (63%-74%)	58% (52%-64%)
12 months	186	84% (79%-90%)	73% (65%-80%)	82% (77%-86%)	80% (74%-85%)
Key pinch strength, injured hand as a percentage of uninjured hand, mean (95% CI)					
6 weeks	217	61% (55%-66%)	36% (27%-46%)	40% (32%-49%)	46% (40%-52%)
3 months	244	78% (73%-82%)	64% (57%-71%)	67% (61%-74%)	66% (61%-72%)
6 months	217	101% (81%-120%)	82% (77%-88%)	81% (75%-87%)	90% (73%-107%)
12 months	188	93% (87%-98%)	86% (82%-91%)	91% (86%-95%)	86% (82%-90%)

eTable 3. Primary and secondary outcomes by study arm and assessment time (continued)

	n	Randomized Participants			
		VLPS	External Fixation	Percutaneous Pinning	Casting
Flexion, injured wrist as a percentage of uninjured wrist, mean (95% CI)					
6 weeks	218	56% (49%-63%)	39% (29%-49%)	45% (37%-53%)	52% (47%-58%)
3 months	242	71% (66%-76%)	66% (60%-72%)	72% (65%-78%)	63% (57%-69%)
6 months	217	89% (76%-101%)	77% (71%-83%)	81% (75%-87%)	77% (72%-82%)
12 months	187	87% (82%-91%)	86% (80%-91%)	85% (78%-92%)	80% (74%-87%)
Extension, injured wrist as a percentage of uninjured wrist, mean (95% CI)					
6 weeks	211	57% (50%-64%)	27% (17%-37%)	32% (23%-41%)	50% (43%-56%)
3 months	243	83% (72%-94%)	70% (63%-77%)	72% (67%-78%)	77% (72%-83%)
6 months	218	89% (84%-94%)	90% (80%-99%)	81% (76%-86%)	91% (80%-103%)
12 months	187	96% (90%-102%)	87% (81%-92%)	90% (85%-95%)	97% (90%-103%)
Radial deviation, injured wrist as a percentage of uninjured wrist, mean (95% CI)					
6 weeks	211	61% (53%-70%)	30% (18%-43%)	47% (37%-57%)	64% (52%-76%)
3 months	241	93% (73%-113%)	74% (63%-84%)	69% (61%-78%)	85% (75%-95%)
6 months	219	93% (84%-101%)	96% (85%-107%)	84% (74%-95%)	100% (90%-111%)
12 months	188	92% (82%-102%)	100% (88%-113%)	89% (77%-101%)	115% (102%-129%)
Ulnar deviation, injured wrist as a percentage of uninjured wrist, mean (95% CI)					
6 weeks	211	67% (58%-76%)	42% (29%-54%)	45% (35%-55%)	61% (50%-72%)
3 months	242	83% (72%-93%)	66% (58%-74%)	79% (70%-88%)	75% (67%-83%)
6 months	219	86% (81%-91%)	83% (75%-91%)	91% (83%-100%)	81% (74%-88%)
12 months	188	91% (84%-99%)	84% (79%-90%)	92% (82%-101%)	89% (69%-108%)
Pronation, injured wrist as a percentage of uninjured wrist, mean (95% CI)					
6 weeks	211	88% (82%-94%)	78% (65%-91%)	83% (73%-93%)	87% (80%-93%)
3 months	242	98% (96%-100%)	94% (90%-97%)	97% (94%-99%)	92% (88%-96%)
6 months	218	100% (98%-103%)	98% (96%-100%)	98% (97%-100%)	95% (91%-98%)
12 months	187	99% (98%-100%)	96% (94%-98%)	99% (98%-100%)	96% (92%-100%)

eTable 3. Primary and secondary outcomes by study arm and assessment time (continued)

	n	Randomized Participants			
		VLPS	External Fixation	Percutaneous Pinning	Casting
Supination, injured wrist as a percentage of uninjured wrist, mean (95% CI)					
6 weeks	211	82% (71%-92%)	64% (50%-78%)	61% (49%-72%)	73% (64%-82%)
3 months	242	95% (86%-103%)	79% (73%-86%)	81% (74%-87%)	81% (76%-86%)
6 months	219	94% (89%-100%)	93% (88%-97%)	90% (85%-95%)	89% (85%-93%)
12 months	188	99% (93%-105%)	94% (90%-99%)	100% (94%-106%)	93% (88%-97%)
Volar/dorsal tilt, degrees, mean (95% CI)^f					
enrollment	249	-19 (-23— -5)	-11 (-15— -8)	-13 (-16— -9)	-9 (-12— -7)
2 weeks	233	5 (3-6)	-1 (-4-4)	1 (-2-3)	-12 (-14— -8)
6 weeks	239	5 (3-7)	-1 (-3— -2)	1 (-1-4)	-12 (-15— -9)
3 months	206	6 (3-8)	0 (-3-3)	1 (-2-4)	-10 (-14— -6)
6 months	175	5 (3-7)	-3 (-6-0)	3 (1-6)	-9 (-13— -5)
12 months	137	3 (0-6)	-1 (-5-2)	2 (-1-4)	-11 (-16— -7)
Ulnar variance, mm, mean (95% CI)					
enrollment	242	2.9 (2.2, 3.7)	2.0 (1.2, 2.8)	2.1 (1.3, 2.9)	2.3 (1.7, 2.9)
2 weeks	230	0.6 (-0.1, 1.3)	1.8 (1.3, 2.4)	1.7 (1.1, 2.2)	3.3 (2.5, 4.0)
6 weeks	237	1.3 (0.4, 2.2)	2.0 (1.4, 2.6)	2.8 (2.2, 3.4)	3.6 (2.8, 4.4)
3 months	202	1.0 (0.4-1.5)	2.1 (1.6-3.2)	2.5 (1.9-3.0)	3.7 (2.9-4.6)
6 months	176	1.3 (0.4-2.2)	2.0 (1.4-2.6)	2.8 (2.2-3.4)	3.6 (2.8-4.4)
12 months	135	1.4 (0.7, 2.0)	3.2 (1.6, 4.8)	2.1 (1.6, 2.7)	2.9 (2.1, 3.8)
Radial inclination, degrees, mean (95% CI)					
enrollment	251	16 (14-17)	16 (14-18)	16 (15-18)	17 (15-18)
2 weeks	235	21 (19-22)	21 (19-22)	23 (20-23)	14 (14-17)
6 weeks	243	22 (20-23)	20 (19-21)	22 (21-24)	15 (14-17)
3 months	207	23 (21-24)	20 (18-21)	22 (20-23)	15 (13-17)
6 months	182	23 (21-25)	21 (19-23)	21 (19-22)	16 (14-17)
12 months	139	22 (20-23)	20 (18-21)	21 (19-23)	17 (15-20)

eTable 3. Primary and secondary outcomes by study arm and assessment time (continued)

	n	Randomized Participants			
		VLPS	External Fixation	Percutaneous Pinning	Casting
Radial height, mm, mean (95% CI)					
enrollment	242	8.1 (7.3, 8.9)	8.5 (7.2, 9.8)	8.3 (7.5, 9.0)	8.8 (8.1, 9.5)
2 weeks	230	10.8 (10.0, 11.5)	10.4 (9.5, 11.4)	10.9 (10.1, 11.7)	7.9 (7.2, 8.7)
6 weeks	235	11.4 (10.5, 12.3)	10.4 (9.4, 11.4)	10.1 (9.1, 11.0)	8.5 (7.5, 9.4)
3 months	202	11.2 (10.6-12.1)	9.7 (8.8-10.7)	10.8 (9.9-11.7)	7.7 (6.9-8.6)
6 months	183	11.4 (10.5-12.3)	10.4 (9.4-11.4)	10.1 (9.1-11.0)	8.5 (7.5-9.4)
12 months	135	11.1 (10.1, 12.1)	9.8 (8.9, 10.8)	10.8 (9.8, 11.8)	9.1 (7.9, 10.4)