

**Table S4.** Characteristics of the randomized controlled trials included in this network meta-analyses.

STUDY		PATIENTS					TREATMENT MODALITIES				OUTCOMES
Author/ year	Country	Patients	Age (y) Mean $\pm$ SD	Female Number (%)	Dominant side involved Number (%)	Type of DRF	Groups	Description of intervention	Time of surgery Mean $\pm$ SD	Time of immobilization post treatment	Outcomes / Follow-up
Arora et al 2011	Austria	36	75.9 $\pm$ NR	28 (77.8)	15 (41.7)	Unstable intra or extra-articular DRF (AO type: A2 3; A3 7; C1 4; C2 12; C3 10)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	After surgery, the wrist was immobilized for 10 days, then the sutures were removed and the wrist was placed in a removable splint for 1 week	6, 12 weeks, 6 months, and 1 year follow-up  Wrist ROM: - Flexion - Extension - Pronation - Supination - Radial deviation - Ulnar deviation  Grip strength  VAS  DASH  PRWE  Complications
		37	77.4 $\pm$ NR	27 (73)	21 (56.8)	Unstable intra or extra-articular DRF (AO type: A2 3; A3 9; C1 11; C2 8; C3 6)	CG: Non operative treatment	Closed reduction and cast immobilization		5 weeks	
Atroshi et al 2006	Sweden	19	71 $\pm$ NR	15 (78.9)	10 (52.6)	Unstable intra or extra-articular DRF (AO type: A2/A3 8; C2/C3 11)	IG 1: BEF	The Hoffman external fixator was used. No additional fixation was used	27 $\pm$ 11 min	After surgery the wrist was immobilized for 6 weeks	10 weeks, 6 months, and 1 year follow-up  Wrist ROM: - Flexion - Extension - Pronation
		19	70 $\pm$ NR	16 (84.2)	9 (47.4)	Unstable intra or extra-articular DRF (AO type:	IG 2: NBEF	The Hoffman Compact external fixation	37 $\pm$ 11 min	After surgery the wrist was immobilized for 6 weeks	

						A2/A3 11; C2/C3 8)		was used. No additional fixation was used			- Supinati on -Radial deviation -Ulnar deviation  Grip strength  VAS  DASH  SF-12  Complic ations
Azzop ardi et al 2005	Scotlan d	27	72 ± 8	23 (85.2 )	10 (37)	Unstabl e, dorsally angulat ed and extraarti cular DRF (A3 type AO)	IG 1: PKW	Closed reduction , supplem entary percutan eous pinning (k-wires), and cast immobiliz ation	NR	After surgery the wrist was immobiliz ed for 5 weeks, then wires were removed	1-year follow-up  Wrist ROM: -Flexion - Extensio n - Pronatio n - Supinati on -Radial deviation -Ulnar deviation  Grip strength  ADL  VAS  SF-36  Complic ations
		27	71 ± 9	25 (92.6 )	12 (44.4)	Unstabl e, dorsally angulat ed and extraarti cular DRF (A3 type AO)	CG: Non opera tive treat ment	Closed reduction and cast immobiliz ation		5 weeks	Supinati on -Radial deviation -Ulnar deviation  Grip strength  ADL  VAS  SF-36  Complic ations
Bartl et al 2014	Germa ny	86	75. 3 ± 6.7	77 (90)	76 (89)	Unstabl e intraarti cular DRF (AO type: C1 36; C2 35; C3 15)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	2 weeks	3 months, and 1 year follow-up  Wrist ROM: -Flexion - Extensio n - Pronatio n - Supinati on
		88	74. 4 ± 7.1	76 (86)	84 (97)	Unstabl e intraarti cular DRF (AO type: C1	CG: Non opera tive treat ment	Closed reduction and cast immobiliz ation		6 weeks	Supinati on

[illegible]

						25; C3 2)					
Foldhazy et al 2010	Sweden	28	73.5 ± NR	24 (85.7)	17 (60.7)	Unstable intra or extra-articular DRF (AO type: A2 1; A3 10; C2 7; C3 4)	IG 1: BEF	Closed reduction, BEF without supplemental k-wires, and immobilization	NR	5 weeks	2, 6 months, and 1 year follow-up. GOBC VAS
		31	71.5 ± NR	29 (93.6)	12 (38.7)	Unstable intra or extra-articular DRF (AO type: A2 5; A3 11; C1 1; C2 8; C3 4)	GC: Non operative treatment	Closed reduction and cast immobilization		5 weeks	Grip strength Wrist ROM: -Flexion -Extension -Pronation -Supination -Radial deviation -Ulnar deviation Complications
Goehre et al 2014	Germany	21	71.3 ± 5.7	18 (85.7)	NR	Unstable intra or extra-articular DRF (AO type: A2 4; A3 14; C1 3)	IG 1: VLP	Open reduction and internal fixation with VLP	60 min ± NR	1 week	3, 6 months, and 1 year follow-up. DASH PRWE
		19	73.8 ± 8.9	19 (100)	NR	Unstable intra or extra-articular DRF (AO type: A2 9; A3 6; C1 4)	IG 2: PKW	Closed reduction, supplementary percutaneous k-wires fixation (combined Kapandji and Willenegger techniques), and immobilization	23 min ± NR	6 weeks	Castain Score Grip strength Wrist ROM: -Flexion -Extension -Pronation -Supination -Radial deviation -Ulnar deviation

											Complications
Hassell und et al 2021	Norwegian	50	73.4 ± NR	47 (94)	24 (48)	Unstable intra or extra-articular DRF (AO type: A2 3; A3 9; C1 13; C2 16; C3 9)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	2 weeks	3, 6 months, and 1 year follow-up  Quick DASH  PRWE
		50	73.9 ± NR	42 (84)	18 (36)	Unstable intra or extra-articular DRF (AO type: A2 2; A3 12; C1 11; C2 18; C3 7)	CG: Non operative treatment	Closed reduction and cast immobilization		5.5 weeks	EQ-5D index  EQ-VAS  Grip strength  Wrist ROM: - Flexion - Extension - Pronation - Supination - Radial deviation - Ulnar deviation  Complications
Hegeman et al 2004	Netherlands	15	71 ± 7.9	13 (86.7)	NR	Unstable intra-articular DRF (AO type: C2 9; C3 6)	IG 1: BEF	Closed reduction, Hoffman II Compact external fixation, and immobilization	NR	6 weeks	6 weeks, 3 months, and 1 year follow-up  Gartland and Werley Score
		17	69 ± 8	16 (94.1)	NR	Unstable intra-articular DRF (AO type: C2 14; C3 3)	CG: Non operative treatment	Closed reduction and cast immobilization		6 weeks	Grip strength  Wrist ROM: - Flexion - Extension  Complications
		20	66 ± NR	25 (100)	6 (24)	Dorsally displaced intra	IG 1: PKW	Closed reduction	32 ± 14 min	5 weeks	3 months, and 1

<b>Hollevoet et al 2011</b>	Belgium					or extra-articular DRF (intra articular 13)		supplementary percutaneous pinning (k-wires), and cast immobilization			year follow-up
		20	67 ± NR	16 (80)	9 (45)	Dorsally displaced intra or extra-articular DRF (intra articular 9)	IG 2: VLP	Open reduction and internal fixation with VLP	65 ± 20 min	5 weeks	Wrist ROM: -Flexion-extension arc -Pronation – supination arc Grip strength DASH Complications
<b>Horne et al 1990</b>	New Zealand	14	70.6 ± 5.4	NR	NR	Displaced intra or extra-articular DRF (Frykman type: extra articular 10; intra articular 5)	IG 1: BEF	Closed reduction, BEF without supplemental k-wires, and immobilization	NR	5 weeks	4 to 15 months follow-up Functional assessment score
		15	73.9 ± 8.6	NR	NR	Displaced intra or extra-articular DRF (Frykman type: extra articular 6; intra articular 8)	CG: Non operative treatment	Closed reduction and cast immobilization		5 weeks	
<b>Jakubietz et al 2008; Jakubietz et al 2012</b>	Switzerland	15	64.5 ± NR	13 (86.7)	15 (100)	Unstable intra-articular DRF (AO type: C1 10; C2 4; C3 1)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	2 weeks	6 weeks, 3, 6 months, and 1 year follow-up Wrist ROM: -Flexion-extension arc -Pronation – supination arc -Radial – Ulnar arc Grip strength
		15	66.3 ± NR	12 (80)	10 (66.7)	Unstable intra-articular DRF (AO type: C1 10; C2 3; C3 2)	IG 2: DPF	Open reduction and internal fixation with DPF	NR	2 weeks	

											VAS Gartland Werley Score Complic ations
Jeudy et al 2012	France	39	64.6 ± 3.5	31 (79.5)	17 (43.6)	Unstable intra-articular DRF (AO type: C2 34; C3 5)	IG 1: BEF	Closed reduction, Hoffman II external fixation, with supplemental k-wires, and immobilization	NR	6 weeks	6 weeks, 3- and 6-months follow-up Wrist ROM: -Flexion-extension arc Grip strength
		46	64.7 ± 3.7	26 (56.5)	18 (38.9)	Unstable intra-articular DRF (AO type: C2 26; C3 10)	IG 2: VLP	Open reduction and internal fixation with VLP	NR	6 weeks	GOBC PRWE Complic ations
Koshimine et al 2005	Japan	22	68 ± NR	18 (81.8)	NR	Unstable intra or extra-articular DRF (AO type: A2 8; A3 1; C1 7; C2 6)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	2 weeks	6 to 24 months follow-up Wrist ROM: -Flexion - Extension - Pronation - Supination Gartland Werley Score Complic ations
		31	74 ± NR	28 (90.3)	NR	Unstable intra or extra-articular DRF (AO type: A2 10; A3 2; C1 5; C2 14)	IG 2: VNLP	Open reduction and internal fixation with VNLP	NR	2 weeks	
Lawson et al 2021	Australia and New Zealand	81	70.5 ± 7	70 (86.4)	NR	Unstable intra or extra-articular DRF (AO type: A 55; C 26)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	2 weeks	3 months, and 1 year follow-up PRWE DASH
		85	71.3 ± 7.6	75 (88.2)	NR	Unstable intra or extra-articular DRF	CG: Non operative	Closed reduction and cast immobilization		6 weeks	EQ-5D index EQ-VAS

						(AO type: A 49; C 35)	treatment				NRS Complications
<b>Marcheix et al 2010</b>	France	53	73 ± 11	48 (90.6)	32 (60.4)	Unstable intra or extra-articular DRF (AO type: A2 1; A3 22; C2 23; C3 6)	IG 1: PKW	Closed reduction, supplementary percutaneous pinning (k-wires), and cast immobilization	NR	6 weeks	3- and 6-months follow-up  Wrist ROM: - Flexion - Extension - Pronation - Supination  DASH  Grip strength  Herzberg Score  Complications
		50	75 ± 11	38 (76)	22 (44)	Unstable intra or extra-articular DRF (AO type: A3 17; C2 25; C3 8)	IG 2: VLP	Open reduction and internal fixation with VLP	NR	3 weeks	
<b>Martinez-Méndez et al 2017</b>	Spain	50	67 ± 8	39 (78)	35 (70)	Unstable intra-articular DRF (AO type: C1 23; C2 23; C3 4)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	1 week	2 years follow-up  Wrist ROM: - Flexion - Extension - Pronation - Supination  Grip strength  VAS  DASH  PRWE  Complications
		47	70 ± 7	37 (78.7)	30 (63.8)	Unstable intra-articular DRF (AO type: C1 22; C2 20; C3 5)	CG: Non operative treatment	Closed reduction and cast immobilization	NR	6 weeks	
		70	63 ± NR	63 (90)	34 (48.6)	Unstable intra or extra-articular DRF (AO type: A2 5; A3 25; C1	IG 1: VLP	Open reduction and internal fixation with VLP	NR	4 weeks	6 weeks, 3 months, 1- and 3-years follow-up  Wrist ROM:

Mellstr and-Navarro et al 2016; Saving et al 2019a	Sweden					35; C2 3; C3 2)						-Flexion - Extension - Pronation - Supination -Radial deviation -Ulnar deviation  DASH  Grip strength  PRWE  EQ-5D  Complications
		69	63 ± NR	64 (92.8 )	28 (40.6)	Unstable intra or extra-articular DRF (AO type: A2 5; A3 20; C1 38; C2 4; C3 2)	IG 2: BEF	Closed reduction , Hoffman Compact external fixation with supplemental k-wires, and immobilization	NR	5.5 weeks		
Moroni et al 2004	Italy	20	>6 5	NR	NR	Unstable extra-articular DRF (AO type: A2/A3)	IG 1: BEF	Closed reduction , Orthofix Pennig II external fixation with supplemental k-wires, and immobilization	NR	6 weeks	3 months follow-up  Horesh Demerit Point Wrist  SF-36  Complications	
		20	>6 5	NR	NR	Unstable extra-articular DRF (AO type: A2/A3)	CG: Non operative treatment	Closed reduction and cast immobilization	NR	6 weeks		
Saving et al 2019	Sweden	58	80 ± NR	55 (94.8 )	27 (46.6)	Unstable intra or extra-articular DRF (AO type: A2 5; A3 25; C1 35; C2 3; C3 2)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	2 weeks	3 months, and 1 year follow-up  PRWE  DASH  EQ-5D	
		64	78 ± NR	56 (87.5 )	23 (35.9)	Unstable intra or extra-articular DRF (AO type: A2 5; A3 25; C1 35; C2 3; C3 2)	CG: Non operative treatment	Closed reduction and cast immobilization		4.5 weeks	Wrist ROM: -Flexion - Extension - Pronation	

											- Supination -Radial deviation -Ulnar deviation  Grip strength
Tahir et al 2021	Pakistan	87	81 ± 3	16 (18.4)	60 (69)	Unstable intra or extra-articular DRF (AO type: A2 31; A3 28; C1 9; C2 9; C3 10)	IG 1: VLP	Open reduction and internal fixation with VLP	NR	NR	3 months, and 1 year follow-up  PRWE  Quick DASH
		72	81 ± 2	17 (23.6)	45 (62.5)	Unstable intra or extra-articular DRF (AO type: A2 38; A3 3; C1 18; C2 9; C3 4)	CG: Non operative treatment	Closed reduction and cast immobilization		4.5 weeks	Mayo Wrist Score  SF-12  Wrist ROM: -Flexion - Extension - Pronation - Supination  Grip strength
Wong et al 2010	China	30	70 ± NR	24 (80)	21 (70)	Unstable extra-articular DRF (Frykman type: I 17; II 13)	IG 1: PKW	Closed reduction, supplementary percutaneous pinning (k-wires), and cast immobilization	NR	6 weeks	1 year follow-up  Wrist range of motion: -Flexion - Extension - Pronation
		30	71 ± NR	25 (83.3)	20 (66.7)	Unstable extra-articular DRF (Frykman type: I 18; II 12)	CG: Non operative treatment	Closed reduction and cast immobilization		6 weeks	- Supination -Radial deviation -Ulnar deviation  Grip Strength

											Mayo Wrist Score
											WHOQo L
											Complic ations

**ADL:** Activities of Daily Living; **BEF:** Bridging External Fixation; **CG:** Control Group; **DASH:** Disabilities of the Arm, Shoulder and Hand questionnaire; **DPF:** Dorsal Plate Fixation; **DRF:** Distal Radius Fracture; **EQ-5D** index: EuroQol 5D questionnaire; **EQ-VAS:** EuroQol Visual Analog Scale; **GOBC:** Green & O'Brian/Coney questionnaire; **IG:** Intervention Group; **IMN:** Intramedullary Nail; **MHQ:** Michigan Hand Questionnaire; **NBEF:** Non Bridging External Fixation; **NR:** Not Reported; **NRS:** Numerical Rating Scale; **PKW:** Percutaneous K-wire; **PRWE:** Patient Rated-Wrist Evaluation questionnaire; **ROM:** Range of Motion; **SD:** Standard Deviation; **SF-12:** 12-Item Short Form Survey of Health; **SF-36:** 36-Item Short Form Survey of Health; **VAS:** Visual Analog Scale; **VLP:** Volar Locking Plate; **VNLP:** Volar Non-Locking Plate; **WHOQoL:** World Health Organization Quality of Life questionnaire.