

Appendix 3. Study demographics.

First Author (Year)	LOE	No. of Patients	Sex (M/F)	Mean age (range), y	Mean BMI	Mean Follow- up, mo	Time from Injury to Surgery, wk	No. of Sutures	Tibial Fixation	No. of Tibial Tunnels	Tibial Tunnel Size, mm	Concomitant injuries / procedures
Simple Stitch Configuration												
Chung et al ⁴ (2020)	III	37	5/32	56.8 ± 7.1	26.2 ± 2.4	125.9 ± 21.2	--	One- or Two- simple stitch	Polypropylene button	1	--	Cartilage arthrosis (n=55)
Hiranaka et al ¹⁰ (2020)	III	27	5/22	65.4 ± 6.4	24.9 ± 3.0	12	11.5 ± 9.8	Two- simple stitch	Bioabsorbable interference screw	1	4.5	--
Furumatsu et al ⁹ , two- simple stitch cohort (2022)	III	30	5/25	65.0 ± 7.0	--	16.6 (12- 30)	12.0 ± 9.5	Two- simple stitch	Double-spike plate and screw	1	4.0 or 4.6	--
Furumatsu et al ⁹ , two- simple stitch with Posteromedial Pullout Repair cohort (2022)	III	25	10/15	61.7 ± 10.3	--	16.6 (12- 30)	10.2 ± 7.7	Two- simple stitch with Posteromedial Pullout Repair using All-Inside fixation	Double-spike plate and screw	1	4.0 or 4.7	--
Kim et al ¹² (2011)	III	22	7/15	53.2 ± 6.1	23.9 ± 4.3	25.9 ± 4.9	4.2 ± 1.1	Three- simple stitch	3.5mm screw and washer	1	--	Cartilage arthrosis (n=30)
Lee et al ²² (2014)	III	25	2/23	56.5 ± 6.1 (all, <65)	26.9 ± 3.2	25.9 ± 5.5	--	Two or Three- simple stitch	--	1	--	Arthrosis (n=25)
Ahn et al ¹ (2015)	III	25	1/24	55.6 ± 7.5 (35-69)	25.11 ± 3.78	17.4 ± 4.1 (12-23)	--	Two- simple stitch	Tied over bony bridge	2	--	Cartilage arthrosis (n=25), subchondral edema (n=18)

Kim et al ¹⁴ (2011)	III	30	5/25	55.2 ± 8.7 (42-65)	26.81 ± 2.57	48.5 ± 18.4	--	Two- or Three- simple stitch	Cortical Button	1	3/32 K-wire	Cartilage arthrosis (n=30)
Ulku et al ²⁸ (2020)	III	21	--	52.9 ± 3.8	--	44.6 (26 - 64)	21.7 (13.0 - 34.8)	Two- simple stitch	Cortical Button	2	--	Cartilage arthrosis (n=25)

All-inside-dependent modified Mason-Allen configuration

Hiranaka et al ¹⁰ (2020)	III	41	10/31	63.7 ± 8.7	26.2 ± 4.0	12	12.6 ± 8.6	--	Double-spike plate and screw	1	4.5	--
Furumatsu et al ⁹ (2022)	III	28	6/22	63.9 ± 9.4	--	16.6 (12- 30)	12.5 ± 8.0	--	Double-spike plate and screw	1	4.0 or 4.5	--
Zhang et al ³¹ (2021)	III	28	6/22	63.0 ± 8.6	26.9 ± 3.7	12	89.5 ± 64	--	Double-spike plate and screw	1	--	--

Modified reverse Mason-Allen configuration

Moon et al ²⁴ , reduced or maintained MMER cohort (2020)	III	21	6/15	52.7 ± 10.8	26.2 ± 4.4	24	10.8 ± 6.9	--	EndoButton	1	--	Cartilage lesion of MFC (n=21), Cartilage lesion of MTP (n=21)
Moon et al ²⁴ , increased MMER cohort (2020)	III	42	7/35	56.0 ± 7.2	26.2 ± 3.2	24	21.7 ± 16.3	--	EndoButton	1	--	Cartilage lesion of MFC (n=32), cartilage lesion of MTP (n=42)
Lee et al ²² (2014)	III	25	2/23	55.7 ± 10.6 (all, <65)	27.3 ± 2.6	24.1 ± 5.4	--	--	--	1	--	Arthrosis (n=25)

Cinch-loop Stitch Configuration

Yanagisawa et al ³⁰ , decreased Meniscal Extrusion cohort (2020)	III	7	4/3	59.3 ± 7.9	26.7 ± 3.5	12	4.3 ± 3.3	Two- or Three-Cinch-Loop Stitches	Double-spike plate and screw	1	--	Cartilage arthrosis (n=7)
Yanagisawa et al ³⁰ , increased Meniscal Extrusion cohort (2020)	III	23	1/22	61.5 ± 8.5	25.2 ± 3.6	12	--	Two- or Three-Cinch-Loop Stitches	Double-spike plate and screw	1	--	Cartilage arthrosis (n=23)
Kaplan et al ¹¹ (2018)	III	18	7/11	47.2 ± 11.9 (17.2 - 61.7)	30.6 ± 5.6 (22 - 43)	24.9 ± 7.8 (10.3 - 35.7)	9.0	Two-Cinch-Loop Stitches	Cortical Button	1	6mm socket, 3.5mm tunnel	Tibial plateau subchondroplasty (n=2), patellar ACI (n=1), ACLR (n=2)
Ulku et al ²⁸ (2020)	III	20	--	52.9 ± 3.8	--	44.6 (26 - 64)	12.0 ± 9.5	Two-Cinch-Loop Stitches	Cortical Button	2	--	Cartilage arthrosis (n=25)

LOE, level of evidence; No. number; y, year; m, month; wk, week; M, male; F, female; BMI, body mass index; --, not reported; MMER, medial meniscal extrusion ratio;

MFC, medial femoral condyle; MTP, medial tibial plateau; ACI, autologous chondrocyte implantation; ACLR, anterior cruciate ligament reconstruction.