

TABLE E-1 Studies on Size of ACL Femoral Insertion Site Identified in Literature Search

Study	No. of Subjects	Length (mm)			Width (mm)			Area (mm ²)		
		Average*	Minimum	Maximum	Average*	Minimum	Maximum	Average*	Minimum	Maximum
Odensten and Gillquist ¹⁷ (1985)	33	18 (2)			11 (2)					
Muneta et al. ¹⁸ (1997)	16	16 (2.8)			8.3 (2.8)			93.3 (34.1)		
Harner et al. ¹⁹ (1999)	10							113 (27)		
Colombet et al. ²⁰ (2006)	7	18.3 (2.3)	14.2	21.3	10.3 (2.7)	7.2	14.5			
Dargel et al. ²⁸ (2006)	60							152.4 (49.84)		
Takahashi et al. ²² (2006)	32									
Luites et al. ²¹ (2007)	35							184 (52)		
Ferretti et al. ²⁴ (2007)	16	17.2 (1.2)	14.7	19	9.9 (0.8)	8.4	11.5	196.8 (23.1)	158.1	230.4
Heming et al. ²⁵ (2007)	12	18.4 (0.6)			9.5 (1.5)					
Edwards et al. ²³ (2008)	22	14 (2)	8	18	7 (1)	6	10			
Siebold et al. ²⁶ (2008)	46	15 (3)	10	19	8 (2)	5	13	83 (19)	46.0	156.0
Iwahashi et al. ²⁷ (2010)	8	17.4 (0.9)	16.2	18.4	8 (0.5)	7.1	8.3	128.3 (10.5)	113.6	137.5
Weighted average		16.3	11.1	18.9	8.9	6.1	11.8	136.0	79.3	170.9

*The standard deviation is given in parentheses.

TABLE E-2 Femoral Tunnel Aperture Length

	Femoral Tunnel Aperture Length* (<i>mm</i>)						
	6-mm Drill-Bit Diameter	7-mm Drill-Bit Diameter	8-mm Drill-Bit Diameter	9-mm Drill-Bit Diameter	10-mm Drill-Bit Diameter	11-mm Drill-Bit Diameter	12-mm Drill-Bit Diameter
Transverse drill angle							
20°	17.5	20.5	23.4	26.3	29.2	32.2	35.1
30°	12.0	14.0	16.0	18.0	20.0	22.0	24.0
40°	9.3	10.9	12.4	14.0	15.6	17.1	18.7
50°	7.8	9.1	10.4	11.7	13.1	14.4	15.7
60°	6.9	8.1	9.2	10.4	11.5	12.7	13.9
70°	6.4	7.4	8.5	9.6	10.4	11.7	12.8

*Individual values as calculated with the equation mentioned in the text.

TABLE E-3 Femoral Tunnel Aperture Area

	Femoral Tunnel Aperture Area* (<i>mm</i> ²)						
	6-mm Drill-Bit Diameter	7-mm Drill-Bit Diameter	8-mm Drill-Bit Diameter	9-mm Drill-Bit Diameter	10-mm Drill-Bit Diameter	11-mm Drill-Bit Diameter	12-mm Drill-Bit Diameter
Transverse drill angle							
20°	82.7	112.5	147.0	186.0	229.6	277.9	330.7
30°	56.5	77.0	100.5	127.2	157.1	190.1	226.2
40°	44.0	59.9	78.2	99.0	122.2	147.8	175.9
50°	36.9	50.2	65.6	83.0	102.5	124.1	147.6
60°	32.6	44.4	58.0	73.5	90.7	109.7	130.6
70°	30.1	41.0	53.5	67.7	81.5	101.1	120.4

*Individual values as calculated with the equation mentioned in the text.