

Supplementary Table 1

Article characteristics

First author	Population	Proportion with previous ACL reconstruction, %	Study quality checklist (no. items fulfilled)	Return to sport rate % (level)	Focus of study
Aglietti 1994 [1]	(n = 60)	0	3	87 (any) 50 (preinjury) 18 (competitive)	Graft type comparison
Aglietti 1996 [2]	(n = 68) Athletes	6	6	93 (any) 31 (preinjury) 22 (competitive)	Surgical technique evaluation
Aglietti 1997 [3]	(n = 60)	0	4	95 (any) 55 (preinjury)	Graft type comparison
Aglietti 2004 [4]	(n = 120)	0	6	63 (any) 56 (preinjury)	Graft type comparison
Ardern 2011 [5]	(n = 307) Competitive athletes	0	5	67 (any) 33 (preinjury) 33 (competitive)	Return to sport
Ardern 2012 [6]	(n = 314) Amateur athletes, at least recreational level	0	5	93 (any) 61 (preinjury) 41 (competitive)	Return to sport
Ardern 2013 [7]	(n = 187) Amateur athletes, at least recreational level	6	6	31 (preinjury) 26 (competitive)	Return to sport
Bak 2001 [8]	(n = 132) Soccer players	0	5	61 (any) 61 (competitive)	Surgical technique evaluation
Barrett 1991 [9]	(n = 45)	0	4	87 (any) 47 (preinjury) 51 (competitive)	Surgical technique evaluation
Blonna 2012 [10]	(n = 47) Amateur athletes, at least recreational level	0	4	91 (preinjury)	Psychometric properties of Subjective Patient Outcome for Return to Sports (SPORTS) score
Brophy 2012 [11]	(n = 100) Football (soccer) players	0	5	72 (any) 61 (preinjury)	Return to sport
Colombet 2002 [12]	(n = 200)	0	6	85 (any) 68 (preinjury) 49 (competitive)	Surgical technique evaluation
Daniel 1994 [13]	(n = 91)	0	3	86 (preinjury)	ACL treatment technique evaluation
Deehan 2000 [14]	(n = 90)	0	3	86 (any)	Surgical technique evaluation
Erickson 2013 [15]	(n = 52) Professional football (soccer) players	Not reported	5	77 (preinjury) 77 (competitive)	Return to sport
Erickson 2013 [16]	(n = 25) Elite level skiers and snowboarders	Not reported	5	80 (preinjury) 80 (competitive)	Return to sport

Supplementary Table 1

First author	Population	Proportion with previous ACL reconstruction, %	Study quality checklist (no. items fulfilled)	Return to sport rate % (level)	Focus of study
Fabbriciani 2005 [17]	(n = 18) Rugby players	Not reported	4	100 (any) 100 (preinjury) 100 (competitive)	Surgical technique evaluation
Feller 2003 [18]	(n = 65)	0	4	54 (preinjury)	Graft type comparison
Frobell 2010 [19]	(n = 83) Amateur athletes, at least recreational level	0	5	41 (preinjury)	ACL treatment technique evaluation
Gobbi 2003 [20]	(n = 80) Regional or national level athletes	0	6	65 (preinjury)	Surgical technique evaluation
Gobbi 2006 [21]	(n = 100)	0	6	89 (any) 58 (preinjury)	Graft type comparison
Grindem 2012 [22]	(n = 69) Played pivoting sports twice per week before injury	0	6	68 (preinjury)	Return to sport
Harris 2013 [23]	(n = 64) Professional basketball players	Not reported	5	98 (any) 86 (preinjury) 98 (competitive)	Return to sport
Hasebe 2005 [24]	(n = 15)	0	4	100 (any) 33 (preinjury) 33 (competitive)	Surgical technique evaluation
Heijne 2008 [25]	(n = 10)	Not reported	6	80 (any) 50 (preinjury)	Qualitative evaluation of return to sport
Hofmeister 2001 [26]	(n = 22)	0	4	91 (any) 82 (preinjury)	Clinical evaluation
Ibrahim 2005 [27]	(n = 85) Amateur athletes, at least recreational level	Not reported	6	89 (any sport)	Graft type comparison
Järvelä 2001 [28]	(n = 72)	0	3	78 (preinjury)	Clinical evaluation
Järvinen 1995 [29]	(n = 30) Amateur athletes, at least recreational level	17 (n = 5) (previous primary ACL repair)	4	27 (any)	Surgical technique evaluation
Jerre 2001 [30]	n = 275 Amateur athletes, at least recreational level	0	5	42 (preinjury) 31 (competitive)	Clinical evaluation (comparison between recreational and competitive athletes)
Kocher 2002 [31]	(n = 201)	0	4	78 (any) 40 (competitive)	Evaluation of patient satisfaction
Kvist 2005 [32]	(n = 62)	0	4	53 (preinjury) 31 (competitive)	Psychological factors influencing return to sport
Langford 2009 [33]	(n = 87) Competitive athletes	0	5	51 (any) 51 (competitive)	Psychological factors influencing return to sport

Supplementary Table 1

First author	Population	Proportion with previous ACL reconstruction, %	Study quality checklist (no. items fulfilled)	Return to sport rate % (level)	Focus of study
Lee 2008 [34]	(n = 64) Amateur athletes, at least recreational level	0	5	62 (any) 44 (preinjury)	Return to sport
Lentz 2012 [35]	(n = 94) Amateur athletes, at least recreational level	0	4	91 (any) 55 (preinjury)	Return to sport
Makihara 2006 [36]	(n = 16)	0	3	100 (any)	Clinical evaluation
Marcacci 1995 [37]	(n = 82) Professional and amateur athletes	0	4	73 (preinjury)	Surgical technique evaluation
Marcacci 1999 [38]	(n = 40) Professional and amateur athletes	0	5	100 (any) 90 (preinjury)	Surgical technique evaluation
Marcacci 2003 [39]	(n = 50) Professional and amateur athletes	0	5	90 (preinjury)	Surgical technique evaluation
Mascarenhas 2010 [40]	(n = 38) Athletes self-reported preinjury participation in strenuous or very strenuous sport 4-7 times/week	0	3	61 (preinjury)	Graft type comparison
Mascarenhas 2012 [41]	(n = 46) Athletes self-reported preinjury participation in strenuous or very strenuous sport 4-7 times/week	0	4	50 (preinjury)	Graft type comparison
McCullough 2012 [42]	(n = 96) High school- and college-level American football players	0	4	64 (preinjury) 64 (competitive)	Return to sport
McDevitt 2004 [43]	(n = 95) Cadets and midshipmen	0	3	99 (any) 99 (preinjury)	Rehabilitation protocol evaluation
Mikkelsen 2000 [44]	(n = 44)	0	5	91 (any) 39 (preinjury)	Rehabilitation protocol evaluation
Muellner 1998 [45]	(n = 40) Amateur athletes, at least recreational level	0	4	100 (any)	Rehabilitation protocol evaluation
Murray 2012 [46]	(n = 114) Amateur athletes, at least recreational level		3	81 (any) 55 (preinjury)	Long term clinical evaluation (focus on osteoarthritis)

Supplementary Table 1

First author	Population	Proportion with previous ACL reconstruction, %	Study quality checklist (no. items fulfilled)	Return to sport rate % (level)	Focus of study
Myklebust 2003 [47]	(n = 57) Three upper divisions of Norwegian team handball league	0	5	88 (any sport) 58 (preinjury)	Clinical evaluation
Nakayama 2000 [48]	(n = 50) Competitive athletes	Not reported	4	100 (any) 92 (preinjury) 92 (competitive)	Return to sport
Noyes 1997 [49]	(n = 56)	18	4	75 (any)	Clinical evaluation
O'Neill 1996 [50]	(n = 125)	6	4	90 (preinjury)	Surgical technique evaluation
Rebeyrotte-Boulègue 2005 [51]	(n = 55)	Not reported	4	100 (any) 71 (preinjury)	Clinical evaluation
Roos 1995 [52]	(n = 157) Football (soccer) players	0	3	22 (any) 22 (preinjury) 22 (competitive)	Clinical evaluation
Ross 2002 [53]	(n = 50) US air force cadets	0	3	100 (any)	Return to participation (including sport and activities of daily living)
Sandberg 1988 [54]	(n = 112)	0	4	48 (any) 18 (competitive)	Surgical technique evaluation
Sauter 1998 [55]	(n = 50)	Not reported	3	72 (any)	Surgical technique evaluation
Scott 2011 [56]	(n = 18) Professional basketball players	Not reported	4	79 (preinjury) 79 (competitive)	Return to sport
Seto 1988 [57]	(n = 25)	0	3	96 (any)	Clinical evaluation
Shah 2010 [58]	(n = 49) Professional American football players	0	5	63 (preinjury) 63 (competitive)	Return to sport
Shaieb 2002 [59]	(n = 70)	0	5	41 (preinjury)	Graft type comparison
Shelbourne 1997 [60]	(n = 1057)	0	4	95 (any)	Rehabilitation protocol evaluation
Shelbourne 2000 [61]	(n = 662) Amateur athletes, at least recreational level	0	6	54 (any)	Graft type comparison
Smith 2004 [62]	(n = 77) Competitive athletes	0	5	81 (any) 56 (preinjury)	Return to sport
Thomeé 2013 [63]	(n = 64) Amateur athletes, at least recreational level	0	6	47 (preinjury)	Return to sport
Tjong 2013 [64]	(n = 31) Competitive athletes	0	4	35 (preinjury) 40 (competitive)	Qualitative evaluation of return to sport

Supplementary Table 1

First author	Population	Proportion with previous ACL reconstruction, %	Study quality checklist (no. items fulfilled)	Return to sport rate % (level)	Focus of study
Waldén 2011 [65]	(n = 71)	Not reported	6	97 (any) 93 (preinjury)	ACL injury characteristics in elite football
Webster 2008 [66]	(n = 220) Competitive athletes	9	3	69 (any) 40 (preinjury) 44 (competitive)	Psychological factors influencing return to sport
Wiger 1999 [67]	(n = 429) Competitive athletes	0	6	39 (any)	Clinical evaluation (gender comparison)
Zaffagnini 2008 [68]	(n = 72)	0	4	96 (any)	Surgical technique evaluation

Supplementary Appendix A

Articles excluded from analysis

Reason for exclusion	Reference
No return to sport rate reported (n = 11)	Beynnon BD, Johnson RJ, Naud S, et al. Accelerated versus nonaccelerated rehabilitation after anterior cruciate ligament reconstruction: a prospective, randomized, double-blind investigation evaluating knee joint laxity using roentgen stereophotogrammetric analysis. <i>Am J Sports Med</i> 2011;39:2536-2548. Dunn WR, Spindler KP. Predictors of activity level 2 years after anterior cruciate ligament reconstruction (ACLR): a Multicentre Orthopaedic Outcomes Network (MOON) ACLR cohort study. <i>Am J Sports Med</i> 2010;38:2040-2050. Flanigan DC, Everhart SJ, Pedroza A, et al. Fear of reinjury (kinesiophobia) and persistent knee symptoms are common factors for lack of return to sport after anterior cruciate ligament reconstruction. <i>Arthroscopy</i> 2013;29:1322-1329. Griffith TB, Allen BJ, Levy BA, et al. Outcomes of repeat revision anterior cruciate ligament reconstruction. <i>Am J Sports Med</i> 2013;41:1296-1301. Hartigan EH, Lynch AD, Lokerstedt DS, et al. Kinesiophobia after anterior cruciate ligament rupture and reconstruction: Noncopers versus potential copers. <i>J Orthop Sports Phys Ther</i> 2013;43:821-832. Hettich CM, Dunn WR, Reinke EK, et al. The rate of subsequent surgery and predictors after anterior cruciate ligament reconstruction. Two- and 6-year follow-up results from a multicentre cohort. <i>Am J Sports Med</i> 2012;41:1534-1540. Kamien PM, Hydrick JM, Replogle WH, et al. Age, graft size, and Tegner Activity Level as predictors of failure in anterior cruciate ligament reconstruction with hamstring autograft. <i>Am J Sports Med</i> 2013; doi: 10.1177/0363546513493896. Kvist J, Österberg A, Gauffin H, et al. Translation and measurement properties of the Swedish version of ACL-Return to Sports after Injury questionnaire. <i>Scand J Med Sci Sports</i> 2013;23:568-575. McRae S, Leiter J, McCormack R, et al. Ipsilateral versus contralateral hamstring grafts in anterior cruciate ligament reconstruction: A prospective randomized trial. <i>Am J Sports Med</i> 2013;41:2492-2499. Mohammadi F, Salavati M, Akhbari B, et al. Comparison of functional outcome measures after ACL reconstruction in competitive soccer players: a randomized trial. <i>J Bone Joint Surg Am</i> 2013;95:1271-1277. Zaffagnini S, Bruni D, Muccioli GMM, et al. Single-bundle patellar tendon versus non-anatomical double-bundle hamstrings ACL reconstruction: a prospective randomized study at 8-year minimum follow-up. <i>Knee Surg Sports Traumatol Arthrosc</i> 2011;19:390-397.
Report on implementation of novel post-operative rehabilitation intervention (n = 2)	Carson F, Polman R. Experiences of professional rugby union players returning to competition following anterior cruciate ligament reconstruction. <i>Phys Ther Sport</i> 2012;13:35-40. Della Villa S, Boldrini L, Ricci M, et al. Clinical outcomes and return-to-sports participation of 50 soccer players after anterior cruciate ligament reconstruction through a sport-specific rehabilitation protocol. <i>Sports Health</i> 2012;4:17-24.
Report on return to sport after two-stage revision procedure (n = 1)	Franceschi F, Papalia R, Del Buono A, et al. Two-stage procedure in anterior cruciate ligament revision surgery: A five-year follow-up prospective study. <i>Int Orthop</i> 2013;37:1369-1374.
Combined return to sport data reported for people with and without ACL reconstruction surgery (n = 1)	Fälström A, Hägglund M, Kvist J. Patient-reported knee function, quality of life, and activity level after bilateral anterior cruciate ligament injuries. <i>Am J Sports Med</i> 2013;doi: 10.1177/0363546513502309.
Return to sport data published in previous report (n = 1)	Keays SL, Newcombe PA, Bullock-Saxton JE, et al. Factors involved in the development of osteoarthritis after anterior cruciate ligament surgery. <i>Am J Sports Med</i> 2010;38:455-463.

Supplementary Appendix A

Data excluded from analysis

Articles with overlapping return to sport data

First author	Follow up	Return to sport rate, %	Number of participants included
Ardern 2011 [5]	12 months post-operative	67 (any) 33 (preinjury) 33 (competitive)	307 of 503 (196 competitive athletes with data reported in Ardern 2012 were excluded)
Ardern 2012 [6]	Average 39 months post-operative	66 (any) 45 (preinjury) 41 (competitive)	314 of 314
Frobell 2010 [19]	2 years post-operative	41 (preinjury)	83 of 83
Frobell 2013 [69]	5 years post-operative	21 (preinjury)	0 of 83

Articles reporting multiple return to sport rates (within the same article)

First author	Follow up	Return to sport rate, %	Return to sport rate reported in review, %
Ardern 2012 [6]	Any time since surgery (range 2 to 7 years)	93 (any) 45 (preinjury) 41 (competitive)	93 (any) 45 (preinjury) 41 (competitive)
	At the time of follow up (average 39 months)	66 (any) 45 (preinjury) 29 (competitive)	
Brophy 2012 [11]	Average 12 months post-operative	72 (any) 61 (preinjury)	72 (any) 61 (preinjury)
	Average 7 years post-operative	35 (any) 16 (preinjury)	
Deehan 2000 [14]	2 years post-operative	86 (any)	86 (any)
	3 years post-operative	83 (any)	
	4 years post-operative	68 (any)	
	5 years post-operative	66 (any)	
Smith 2004 [62]	12 months post-operative	81 (any) 56 (preinjury)	81 (any) 56 (preinjury)
	Average 43 months post-operative	60 (any) 30 (preinjury)	

Supplementary Appendix B

First author	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6
	Selection criteria	Representative sample	Preinjury sport participation described	Prospective data collection	Demographic data reported	Return to preinjury sport level reported
Aglietti 1994 [1]	Y	N	Y	Y	N	N
Aglietti 1996 [2]	Y	Y	Y	Y	Y	Y
Aglietti 1997 [3]	Y	Y	N	Y	Y	N
Aglietti 2004 [4]	Y	Y	Y	Y	Y	Y
Ardern 2011 [5]	Y	Y	Y	N	Y	Y
Ardern 2012 [6]	Y	Y	Y	N	Y	Y
Ardern 2013 [7]	Y	Y	Y	Y	Y	Y
Bak 2001 [8]	Y	Y	Y	Y	Y	N
Barrett 1991 [9]	N	N	Y	Y	Y	Y
Blonna 2012 [10]	Y	Y	N	N	Y	Y
Brophy 2012 [11]	Y	Y	Y	Y	Y	Y
Colombet 2002 [12]	Y	Y	Y	Y	Y	Y
Daniel 1994 [13]	Y	Y	N	Y	N	N
Deehan 2000 [14]	Y	N	N	Y	Y	N
Erickson 2013 [15]	Y	Y	Y	N	Y	Y
Erickson 2013 [16]	Y	Y	Y	N	Y	Y
Fabbriciani 2005 [17]	N	N	Y	Y	Y	Y
Feller 2003 [18]	Y	N	N	Y	Y	Y
Frobell 2010 [19]	Y	Y	N	Y	Y	Y
Gobbi 2003 [20]	Y	Y	Y	Y	Y	Y
Gobbi 2006 [21]	Y	Y	Y	Y	Y	Y
Grindem 2012 [22]	Y	Y	Y	Y	Y	Y

Supplementary Appendix B

First author	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6
	Selection criteria	Representative sample	Preinjury sport participation described	Prospective data collection	Demographic data reported	Return to preinjury sport level reported
Harris 2013 [23]	Y	Y	Y	N	Y	Y
Hasebe 2005 [24]	N	N	Y	Y	Y	Y
Heijne 2008 [25]	Y	Y	Y	Y	Y	Y
Hofmeister 2001 [26]	Y	Y	N	N	Y	Y
Ibrahim 2005 [27]	Y	Y	Y	Y	Y	Y
Järvelä 2001 [28]	Y	N	Y	N	Y	Y
Järvinen 1995 [29]	N	Y	Y	Y	N	N
Jerre 2001 [30]	Y	Y	Y	N	Y	Y
Kocher 2002 [31]	Y	Y	N	Y	Y	N
Kvist 2005 [32]	Y	Y	N	N	Y	Y
Langford 2009 [33]	Y	Y	Y	Y	Y	N
Lee 2008 [34]	Y	Y	Y	N	Y	Y
Lentz 2012 [35]	Y	Y	N	N	Y	Y
Makihara 2006 [36]	N	N	Y	Y	Y	N
Marcacci 1995 [37]	N	N	Y	Y	Y	Y
Marcacci 1999 [38]	Y	N	Y	Y	Y	Y
Marcacci 2003 [39]	Y	N	Y	Y	Y	Y
Mascarenhas 2010 [40]	Y	N	N	N	Y	Y
Mascarenhas 2012 [41]	Y	N	N	Y	Y	Y
McCullough 2012 [42]	Y	N	Y	N	Y	Y

Supplementary Appendix B

First author	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6
	Selection criteria	Representative sample	Preinjury sport participation described	Prospective data collection	Demographic data reported	Return to preinjury sport level reported
McDevitt 2004 [43]	Y	N	N	Y	N	Y
Mikkelsen 2000 [44]	Y	N	Y	Y	Y	Y
Muellner 1998 [45]	Y	Y	N	Y	Y	N
Murray 2012 [46]	Y	Y	N	N	N	Y
Myklebust 2003 [47]	Y	Y	Y	Y	N	Y
Nakayama 2000 [48]	N	N	Y	Y	Y	Y
Noyes 1997 [49]	Y	Y	N	Y	Y	N
O'Neill 1996 [50]	N	Y	N	Y	Y	Y
Rebeyrotte-Boulégué 2005 [51]	Y	N	N	Y	Y	Y
Roos 1995 [52]	N	Y	Y	N	N	Y
Ross 2002 [53]	Y	N	Y	N	Y	N
Sandberg 1988 [54]	Y	Y	N	Y	Y	N
Sauter 1998 [55]	Y	N	N	Y	Y	N
Scott 2011 [56]	Y	N	Y	N	Y	Y
Seto 1988 [57]	Y	Y	N	N	Y	N
Shah 2012 [58]	Y	Y	Y	N	Y	Y
Shaieb 2002 [59]	Y	N	Y	Y	Y	Y
Shelbourne 1997 [60]	Y	Y	N	Y	Y	N
Shelbourne 2000 [61]	Y	Y	Y	Y	Y	Y
Smith 2004 [62]	Y	Y	Y	N	Y	Y

Supplementary Appendix B

First author	Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6
	Selection criteria	Representative sample	Preinjury sport participation described	Prospective data collection	Demographic data reported	Return to preinjury sport level reported
Thomeé 2013 [63]	Y	Y	Y	Y	Y	Y
Tjong 2012 [64]	Y	Y	Y	N	N	Y
Waldén 2011 [65]	Y	Y	Y	Y	Y	Y
Webster 2008 [66]	Y	N	N	Y	Y	N
Wiger 1999 [67]	Y	Y	Y	Y	Y	Y
Zaffagnini 2008 [68]	Y	Y	N	Y	Y	N
No. of articles fulfilling each criterion (% of total included studies)	60 (87)	46 (67)	44 (64)	47 (68)	61 (88)	51 (74)

Note

Y = criterion fulfilled

N = criterion not fulfilled

Supplementary Appendix C

Articles contributing data to contextual factor sub-group analysis

Contextual factor	Variable	Reference
Gender	Men	[5, 7, 11, 15-17, 23, 25, 27, 32, 35, 42, 47, 58, 62, 64]
	Women	[5, 7, 11, 16, 25, 26, 32, 35, 47, 56, 62-64]
Graft type	Hamstring tendon	[1-7, 11, 12, 18, 19, 21, 24, 34, 38, 39, 41, 48, 50, 59, 63, 68]
	Patellar tendon	[1, 3, 4, 10, 13, 18, 21, 28-30, 40, 41, 43-47, 49, 50, 54, 59-61, 67]
Sports performance level	Elite	[12, 15-17, 23, 37, 47, 56, 58, 64, 65]
	Non-elite	[1-14, 18-22, 24-36, 38-42, 44-46, 48-55, 57, 59-64, 66-68]
	Up to 12 months	[5, 7, 11, 15, 16, 22, 23, 33-35, 45, 48, 62, 65]
Length of follow up	12-36 months	[1, 4, 12, 14, 17-21, 24-26, 29-31, 36, 43, 44, 49, 51, 53, 63]
	> 36 months	[2, 3, 6, 8-10, 13, 27, 34, 37, 40, 41, 46, 47, 50, 52, 54, 57, 60, 61, 67, 68]

References

1. Aglietti P, Buzzi R, Zaccherotti G, et al. Patellar tendon versus doubled semitendinosus and gracilis tendons for anterior cruciate ligament reconstruction. *Am J Sports Med* 1994;22:211-8.
2. Aglietti P, Buzzi R, Menchetti PM, et al. Arthroscopically assisted semitendinosus and gracilis tendon graft in reconstruction for acute anterior cruciate ligament injuries in athletes. *Am J Sports Med* 1996;24:726-30.
3. Aglietti P, Zaccherotti G, Buzzi R, et al. A comparison between patellar tendon and doubled semitendinosus/gracilis tendon for anterior cruciate ligament reconstruction. A minimum five-year follow-up. *J Sports Traumatol Rel Res* 1997;19:57-68.
4. Aglietti P, Giron F, Buzzi R, et al. Anterior cruciate ligament reconstruction: Bone-patellar tendon-bone compared with double semitendinosus and gracilis tendon grafts - A prospective, randomized clinical trial. *J Bone Joint Surg Am* 2004;86:2143-55.
5. Ardern CL, Webster KE, Taylor NF, et al. Return to the preinjury level of competitive sport after anterior cruciate ligament reconstruction surgery: Two-thirds of patients have not returned by 12 months after surgery. *Am J Sports Med* 2011;39:538-43.
6. Ardern CL, Taylor NF, Feller JA, et al. Return-to-sport outcomes at 2 to 7 years after anterior cruciate ligament reconstruction surgery. *Am J Sports Med* 2012;40:41-8.
7. Ardern CL, Taylor NF, Feller JA, et al. Psychological responses matter in returning to preinjury level of sport after anterior cruciate ligament reconstruction surgery. *Am J Sports Med* 2013;41:1549-58.
8. Bak K, Jorgensen U, Ekstrand J, et al. Reconstruction of anterior cruciate ligament deficient knees in soccer players with an iliotibial band autograft: A prospective study of 132 reconstructed knees followed for 4 (2-7) years. *Scand J Med Sci Sports* 2001;11:16-22.
9. Barrett DS, MacKenney RP. MacIntosh-Jones reconstruction for the unstable knee. *Injury* 1991;22:282-6.
10. Blonna D, Castoldi F, Delicio D, et al. Validity and reliability of the SPORTS score. *Knee Surg Sports Traumatol Arthrosc* 2012;20:356-60.
11. Brophy R, Schmitz L, Wright R, et al. Return to play and future ACL injury risk after ACL reconstruction in soccer athletes from the Multicenter Orthopaedic Outcomes Network (MOON) Group. *Am J Sports Med* 2012;40:2517-22.
12. Colombet P, Allard M, Bousquet V, et al. Anterior cruciate ligament reconstruction using four-strand semitendinosus and gracilis tendon grafts and metal interference screw fixation. *Arthroscopy* 2002;18:232-7.
13. Daniel DM, Stone ML, Dobson BE, et al. Fate of the ACL-injured patient: A prospective outcome study. *Am J Sports Med* 1994;22:632-44.
14. Deehan DJ, Salmon LJ, Webb VJ, et al. Endoscopic reconstruction of the anterior cruciate ligament with an ipsilateral patellar tendon autograft. A prospective longitudinal five-year study. *J Bone Joint Surg Br* 2000;82:984-91.
15. Erickson BJ, Harris JD, Cvetanovich GL, et al. Performance and return to sport after anterior cruciate ligament reconstruction in male Major League Soccer players. *The Orthopaedic Journal of Sports Medicine* 2013;1:2325967113497189.
16. Erickson BJ, Harris JD, Fillingham YA, et al. Performance and return to sport after anterior cruciate ligament reconstruction in X-Games skiers and snowboarders. *The Orthopaedic Journal of Sports Medicine* 2013;1:2325967113511196.
17. Fabbriciani C, Milano G, Mulas PD, et al. Anterior cruciate ligament reconstruction with doubled semitendinosus and gracilis tendon graft in rugby players. *Knee Surg Sports Traumatol Arthrosc* 2005;13:2-7.
18. Feller JA, Webster KE. A randomized comparison of patellar tendon and hamstring tendon anterior cruciate ligament reconstruction. *Am J Sports Med* 2003;31:564-73.
19. Frobell RB, Roos EM, Roos HP, et al. A randomized trial of treatment for acute anterior cruciate ligament tears. *N Engl J Med* 2010;363:331-42.
20. Gobbi A, Tuy B, Mahajan S, et al. Quadrupled bone-semitendinosus anterior cruciate ligament reconstruction: A clinical investigation in a group of athletes. *Arthroscopy* 2003;19:691-9.
21. Gobbi A, Francisco R. Factors affecting return to sports after anterior cruciate ligament reconstruction with patellar tendon and hamstring graft: A prospective clinical evaluation. *Knee Surg Sports Traumatol Arthrosc* 2006;14:1021-8.
22. Grindem H, Eitzen I, Moksnes H, et al. A pair-matched comparison of return to pivoting sports at 1 year in anterior cruciate ligament-injured patients after a nonoperative versus an operative treatment course. *Am J Sports Med* 2012;40:2509-16.
23. Harris JD, Erickson BJ, Bach BR, et al. Return-to-sport and performance after anterior cruciate ligament reconstruction in National Basketball Association players. *Sports Health* 2013;10.1177/1941738113495788.

24. Hasebe Y, Tanabe Y, Yasuda K. Anterior-cruciate-ligament reconstruction using doubled hamstring-tendon autograft. *J Sport Rehabil* 2005;14:279-93.
25. Heijne A, Axelsson K, Werner S, et al. Rehabilitation and recovery after anterior cruciate ligament reconstruction: Patients' experiences. *Scand J Med Sci Sports* 2008;18:325-35.
26. Hofmeister EP, Gillingham BL, Bathgate MB, et al. Results of anterior cruciate ligament reconstruction in the adolescent female. *Journal of Pediatric Orthopaedics* 2001;21:302-6.
27. Ibrahim SA, Al-Kussary IM, Al-Misfer AR, et al. Clinical evaluation of arthroscopically assisted anterior cruciate ligament reconstruction: patellar tendon versus gracilis and semitendinosus autograft. *Arthroscopy* 2005;21:412-7.
28. Järvelä T, Kannus P, Järvinen M. Anterior cruciate ligament reconstruction in patients with or without accompanying injuries: A re-examination of subjects 5 to 9 years after reconstruction. *Arthroscopy* 2001;17:818-25.
29. Järvinen M, Natri A, Lehto M, et al. Reconstruction of chronic anterior cruciate ligament insufficiency in athletes using a bone-patellar tendon-bone autograft: A two-year follow up study. *Int Orthop* 1995;19:1-6.
30. Jerre R, Ejerhed L, Wallmon A, et al. Functional outcome of anterior cruciate ligament reconstruction in recreational and competitive athletes. *Scand J Med Sci Sports* 2001;11:342-6.
31. Kocher MS, Steadman JR, Briggs K, et al. Determinants of patient satisfaction with outcome after anterior cruciate ligament reconstruction. *J Bone Joint Surg Am* 2002;84-A:1560-72.
32. Kvist J, Ek A, Sporrstedt K, et al. Fear of re-injury: A hindrance for returning to sports after anterior cruciate ligament reconstruction. *Knee Surg Sports Traumatol Arthrosc* 2005;13:393-7.
33. Langford JL, Webster KE, Feller JA. A prospective longitudinal study to assess psychological changes following anterior cruciate ligament reconstruction surgery. *Br J Sports Med* 2009;5:377-81.
34. Lee DY, Karim SA, Chang HC. Return to sports after anterior cruciate ligament reconstruction: A review of patients with minimum 5-year follow-up. *Ann Acad Med Singapore* 2008;37:273-8.
35. Lentz TA, Zeppieri G, Jr., Tillman SM, et al. Return to preinjury sports participation following anterior cruciate ligament reconstruction: contributions of demographic, knee impairment, and self-report measures. *J Orthop Phys Ther* 2012;42:893-901.
36. Makihara Y, Nishino A, Fukubayashi T, et al. Decrease of knee flexion torque in patients with ACL reconstruction: Combined analysis of the architecture and function of the knee flexor muscles. *Knee Surg Sports Traumatol Arthrosc* 2006;14:310-7.
37. Marcacci M, Zaffagnini S, Iacono F, et al. Early versus late reconstruction for anterior cruciate ligament rupture. Results after five years of follow up. *Am J Sports Med* 1995;23:690-3.
38. Marcacci M, Zaffagnini S, Loreti I, et al. Arthroscopic intra and extra articular ACL reconstruction with gracilis and semitendinosus tendons with early resumption of sport. Results at minimum two years follow-up. *Knee* 1999;6:25-32.
39. Marcacci M, Zaffagnini S, Iacono F, et al. Intra- and extra-articular anterior cruciate ligament reconstruction utilizing autogenous semitendinosus and gracilis tendons: 5-year clinical results. *Knee Surg Sports Traumatol Arthrosc* 2003;11:2-8.
40. Mascarenhas R, Tranovich M, Karpie JC, et al. Patellar tendon anterior cruciate ligament reconstruction in the high-demand patient: evaluation of autograft versus allograft reconstruction. *Arthroscopy* 2010 Sep;26:S58-66.
41. Mascarenhas R, Tranovich M, Kropf E, et al. Bone-patellar tendon-bone autograft versus hamstring autograft anterior cruciate ligament reconstruction in the young athlete: a retrospective matched analysis with 2-10 year follow-up. *Knee Surg Sports Traumatol Arthrosc* 2012;20:1520-7.
42. McCullough KA, Phelps KD, Spindler KP, et al. Return to high school- and college-level football after anterior cruciate ligament reconstruction: A Multicenter Orthopaedic Outcomes Network (MOON) cohort study. *Am J Sports Med* 2012;40:2523-9.
43. McDevitt ER, Taylor DC, Miller MD, et al. Functional bracing after anterior cruciate ligament reconstruction: A prospective, randomized, multicenter study. *Am J Sports Med* 2004;32:1887-92.
44. Mikkelsen C, Werner S, Eriksson E. Closed kinetic chain alone compared to combined open and closed kinetic chain exercises for quadriceps strengthening after anterior cruciate ligament reconstruction with respect to return to sports: a prospective matched follow-up study. *Knee Surg Sports Traumatol Arthrosc* 2000;8:337-42.
45. Muellner T, Alacamlioglu Y, Nikolic A., et al. No benefit of bracing on the early outcome after anterior cruciate ligament reconstruction. *Knee Surg Sports Traumatol Arthrosc* 1998;6:88-92.
46. Murray JR, Lindh AM, Hogan NA, et al. Does anterior cruciate ligament reconstruction lead to degenerative disease?: Thirteen-year results after bone-patellar tendon-bone autograft. *Am J Sports Med* 2012 Feb;40:404-13.

47. Myklebust G, Holm I, Maehlum S, et al. Clinical, functional and radiologic outcome in team handball players 6 to 11 years after anterior cruciate ligament injury: A follow up study. *Am J Sports Med* 2003;**31**:981-9.
48. Nakayama Y, Shirai Y, Narita T, et al. Knee functions and a return to sports activity in competitive athletes following anterior cruciate ligament reconstruction. *J Nippon Med Sch* 2000;**67**:172-6.
49. Noyes FR, Barber-Westin SD. Anterior cruciate ligament reconstruction with autogenous patellar tendon graft in patients with articular cartilage damage. *Am J Sports Med* 1997;**25**:626-34.
50. O'Neill DB. Arthroscopically assisted reconstruction of the anterior cruciate ligament. A prospective randomized analysis of three techniques. *J Bone Joint Surg Am* 1996;**78-A**:803-13.
51. Rebeyrotte-Boulègue I, Daviet J, Oksman A, et al. Isokinetic evaluation of anterior cruciate ligament reconstruction using a free fascia lata graft strengthened by gracilis tendon. *Isokinet Exerc Sci* 2005;**13**:20-4.
52. Roos H, Ornell M, Gardsell P, et al. Soccer after anterior cruciate ligament injury: An incompatible combination? *Acta Orthop Scand* 1995;**66**:107-12.
53. Ross MD, Irrgang JJ, Denegar CR, et al. The relationship between participation restrictions and selected clinical measures following anterior cruciate ligament reconstruction. *Knee Surg Sports Traumatol Arthrosc* 2002;**10**:10-9.
54. Sandberg R, Balkfors B. Reconstruction of the anterior cruciate ligament: A 5-year follow-up of 89 patients. *Acta Orthop Scand* 1988;**59**:288-93.
55. Sauter AJM, van Haeff MJ, van der Lubbe N, et al. Anterior cruciate ligament reconstruction with alternative tibial tunnel: Early results after accelerated weightbearing. *Knee Surg Sports Traumatol Arthrosc* 1998;**6**:220-3.
56. Scott K, Namdari S, Milby A, et al. Athletic performance after ACL reconstruction in Women's National Basketball Association. *Phys Sportsmed* 2011;**39**:36-41.
57. Seto JL, Orofino AS, Morrissey MC, et al. Assessment of quadriceps/hamstring strength, knee ligament stability, functional and sports activity levels five years after anterior cruciate ligament reconstruction. *Am J Sports Med* 1988;**16**:170-80.
58. Shah VM, Andrews JR, Fleisig GS, et al. Return to play after anterior cruciate ligament reconstruction in National Football League athletes. *Am J Sports Med* 2010;**38**:2233-9.
59. Shaieb MD, Kan DM, Chang SK, et al. A prospective randomized comparison of patellar tendon versus semitendinosus and gracilis tendon autografts for anterior cruciate ligament reconstruction. *Am J Sports Med* 2002;**30**:214-20.
60. Shelbourne K, Gray T. Anterior cruciate ligament reconstruction with autogenous patellar tendon graft followed by accelerated rehabilitation: A two- to nine-year follow up. *Am J Sports Med* 1997;**25**:786-95.
61. Shelbourne K, Urch S. Primary anterior cruciate ligament reconstruction using the contralateral autogenous patellar tendon. *Am J Sports Med* 2000;**28**:651-8.
62. Smith FW, Roselund EA, Aune AK, et al. Subjective functional assessments and the return to competitive sport after anterior cruciate ligament reconstruction. *British Journal of Sports Medicine* 2004;**38**:279-84.
63. Thomeé R, Petersen CL, Carlsson L, et al. Return to sports after anterior cruciate ligament reconstruction in women. *Sport Orthop Traumatol* 2013;**29**:22-8.
64. Tjong VK, Murnaghan ML, Nyhof-Young JM, et al. A qualitative investigation of the decision to return to sport after anterior cruciate ligament reconstruction: To play or not to play. *Am J Sports Med* 2013;10.1177/0363546513508762.
65. Waldén M, Hägglund M, Magnusson H, et al. Anterior cruciate ligament injury in elite football: A prospective three-cohort study. *Knee Surg Sports Traumatol Arthrosc* 2011;**19**:11-9.
66. Webster K, Feller J, Lambros C. Development and preliminary validation of a scale to measure the psychological impact of returning to sport following anterior cruciate ligament reconstruction surgery. *Phys Ther Sport* 2008;**9**:9-15.
67. Wiger P, Brandsson S, Kartus J, et al. A comparison of results after arthroscopic anterior cruciate ligament reconstruction in female and male competitive athletes: A two- to five-year follow-up of 429 patients. *Scand J Med Sci Sports* 1999;**9**:290-5.
68. Zaffagnini S, Bruni D, Russo A, et al. ST/G ACL reconstruction: Double strand plus extra-articular sling vs double bundle, randomized study at 3-year follow-up. *Scand J Med Sci Sports* 2008;**18**:573-81.
69. Frobell RB, Roos HP, Roos EM, et al. Treatment for acute anterior cruciate ligament tear: Five year outcome of randomised trial. *BMJ* 2013;**346**:f232.