Supplementary material 5 – Articles excluded with reasons.

# A) No sex comparison in psychological readiness to return to sport was reported (n = 27)

- Phelan B, King E, Richter C, et al. A comparison of anterior cruciate ligament return to sports after injury (ACL-RSI) scores of male athletes nine-months post-ACL reconstruction with matched uninjured controls. *Phys Ther Sport* 2019;38:179-83.
- Sanborn RM, Badger GJ, BEAR Trial Team. Psychological readiness to return to sport at 6 months is higher after bridge-enhanced ACL restoration than autograft ACL reconstruction: Results of a prospective randomized clinical trial. *Orthop J Sports Med* 2022;10:23259671211070542.
- 3. Suzuki M, Ishida T, Matsumoto H, et al. Association of psychological readiness to return to sports with subjective level of return at 12 months after ACL reconstruction. *Orthop J Sports Med* 2023;11:23259671231195030.
- Müller S, Bühl L, Nüesch C, et al. Favorable patient-reported, clinical, and functional outcomes 2 years after ACL repair and internal brace augmentation compared with ACL reconstruction and healthy controls. *Am J* Sports Med 2023;51:3131-41.
- 5. McPherson AL, Feller JA, Hewett TE, et al. Psychological readiness to return to sport is associated with second anterior cruciate ligament injuries. *Am J Sports Med* 2019;47:857-62.
- Thorolfsson B, Piussi R, Snaebjornsson T, et al. Greater self-efficacy, psychological readiness and return to sport amongst paediatric patients compared with adolescents and young adults, 8 and 12 months after ACL reconstruction. *Knee Surg Sports Traumatol Arthrosc* 2023;31:5629-40.
- Raoul T, Klouche S, Guerrier B, et al. Are athletes able to resume sport at six-month mean follow-up after anterior cruciate ligament reconstruction? Prospective functional and psychological assessment from the French Anterior Cruciate Ligament Study (FAST) cohort. *Knee* 2019;26:155-64.
- Sadeqi M, Klouche S, Bohu Y, et al. Progression of the psychological ACL-RSI score and return to sport after anterior cruciate ligament reconstruction: A prospective 2-year follow-up study from the French Prospective Anterior Cruciate Ligament Reconstruction Cohort Study (FAST). Orthop J Sports Med 2018;6:2325967118812819.
- 9. Ohji S, Aizawa J, Hirohata K, et al. Changes in subjective knee function and psychological status from preoperation to 6 months post anterior cruciate ligament reconstruction. *J Exp Orthop* 2022;9:114.
- Correa RV, Verhagen E, Resende RA, et al. Performance in field-tests and dynamic knee valgus in soccer players psychologically ready and not ready to return to sports after ACL reconstruction. *Knee* 2023;42:297-303.
- Fones L, Kostyun RO, Cohen AD, et al. Patient-reported outcomes, return-to-sport status, and reinjury rates after anterior cruciate ligament reconstruction in adolescent athletes: Minimum 2-year follow-up. Orthop J Sports Med 2020;8:2325967120964471.

- 12. Ohji S, Aizawa J, Hirohata K, et al. Athletic identity and sport commitment in athletes after anterior cruciate ligament reconstruction who have returned to sports at their pre-injury level of competition. *BMC Sports Sci Med Rehabil* 2021;13:37.
- 13. Aizawa J, Hirohata K, Ohji S, et al. Cross-sectional study on relationships between physical function and psychological readiness to return to sport after anterior cruciate ligament reconstruction. *BMC Sports Sci Med Rehabil* 2022;14:97.
- Ebert JR, Edwards P, Preez LD, et al. Knee extensor strength, hop performance, patient-reported outcome and inter-test correlation in patients 9-12 months after anterior cruciate ligament reconstruction. *Knee* 2021;30:176-84.
- 15. Toale JP, Hurley ET, Hughes AJ, et al. The majority of athletes fail to return to play following anterior cruciate ligament reconstruction due to reasons other than the operated knee. *Knee Surg Sports Traumatol Arthrosc* 2021;29:3877-82.
- 16. Aizawa J, Hirohata K, Ohji S, et al. Factors associated with psychological readiness to return to sports with cutting, pivoting, and jump-landings after primary ACL reconstruction. *Orthop J Sports Med* 2020;8:2325967120964484.
- 17. Erickson LN, Jacobs CA, Johnson DL, et al. Psychosocial factors 3-months after anterior cruciate ligament reconstruction predict 6-month subjective and objective knee outcomes. *J Orthop Res* 2022;40:231-8.
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- 22. Suzuki M, Ishida T, Matsumoto H, et al. Psychological readiness at 9 months after anterior cruciate ligament reconstruction -which factors affect? *Phys Ther Sport* 2022;58:74-9.
- 23. 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;43:377-81.
- Akinci İ, Ozturk F, Ozcadirci A, et al. The relationship between joint awareness and muscle strength, return to sports and quality of life after ACL-R surgery in recreational athletes: A cross-sectional study. J Basic Clin Health Sci 2020;4:305-9.
- 25. 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.

- 26. Welling W, Benjaminse A, Seil R, et al. Low rates of patients meeting return to sport criteria 9 months after anterior cruciate ligament reconstruction: A prospective longitudinal study. *Knee Surg Sports Traumatol Arthrosc* 2018;26:3636-44.
- Welling W, Benjaminse A, Lemmink K, et al. Passing return to sports tests after ACL reconstruction is associated with greater likelihood for return to sport but fail to identify second injury risk. *Knee* 2020;27:949-57.

### B) Anterior cruciate ligament injury was treated non-surgically (n = 5)

- 1. Slater D, Kvist J, Ardern CL. Biopsychosocial factors associated with return to preinjury sport after ACL injury treated without reconstruction: NACOX cohort study 12-month follow-up. *Sports Health* 2023;15:176-84
- 2. Pedersen JR, Hansen SH, Grindem H, et al. Readiness for return to sport in non-surgically treated patients with anterior cruciate ligament injury following a public municipal rehabilitation program. *Phys Ther Sport* 2022;53:7-13.
- 3. Ohji S, Aizawa J, Hirohata K, et al. Kinesiophobia is negatively associated with psychological readiness to return to sport in patients awaiting anterior cruciate ligament reconstruction. *Arthroscopy* 2023;39:2048-55.
- 4. Wellsandt E, Failla MJ, Axe MJ, et al. Does anterior cruciate ligament reconstruction improve functional and radiographic outcomes over nonoperative management 5 years after injury? *Am J Sports Med* 2018;46:2103-12.
- 5. Sonesson S, Österberg A, Gauffin H, et al. Low correlation between functional performance and patient reported outcome measures in individuals with non-surgically treated ACL injury. *Phys Ther Sport* 2021;47:185-92.

#### C) Psychological readiness to return to sport was not analyzed outcome (n = 14)

- 1. Ott SM, Ireland ML, Ballantyne BT, et al. Comparison of outcomes between males and females after anterior cruciate ligament reconstruction. *Knee Surg Sports Traumatol Arthrosc* 2003;11:75-80.
- 2. Barth T, Bond CW, MacFadden LN, et al. The Effects of time and sex on post-anterior cruciate ligament reconstruction psychological patient reported outcome measure scores. *J Athl Train* 2023.
- 3. Webster KE, Feller JA. Who passes return-to-sport tests, and which tests are most strongly associated with return to play after anterior cruciate ligament reconstruction? *Orthop J Sports Med* 2020;8:2325967120969425.
- 4. 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.
- 5. Sandon A, Werner S, Forssblad M. Factors associated with returning to football after anterior cruciate ligament reconstruction. *Knee Surg Sports Traumatol Arthrosc* 2015;23:2514-21.
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- Dunn WR, Spindler KP, MOON Consortium. Predictors of activity level 2 years after anterior cruciate ligament reconstruction (ACLR): A Multicenter Orthopaedic Outcomes Network (MOON) ACLR cohort study. Am J Sports Med 2010;38:2040-50.
- 9. Kuenze C, Lisee C, Pfeiffer KA, et al. Sex differences in physical activity engagement after ACL reconstruction. *Phys Ther Sport* 2019;35:12-7.
- Hagemans FJA, Jonkers FJ, van Dam MJJ, et al. Clinical and radiographic outcomes of anterior cruciate ligament reconstruction with hamstring tendon graft and femoral cortical button fixation at minimum 20-year follow-up. *Am J Sports Med* 2020;48:2962-9.
- 11. Przybylak K, Sibiński M, Domżalski M, et al. Supervised physiotherapy leads to a better return to physical activity after anterior cruciate ligament reconstruction. *J Sports Med Phys Fitness* 2019;59:1551-7.
- 12. Ageberg E, Forssblad M, Herbertsson P, et al. Sex differences in patient-reported outcomes after anterior cruciate ligament reconstruction: Data from the Swedish knee ligament register. *Am J Sports Med* 2010;38:1334-42.
- 13. Ahldén M, Sernert N, Karlsson J, et al. Outcome of anterior cruciate ligament reconstruction with emphasis on sex-related differences. *Scand J Med Sci Sports* 2012;22:618-26.
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### D) Not an original article (n = 24)

- Xiao M, van Niekerk M, Trivedi NN, et al. Patients who return to sport after primary anterior cruciate ligament reconstruction have significantly higher psychological readiness: A systematic review and meta-analysis of 3744 patients. *Am J Sports Med* 2023;51:2774-83.
- 2. Lisee CM, DiSanti JS, Chan M, et al. Gender differences in psychological responses to recovery after anterior cruciate ligament reconstruction before return to sport. *J Athl Train* 2020;55:1098-105.
- Gomez-Espejo V, Olmedilla A, Abenza-Cano L, et al. Psychological readiness to return to sports practice and risk of recurrence: Case studies. *Front Psychol* 2022;13:905816.
- Lubowitz JH, Brand JC, Rossi MJ. Return-to-sport outcomes after anterior cruciate ligament surgical treatment may be improved by attention to modifiable factors and consideration of nonmodifiable factors. *Arthroscopy* 2023;39:571-4.
- 5. Lin TJ. Editorial commentary: There is no standard for or standardization of postoperative rehabilitation protocols after anterior cruciate ligament reconstruction. *Arthroscopy* 2023;39:590-1.
- 6. Webster KE. Editorial commentary: Why the mind matters in anterior cruciate ligament injury recovery: Psychological readiness and return to sport. *Arthroscopy* 2022;38:1277-8.
- Ryan J, Magnussen RA, Cox CL, et al. ACL reconstruction: Do outcomes differ by sex? A systematic review. J Bone Joint Surg Am 2014;96:507-12.
- 8. Bruder AM, Culvenor AG, King MG, et al. Let's talk about sex (and gender) after ACL injury: A systematic review and meta-analysis of self-reported activity and knee-related outcomes. *Br J Sports Med* 2023;57:602-10.

- 9. Mok AC, Fancher AJ, Vopat ML, et al. Sex-specific outcomes after anterior cruciate ligament reconstruction: A systematic review and meta-analysis. *Orthop J Sports Med* 2022;10:23259671221076883.
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- Özden F. Comments on "Translation, cross-cultural adaptation, validation, and measurement properties of the Spanish version of the anterior cruciate ligament-return to sport after injury (ACL-RSI-Sp) Scale". *Knee Surg Sports Traumatol Arthrosc* 2021;29:1013-4.
- 12. Longo UG, De Salvatore S, D'Orrico F, et al. The impact of psychological factors on return to sports after anterior cruciate ligament reconstruction: A systematic review. *Osteology* 2023;3:78-93.
- 13. Ardern CL. Anterior cruciate ligament reconstruction-not exactly a one-way ticket back to the preinjury level: A review of contextual factors affecting return to sport after surgery. *Sports Health* 2015;7:224-30.
- 14. Podlog L, Wadey R, Caron J, et al. Psychological readiness to return to sport following injury: A state-of-the-art review. *Int Rev Sport Exerc Psychol* 2020;1-20.
- 15. Ashton ML, Kraeutler MJ, Brown SM, et al. Psychological readiness to return to sport following anterior cruciate ligament reconstruction. *JBJS Rev* 2020;8:e0110.
- Christino MA, Fantry AJ, Vopat BG. Psychological aspects of recovery following anterior cruciate ligament reconstruction. J Am Acad Orthop Surg 2015;23:501-9.
- 17. DiSanti J, Lisee C, Erickson K, et al. Perceptions of rehabilitation and return to sport among high school athletes with anterior cruciate ligament reconstruction: A qualitative research study. *J Orthop Sports Phys Ther* 2018;48:951-9.
- 18. Burland JP, Toonstra J, Werner JL, et al. Decision to return to sport after anterior cruciate ligament reconstruction, part I: A qualitative investigation of psychosocial factors. *J Athl Train* 2018;53:452-63.
- Betsch M, Darwich A, Chang J, et al. Wide variability in return-to-sport criteria used by team physicians after anterior cruciate ligament reconstruction in elite athletes-a qualitative study. *Arthrosc Sports Med Rehabil* 2022;4:e1759-66.
- 20. Kunnen M, Dionigi RA, Litchfield C, et al. 'My desire to play was stronger than my fear of re-injury': Athlete perspectives of psychological readiness to return to soccer following anterior cruciate ligament reconstruction surgery. *Ann Leis Res* 2020;23:447-61.
- 21. Webster KE. Return to sport and reinjury rates in elite female athletes after anterior cruciate ligament rupture. *Sports Med* 2021;51:653-60.
- 22. Tan SH, Lau BP, Khin LW, et al. The importance of patient sex in the outcomes of anterior cruciate ligament reconstructions: A systematic review and meta-analysis. *Am J Sports Med* 2016;44:242-54.
- 23. Nwachukwu BU, Adjei J, Rauck RC, et al. How much do psychological factors affect lack of return to play after anterior cruciate ligament reconstruction? A systematic review. *Orthop J Sports Med* 2019;7:2325967119845313.

24. Hong IS, Pierpoint LA, Hellwinkel JE, et al. Clinical outcomes after ACL reconstruction in soccer (football, futbol) players: A systematic review and meta-analysis. *Sports Health* 2023;15:788-804.

## E) Only abstracts were available (n = 3)

- 1. Milewski MD, Kostyun R, Iannicelli JP, et al. Recovery of psychological readiness may differ between genders following ACL reconstruction in adolescent athletes. *Orthop J Sports Med* 2016;4:2325967116S00201.
- Traver J, Christino M, Coene R, et al. Association between psychological readiness, patient reported outcomes and return to sports following primary anterior cruciate ligament reconstruction: Readiness Outcomes Affecting Return-to-Sport (ROAR). *Orthop J Sports Med* 2020;8:2325967120S00489.
- 3. Adhitya IPGS, Wibawa A, Aryana IGNW, et al. Predictors of lower knee function improvement two years after anterior cruciate ligament reconstruction. *Phys Sportsmed* 2024;52:239-45.