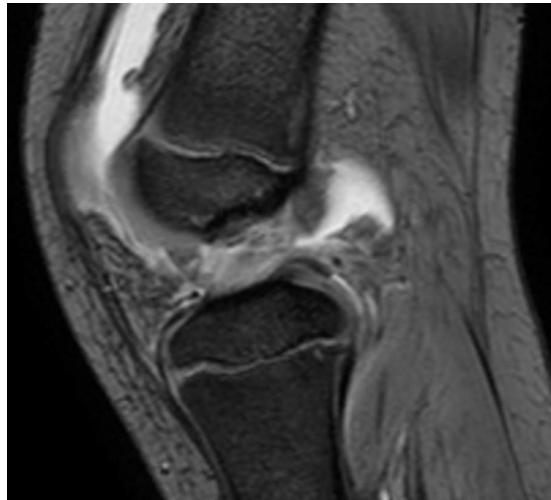


Non-operative treatment of ACL injuries in Norway



Guri Ranum Ekås (MD, PhD)

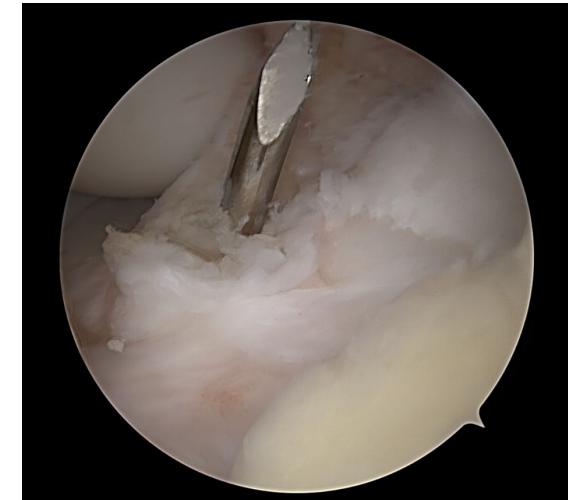
Orthopedic Surgeon

Consultant, Dept. of Orthopedic Surgery

Akershus University Hospital

Assistant Professor, University of Oslo

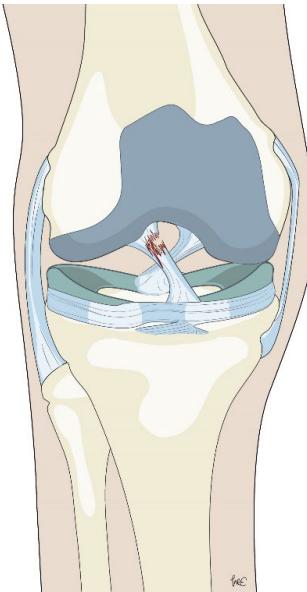
Norway



No disclosures

Agenda

- Prospective register-based study published in BJSM (October, 2025)
- Initial non-operative treatment of ACL injured patients in Norway



British Journal of
Sports Medicine

Original research

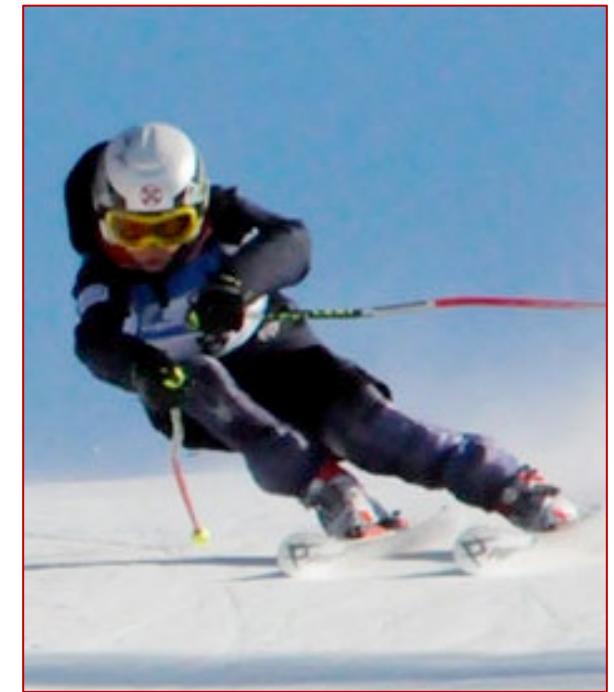
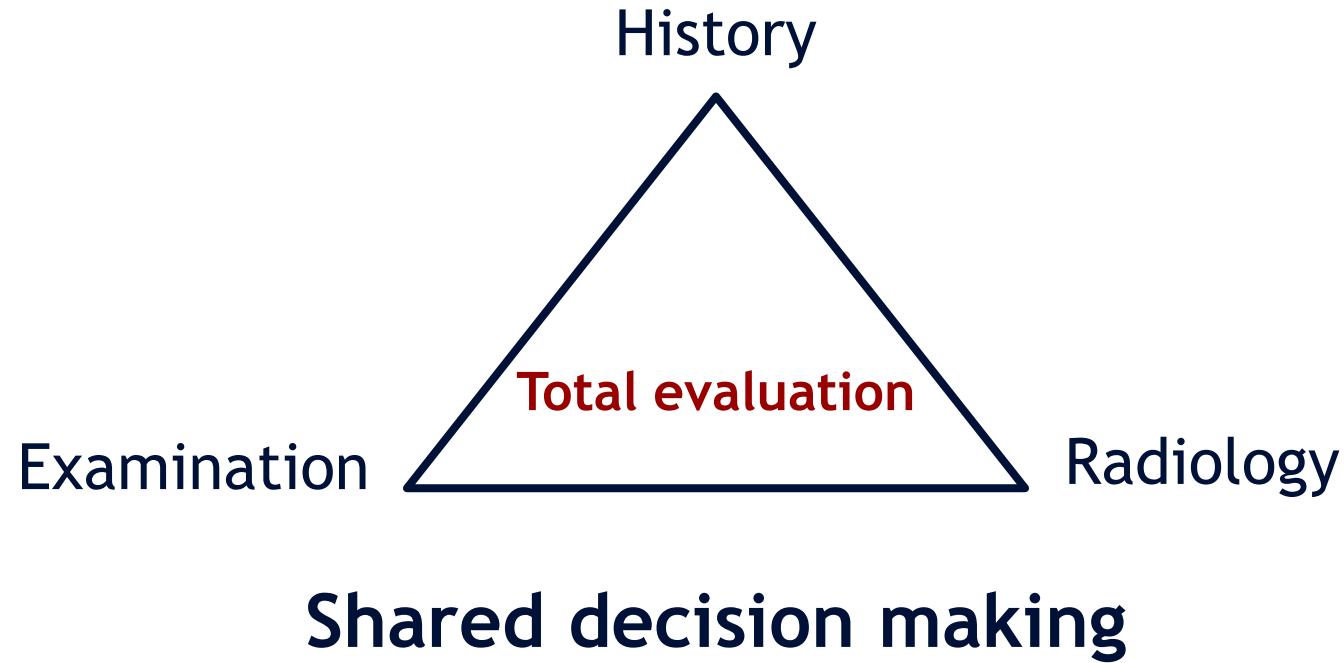
Non-operative treatment of anterior cruciate ligament injuries: two-thirds avoid surgery at 2-year follow-up in a nationwide cohort

Caroline Emilie van Woensel Kooy ^{1,2}, Rune Bruhn Jakobsen, ^{1,3}
Anne Marie Fenstad, ⁴ Andreas Persson, ^{3,5} Lars Engebretsen ^{2,5}, Håvard Moksnes, ³
Guri Ranum Ekås ^{1,2}

Kooy CEvW, et al. *Br J Sports Med* 2025;0:1–9. doi:10.1136/bjsports-2025-109890

Non-operative treatment for ACL injury

- Treatment option in Norway for selected group of patients



Non-operative treatment - clinical outcome?

Did not really have data to answer these questions

- How many are operated later?
- How are they doing?
- Which patients do better with non-operative treatment?

RCTs cannot fully answer these questions

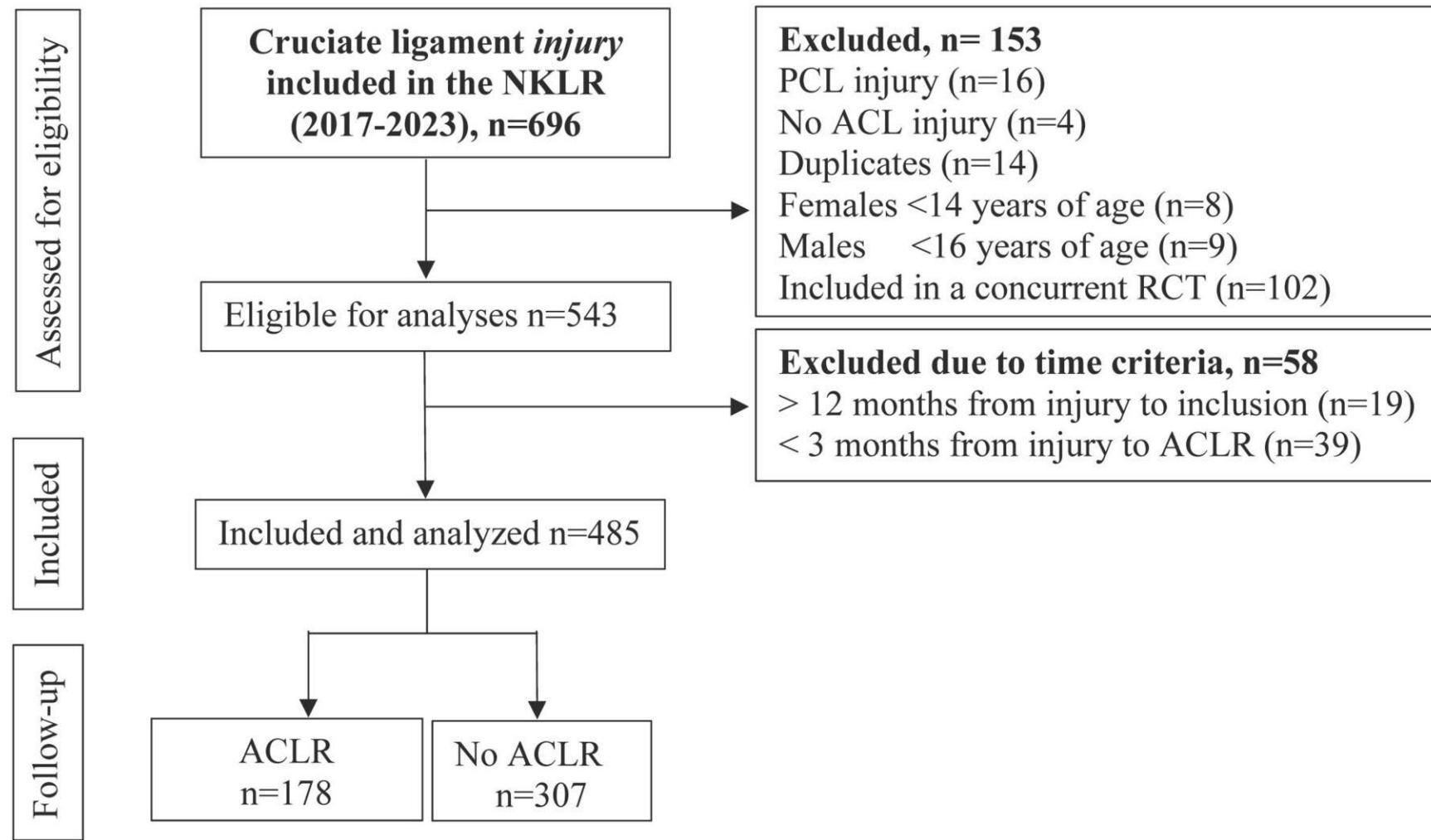
- External validity
- Selection bias - patients who prefer non-operative treatment are typically not included

Amendment - Norwegian Knee Ligament Register (NKLR)



- Prospective register-study
 - clinical outcomes after non-operative treatment
- Application to the Norwegian Data Protection Authority
 - to allow for inclusion of non-operated patients in NKLR
- Developed an electronic form for non-operated patients
- Inclusion time 2017-2023
 - 2 years follow-up

Flow diagram over the study selection procedure



Kooy CEvW, et al. *Br J Sports Med* 2025;0:1–9. doi:10.1136/bjsports-2025-109890

Patient characteristics

- 485 patients who opted for non-operative treatment
- 274 females (56%)
- Mean age 35 years
 - 25% younger than 25 years
- Activity at injury
 - alpine skiing 29%
 - soccer 24%

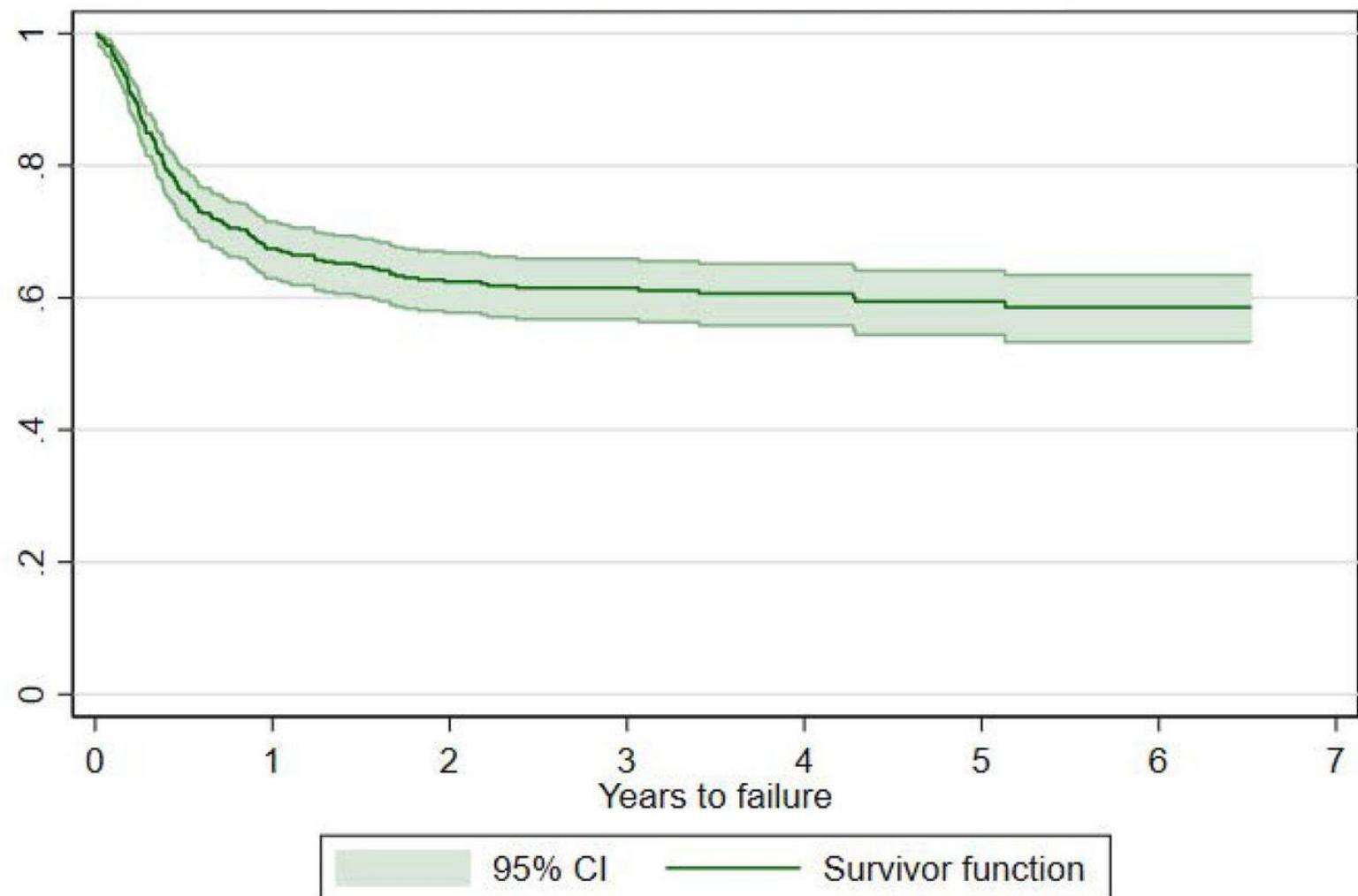
Activity level preinjury

Level 1 (highly pivoting eg, soccer)	174 (36)	
Level 2 (less pivoting eg, alpine skiing)	126 (26)	
Level 3 (non-pivoting eg, running)	152 (31)	
Level 4 (low activity level)	32 (7)	

Kaplan-Meier survival curve for non-operative treatment

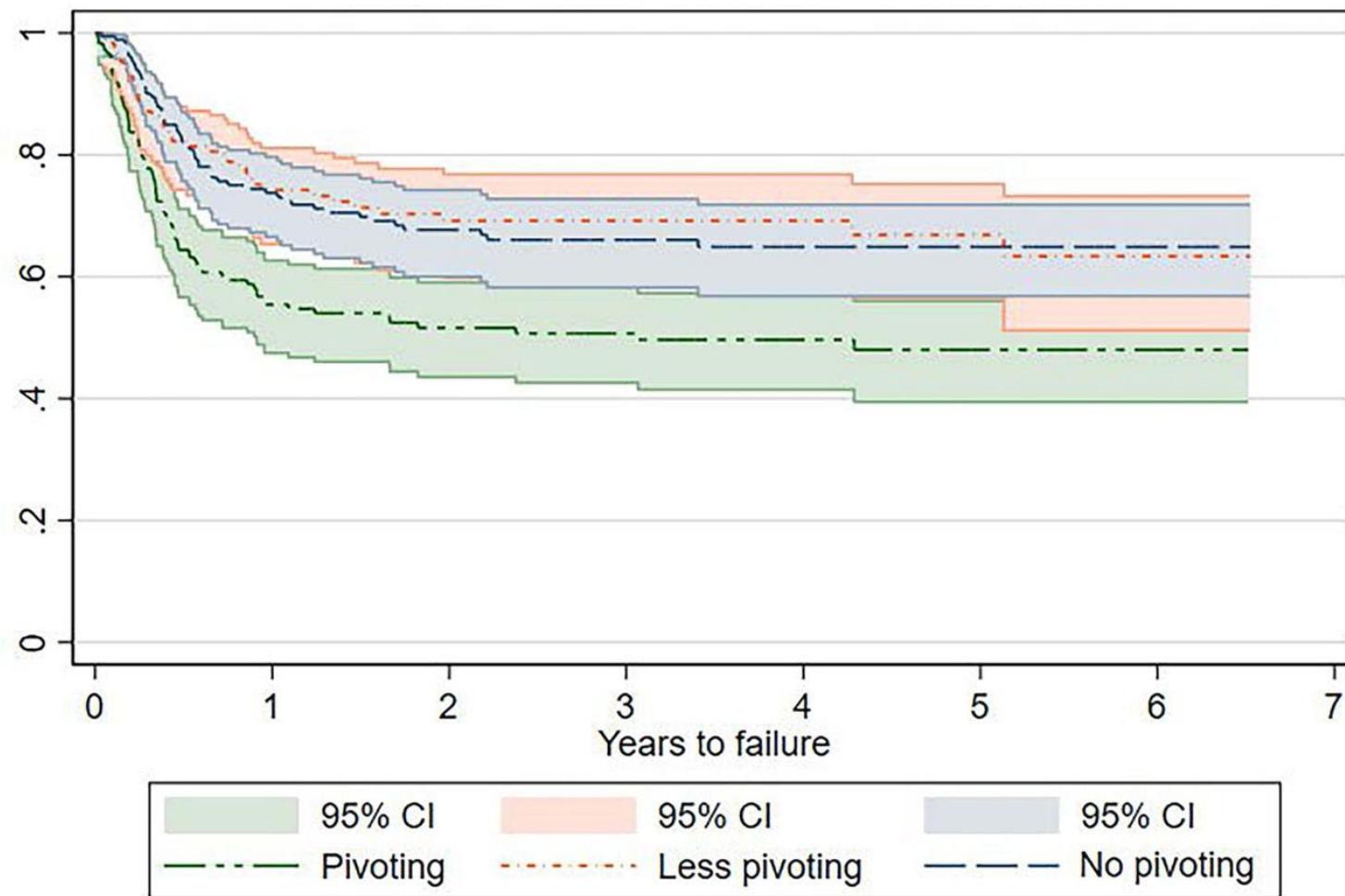
BJSM

- 63% remained non-operated at 2 years



Kooy CEvW, et al. *Br J Sports Med* 2025;0:1–9. doi:10.1136/bjsports-2025-109890

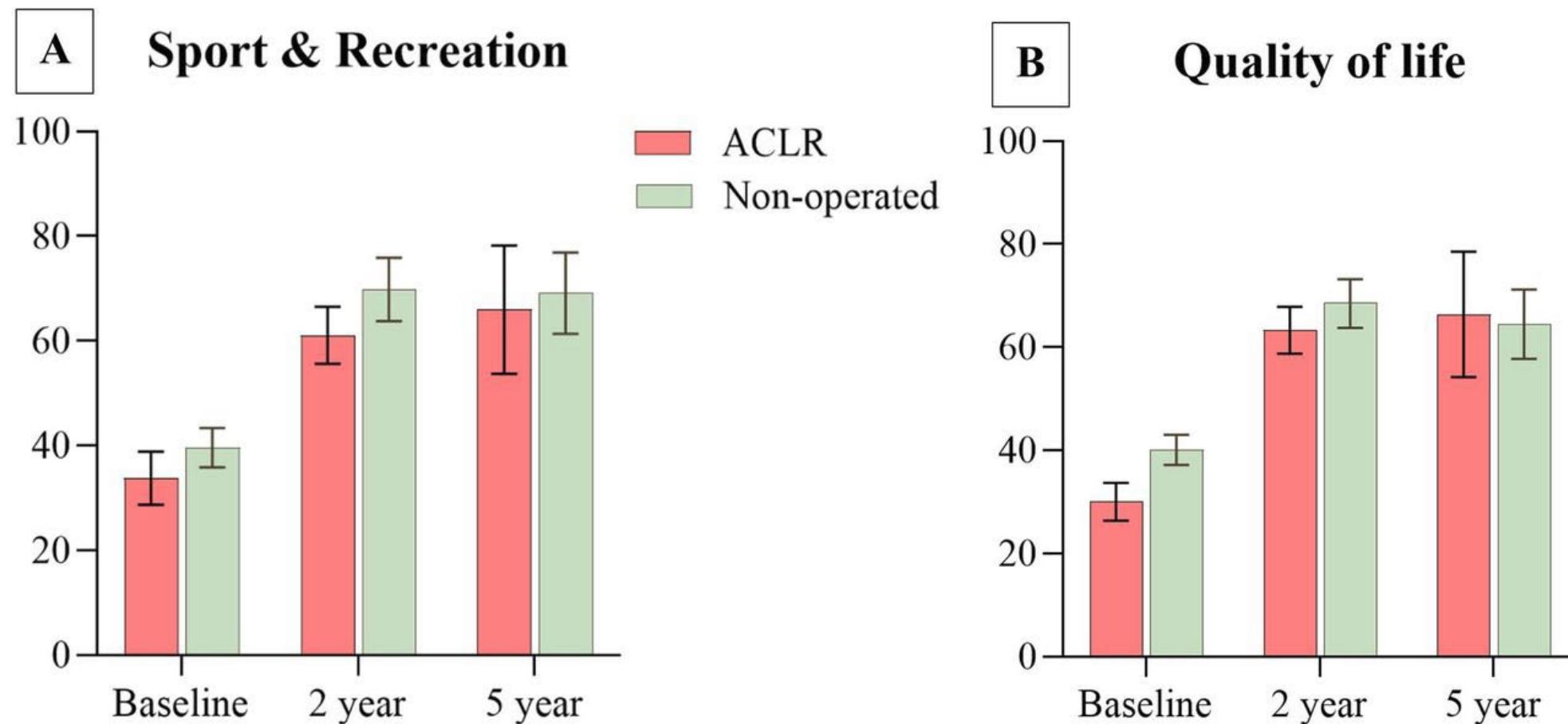
Kaplan-Meier survival curve for non-operative treatment



BJSM

Kooy CEvW, et al. *Br J Sports Med* 2025;0:1–9. doi:10.1136/bjsports-2025-109890

Patient-reported outcomes measured by KOOS



Kooy CEvW, et al. *Br J Sports Med* 2025;0:1–9. doi:10.1136/bjsports-2025-109890

Conclusion

- Non-operated patients are older
 - a higher rate are female
 - 1/3 of patients participated in pivoting sports prior to injury
- In general, 2/3 patients were still non-operated after 2 years
 - 1/2 of the patients participating in high pivoting sports prior to injury ended up being ACL-R
- Meniscal injury at baseline, being younger than 25 years old, and participating in pivoting activity had higher odds of ACL-R

Thank you!

