# Long-Term Sustainability of Multiligament Knee Reconstruction: A Prospective Cohort Study

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### Disclosure

Authors have no financial conflicts to disclose

# Mid-Term outcomes after multiligament reconstruction are good 52 patients, mean follow-up 3.8 years

☐ Return to Work: Manual laborers: 69%

☐ Return to Sport: IKDC level 1 : Contact & pivot sports : 25%

IKDC level 2 : Pivot sports : 47.5%.

☐ Osteoarthritis: T0 : at injury : 37 %

T1: at 3.8 years: 38%, with 80% of patellofemoral

45% of medial tibiofemoral changes.

**Mid-term findings** 

#### Purpose: Multiligament Knee Injuries Treated by Multiligament Reconstructions

# To assess the LONG-TERM SUSTAINABILITY of FUNCTIONAL AND RADIOLOGICAL OUTCOMES including:

- ✓ Patient reported outcomes
- ✓ Return to work
- ✓ Return to sports
- ✓ Chondral injuries progression to osteoarthritis

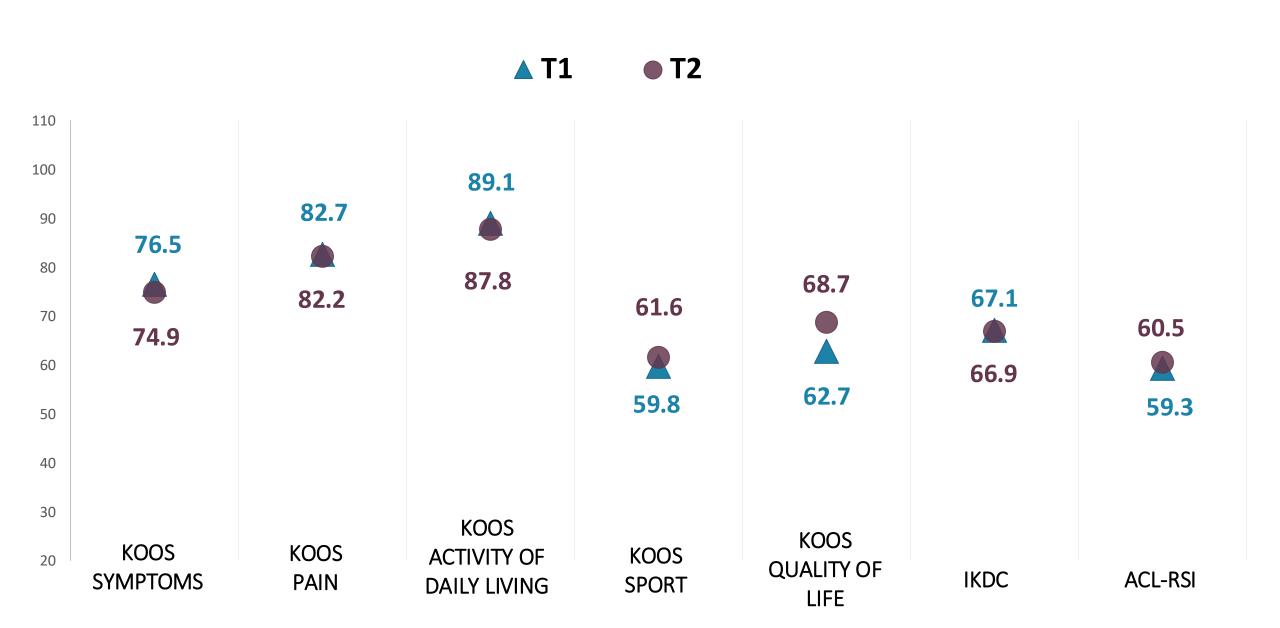
#### Flowchart

Included: Multiligament Reconstruction T0: Time of injury n=72 Lost to follow-up n=4 T1: 3.4 ± 1.4 years n=68 Assessment at T1 & T2: Return to work and sport questionnaires Lost to follow-up n=8 Patient-reported outcomes Osteoarthritis on weight-bearing radiographs T2: 7.2 ± 2.4 years Assessment at T2 only:

Osteoarthritis on magnetic resonance imaging

n=60

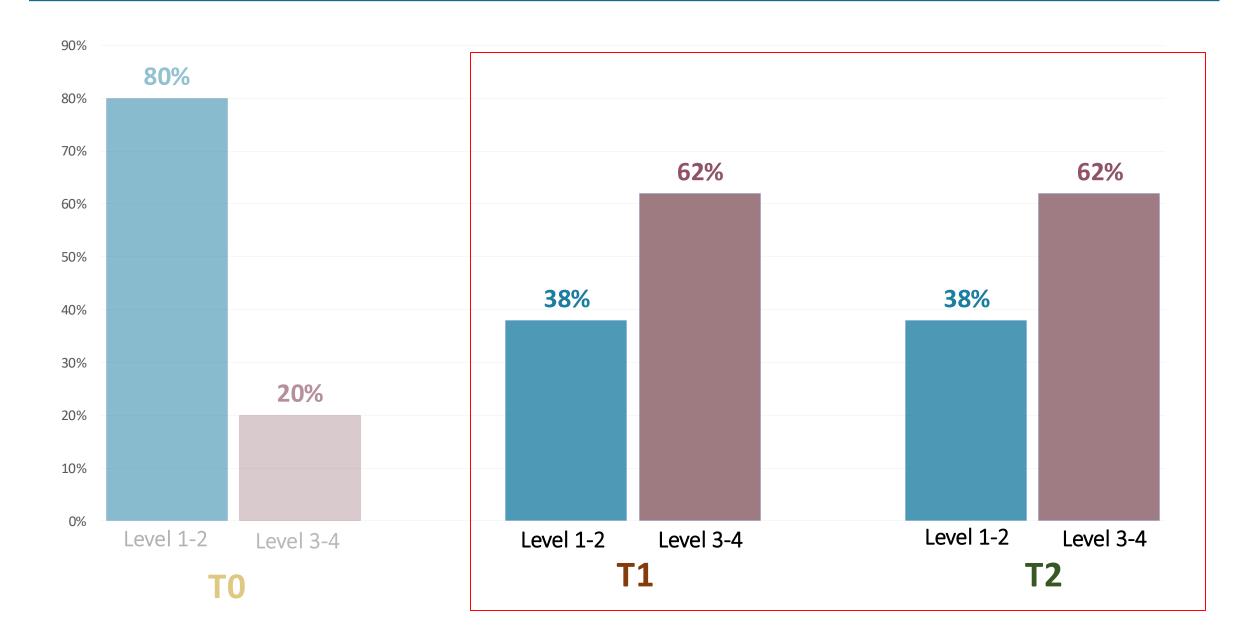
# Functional Outcomes: Patient Reported Outcomes



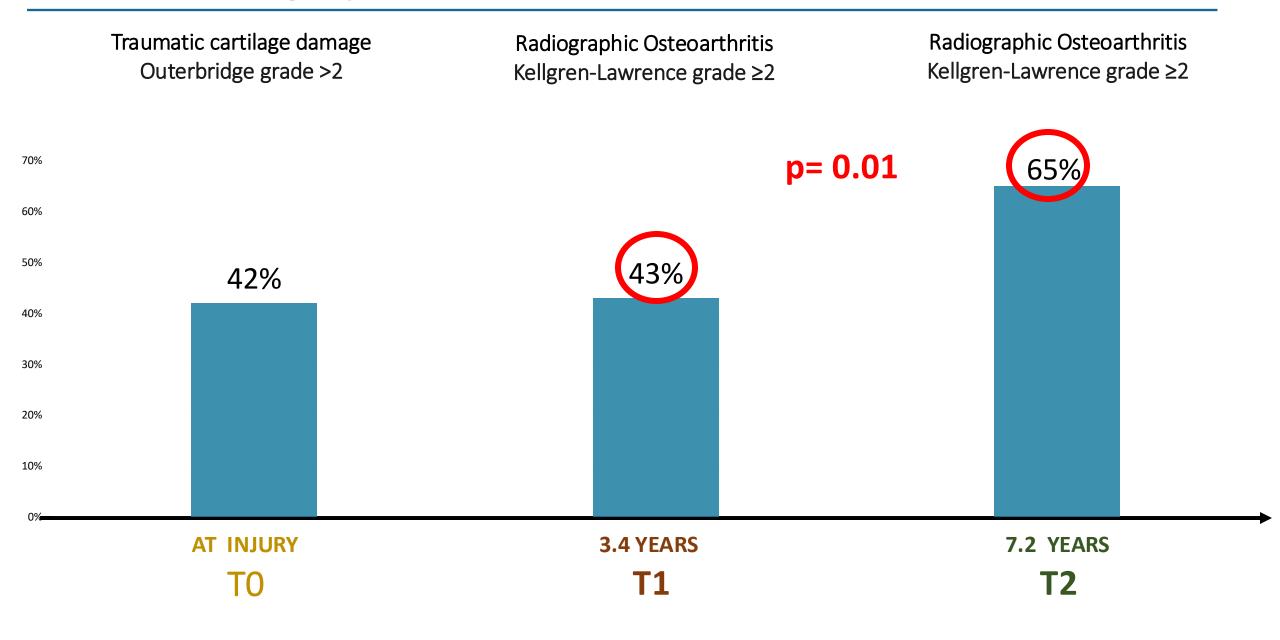
#### Functional Outcomes: Return To Work



# Functional Outcomes: Return To Sport

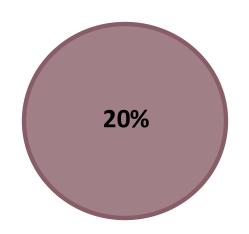


# Overall radiographic evolution



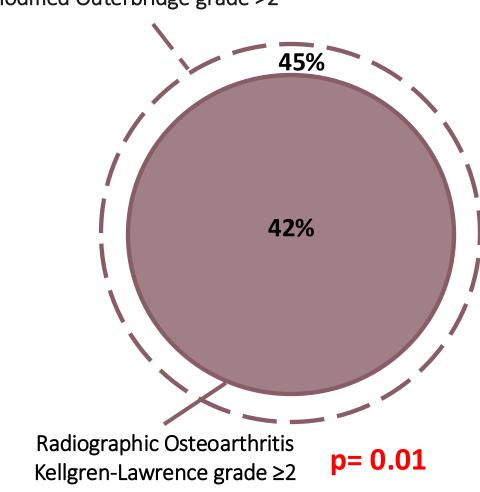
# Osteoarthritis Development: Medial compartment

Radiographic Osteoarthritis Kellgren-Lawrence grade ≥2



Focal cartilage lesion on MRI
Modified Outerbridge grade >2

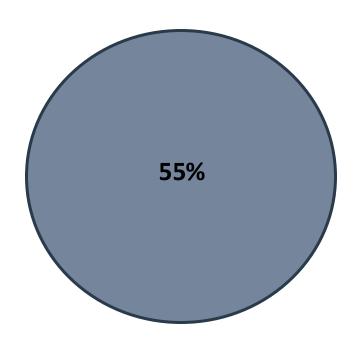
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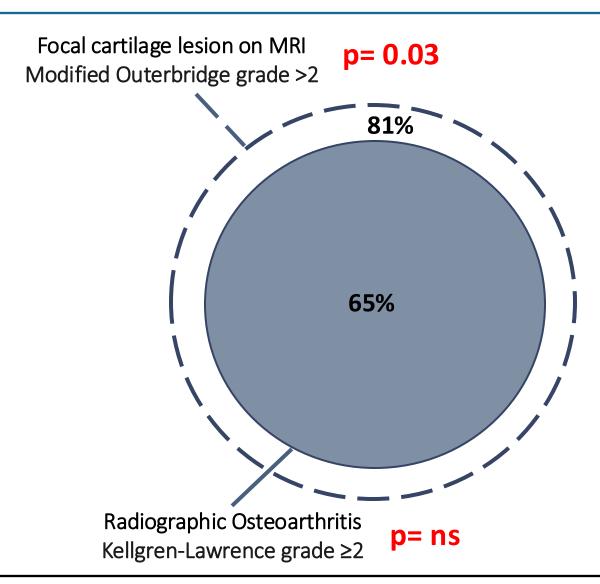


T1 T2

### Osteoarthritis Development: Patellofemoral compartment

Radiographic Osteoarthritis Kellgren-Lawrence grade ≥2





T1 T2

#### Conclusion

- ☐ Functional outcomes remain stable between 3 and and 7 years postoperatively: including patient-reported outcomes, return to work, and return to sport.
- Osteoarthritis progresses over time, especially in the patellofemoral and medial tibiofemoral compartments.
- Osteoarthritis does not appear to affect functional outcomes over time, including return to work and sport. Further analysis is still warranted.

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