

Two-Year Results of an RCT of Uncemented vs. Cemented Fixation in TKA with Patella Resurfacing

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Faculty Disclosure Information

- Nothing to disclose



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Why use uncemented?

- Increased durability with biological fixation
- Shorter surgical time
- Avoidance of cement related complications



KneeFix study

- Single centre, multi-surgeon, RCT
- Stryker Triathlon all uncemented system: HA femur, Tritanium tibia, tritanium patella
- Inclusions:
 - age <75
 - diagnosis of OA
 - suitable for CR + patellar resurfacing
- Exclusions:
 - previous osteotomy
 - >20° deformity
 - BMI >40

- **Primary outcome: Radiolucent lines at 5 years**

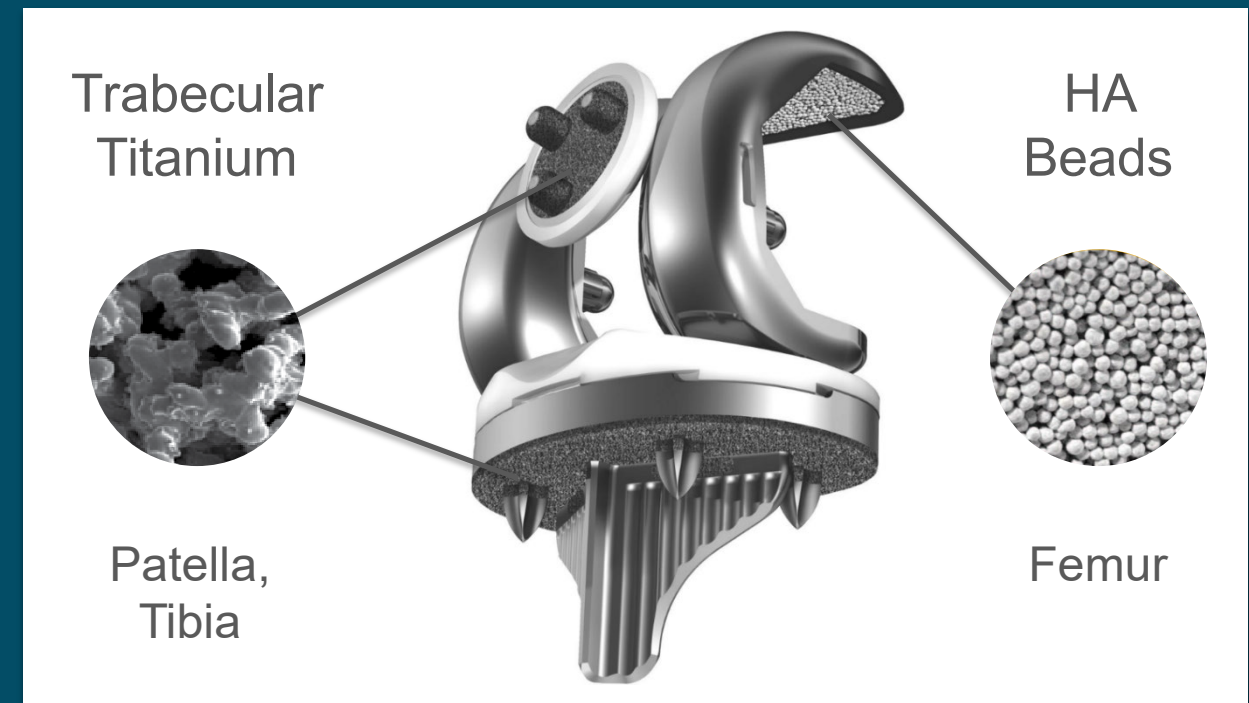
STUDY PROTOCOL**Open Access**

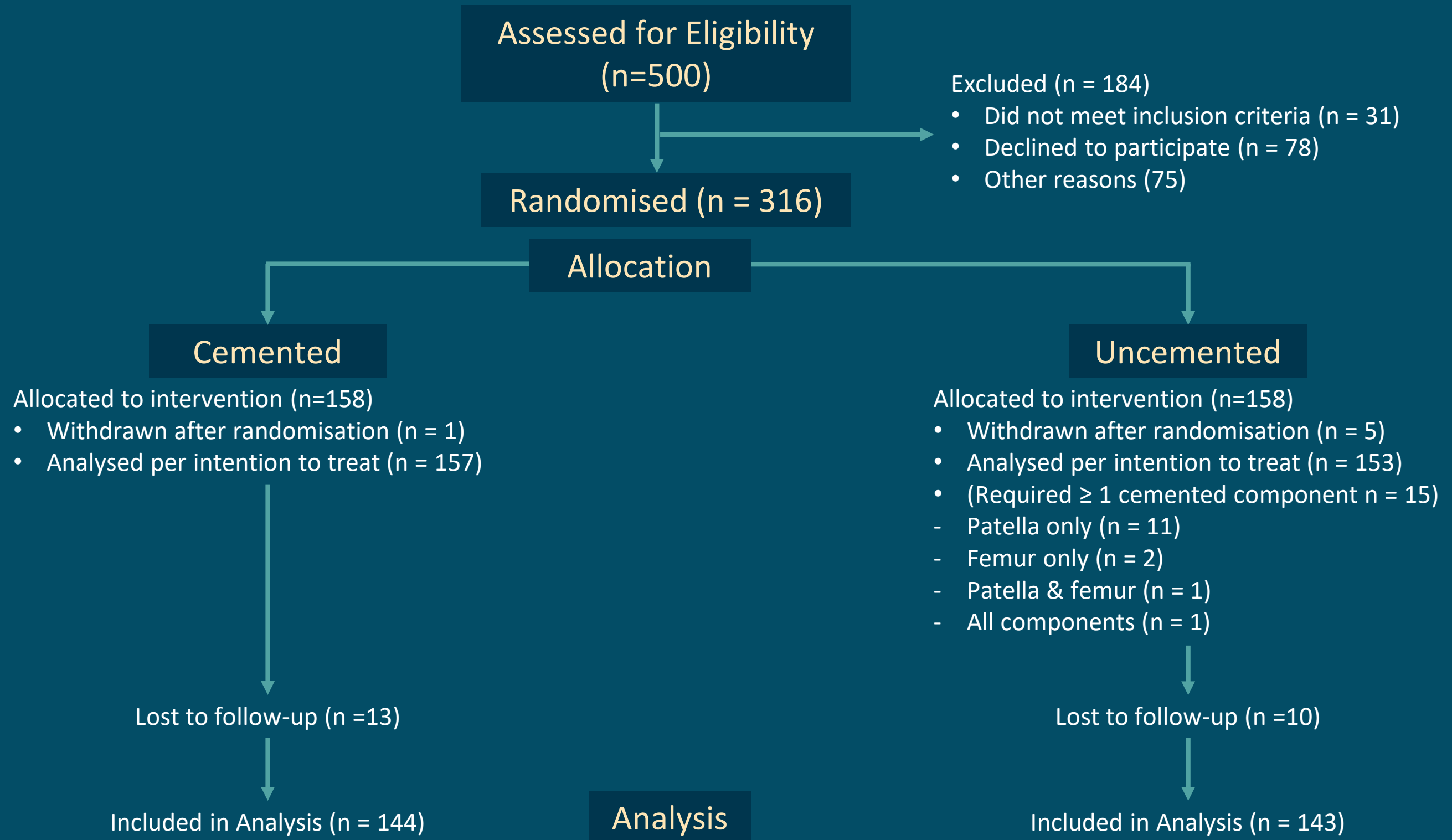


The Knee-Fix study: study protocol for a randomised controlled trial evaluating cemented and cementless components in total knee arthroplasty

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Trials 2022





Patient demographics

	Cemented (n = 144)		Uncemented (n = 143)	
	Mean	SD	Mean	SD
Age (years)	66.0	6.6	65.5	6.8
Male	70	49%	67	47%
Female	74	51%	76	53%
Height (m)	168.5	9.4	169.0	9.5
Weight (kg)	88.4	14.9	90.4	16.2
BMI (kg/m ²)	31.1	4.7	31.6	4.7
ASA score (number, %)				
1	15	9.6	14	9.2
2	116	73.9	107	70.4
3	26	16.6	31	20.4

ASA, American Society of Anaesthesiologists; BMI, body mass index

Results:

- No difference in radiolucent lines

Radiolucent lines @ 2 years

149
Uncemented

0

151
Cemented

1

6 months

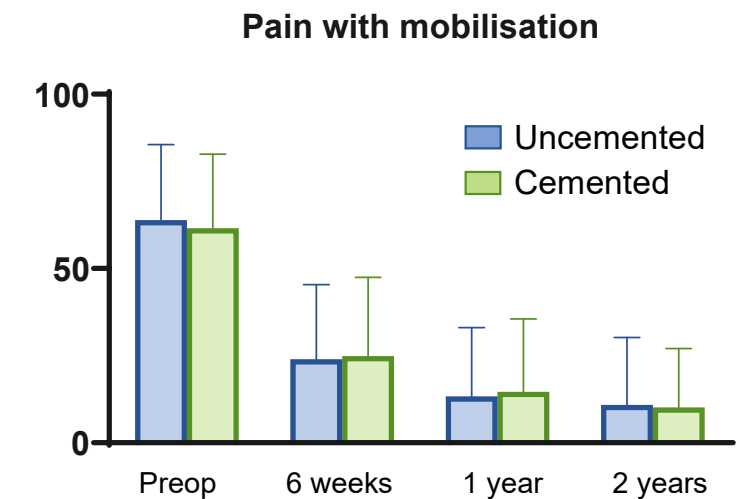
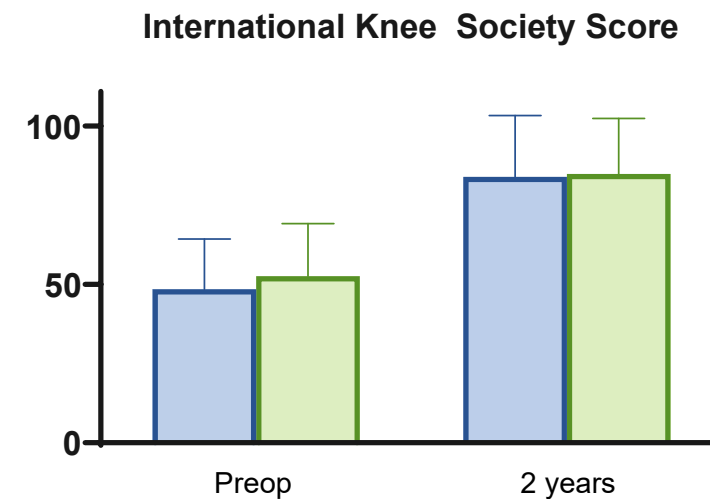
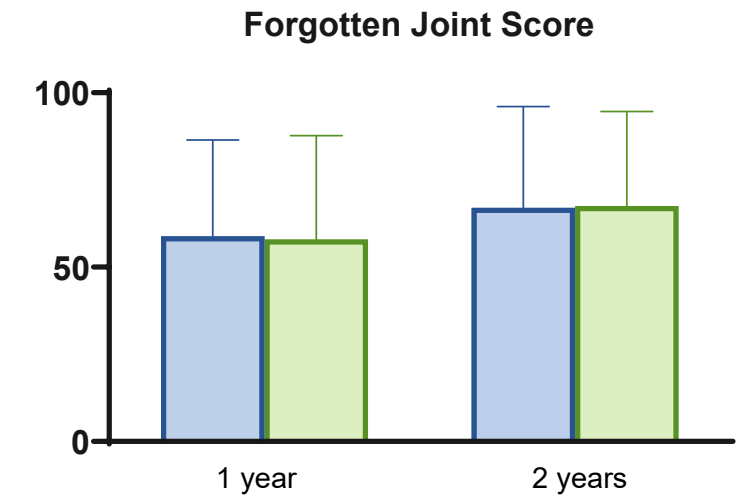
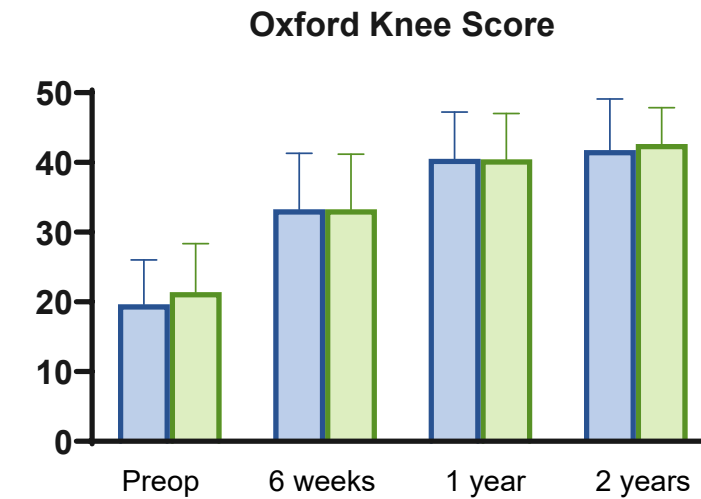
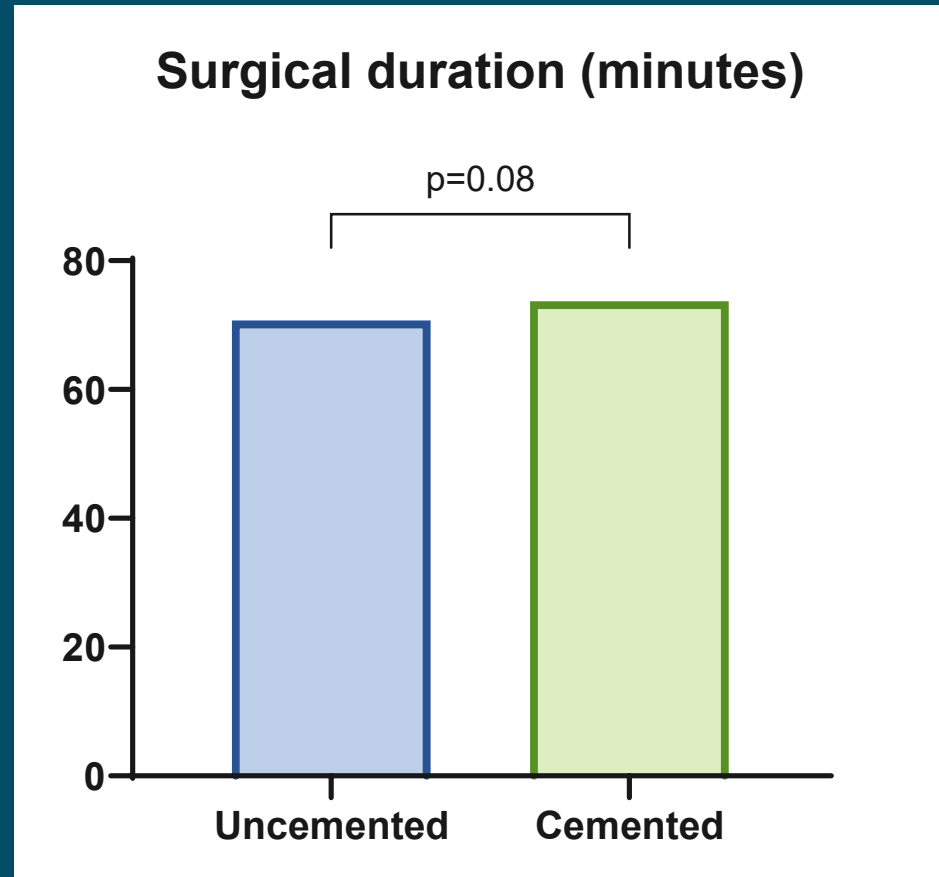


2 years



Results

- No difference in surgical time
- No difference in patient-reported outcomes



Results:

- No difference in reoperations

	Cemented n = 144	Uncemented n = 143	p-value
Infection	1	1	
Revision	0	1	
Manipulation under anaesthetic	12	6	
Total	13	8	0.32

Conclusions

- Near identical outcomes at 2 years
- No early failure of either tibial or patellar uncemented components
- Small gain in surgical time with uncemented implants

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