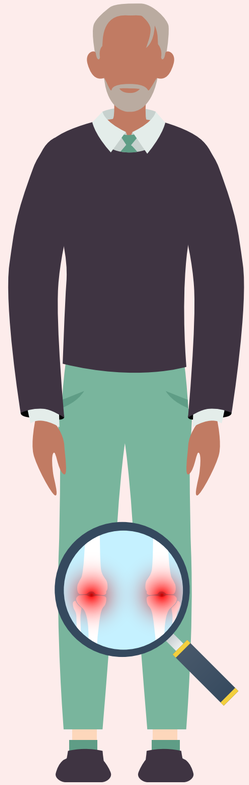
Examining the Mortality Rates for Technology-Assisted Bilateral Simultaneous Total Knee Arthroplasty



Conventional instrumentation for bilateral simultaneous total knee arthroplasty (BSTKA) using intramedullary rods can cause:

- ⚠ Fat emboli
- ⚠ Risk of perioperative complications

Technology-assisted instrumentation for BSTKA may reduce conventional instrumentation risks

Australian Orthopaedic Association National Joint Replacement Registry

Data of patients with osteoarthritis who underwent BSTKA (N = 34,908)

Comparison of surgical procedures

- Conventional instrumentation
- Technology-assisted instrumentation

Statistical comparison of 30- and 90-day postoperative mortality rates

Adjusted for age, sex, procedure year, American Society of Anesthesiologists classification, and body mass index

Technology-assisted instrumentation led to significantly lower 30- and 90-day mortality after BSTKA

	Odds ratio of mortality for technology-assisted vs conventional BSTKA
30-day mortality	**0.26** (95% CI, 0.09 to 0.74; p = 0.01)
90-day mortality	**0.26** (95% CI, 0.10 to 0.67; p = 0.005)

Technology-assisted BSTKA is associated with a significant reduction in mortality compared with conventional instrumentation—a finding that is likely clinically important

Increased Early Mortality in Bilateral Simultaneous TKA Using Conventional Instrumentation Compared with Technology-Assisted Surgery. A Study of 34,908 Procedures from a National Registry

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