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Nearly **50% of people** will develop knee osteoarthritis (OA) in their lifetime.²

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OA-related medical costs and lost wages exceed \$100 billion in US.³

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Since knee OA can't be cured, treatments focus on **delaying progression** and **addressing symptoms**.



Late-stage knee OA is typically treated with surgical **total knee replacement** (TKR).



Potential TKR risks^{4,5}:

- Blood clot formation in deep veins
- Bone infection
- Nerve damage
- Persistent pain
 (demonstrated in up to 30% of post-TKR patients)⁶

Regenexx SD injectates provide a **non-surgical option** using injections of the patient's own stem cells from bone marrow concentrate (BMC).

^aQALY = Cost-effectiveness analysis metric rating how well different types of medical treatments extend and/or improve patients' lives. ^bSimulated with a decision-analytical model.

^cTotal costs of Regenexx approach = indirect costs of productivity losses plus direct costs of procedure using Regenexx injectates, braces, primary care physician, specialist visits, and post-procedure physical therapy.

^dTotal costs of TKR surgery = indirect costs of productivity losses plus direct costs of procedure, complications, surgeon fees, pre-operative work, hospitalization, and rehabilitation.

°The main driver for the difference in costs between the Regenexx approach and TKR is the reduction in the number of TKR surgeries in the Regenexx approach group. Cost savings is the end result of reducing ~70% of TKRs and associated complications.

References

1. Frederix GWJ, van Lieshout C, van der Meulen MP. Regenexx: The Next Generation of Orthopedic Recovery as an Alternative of Surgery. Utrecht, NL: THINC Healthcare; 2023.

2. Cleveland Clinic. Osteoarthritis of the knee. Cleveland Clinic Health Library: Diseases and Conditions. Reviewed September 8, 2021. Accessed July 26, 2024. https://my.clevelandclinic.org/health/diseases/21750-osteoarthritis-knee

3. Centers for Disease Control and Prevention (CDC). National and state medical expenditures and lost earnings attributable to arthritis and other rheumatic conditions—United States, 2003. MMWR Morb Mortal Wkly Rep. 2007;56(1):4-7.

4. Belmont PJ, Jr., Goodman GP, Waterman BR, et al. Thirty-day postoperative complications and mortality following total knee arthroplasty: incidence and risk factors among a national sample of 15,321 patients. J Bone Joint Surg Am. 2014;96:20-26.

Grosu I, Lavand'homme P, Thienpont E. Pain after knee arthroplasty:
 an unresolved issue. Knee Surg Sports Traumatol Arthrosc

6. Aoyagi K, Law LF, Carlesso L, et al. Post-surgical contributors to persistent knee pain following knee replacement: The Multicenter Osteoarthritis Study (MOST). Osteoarthr Cartil Open. 2023;5(1):100335. Published 2023

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RegenexX

THINC Cost-Effectiveness Report:
The Regenexx Approach vs.
Total Knee Replacement for
Knee OA



A healthcare innovation research institute that conducted the first health technology assessment of its kind evaluating cost-effectiveness and quality of life (QoL)^a

THINC Report Features



Compared cost-effectiveness

of injections that utilized BMC, which contains stem cells, with TKR in working-age adults (average age 55 years)^a



Calculated cost and QoL outcomes

for Regenexx approach and TKR^{a,c,d}



Analyzed data

from Regenexx approach clinical trials and Regenexx Provider Patient Registry, as well as TKR clinical trials and cost-effectiveness analyses

THINC Report Key Findings

The THINC report found that compared with TKR surgery for knee OA, procedures using Regenexx injectates demonstrated:

~\$20,000 cost savings over 5 years

Dominance over TKR (lower cost for comparable QoL) ~**70%** decrease in subsequent TKRs^e over 5 years

THINC Report Conclusion:

The Regenexx approach offers a significantly cost-effective option with comparable QoL for knee OA treatment.

Learn More

In general, TKR durability is evaluated in the long term. Therefore, this THINC report evaluated cost savings of the procedure using Regenexx injectates vs. TKR at both 5 and 15 years to see impact in the short and long term.