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

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

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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<sup>4,5</sup>:

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

Regenexx provides a non-surgical knee OA treatment option using injections of the patient's own stem cells from bone marrow concentrate (BMC).

<sup>a</sup>QALY = Cost-effectiveness analysis metric rating how well different types of medical treatments extend and/or improve patients' lives.

<sup>b</sup>Simulated with a decision-analytical model.

<sup>c</sup>Total costs of Regenexx stem cell from BMC = indirect costs of productivity losses plus direct costs of procedure, braces, primary care physician, specialist visits, and post-procedure physical therapy.

<sup>d</sup>Total costs of TKR surgery = indirect costs of productivity losses plus direct

<sup>d</sup>Total costs of TKR surgery = indirect costs of productivity losses plus direct costs of procedure, complications, surgeon fees, pre-operative work, hospitalization, and rehabilitation.

<sup>e</sup>The main driver for the difference in costs between the Regenexx procedure and TKR is the reduction in the number of TKR surgeries in the Regenexx procedure group. Cost savings is the end result of reducing ~70% of TKRs and associated complications.

#### References

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## Regenex<sup>X</sup>

# THINC Cost-Effectiveness Report: Regenexx 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)<sup>a</sup>

## **THINC Report Features**



#### Compared cost-effectiveness

of Regenexx injections of stem cells from BMC with TKR in working-age adults (average age 55 years)<sup>b</sup>



#### Calculated cost and QoL outcomes

for each treatment a,c,d



#### **Analyzed data**

from Regenexx clinical trials and Regenexx 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, the Regenexx procedure demonstrated:

~\$20,000 cost savings over 5 years Dominance over TKR (lower cost for comparable QoL) ~**70%** decrease in subsequent TKRs<sup>®</sup> over 5 years

### **THINC Report Conclusion:**

The Regenexx procedure 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 Regenexx procedure vs. TKR at both 5 and 15 years to see impact in the short and long term.