

# Does Knee Range of Motion Impact Regenexx-SD Outcome?

## Data Collection

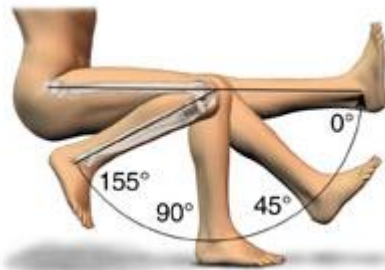
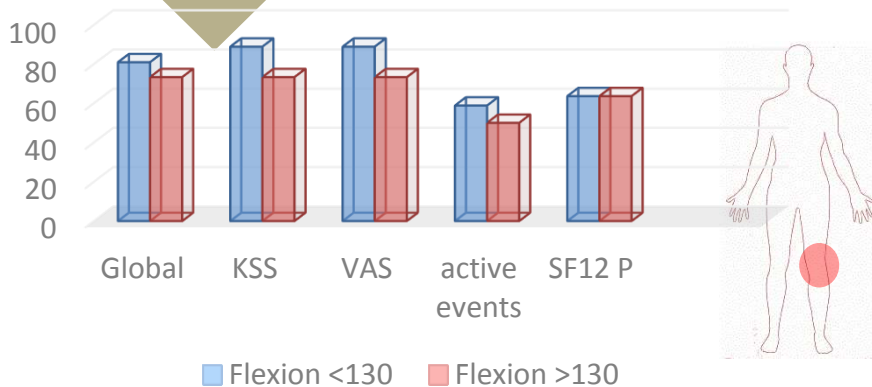
This data is based on our advanced treatment registry which collects outcome information as patients are treated. In particular, it doesn't generalize to all knee stem cell procedures (only Regenexx-SD). Our biostatistician queried data collected by our Chicago RegenexxNetwork site (Mitchell Sheinkop, M.D.) that measured range of motion and knee outcome using various standardized outcome questionnaires.

### Summary

- There is no correlation between lack of knee range of motion in either flexion (bending) or extension (straightening) and poor outcome from a Regenexx-SD procedure.
- The patient numbers here are less than in some infographics, so this analysis could change once more range of motion measurements become available.

#### What does this mean?

These are the percentage improvement numbers for each scale in patients who had at least 130 degrees of knee flexion (Flexion >130) or those who had less ability to bend their knees (Flexion <130). Note that while there appears to be a slight trend for patients with less bending (Flexion <130) to do better (higher bars on this graph), this wasn't statistically significant.



**Caution!** This is registry data, which is not the same as a drug company style controlled trial.

## Does your lack of knee range of motion matter?

#### What does this mean?

These are the percentage improvement numbers for each scale in patients who couldn't straighten their knee all the way (Extension >5) and those who could extend further (Extension <5). While there seems to be a slight trend for limited extension patients (Extension >5) to do better (higher bars on this graph), this wasn't statistically significant.



**Details For Both Charts:** The y-axis is percentage improvements on that scale at 12 months. X-axis details-Global is SF-12 global score, KSS is Knee Society Score, VAS is Visual Analogue Scale for pain, Active Events is a sub-scale of the KSS, and SF-12P is the pain sub-scale of the SF-12. Total n's for each graph: Flexion-Global-36 (p=0.7), KSS-33 (p=0.4), VAS-33 (p=0.4), Active Events-36 (p=0.7), SF-12 P-22 (p=1.0). For the extension graph-Global-36 (p=1.0), KSS-33 (p=1.0), VAS-33 (p=0.6), Active Events-33 (p=0.5), SF-12 P-21 (p=.2). These total n's were further sub-divided into responders and non-responders.



The Regenexx-SD procedure is a same day bone marrow stem cell procedure that isolates the fractions of bone marrow that have the most stem cells.