

## Title:

Medially stabilized versus cruciate retaining and 'deep dish' Total Knee Arthroplasty

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## Abstract:

Introduced in 1994, medially stabilized (MS) total knee arthroplasties (TKA) are developed as a possible solution to abnormal kinematics obtained with more traditional posterior stabilized (PS), cruciate retaining (CR) or anterior stabilized (AS) designs. MS TKA designs offer a fully-congruent medial compartment combined with a flat lateral compartment, creating a medial pivot that offers stability through range of motion but simultaneously allows physiological femoral rollback during flexion. However, clinical studies have failed to demonstrate these proposed advantages over traditional designs. Further studies with large numbers are needed to clarify the possible superiority of these MS designs. The primary objective of the current study is to evaluate differences in survival and patient reported outcome measures (PROMs) between MS implants compared to CR and AS implants. Secondary objectives are (1) to report survival and PROMs of different brands of MS implants and (2) assess the influence of hospital volume on survival and PROMs achieved with MS TKA.

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