Introduction: Unicompartmental knee arthroplasty (UKA) is touted as a more conservative, bone- and tissue-sparing procedure than total knee arthroplasty (TKA). Likewise, revision of UKA to TKA is generally a simpler procedure than revision of TKA to TKA and can be accomplished with primary TKA components in most cases. The purpose of this study was to review a consecutive series of patients undergoing revision of failed UKA to TKA to determine if etiology is similar to that reported in recent literature, and evaluate if the results align more with primary TKA versus revision of TKA to TKA.

Methods: A query of our private practice registry revealed 174 patients underwent 180 revisions of failed UKA from 1996 to 2014. Mean age at revision was 63.3 years (37-86), BMI was 32.3 kg/m2 (20-58), and interval after UKA was 4.9 years (0-35). Most prevalent indications for revision of UKA were aseptic loosening (45%) arthritic progression (17%) and tibial collapse (13%).

Results: At 4 years mean follow-up, 5 knees (2.8%) have required re-revision, which is similar to what we recently reported at 5.5 years in a group of patients who underwent primary TKA (6 of 189; 3.2%), and much lower than what we observed at 6.0 years in a recent study of patients who underwent aseptic revision TKA (35 of 278; 12.6%). In the study group, Knee Society Clinical and Function scores improved from 50.8 and 50.7 preoperatively to 81.6 and 62.7 at most recent. Re-revisions were for instability (2), and 1 each aseptic loosening, infection, and arthrofibrosis.

Conclusions: Compared to published individual institution and national registry data, re-revision rates of failed UKA are equivalent to revision rates of primary TKA and substantially better than re-revision rates of revision TKA. These data should be used to counsel patients undergoing revision UKA to TKA.