Knee osseous

**Stanmore Modular Individualised Lower Extremity System (SMILES):**
Rotating hinge knee prosthesis in primary complex total knee arthroplasty

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**Abstract**

**INTRODUCTION**
The Stanmore Modular Individualised Lower Extremity System, (SMILES), (Stanmore Implants Worldwide), has been shown to be effective in complex revision knee surgery. It incorporates a rotating hinge platform knee joint and can overcome the major problems of bone loss and ligamentous laxity.

**OBJECTIVES**
We report our experience with SMILES knee prosthesis analysing the functional outcomes of replacements implanted for primary complex knee pathology.

**METHODS**
36 patients (45 knees) who received a primary SMILES knee prosthesis between 1990 and 2007 were retrospectively studied. Knee function was assessed pre- and post-operatively using the Oxford Knee Score (0-48 scoring system) and the Knee Society Score. Patients with previous joint replacement or those receiving surgery for tumours were excluded.

**CONCLUSION**
We conclude that the SMILES Knee Prosthesis offers a statistically significant improvement in subjective and objective assessed outcome scores in Complex Primary Knee Arthroplasty. Its use is now well established with greater than 95.3% implant survival over 15 years.