Stanmore Cemented Stem
Over 1 million times per year, Biomet helps one surgeon provide personalized care to one patient.

The science and art of medical care is to provide the right solution for each individual patient. This requires clinical mastery, a human connection between the surgeon and the patient, and the right tools for each situation.

At Biomet, we strive to view our work through the eyes of one surgeon and one patient. We treat every solution we provide as if it’s meant for a family member.

Our approach to innovation creates real solutions that assist each surgeon in the delivery of durable personalized care to each patient, whether that solution requires a minimally invasive surgical technique, advanced biomaterials or a patient-matched implant.

When one surgeon connects with one patient to provide personalized care, the promise of medicine is fulfilled.
The Stanmore hip was designed by Professor John Scales, OBE, and Mr John Wilson, OBE. The first stem was implanted in 1973 following its development at the Royal National Orthopaedic Hospital, Stanmore, England, and the Institute of Orthopaedics, University of London. Since 1987 over 98,700 stems have been implanted worldwide.¹

Clinical Success of the Stanmore Hip Stem

91% Survivorship
at 22 years follow-up in 135 patients²

73% Survivorship
at 20 years, in 807 patients³

86% Survivorship
at 14 years vs. 79% survivorship for the Charnley stem⁴

97.5% Survivorship
at 10 year follow-up in 636 patients⁵

89.9% Survivorship
at 10 year follow-up, in 105 patients⁶

90% Survivorship
at 10 year follow-up in 57 young patients with a mean age of 41 years old

99% Survivorship
at 5 year follow-up, in 97 patients⁷

98.2% Survivorship
at 5 year follow-up, in 249 patients⁸

98% Survivorship
at 5 year follow-up, in 2938 patients⁹

No revisions
Revisions of failed neck of femur treatments in 31 patients: No stem revisions, 94% Merle d’Aubigne score.¹⁰
Stanmore Cemented Hip Stem

Proven Design Principle

The Stanmore femoral stem is a trusted device with excellent long-term clinical success for over 30 years. The Stanmore stem geometry and surface finish have remained unchanged, building clinical longevity to become a gauge of lasting improvement in patients’ life.11

Type One Biomet Taper
The taper allows for use with an array of CoCr and Delta ceramic heads, up to 40 mm diameter, to benefit the joint stability and patient range of motion

Collared Stem
The collar prevents subsidence to attain strong fixation of the implant to the cement

Straight and Standard Stem geometry
The horizontal offsets range from 33.5 mm to 48.5 mm to successfully restore the hip biomechanics

Standard and Lateralised Neck Angles
Enhanced soft tissue tension and joint stability can be achieved by exchanging the 130° standard stem with the lateralised 125° stem

Acetabular Options

Exceed ABT with Biolox Delta ceramic and 15° shell
- Improved wear resistance and mechanical strength compared to alumina ceramic
- Increased diameters for an improved ROM and stability
- 15° shell option allows for more cup coverage in dysplastic anatomies and optimal bearing inclination19
- The clinically proven PPS coating maximises long term implant fixation21,27
- BoneMaster coating enhances early implant stability22
- 5A ODEP Rating

Exceed ABT with E1 Antioxidant Infused Technology
- Utilises the durable and clinically proven RingLoc technology23
- Ultra low wear versus standard polyethylene18
- Oxidative stability and high strength18
- Range of liner types and sizes to better address clinical needs:
  - Standard, Hi-Wall and 10 Degree
  - 22, 28, 32, 36 and 40 mm liners
- 5A ODEP Rating
Stanmore Cemented Hip Stem

Satin Surface Finish

The wet blasted surface treatment creates a smooth satin finish (0.75Ra), optimal for mechanical bonding between the implant and the bone cement.

Rectangular Cross-Section

The stem cross-section enhances the implant rotational stability in the femur.

Tapered Stem Geometry

The 4.5° M/L and 1.4° A/P angle facilitate the stem insertion in the cement.

CoCrMo Alloy

The high stiffness of the material decreases the risks of cement stresses. The high strength of the alloy reduces the risk of prosthetic fractures compared to stainless steel stems.

Avantage E1

- Large head and anatomically shaped cup for a reduced risk of dislocation
- Large ROM
- Wear reduced by 90% compared to traditional ArCom
- Clinically proven double mobility design
- 10B ODEF Rating

E1 Cemented cups

- Available in E1 and ArCom to accommodate the patient activity level
- Flanged, non-flanged and Muller variants to accommodate surgical technique preferences
- Large head options for increased stability and ROM
- All-in-one pusher and inserter for continuous pressurisation
Stanmore Cemented Hip Stem

From Primary to Revision

In addition to the standard and lateralised primary stems, Stanmore combines an unsurpassed primary system with a proven revision technique. The revision stems range from 196 to 214 mm (measurements from the calcar), and have the same proximal geometry as the standard and straight primary stems. Amongst other applications, it can be selected in the management of Paprosky type one revision surgery.

Optipac Mixing System

World leading patented mixing system and cement accessories

- Provides mixing and collection under vacuum for optimal porosity reduction
- All ingredients come pre-packed in the mixing system, which remains closed until cement delivery
- Offers further porosity reduction resulting in improved cement quality
- Reduced exposure to the cement components for a better working environment
- Cement delivery and pressurization systems, allows for adequate cement filling and improved cement penetration into the bone
Modern Instrument platform

The instrumentation enables a reproducible and easy technique, allowing optimal restoration of the joint biomechanics and reduced pain.

10 Year Warranty Programme – When confidence is Key

Biomet is the only orthopaedic company that offers a 10 year limited warranty on specific products, in particular on the Stanmore stem. The Warranty procedure is simple, quick, with minimal paperwork, allowing Biomet Clinical Research Department to rapidly initiate the warranty for revision cases. Should warranted implants require revision within 10 years after the implantation date, Biomet will provide a free of charge replacement implant for the revision operation.

The 10 year limited warranty is not offered in every country. Please contact your local Biomet Clinical Research Department for more information about the Warranty Programme and its availability in your country.
References


5. Swedish Hip Register 2009 Annual Report Stanmore modular stem / Stanmore cup

6. Swedish Hip Register 2009 Annual Report Stanmore Monobloc stem / Stanmore cup

7. Swedish Hip Register 2009 Annual Report Stanmore modular stem / Trilogy® HA cup

8. Swedish Hip Register 2009 Annual Report Stanmore modular stem / ZCA® cup

9. UK National Joint Register 2010 Annual report Stanmore stem


17. Data on file at Biomet. Report from SP Technical Research Institute of Sweden (20070813). Airborne methyl methacrylate monomer during the use of different bone cement mixing systems


