What does our strategy mean for products?

**Retain**
Helps patients retain an active lifestyle, with no restrictions on post-procedure activities
(SUPARTZ™)

**Replace**
Replaces patient joints with artificial devices
(SYNERGY®, PROFIX®, GENESIS™ II)

**Restore**
Restores normal function with advanced implants & surgical techniques
(COMPETITOR™, JOURNEY ™, BHR ™)

**Rebuild**
Rebuilds the body to recover from implant failure
(LEGION™, EMPERION™)

Hip product portfolio

- **Restore**
  - 64 and under procedures are 40% of US Market
  - 9% Growth
  - BHR™
  - BHR mid head
  - Mini Stem, Active Patient Acetabular Cup System

- **Replace**
  - SYNERGY®, ANTHOLOGY®, EMPERION®, SPECTRON®, REFLECTION®

- **Rebuild**
  - 64 and under procedures are 31% of US Market
  - 4% Growth
  - EMPERION, ECHELON™

**Active Technologies**

- 64 and under procedures are 40% of US Market
- 9% Growth

- 64 and under procedures are 31% of US Market
- 4% Growth

Source: Solucient, 2005

Today’s 65 senior is not *really* 65

1960 active senior

2006 active senior
Smith & Nephew orthopaedics hip portfolio
Clinical performance

SPECTRON° stem
100% survival rate of the SPECTRON stem at 12 years ¹

97.0% survival rate of SPECTRON stem at 9.6 years ²

99.7% survival rate of SPECTRON EF at 7 yrs ³

SYNERGY° stem

99.5% Survivorship ⁴


³ Swedish National Hip Registry, 2000 Report, Henrik Malchau, MD, PhD

Knowledge of the shape of the femur

- Extensive knowledge of the femoral shape based on
  - CT database
  - Radiographic analysis
  - Clinical analysis

- Ability to apply this knowledge to design implants that properly fit the geometric shape of the femur
Re-establishing the biomechanics of the hip

The first to promote the re-establishment of the natural biomechanics of the hip

- Place the center of the femoral head and the shaft of the femur to the natural locations
  - Dual offsets femoral stems
  - Appropriate range of offsets for the stem size

- Enhanced Range of Motion
  - Circulotrapezoidal neck geometry
  - Femoral heads with significant neck length adjustment without compromising ROM
  - Acetabular components designed with enhanced ROM
Instrumentation

- Easy to use instrumentation
- Standardization between systems
- Ergonomic instrumentation
- Reduced number of instruments
- Instruments laid out in order of use
Hip product highlights for 2007

ANTHOLOGY™ stem

EMPERION™ stem

ANTHOLOGY™ Hip System

• Value proposition

• The ANTHOLOGY™ system provides the surgeon a press-fit implant that is optimum for all femur types

• It is designed to be MIS friendly, reduce dislocations, and be more bone and tissue conserving than previous primary implant designs

™Trademark of Smith & Nephew.
EMPERION™ Modular Hip System

• Versatile
  • Primary and Revision Implant Options
  • Treats more indications than the competition
  • Optimal solution for patients with difficult anatomy

• Modular titanium stem

• Infinite version adjustment

• Simple nomenclature, instrumentation, & procedure

Surgery: paint by number

<table>
<thead>
<tr>
<th>Distal diameter of stem (mm)</th>
<th>Color</th>
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<tbody>
<tr>
<td>9</td>
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<td>23</td>
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Color-coded trays

Color-coded templates

Color-coded trials
Primary OA case

![X-ray image of a hip with a total hip replacement (THR)]
Proximal – distal mismatch
Complete revision portfolio

Proximal and distal mismatch

**EMPERION™ stem**
- Proximal fit and distal fill
- Proximal fixation
- Version control

Distal fixation

**ECHELON™ stem**
- Extensively porous coated
- Porous Plus HA
- Cemented option

*Trademark of Smith & Nephew, Reg. US Pat. & TM Off.*
# Types of revisions and stems to use

<table>
<thead>
<tr>
<th>Paprosky’s Revision Classification System</th>
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<tbody>
<tr>
<td><strong>Type 1</strong></td>
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<tr>
<td>EMPERION° stem</td>
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<tr>
<td>ECHELON° stem</td>
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<tr>
<td><strong>Type 2</strong></td>
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<tr>
<td>EMPERION stem</td>
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<tr>
<td>ECHELON° stem</td>
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<tr>
<td><strong>Type 3</strong></td>
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<tr>
<td>ECHELON stem</td>
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<tr>
<td>EMPERION stem (Tall Sleeve)</td>
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Future opportunities

Using technology to address opportunities

- **Implant**
  - Biomechanics
  - Fixation
  - Bone/tissue preservation
  - Longevity

- **Instrumentation**
  - Reproducibility
  - Ergonomics
  - Simplicity
  - Efficiency