EXCEEDING THE HIGHEST STANDARDS YOURS.

DePuy Synthes
PART OF THE Johnson & Johnson FAMILY OF COMPANIES
We’re hip & femur fracture specialists - providing the broadest portfolio of best in class products and services, unparalleled expertise, and the most expansive resources in the industry. You never know what your next patient may require; that’s why you trust us to support everything you might need.

Pictograms are used to summarize product groups and may not adequately represent the indications for use of each specific device. Please refer to the Package Insert or Surgical Technique Guide for a full list of cleared indications.
TFN-ADVANCED® PROXIMAL FEMORAL NAILING SYSTEM (TFNA)

Since its inception, TFNA has become the #1 selling cephalomedullary nail in the United States. The TRAUMACEM™ V+ Augmentation System is now exclusively offered for use with the TFNA System and builds off the unmatched list of comprehensive surgical options that TFNA provides to improve construct stability in at-risk patients with poor bone quality.

IMPROVED FIT AND STRENGTH

LATERAL RELIEF CUT™ & SMALL PROXIMAL DIAMETER
Preserves bone in insertion area due to reduced critical width

LATERAL RELIEF CUT™ & SMALL PROXIMAL DIAMETER
IMPROVED FIT AND STRENGTH

TIM™ TITANIUM ALLOY & BUMP CUT DESIGN
Provides improved fatigue strength when compared with existing nails of similar size

ANATOMIC 1.0M RADIUS OF CURVATURE
Mean total surface area of nail protrusion is 25% less than Gamma3

FATIGUE LIMIT STUDY

TFNA System
Gamma3
Intertan

24% DIFFERENCE
47% DIFFERENCE

HEMICAL BLADE TECHNOLOGY
Designed to improve implant anchorage, provide greater rotational stability and provide greater resistance to superior load when compared to a screw.

AUGMENTABLE HEAD ELEMENTS
Through extensive bench testing and clinical history in Europe since 2010, including 3 prospective multicenter trials, augmentation has demonstrated its ability to increase resistance to head element migration.

PREASSEMBLED LOCKING MECHANISM
Static or rotational locking options that can be selected intraoperatively.

See pages 14 & 15 for information on the Hip Fracture Care Program.
FEMORAL NECK SYSTEM (FNS)

The Femoral Neck System (FNS) is designed for improved angular stability\(^{11}\) and rotational stability\(^{10}\) with the intent to reduce reoperations related to fixation complications.

ENHANCED FIXATION IN A COMPACT DESIGN

ROTATIONAL CONTROL

The FNS has up to a 40% increase in rotational stability when compared to a Sliding Hip Screw system\(^{10}\).

GUIDED COLLAPSE

With a compact design, FNS is intended to minimize invasiveness on the patient including up to 20 mm of guided collapse without lateral protrusion of the bolt.

ANGULAR STABILITY

A published biomechanical study shows that FNS offers 100% more resistance to varus collapse when compared to multiple cannulated screws\(^{11}\).

NOTE: The Femoral Neck System (FNS) is indicated for basilar femoral neck fractures in adults and adolescents (12-21) in which the growth plates have fused or will not be crossed.

FEMORAL NECK FRACTURES

TARGETED INSERTION HANDLE

All steps of the procedure can be completed after placement of one central guide wire into the femoral head, enabling a repeatable approach.

STREAMLINED PROCEDURE

HIP REPLACEMENT OPTIONS

Hemi Hip Arthroplasty

SUMMIT\(^\text{®}\) Tapered Hip System with SELF-CENTERING\(^\text{™}\) Endo Heads

The SUMMIT\(^\text{®}\) Tapered Hip System has achieved over 15 years of clinical history, and it remains a viable treatment option for patients today. When combined with the Bipolar and Unipolar head options, the construct can be a cost-effective and efficient approach to treat femoral neck fractures and avascular necrosis.

Total Hip Arthroplasty

CORAIL\(^\text{®}\) Hip System with PINNACLE\(^\text{®}\) Acetabular Cup System

The CORAIL\(^\text{®}\) PINNACLE\(^\text{®}\) Hip construct is one of the most widely used total hip constructs in the world. In 2017, the CORAIL Stem achieved over 2 million unit sales worldwide, and the PINNACLE Cup reached over 2.5 million unit sales worldwide since their introduction.\(^{12,13}\)
The FRN System offers the choice of Piriformis Fossa (PF) or Greater Trochanter (GT) entry points and extensive locking options to accommodate varying surgical preferences while enabling the treatment of a range of fracture complexity. FRN was designed for anatomical fit with a 1.0m radius of curvature and short proximal nail end to better fit patient anatomy.14,15

ANATOMICAL FIT

LOWER PROXIMAL NAIL PROMINENCE
Short proximal nail end designed to reduce risk of nail prominence compared to nails with a longer nail end (i.e. Zimmer PF)14

ANATOMIC 1.0M RADIUS OF CURVATURE (ROC)
1.0m anatomic bow designed to help avoid impinging anterior cortex compared to nails with larger radius of curvature15

FEMORAL RECON NAIL (FRN)

CHOICE OF ENTRY POINTS

GREATER TROCHANTER OR PIRIFORMIS FOSSA
Accommodates surgeon preference

PROXIMAL LOCKING
Choice of standard locking, reconstruction locking or combined with proximal dynamization option

DISTAL LOCKING
Four locking options including:
• An A/P hole
• Distal dynamization option
• An oblique distal locking hole offset 10 degrees

DISTAL LOCKING OPTIONS

COMPATIBLE WITH ANGULAR STABLE LOCKING SYSTEM (ASLS)

EXTENSIVE LOCKING OPTIONS

Simulated competitor nail with 1.5m ROC
FRN with 1.0m ROC

Simulated Zimmer PF
DePuy Synthes PF Femoral Recon Nail
3.5MM LOCKING ATTACHMENT PLATE

As an alternative to cerclage cables, the 3.5mm Locking Attachment Plate (LAP) preserves the periosteal blood supply and bypasses a prosthesis stem with an angular stable solution.\textsuperscript{16,17}

**PROVIDES STIFF, BICORTICAL FIXATION FOR INCREASED ROTATIONAL STABILITY**

- LAP provides a stronger, stiffer construct than an orthopedic cable\textsuperscript{14}
- Locking capability advantageous in osteopenic bone where screw purchase is compromised
- Contourable to accommodate patient’s anatomy

**COMPATIBLE WITH EXISTING DEPUY SYNTHES 4.5MM LCP PLATES INCLUDING VA-LCP PLATES**

- Attaches to plate via a dedicated connection screw at the locking hole of the plate
- Available in 4-hole and 8-hole, in stainless steel and titanium

ORTHOPAEDIC CABLE SOLUTIONS

Comprehensive surgical options for cerclage fixation in joint reconstruction and trauma procedures

**CABLES FEATURE A UNIQUE WEAVE DESIGN TO ALLOW FOR GREATER FLEXIBILITY AND CONTROL**

1.7 mm diameter, available in 316L stainless steel with stainless steel crimp and L605 cobalt chromium alloy with titanium crimp

**CABLES FEATURE**

- 8 outer bundles of 7 strands
- One central bundle of 19 strands

**Cable Positioning Pins**

Secures cable to the plate and prevents cable migration

TROCHANTERIC REATTACHMENT DEVICE OPTION

For reattachment of the greater trochanter following osteotomy in total hip arthroplasty or fracture

- Large proximal hooks grip the greater trochanter, securing its location while resisting superiorly directed forces
- Preassembled with 1.7 mm CoCr cables and titanium crimps
- Crimps reside in plate for easy access, handling, and cable alignment
- Available in TAN and in two lengths
REAMER IRIGATOR ASPIRATOR (RIA)

RIA is a proprietary single-pass reaming and a bone harvesting system designed to reduce fat embolism and thermal necrosis that can occur during reaming/nailing of long-bone fractures.

LOWER PAIN SCORE

- Reduced complication rates compared to iliac crest bone graft (ICBG) harvesting
- Reported lower mean pain scores for RIA donor sites when compared to ICBG donor sites across 60 weeks

LOWER PAIN SCORE STUDY

<table>
<thead>
<tr>
<th>Total Pain Score (Points)</th>
<th>RIA</th>
<th>ICBG</th>
</tr>
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<tbody>
<tr>
<td>&lt;48 hrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;48 hrs to &lt;3 months</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;3 months</td>
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</tbody>
</table>

IMPROVED SAFETY

- Demonstrated to reduce heterotopic ossification, fat embolization, pulmonary insult and thermal necrosis compared to standard reaming

FAST, EFFICIENT REAMING

- Time saving, one-step procedure
- Sharp reamer heads for optimized cutting

CLEAR CANAL

Removes infected and necrotic bone tissue.

AUTOGRAFT RECOVERY

- Provide an efficient method for obtaining large volumes of autologous bone graft
- Produce bone graft with high concentration of viable cells and growth factors
The CareAdvantage Approach

CareAdvantage, from the Johnson & Johnson Medical Devices Companies is a holistic approach to help the healthcare delivery system realize better care by aligning our broad capabilities to its individual needs.

Needs Identification
Discuss challenges and perform analysis to define opportunities where we can help.

JJMDC Capabilities
Bring our unique capabilities as part of the Johnson & Johnson Family of Companies.

Delivering Results
Tailor the approach to deliver results and measurable impact.

Our Capabilities
As a part of the Johnson & Johnson Family of Companies, JJMDC brings unique capabilities to help our customers address individual needs, from developing care pathways within multiple therapeutic areas and understanding how to better engage consumers and patients, to achieving efficiencies within the OR and supply chain.

Hip Fracture Care Program*
An evidence-based care improvement program for the elderly fragility fracture patient population that facilitates interdisciplinary care coordination and clinical standardization to reduce variation, improve outcomes and optimize care.

Program Components
- Implementation support & facilitation by clinical subject matter experts
- Implementation Toolbox include best practice materials to guide through implementation
- On-site opportunity assessment includes interviews with multi-disciplinary key stakeholders
- Performance dashboard subscription to track data, visualize progress and benchmark

Delivering Results
Demonstrated measurable results at a regional community hospital in northeast USA

- $1000 average savings per orthopaedic episode†
- 28% reduction in time from ED to OR†
- 1.2 days reduction in average length of stay†

These are examples only and do not guarantee or predict future results, which will vary depending on individual circumstances.

*Hip Fracture Care Program is a fee-for-service offering.

For additional information, please visit www.CareAdvantagejjmdc.com or contact CareAdvantagejjmdc@its.jnj.com


20. Sagi HC, Young ML, Gerstenfeld L, Einhorn TA, Tornetta P. Qualitative and quantitative differences between bone graft obtained from the medullary canal (with a reamer/irrigator/aspirator) and the iliac crest of the same patient. J Bone Joint Surg Am. 2012; 94(23):2128-2135.


26. Hall IA MM, Vezente MR, Morison ZA, Dehghan N, Kedar HI, Petrisor B, Schenstich E. A prospective randomized trial investigating the effect of the reamer-irrigator-aspirator (RIA) on the volume of embolic load and respiratory functions during intramedullary nailing of femoral shaft fractures. Orthopedic Trauma Association 2013 Annual Meeting; October 9-12, 2013; Phoenix AZ, USA.


Bench test results may not be indicative of clinical performance. Please refer to the package insert(s) or other labeling associated with the devices identified in this surgical technique for additional information. Some devices listed in this surgical technique may not have been licensed in accordance with Canadian law and may not be for sale in Canada. Please contact your sales consultant for items approved for use in Canada. Not all products are currently available in all markets. The third party trademarks used herein are trademarks of their respective owners.

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WARNING: In the USA, this product has labeling limitations. See package insert for complete information.

CAUTION: USA Law restricts these devices to sale by or on the order of a physician.