CORAIL®
HIP SYSTEM

Product Portfolio
“CORAIL®... a system for all my patients”
Dr JP Vidalain, France

“CORAIL... proven and reliable”
Mr D Beverland, UK

“A simple system … popular with the OR team”
Dr C Clark, USA

“CORAIL … ideal for minimal invasive surgery”
Dr M Michel, Switzerland

“Ideal system for a wide number of indications”
Prof KH Koo, Korea
“In use worldwide; since 1986; FDA cleared in 1996; recognised at the highest level (10A) in 2004 by ODEP (Orthopaedic Data Evaluation Panel) in the UK. The CORAIL philosophy is based on simple principles: primary mechanical stability, secondary biological integration, bone preservation and harmonious stress transfer. The design geometry gives the primary mechanical stability. The Hydroxyapatite (HA) coating allows secondary biological integration. The combination of the design and the HA coating of the CORAIL Hip System has been proven to work.\textsuperscript{1-3} The surgical technique is simple and allows for bone preservation as we are looking for “optimum filling” and not close cortical contact with the implant. The restoration of bone stock occurs with the creation of newly formed bone all around the stem thanks to the effect of both the design and the HA coating. The compaction broaching surgical technique is reproducible and straightforward. There are no long-term radiographic changes. The CORAIL Hip System has now become a Gold Standard among primary cementless stems.”

ARTRO Group. CORAIL Design Surgeon Team.
Clinique d’Argonay. International Visitation Centre CORAIL, Annecy, France
Formation of a bone trabecula in the periprosthetic gap establishing an anatomic continuity between the implant and host bone. Notable absence of intervening fibrous tissue.4,5,6,7

Host Bone

CORAIL Implant

Hydroxyapatite
The most striking clinical finding in our material was the absence of thigh pain, which is often seen both in proximally and fully porous-coated stems...thigh pain, seems to be eliminated with the entirely HA-coated stem, probably because of comprehensive diaphyseal bonding.”

Røkkum M., J. Arthroplasty, 1999

97.0%
Survivorship in 5456 cases at 15 years. Havelin L. J. Bone and Joint Surg. 2007

99.1%
Survivorship in 120 Consecutive Cases at 12 years. Chatelet JC.
Rev Chir Orthop Reparatrice Appar Mot. 2004

97.7%
Extensive Range – Wide Range of Indications

CORAIL Standard Offset 135° neck angle, collarless.

CORAIL Standard Offset 135° neck angle, collared.

CORAIL High Offset 135° neck angle. Used for lateralisation and extreme morphologies, always collarless.

CORAIL Coxa Vara 125° neck angle. Used for coxa vara indications always collared.

CORAIL Dysplasia Size 6 Stem

CORAIL – Cemented option

The CORAIL Hip System offers five different primary stems and a cemented stem.
The CORAIL Stem features a 12/14 ARTICUL/EZE® Mini Taper (AMT) which allows a range of motion of up to 148° with the PINNACLE® Cup System.\textsuperscript{11}
Proven Fixation

“We believe that all components were bonded directly to the bone, promoted by the reliable primary fixation and the osteoconductive effect of HA.”

Røkkum M., J. Arthroplasty, 1998

The CORAIL stem receives the Level 10A - Highest Evidence Rating from ODEP.12

Orthopaedic Data Evaluation Panel, UK 2004
The design of the extra medullary section improves the biomechanics of the stem. The low profile neck increases the range of motion of the stem within the cup before the neck impinges on the cup. The AMT taper (ARTICUL/EZE Mini Taper) captures completely the femoral head reducing the potential for impingement of the cup.

155 μm hydroxyapatite coating on the grit-blasted surface of the CORAIL stem induces rapid osteointegration. The HA coated medial to lateral taper resists axial / torsional stresses and promotes osteointegration for optimum fixation.

The design of the CORAIL stem, with its titanium alloy and its full hydroxyapatite coating ensures load transfer without abnormal peak forces and allows a very low incidence of thigh pain.
CORAIL as a Primary Cementless Stem

After twelve years of constant pain, this young patient was unable to sleep through the night and facing the fact that he could no longer run his business as his quality of life was extremely poor. However, only seven months after his CORAIL Hip surgery (PINNACLE 36 mm Ceramic-on-Ceramic), he was back enjoying life with friends, skiing and ice climbing.
Full length of stem HA coating induces rapid osteointegration.

Vertical grooves and HA coating provide stabilisation to minimise distal thigh pain.

AMT neck for wider Range of Motion before impingement.

CORAIL trapezoidal-like proximal cross section To provide rotational stability and self locking.

CORAIL Standard Offset 135° neck angle (collared and collarless)
CORAIL High Offset 135° neck angle (collarless)
CORAIL Coxa Vara 125° neck angle
This lady was the very first CORAIL stem patient and the first fractured neck of femur case treated with CORAIL. Although suffering from severe osteoporosis, she was then a very active woman – a keen alpine skier and mountaineer. In August 1986, she suffered a fractured neck of femur after a mountain accident. She was operated on at the Clinique d’Argonnay, Annecy, by Dr Machenaud of the ARTRO Group, who implanted the first CORAIL Stem.

Although this patient has been reoperated for acetabular wear, she is doing well after 21 years and participates in winter sports with family and friends. This patient is just one of the many fractured neck of femur patients who have benefited from the CORAIL stem’s reliability.

Recent results of fractured neck of femur trials show that primary arthroplasty provides a better solution than hemi-arthroplasty or internal fixation. In randomised clinical trials Total Hip Replacement (THR) has been found to provide improved clinical results in relation to hip function, level of pain and health-related quality of life than either internal fixation or hemiarthroplasty, in previously mobile, otherwise healthy lucid fractured neck of femur patients aged more than 60 years old. In those patients, randomised clinical trials have also reported lower revision rates for THR than either hemi-arthroplasty or internal fixation.
THR following femoral neck fracture consistently leads to reduced post-operative pain.

THR is associated with improved health and overall quality of life relative to other treatment options.

The CORAIL stem extramedullary geometry is designed for extended range of motion to provide increased stability reducing the risk of dislocation and revision surgery.
CORAIL as a Cemented Stem

Following an ‘intra-capsular fracture’ this male was templated for a hydroxyapatite coated CORAIL stem.

Having prepared the femur for a CORAIL Stem, the surgical team selected the cemented option from the CORAIL Hip System. This was a more suitable implant for this patient. Both hydroxyapatite coated and cemented options share exactly the same broach envelope and instrumentation.

“The cement mantle distribution was similar for the Titan and Cemented version of the CORAIL Hip System.”

Nick Bishop, Dr MM Morlock, Ph.D.
Technical University Hamburg-Harburg, Biomechanics Section. Hamburg, Germany, Sept 2008

“In the current FEA study, the mechanical performance of the CORAIL Hip System Cemented implant was analysed and compared to that of the Titan and CHARNLEY® implants. The simulations indicated that the mechanical performance of the CORAIL Hip System Cemented was superior to that of the Titan and CHARNLEY stems. Fewer cracks were formed in the cement mantle surrounding the Cemented version of the CORAIL Hip System during the loading history. Furthermore, the migration values for the CORAIL Hip System implant were very small (lower than 20 μm).”

Dennis Janssen, MSc, Nico Verdonschot, PhD, Radboud University Nijmegen Medical Centre Orthopaedic Research Lab, Nijmegen, The Netherlands, Apr 2008
Fully polished Stainless Steel
To minimise cement abrasion

CORAIL trapezoidal like proximal cross section
To provide rotational stability and self locking

AMT neck for wider Range of Motion before impingement

Resection plane laser mark for optimal seating in cement

Elliptical tip
To ease insertion and reduce stress in the cement
CORAIL Surgical Technique – Contents

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CORAIL Primary Stem (Cemented) - Surgical Technique

Pre-operative Planning, Surgical Approach, Femoral Neck Resection, Proximal Cancellous Bone Compaction, Femoral Canal Preparation, Trial Reduction (please refer to the CORAIL Primary Stem (Cementless) Surgical Technique pages 16-19)

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CORAIL Primary Stem (Cementless) - Surgical Technique

Pre-operative Planning

The CORAIL Hip System provides pre-operative templates at three different magnifications (100%, 115% and 120%). The templates are placed over the AP and lateral radiographs to help determine the implant size in order to restore the patient’s natural anatomy. When templating ensure that the prosthesis does not make cortical contact. Understand the difference between fit and fill and optimum fit. The surgical objective is a 1–2 mm gap between the cortices and the implant. If in doubt template a size that contacts the cortex and then go down a size. Templating should be done with a medium neck so that the possibility to change to a short or a long neck still remains in order to adjust leg length. The pre-operative templating will indicate the level of neck resection.

Surgical Approach

The CORAIL stem can be used with any surgical approach that the surgeon is familiar with.
Femoral Neck Resection

The angle of resection should be 45°. The neck resection guide should be used to determine the level of the femoral neck resection in conjunction with pre-operative templating. If the resection is too high, it may result in a varus positioned stem.

*Note: the osteotomy can be performed in one or two steps depending on the surgeon’s preference.*

Proximal Cancellous Bone Compaction

It is important to select a point of entry posterolaterally to the Piriformis Fossa to avoid varus positioning. Use a curette or general instrument to indicate the direction of the canal. Use the bone tamp to compact the cancellous bone proximally. This is an important step as the philosophy of the CORAIL stem is based on bone preservation.

To prevent under-sizing or varus positioning, the greater trochanter may be prepared with an osteotome to allow better insertion of the broaches.

Please refer to the PINNACLE Surgical Technique for full details with regards to the acetabulum preparation (Cat No: 9068-80-050).
Femoral Canal Preparation

Ensure that broaching is started postero-laterally. The broach should run parallel to the posterior cortex following the natural anatomy of the femur. Begin with the smallest broach attached to the broach handle and increase the size of broach sequentially until longitudinal and rotational stability is achieved, broaching should then be stopped. Careful preoperative planning is key to help selection of the final broach size. The version will be determined by the natural version of the femur.

In Type A Femurs\textsuperscript{26}, the diaphysis should be reamed prior to broaching to ensure that the CORAIL stem is implanted into compacted cancellous bone in the metaphysis.

Calcar Reaming

Leave the last broach in place and use the calcar mill to achieve a flat resection surface. The calcar reaming should allow an optimised fit of the collar on the calcar.

\textit{Note: Ensure all soft tissue is clear before performing calcar reaming.}
Trial Reduction

With the final broach in situ, attach the appropriate trial neck and trial head. Reduce the hip and assess what adjustments, if any, are required to ensure stability through a full range of motion. Remove the trial head, neck trial and final broach. Do not irrigate or dry the femoral canal. This will help to preserve the compacted cancellous bone quality and encourage osteointegration of the stem.

Femoral Component Insertion

The protective covers should be left on until the components are ready to be implanted. Before implanting a femoral head, the male taper on the femoral stem should be wiped clean of any blood, bone chips or other foreign materials.

Important Note:

When implanting the definitive stem (that has the same size as the final broach) in the femoral canal, ensure that it is directed in by hand. This will help avoid changing the version as a precautionary measure. You should not have more than a thumb's breadth between the resection line and the top of the HA coating on the stem. If the stem does not readily go down this far, the surgeon should broach again. If the HA level of the stem sinks below the resection line, the surgeon should consider a larger stem or using a collar. Then lightly tap the stem impactor to fully seat the stem.

Note: The stem is 0.31 mm thicker than the broach to allow the necessary press-fit.
Addition of Bone Graft

Once the CORAIL stem is fully seated, cancellous bone from the resected femoral head is added around the proximal part of the stem using the bone tamp to seal the femoral canal and to reduce the time for osteointegration which provides definitive stability.

Femoral Head Impaction

A final trial reduction is carried out to confirm joint stability and range of motion.

A DePuy 12/14 head must be used. Clean and dry the stem taper carefully to remove any particulate debris. Place the femoral head onto the taper and lightly tap it (especially if a ceramic head is used) using the head impactor. Ensure bearing surfaces are clean and finally reduce the hip.
CORAIL Dysplasia Size 6 Stem - Surgical Technique

Pre-operative Planning

X-ray templates are used during the pre-operative planning to define the femoral neck cutting plane, the degree of lateralisation and the positioning of the cup inside the native acetabular cavity.

Femoral Neck Resection

Following exposure of the proximal femur, the first neck cut is made higher than the one planned, in order to remove the femoral head. The second neck cut will depend on the implant chosen during the pre-operative planning. If the implant chosen is the K6S, then the neck cut will be a 45° angle cut. If the implant chosen is the K6A, then the neck cut will be biplaner as identified.

The axis of the femoral cavity is then located using a curette.
Femoral Canal Preparation

The femoral cavity is prepared using the single monobloc broach specific to each type of implant.

The chosen broach is inserted firmly down to the level of the cervical cutting plane.

Trial Reduction

The trial stem is introduced to the prepared cavity.

Joint mobility and stability tests can be carried out using trial heads.
Femoral Component Insertion

![Implant K6S Implant K6A](image)

**Important Note:**
The protective covers should be left on until the components are ready to be implanted. Before implanting a femoral head, the male taper on the femoral stem should be wiped clean of any blood, bone chips or other foreign materials.

The stem is introduced by hand first and then impacted down to the level of either the hydroxyapatite coating in case of the K6S or at the level of the trochanteric bearing in case of the K6A.

Femoral Head Impaction

![Implant K6S Implant K6A](image)

A final trial reduction is carried out to confirm joint stability and range of motion.

*A DePuy 12/14 head must be used.* Clean and dry the stem taper carefully to remove any particulate debris. Place the femoral head onto the taper and lightly tap it (especially if a ceramic head is used) using the head impactor. Ensure bearing surfaces are clean and finally reduce the hip.
CORAIL Primary Stem (Cemented) - Surgical Technique

CAUTION: This section is for Cemented Stems only - HA Coated Implants must not be implanted with cement.

The canal is prepared in exactly the same way as for the CORAIL Cementless. To implant the cemented option the following additional steps are required. (For a full description, please refer to the CORAIL Primary Stem (Cementless) Surgical Technique pages 16-19).

Cement Restrictor - Trial

Select the size of trial cement restrictor identified during pre-operative templating to fit the distal canal. Attach it to the cement restrictor inserter and insert the trial cement restrictor to the planned depth. Check that it is firmly seated in the canal. Remove the trial cement restrictor.

Pulse Lavage

The use of pulse lavage is recommended to clean the femoral canal of debris and to open the interstices of the bone.

By using pulse lavage prior to setting the cement restrictor, the risks of creating fatty embolism will be reduced.27
Cement Restrictor - Implant

Insert the selected DePuy cement restrictor implant at the same level as the restrictor trial.

**Note:** The size of the cement restrictor should be one size larger than the last trial restrictor inserted to the planned level. The planned level should be 1cm below the tip of the implant.

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Table 1

Final Bone Preparation

The bone can be dried by passing a swab down the femoral canal which helps to remove any remaining debris.
Cementing Technique

High viscosity cement should be used (SMARTSET® HV or SMARTSET GHV Gentamicin bone cement with the CEMVAC® Vacuum Mixing System). Attach the syringe to the CEMVAC cement injection gun. Assess the viscosity of the cement. The cement is ready for insertion when it has taken on a dull, doughy appearance and does not adhere to the surgeon's glove. Start at the distal part of the femoral canal and inject the cement in a retrograde fashion, allowing the cement to push the nozzle gently back, until the canal is completely filled and the distal tip of the nozzle is clear of the canal.

Note: Setting time may vary if the cement components or mixing equipment have not been fully equilibrated to 23°C before use.

Cut the nozzle and place a femoral pressuriser over the end. The cement must be pressurised to ensure good interdigitation of the cement into the trabecular bone. Continually inject cement during the period of pressurisation. Use the femoral preparation kit curettes to remove excess bone cement. Implant insertion can begin when the cement can be pressed together without sticking to itself. For a full description, please see the Utilising Modern Cementing Techniques literature (Cat No:4010030).
The curved stem inserter is used to impact the stem for the last few centimetres.

**Femoral Component Insertion**

Select a stem of the same size as the final broach inserted. Introduce the implant using the curved stem inserter in line with the long axis of the femur in one slow movement. Its entry point should be lateral, close to the greater trochanter.

During stem insertion maintain thumb pressure on the cement at the medial femoral neck. Insert the stem up to the resection level. If necessary, a few light taps on the stem inserter will bring the stem to the right level.

Remove excess cement with a curette. Maintain pressure until the cement is completely polymerised.

**Important Note:**
The protective covers should be left on until the components are ready to be implanted. Before implanting a femoral head, the male taper on the femoral stem should be wiped clean of any blood, bone chips or other foreign materials.

**Femoral Head Impaction**

A final trial reduction is carried out to confirm joint stability and range of motion.

*A DePuy 12/14 head must be used.* Clean and dry the stem taper carefully to remove any particulate debris. Place the femoral head onto the taper and lightly tap it (especially if a ceramic head is used) using the head impactor. Ensure bearing surfaces are clean and finally reduce the hip.
## Sizing Information

### STANDARD OFFSET – COLLARLESS/COLLARED

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<th>Offset (mm) (C)</th>
<th>Neck Length (mm) (D)</th>
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#### HIGH OFFSET – CEMENTED

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*Note: All measurements are based on a 28 mm +5.0 ARTICUL/EZE head.*
## Implants

### CORAIL Standard Offset Stem (Collarless)
- 3L92507  CORAIL Size 8
- 3L92509  CORAIL Size 9
- 3L92510  CORAIL Size 10
- 3L92511  CORAIL Size 11
- 3L92512  CORAIL Size 12
- 3L92513  CORAIL Size 13
- 3L92514  CORAIL Size 14
- 3L92515  CORAIL Size 15
- 3L92516  CORAIL Size 16
- 3L92518  CORAIL Size 18
- 3L92520  CORAIL Size 20

### CORAIL Standard Offset Stem (Collared)
- 3L92498  CORAIL Size 8
- 3L92499  CORAIL Size 9
- 3L92500  CORAIL Size 10
- 3L92501  CORAIL Size 11
- 3L92502  CORAIL Size 12
- 3L92503  CORAIL Size 13
- 3L92504  CORAIL Size 14
- 3L92505  CORAIL Size 15
- 3L92506  CORAIL Size 16
- 3L92508  CORAIL Size 18
- 3L92521  CORAIL Size 20

### CORAIL High Offset Stem (Collarless)
- L20309  CORAIL Size 9
- L20310  CORAIL Size 10
- L20311  CORAIL Size 11
- L20312  CORAIL Size 12
- L20313  CORAIL Size 13
- L20314  CORAIL Size 14
- L20315  CORAIL Size 15
- L20316  CORAIL Size 16
- L20318  CORAIL Size 18
- L20320  CORAIL Size 20

### CORAIL Coxa Vara High Offset Stem (Collared)
- 3L93709  CORAIL Size 9
- 3L93710  CORAIL Size 10
- 3L93711  CORAIL Size 11
- 3L93712  CORAIL Size 12
- 3L93713  CORAIL Size 13
- 3L93714  CORAIL Size 14
- 3L93715  CORAIL Size 15
- 3L93716  CORAIL Size 16
- 3L93718  CORAIL Size 18
- 3L93720  CORAIL Size 20

### CORAIL Cemented Standard Offset
- L96408  CORAIL Cemented Size 8
- L96409  CORAIL Cemented Size 9
- L96410  CORAIL Cemented Size 10
- L96411  CORAIL Cemented Size 11
- L96412  CORAIL Cemented Size 12
- L96413  CORAIL Cemented Size 13
- L96414  CORAIL Cemented Size 14
- L96415  CORAIL Cemented Size 15
- L96416  CORAIL Cemented Size 16
- L96418  CORAIL Cemented Size 18
- L96420  CORAIL Cemented Size 20

### CORAIL Cemented High Offset
- L96509  CORAIL Cemented Size 9
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- L96512  CORAIL Cemented Size 12
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- L96518  CORAIL Cemented Size 18
- L96520  CORAIL Cemented Size 20

### Standard Dysplasic CORAIL Stem
- L20106  K6S

### CORAIL Stem with Trochanteric Base
- L20006  K6A
Ordering Information

Implants

Femoral Heads

**ARTICUL/EZE BIOLOX® delta**
- 1365-28-310  28 mm +1.5
- 1365-28-320  28 mm +5
- 1365-28-330  28 mm +8.5
- 1365-32-310  32 mm +1
- 1365-32-320  32 mm +5
- 1365-32-330  32 mm +9
- 1365-36-310  36 mm +1.5
- 1365-36-320  36 mm +5
- 1365-36-330  36 mm +8.5
- 1365-36-340  36 mm +12

**ARTICUL/EZE ULTAmET™**
- 1365-11-500  28 mm +1.5
- 1365-12-500  28 mm +5
- 1365-13-500  28 mm +8.5
- 1365-50-000  36 mm -2
- 1365-51-000  36 mm +1.5
- 1365-52-000  36 mm +5
- 1365-53-000  36 mm +8.5
- 1365-54-000  36 mm +12
- 1365-55-000  36 mm +15.5
- 1365-04-000  40 mm -2
- 1365-05-000  40 mm +1.5
- 1365-06-000  40 mm +5
- 1365-07-000  40 mm +8.5
- 1365-08-000  40 mm +12
- 1365-09-000  40 mm +15.5
- 1365-60-000  44 mm -2
- 1365-61-000  44 mm +1.5
- 1365-62-000  44 mm +5
- 1365-63-000  44 mm +8.5
- 1365-64-000  44 mm +12
- 1365-65-000  44 mm +15.5

All 12/14 heads available in the DePuy portfolio are compatible with the CORAIL Revision Stem with a maximum offset of 13 mm:

- “Classical” heads: all 12/14 ARTICUL/EZE, 12/14 CoCr, 12/14 BIOLOX femoral heads, aSPHERE ARTICUL/EZE 12/14

- In case of ceramic head revision, BIOLOX delta TS heads should be used, as these are designed for revision of BIOLOX ARTICUL/EZE heads.

Core Instrumentation

- CONTK2  Sterilisation Case
- L20500  Base Aluminium Basket
- L20501  Bottom Thermoformed Tray
- L20502  Middle Thermoformed Tray
- L20503  Top Thermoformed Tray
- L20504  Top Basket
- L20408  Broach 8
- L20409  Broach 9
- L20410  Broach 10
- L20411  Broach 11
- L20412  Broach 12
- L20413  Broach 13
- L20414  Broach 14
- L20415  Broach 15
- L20416  Broach 16
- L20418  Broach 18
- L20420  Broach 20

**ARTICUL/EZE Trial Head**
- 2530-81-000  28 mm +1.5
- 2530-82-000  28 mm +5
- 2530-83-000  28 mm +8.5
- 2530-84-000  28 mm +12
- 2530-85-000  28 mm +15.5
- 2530-91-000  32 mm +1
- 2530-92-000  32 mm +5
- 2530-93-000  32 mm +9
- 2530-94-000  32 mm +13
- 2530-95-000  32 mm +17
- 2531-50-000  36 mm -2
- 2531-51-000  36 mm +1.5
- 2531-52-000  36 mm +5
- 2531-53-000  36 mm +8.5
- 2531-54-000  36 mm +12
- 2531-55-000  36 mm +15.5
- 2531-04-000  40 mm -2
- 2531-05-000  40 mm +1.5
- 2531-06-000  40 mm +5
- 2531-07-000  40 mm +8.5
- 2531-08-000  40 mm +12
- 2531-09-000  40 mm +15.5
- 2531-60-000  44 mm -2
- 2531-61-000  44 mm +1.5
- 2531-62-000  44 mm +5
- 2531-63-000  44 mm +8.5
- 2531-64-000  44 mm +12
- 2531-65-000  44 mm +15.5
### Ordering Information

#### Core Instrumentation
- L20431 Standard Offset Neck Segment
- L20432 Coxa Vara Neck Segment
- L20433 High Offset Neck Segment
- 2570-04-200 Calcar Mill Large
- 2570-04-100 Calcar Mill Small
- 2598-07-570 Positioner Inserter
- 2570-05-100 Stem Impactor
- 2001-65-000 Head Impactor
- 9653-88-000 Anteversion Axis
- L20440 Neck Resection Guide
- L93606 Bone Tamp
- L93205 Bone Impactor
- 2002-31-000 Osteotome
- 9522-11-500 Curved Broach Handle

#### Optional Instruments
- 2598-07-350 Universal Anterior Broach Handle, Left
- 2598-07-360 Universal Anterior Broach Handle, Right
- 9522-10-500F Straight Broach Handle
- 9522-12-500F Extra Curved Broach Handle
- 2598-07-460 Universal Stem Inserter Handle
- 2598-07-440 Curved Inserter Shaft (CORAIL/TRI-LOCK®)
- 9400-80-007 MI Calcar Reamer Small
- L20464 CORAIL Dysplasia Tray

#### DDH – Size 6 Instrumentation
- L20465 CORAIL Dysplasia Tray Cover
- L20462 Trial stem K6S
- L20463 Trial stem K6A
- L20461 Monobloc Broach for stem K6S
- L20460 Monobloc Broach for stem K6A

#### Cementing Instrumentation

##### Cement Restructor Kit
- 5460-02-000 Cement Restructor Inserter
- 5460-30-000 Cement Restructor Trial 1
- 5460-32-000 Cement Restructor Trial 2
- 5460-34-000 Cement Restructor Trial 3
- 5460-36-000 Cement Restructor Trial 4
- 5460-38-000 Cement Restructor Trial 5
- 5460-40-000 Cement Restructor Trial 6
- 5460-42-000 Cement Restructor Trial 7

##### DePuy Bone Cements
- 3092040 SMARTSET HV Bone Cement 40g
- 3095040 SMARTSET GHV Gentamicin Bone Cement 40g

##### CEMVAC Vacuum Mixing System

#### Hardware
- 831401 DePuy Multi-Pressure Vacuum Pump
- 831202 Syringe Holder
- 831205 CEMVAC 1 Piece Gun
- 3210016 Nozzle Cutter

#### Disposables
- 831215 Single Syringe Set (Box 20 x 1 single sterile pack)
- 831220 Double Syringe Set (Box 10 x 2 double sterile pack)
- 831230 Revision Nozzle (8.5 mm x 5)
- 831231 Revision Nozzle (6.5 mm x 5)
- 831234 Nozzle Adaptor 90 Degree (x 5)
- 3206005 Standard Femoral Pressuriser (x 5)
- 3206002 Wedge Femoral Pressuriser Large (x 5)

#### Pre-operative Templates
- CALQ400 X-ray Templates (100%)
- CALQ415 X-ray Templates (115%)
- CALQ420 X-ray Templates (120%)

##### Dysplasia
- CALQ854 Set of Dysplasia Templates (120%)

##### Digital Templates
The availability of digital templates depends on DePuy International’s agreement with the vendors.

Please contact DePuy International for more information.

#### DNIs
- 23L92501 DNI CORAIL Standard with Collar Size 11 HA
- 23L92521 DNI CORAIL Standard with Collar Size 20 HA
- 23L92512 DNI CORAIL Standard Size 12 HA
- 23L93711 DNI CORAIL Coxa Vara Size 11 HA
- 23L92511 DNI CORAIL Standard Size 11 HA
- 2L20311 DNI CORAIL High Offset Size 11 HA
- 2L20066 DNI CORAIL Dysplasia with Trochanteric Base Size 6 HA
- 2L20106 DNI CORAIL Dysplasia Size 6 HA