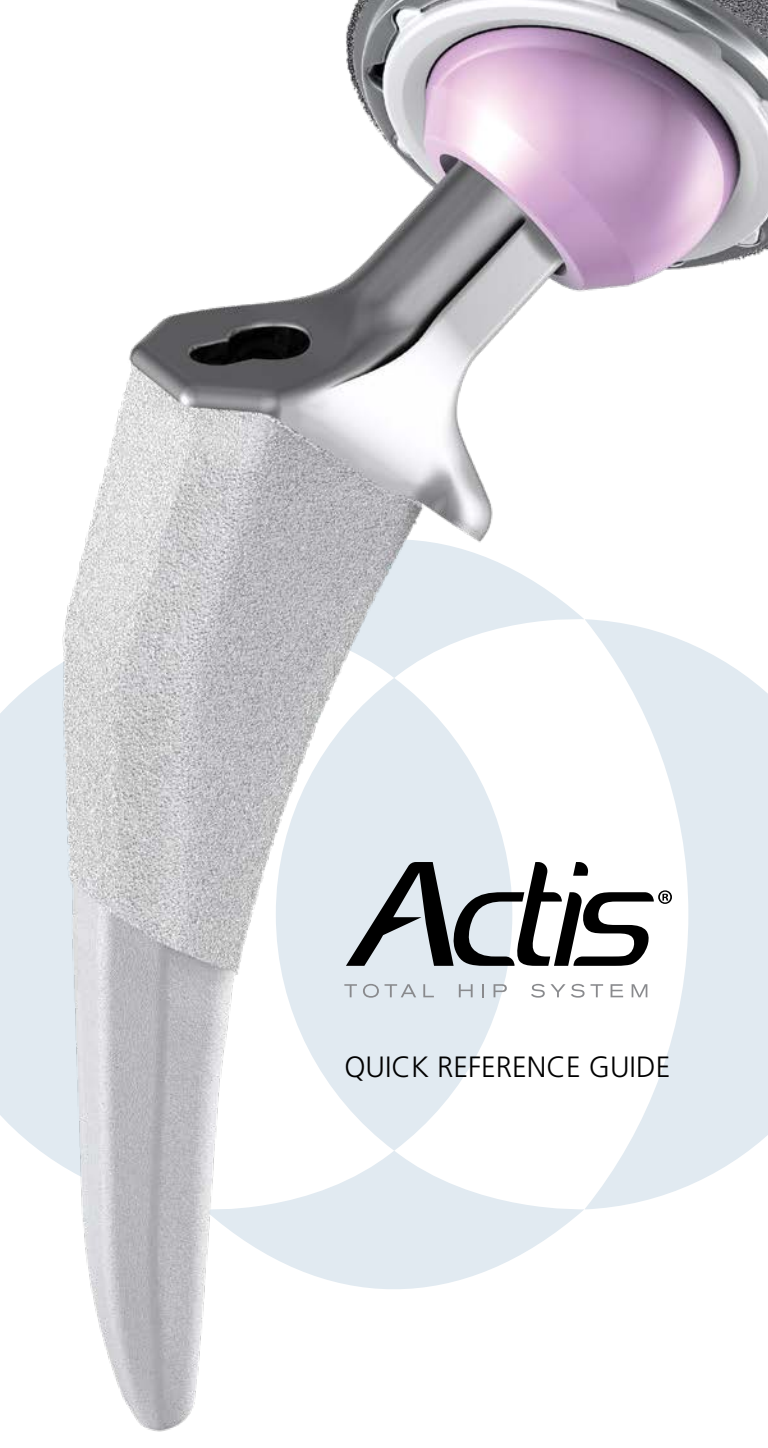


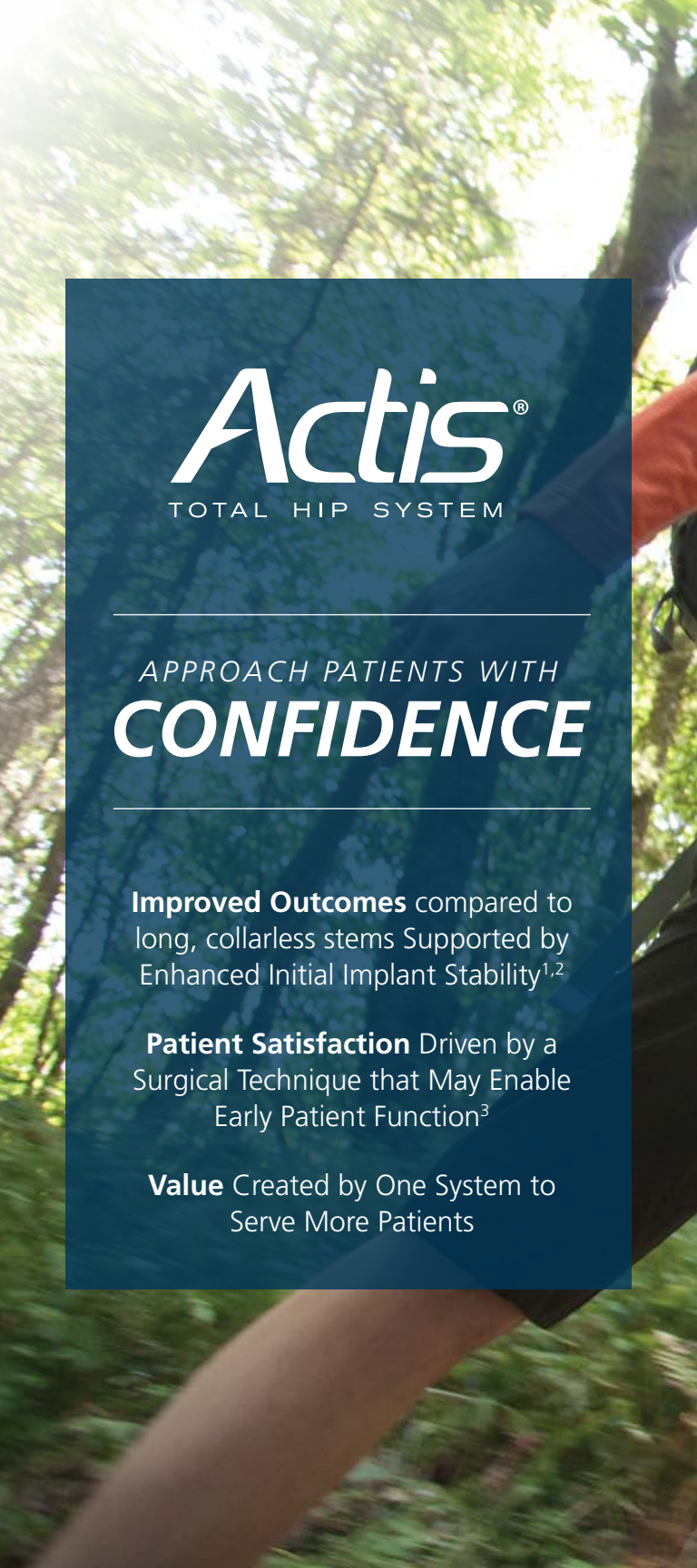
Actis®

TOTAL HIP SYSTEM

QUICK REFERENCE GUIDE

DePuy Synthes

PART OF THE Johnson & Johnson FAMILY OF COMPANIES



Actis®

TOTAL HIP SYSTEM

APPROACH PATIENTS WITH

CONFIDENCE

Improved Outcomes compared to long, collarless stems Supported by Enhanced Initial Implant Stability[1,2]

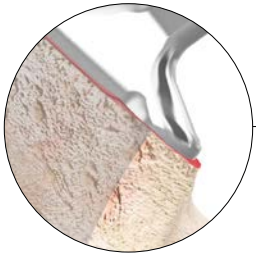
Patient Satisfaction Driven by a Surgical Technique that May Enable Early Patient Function[3]

Value Created by One System to Serve More Patients

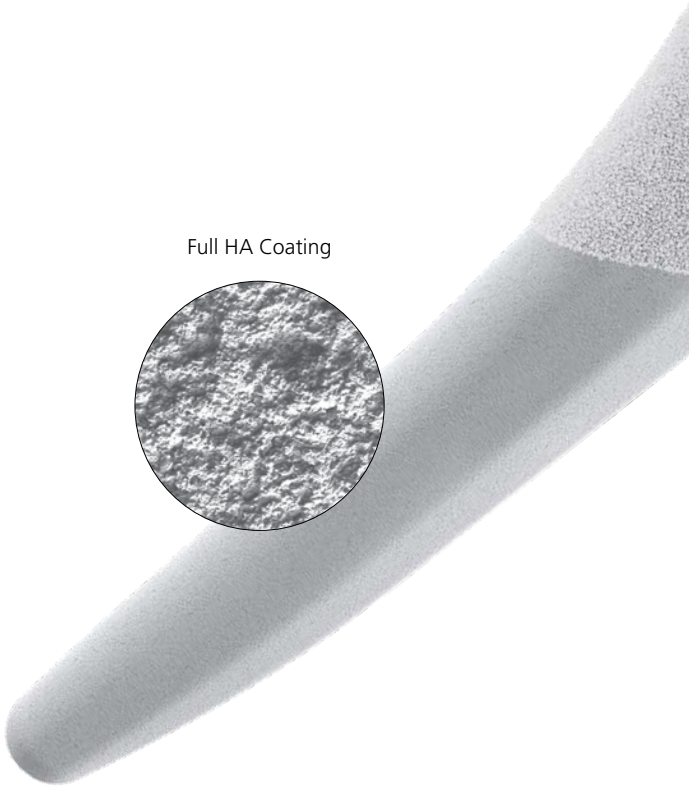
DESIGN FEATURES

Improved Outcomes compared to long, collarless stems Supported by Enhanced Initial Implant Stability[1,2]

The ACTIS® Hip System has features, such as a medial collar and triple taper geometry, that have been shown to improve primary stability of the stem while also offering solutions for a broader range of patient anatomies.



Medial Collar



Full HA Coating

Variable Triple-
Tapered Geometry

Proximal DUOFIX® Coating

SIMPLE TECHNIQUE

STEP 1
Neck Osteotomy

Neck resection guide designed for use with fluoroscopy.

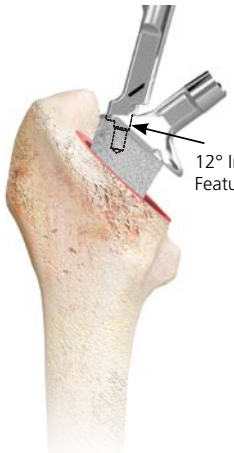
STEP 2
Femoral Canal Preparation

When unique femoral morphologies are encountered, flexible distal reamers are available.

Hybrid broach with compaction broach pattern on the Anterior/ Posterior sides and extraction teeth on the Medial/Lateral sides of the broach.

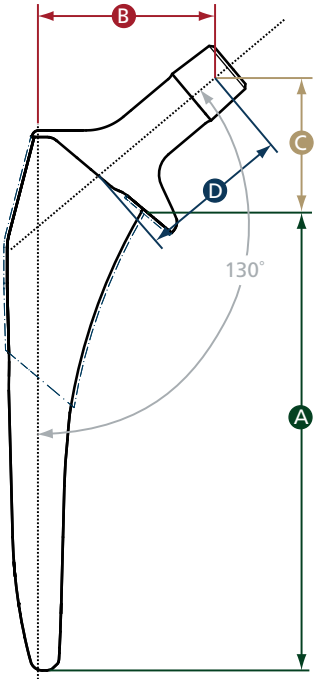
STEP 3
Offset Selection & Head Trialing

STEP 4
Femoral Component Insertion



See surgical technique for more details.

TECHNICAL SPECS



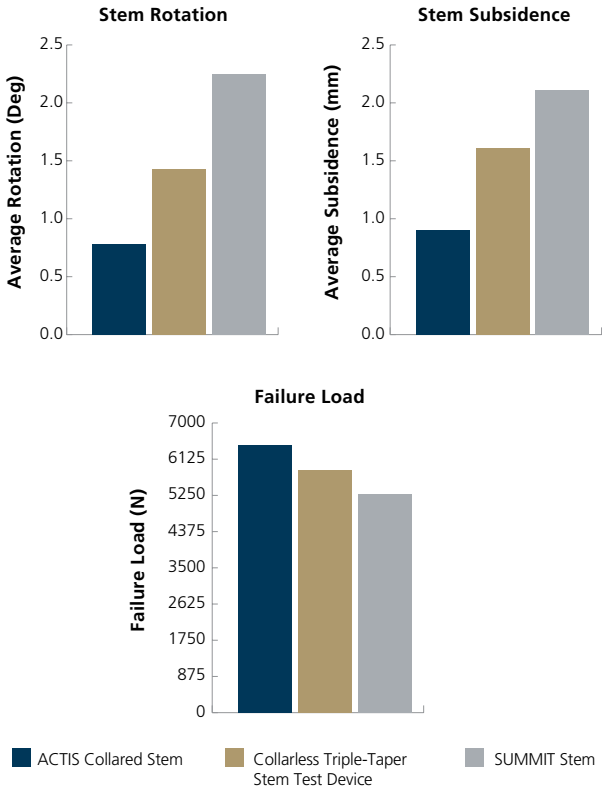
Direct Lateralization
When moving from stem sizes 0 to 3, you gain 6 mm of direct lateralization. You gain 8 mm of direct lateralization in moving to a High Offset stem in sizes 4 to 12.

Size	A Stem Length (mm)	B Offset with Head (mm)						C Leg Adjustment Length with Head (mm)						D Neck Length with Head (mm)					
		-2	+1.5	+5	+8.5	+12	+15.5	-2	+1.5	+5	+8.5	+12	+15.5	-2	+1.5	+5	+8.5	+12	+15.5
0 Std.	95	31	34	36	39	42	*	23	25	27	30	32	*	23	27	30	34	37	*
0 High	95	37	40	42	45	48	*	23	25	27	30	32	*	27	31	34	38	41	*
1 Std.	97	31	34	36	39	42	44	23	25	27	30	32	34	23	27	30	34	37	41
1 High	97	37	40	42	45	48	50	23	25	27	30	32	34	27	31	34	38	41	45
2 Std.	99	33	36	38	41	44	46	24	26	28	31	33	35	25	28	32	35	39	42
2 High	99	39	42	44	47	50	52	24	26	28	31	33	35	29	32	36	39	43	46
3 Std.	101	33	36	38	41	44	46	25	27	29	32	34	36	25	28	32	35	39	42
3 High	101	39	42	44	47	50	52	25	27	29	32	34	36	29	32	36	39	43	46
4 Std.	103	34	37	40	42	45	48	26	28	30	33	35	37	26	30	33	37	40	44
4 High	103	42	45	48	50	53	56	26	28	30	33	35	37	32	35	39	42	46	49
5 Std.	105	34	37	40	42	45	48	26	29	31	33	35	38	26	30	33	37	40	44
5 High	105	42	45	48	50	53	56	26	29	31	33	35	38	32	35	39	42	46	49
6 Std.	107	36	39	42	44	47	50	28	30	32	34	37	39	28	32	35	39	42	46
6 High	107	44	47	50	52	55	58	28	30	32	34	37	39	33	37	40	44	47	51
7 Std.	109	36	39	42	44	47	50	28	31	33	35	37	40	28	32	35	39	42	46
7 High	109	44	47	50	52	55	58	28	31	33	35	37	40	33	37	40	44	47	51
8 Std.	111	38	41	44	46	49	52	30	32	34	36	39	41	30	34	37	41	44	48
8 High	111	46	49	52	54	57	60	30	32	34	36	39	41	36	39	43	46	50	53
9 Std.	113	38	41	44	46	49	52	30	33	35	37	39	42	30	34	37	41	44	48
9 High	113	46	49	52	54	57	60	30	33	35	37	39	42	36	39	43	46	50	53
10 Std.	115	40	43	46	48	51	54	32	34	36	38	41	43	32	35	39	42	46	49
10 High	115	48	51	54	56	59	62	32	34	36	38	41	43	37	41	44	48	51	55
11 Std.	117	40	43	46	48	51	54	32	34	36	38	41	43	32	35	39	42	46	49
11 High	117	48	51	54	56	59	62	32	34	36	38	41	43	37	41	44	48	51	55
12 Std.	119	40	43	46	48	51	54	32	34	36	38	41	43	32	35	39	42	46	49
12 High	119	48	51	54	56	59	62	32	34	36	38	41	43	37	41	44	48	51	55

FAQS

1. What are the potential benefits of a collar on a press-fit stem?

Extensive lab testing performed at the Institute of Biomechanics TUHH in Hamburg, Germany demonstrated that the natural loading of the femur with a medial collar provides greater primary stability, with reduced micromotion and subsidence when compared to a collarless triple-taper stem test device and the SUMMIT® Stem. Additionally, the amount of force necessary to cause a femur fracture was higher for the ACTIS Stem than that of a biomechanically similar test device without a collar, which suggests the ACTIS Stem may potentially reduce the risk of femur fractures in patients with total hip replacements. The ACTIS Stem surgeon design team has extensive clinical experience with tissue-sparing total hip approaches, such as the anterior approach, and uses collared press-fit stems[1].



2. Why doesn't the ACTIS Stem feature ZTT Steps?

ZTT Steps are designed to help transfer shear forces through the implant into the femur by compression. This result can also be achieved with a medial collar, as featured on the ACTIS Stem. Therefore the surgeon design team did not think that both features were necessary.

3. How does the length of the ACTIS Stem compare to other DePuy Synthes Companies Hip Stems?

The ACTIS Stem is the same length as the TRI-LOCK® Bone Preservation Stem (BPS) Stem. For example, the ACTIS Stem size 1 is 97mm in length, the same as the TRI-LOCK BPS Stem. Each size grows progressively by 2mm.

	SIZE	0	1	2	3	4	5	6	7	8	9	10	11	12
LENGTH	ACTIS	95	97	99	101	103	105	107	109	111	113	115	117	119
	TRI-LOCK	95	97	99	101	103	105	107	109	111	113	115	117	119

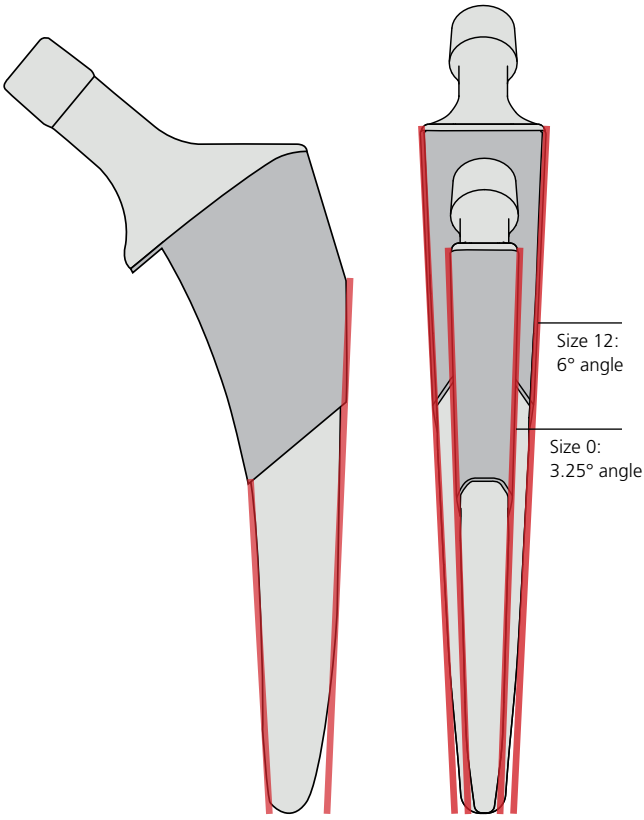
4. How does the neck geometry and biomechanics of the ACTIS Stem compare to other DePuy Synthes Companies Hip Stems?

The ACTIS Stem has nearly the same neck geometry and biomechanics as the TRILOCK BPS Hip System, which originated from the SUMMIT Hip System. The ACTIS Stem features a 130 degree neck shaft angle, progressive dual offset, and direct lateralization with the high offset option.

High Standard

5. What is the AP and ML taper angle for the ACTIS Stem?

The AP taper angle, visible in the lateral view, of the ACTIS Stem is between 3 and 6 degrees. To allow broach-only femoral preparation, the A/P taper angle grows by 0.25 degrees per size to maintain a more consistent ratio of proximal fill. The ML taper, visible in the AP view, remains a consistent 3 degrees among all sizes.

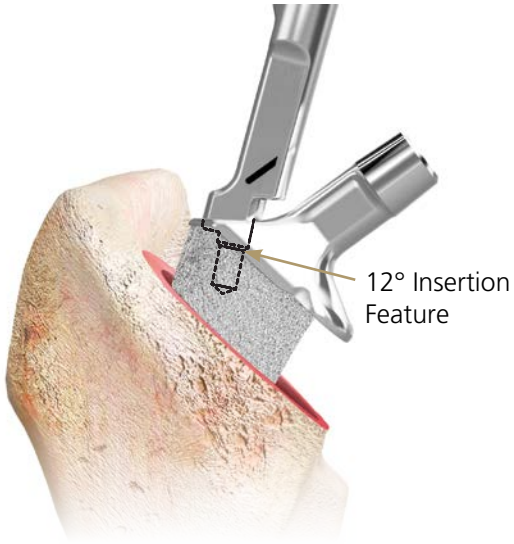


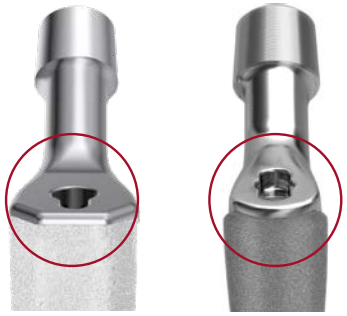
M/L taper angle is consistent for all sizes at 3 degrees

A/P taper angle grows by 0.25 degrees per size.

6. Can I use the stem inserter from the TSS Core Kit?

The ACTIS Stem has a 12 degree angled insertion feature, to potentially avoid soft tissue and bony impingement. In addition, the stem insertion/extraction feature is a different shape compared to TRI-LOCK, SUMMIT, and CORAIL® Stems. As a result, the only stem inserter that can be used across all primary DePuy Synthes Companies stems is the TSS bullet tip inserter. Additionally, a dedicated retaining and non-retaining stem inserter with both straight and curved options is found in the ACTIS Hip Instrument Set.





ACTIS Stem TRI-LOCK BPS Stem

NOTE: The ACTIS Stem insertion/extraction feature is a different shape compared to TRI-LOCK, SUMMIT, and CORAIL Stems.

ORDERING INFORMATION

FEMORAL STEMS

Standard Offset	Description	Size
101011005	ACTIS COLLARED STD	SIZE 0
101011010	ACTIS COLLARED STD	SIZE 1
101011020	ACTIS COLLARED STD	SIZE 2
101011030	ACTIS COLLARED STD	SIZE 3
101011040	ACTIS COLLARED STD	SIZE 4
101011050	ACTIS COLLARED STD	SIZE 5
101011060	ACTIS COLLARED STD	SIZE 6
101011070	ACTIS COLLARED STD	SIZE 7
101011080	ACTIS COLLARED STD	SIZE 8
101011090	ACTIS COLLARED STD	SIZE 9
101011100	ACTIS COLLARED STD	SIZE 10
101011110	ACTIS COLLARED STD	SIZE 11
101011120	ACTIS COLLARED STD	SIZE 12

High Offset	Description	Size
101012005	ACTIS COLLARED HIGH	SIZE 0
101012010	ACTIS COLLARED HIGH	SIZE 1
101012020	ACTIS COLLARED HIGH	SIZE 2
101012030	ACTIS COLLARED HIGH	SIZE 3
101012040	ACTIS COLLARED HIGH	SIZE 4
101012050	ACTIS COLLARED HIGH	SIZE 5
101012060	ACTIS COLLARED HIGH	SIZE 6
101012070	ACTIS COLLARED HIGH	SIZE 7
101012080	ACTIS COLLARED HIGH	SIZE 8
101012090	ACTIS COLLARED HIGH	SIZE 9
101012100	ACTIS COLLARED HIGH	SIZE 10
101012110	ACTIS COLLARED HIGH	SIZE 11
101012120	ACTIS COLLARED HIGH	SIZE 12

CASES

ACTIS CORE CASE BASE: 2010-04-500
DEPUY SYNTHES LID: 2545-01-700

2598-07-530	MODULAR BOX OSTEOTOME
85-3927	FEMORAL RASP
2598-07-460	UNIVERSAL INSERTER HANDLE
2010-07-110	ACTIS STRAIGHT INSERTR SHAFT
2010-07-120	ACTIS CURVED INSERTER SHAFT
2598-07-435	BULLET TIP INSERTER SHAFT
2598-07-550	EXTRA CURVED BROACH HANDLE (2 broach handles)

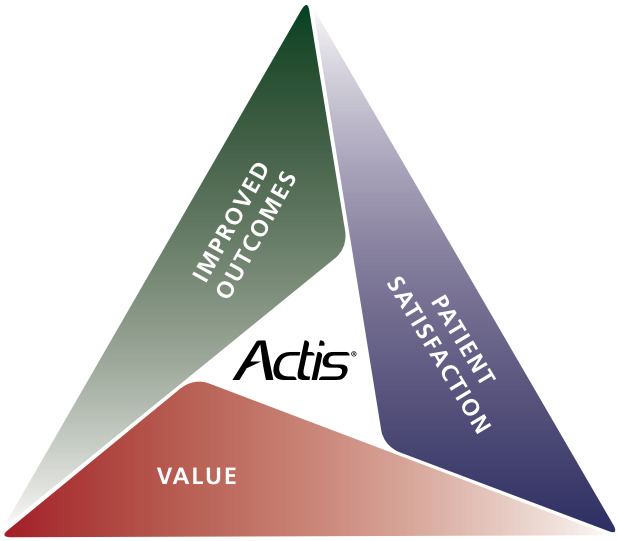
ACTIS BROACH CASE BASE: 2010-04-200
DEPUY SYNTHES LID: 2545-01-700

2010-01-002	ACTIS BROACH STARTER
2010-01-005	ACTIS BROACH SZ 0
2010-01-010	ACTIS BROACH SZ 1
2010-01-020	ACTIS BROACH SZ 2
2010-01-030	ACTIS BROACH SZ 3
2010-01-040	ACTIS BROACH SZ 4
2010-01-050	ACTIS BROACH SZ 5
2010-01-060	ACTIS BROACH SZ 6
2010-01-070	ACTIS BROACH SZ 7
2010-01-080	ACTIS BROACH SZ 8
2010-01-090	ACTIS BROACH SZ 9
2010-01-100	ACTIS BROACH SZ 10
2010-01-110	ACTIS BROACH SZ 11
2010-01-120	ACTIS BROACH SZ 12
2010-02-100	ACTIS STD NK SZ0/1
2010-02-200	ACTIS STD NK SZ2/3
2010-02-300	ACTIS STD NK SZ4/5
2010-02-400	ACTIS STD NK SZ6/7
2010-02-500	ACTIS STD NK SZ8/9
2010-02-600	ACTIS STD NK SZ10/11/12
2010-02-150	ACTIS HIGH NK SZ0/1
2010-02-250	ACTIS HIGH NK SZ2/3
2010-02-350	ACTIS HIGH NK SZ4/5
2010-02-450	ACTIS HIGH NK SZ6/7
2010-02-550	ACTIS HIGH NK SZ8/9
2010-02-650	ACTIS HIGH NK SZ10/11/12
2012-06-100	NECK RESECTION GUIDE

FEMORAL HEAD TRIALS

ACTIS FLEX REAMER CASE BASE: 2010-04-600
DEPUY SYNTHES LID: 2545-01-700

2011-01-210	ACTIS REAMER SZ 0 AND 1
2011-01-220	ACTIS REAMER SZ 2 AND 3
2011-01-230	ACTIS REAMER SZ 4 AND 5
2011-01-240	ACTIS REAMER SZ 6 AND 7
2011-01-250	ACTIS REAMER SZ 8 AND 9
2011-01-260	ACTIS REAMER SZ 10 AND 11
2011-01-270	ACTIS REAMER SZ 12
2010-03-100	AA NECK RESECTION GUIDE, LEFT
2010-03-105	AA NECK RESECTION GUIDE, RIGHT
2010-07-100	ACTIS RETAINING STEM INSERTER
2001-42-000	T-HANDLE



The ACTIS Total Hip System can help you achieve your surgery center's Triple Aim goals.

1. Hamburg University Actis Cadaveric Stability Testing. Data on File (Adaptiv #103156243).
2. Demey, G., Fary, C., Lustig, S., et. al. "Does a Collar Improve the Immediate Stability of Uncemented Femoral Hip Stems in Total Hip Arthroplasty? A Bilateral Comparative Cadaver Study." JOA, 2011 26(8), pp.1549-1555.
3. Barrett, W., et al. "Prospective Randomized Study of Direct Anterior vs Postero-Lateral Approach for Total Hip Arthroplasty. JOA, 2013 28, pp 1634-1638.

DePuy Synthes *People inspired*™

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