

Triathlon® AS-1

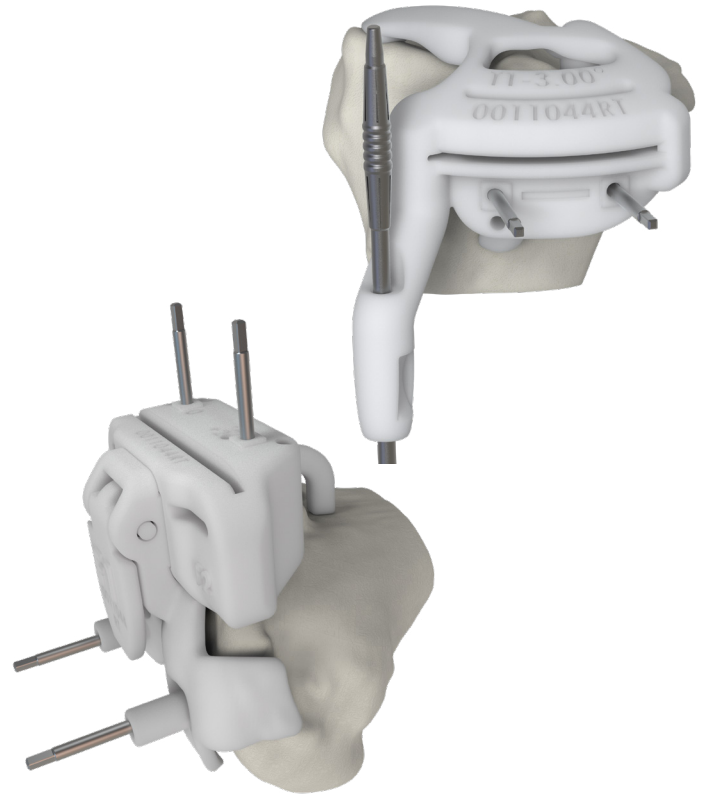
Triathlon AS-1 is a CT-based, patient-specific system that is designed to simplify the total knee arthroplasty (TKA) procedure¹ for a comprehensive ambulatory surgery solution.

Combined with our Triathlon Knee implants, Triathlon AS-1 is designed to streamline TKA before, during and after surgery,¹ allowing surgeons the ability to take greater control at their site of care.

CT-based planning

Triathlon AS-1 patient-specific guides are designed utilizing our CT-based planning expertise with Triathlon. Your patient's CT scan is processed through a proprietary planning algorithm which, paired with your surgical sizing preferences, produces an individualized preoperative plan and 3D-printed cutting guides specific to your patient's anatomy.

With our planning algorithm, we can determine implant sizing and accurate positioning.¹ As demonstrated in a cadaveric model, implant positional accuracy to plan with Triathlon AS-1 was within 1.7° for overall limb alignment.¹



Surgical plan

Serial Number: **SNO**
 Patient Initials: **ZZ**
 Birth Year: **YYYY**
 Knee: **Right**

Triathlon® AS-1 Surgical Plan

Manufactured by **Stryker**

Femoral Size: 3	Tibial Size: 4
Femoral Type: PS chisel cemented	Insert Type: PS
Pre-Planned external rotation from the TEA Axis: 0°	Baseplate Type: Cement Universal
TEA to PCA angle: 2.9°	Posterior Slope: 0°
Distal Cut Angle to Mechanical Axis: Neutral 0°	Proximal Cut Angle to Mechanical Axis: Neutral 0°
Femoral Resections	Tibial Resections
Medial Distal: 8	Medial: 5.7
Lateral Distal: 5.9	Lateral: 7
Medial Posterior: 8	
Lateral Posterior: 5.6	

Notes: Bone resection values do not include cartilage thickness, osteophyte or account for bone lost to saw blade cut. Bone images on this page are depicted without osteophytes. All resection values in mm. Patient specific images and values are intended as reference materials and are not a substitute for intraoperative evaluation by a surgeon. A surgeon must always rely on his or her own professional clinical judgment when deciding whether to use a particular product to treat a particular patient, including confirming that the images and values provided accurately reflect patient anatomy. The manufacturer and/or distributor does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before using it in surgery. US Federal law restricts the use of this device to sale to or on the order of a physician. A surgeon must always refer to the package insert, product label and instructions for use before using any medical device. Products may not be available in all markets because product availability is subject to the regulatory and/or medical practices in individual markets. The manufacturer and/or distributor disclaims any liability arising from the use of Triathlon AS-1 instrumentation contrary to the Instructions for Use, the Surgical Plan, and/or the Surgical Technique Guide. Please contact your Stryker representative if you have questions about the availability of products in your area. Manufactured by Conformis, Inc.

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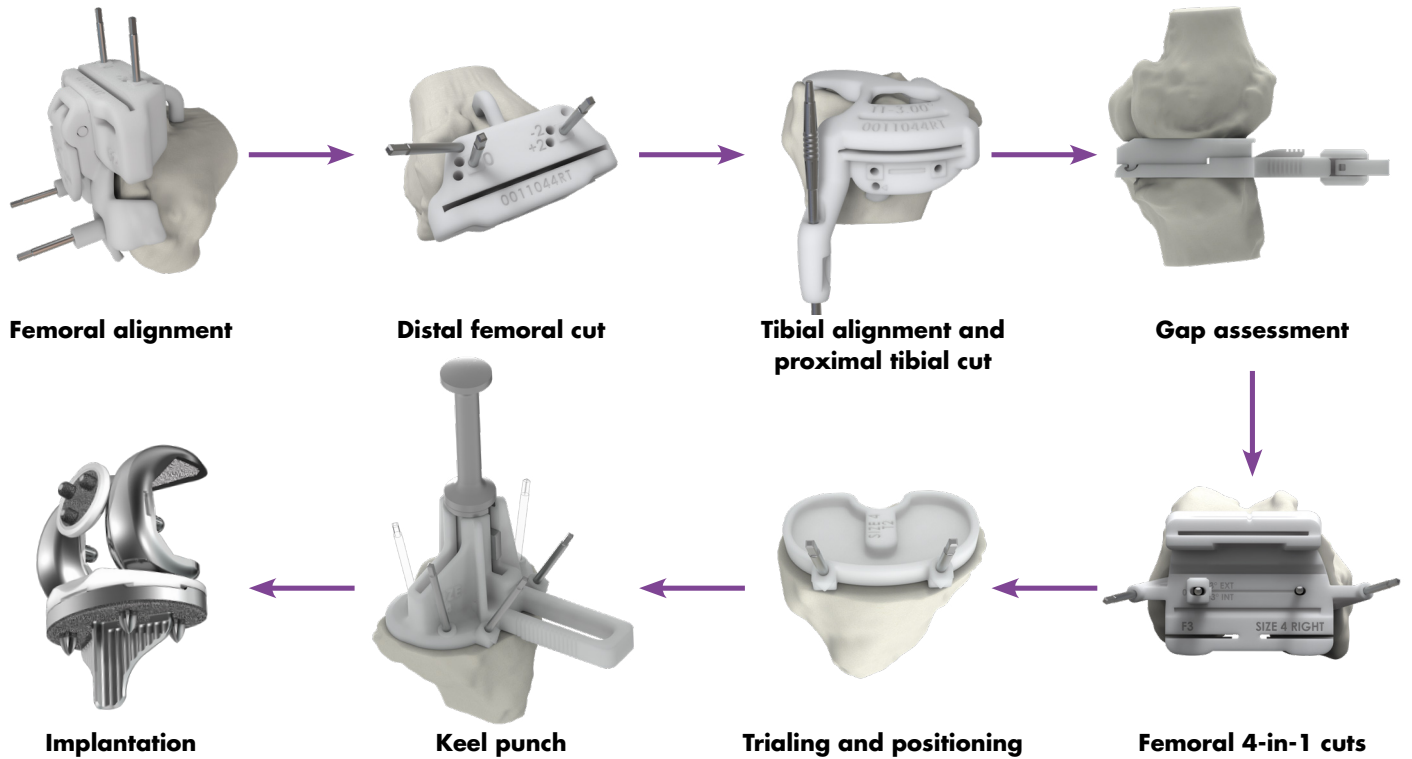
Triathlon® AS-1 Surgical Plan

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Notes: Bone resection values do not include cartilage thickness, osteophyte or account for bone lost to saw blade cut. Bone images on this page are depicted with osteophytes. The disposable patient specific guides are designed and produced to reference osteophyte for positioning. Do not remove osteophytes until resections are made. All resection values in mm.

Streamlined procedure

Triathlon AS-1 delivers an easy-to-follow workflow through the use of step-by-step 3D-printed cutting guides and trials.



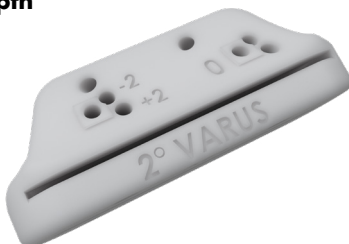
Intraoperative adjustability

The adjustability options available with Triathlon AS-1 allow you to fine-tune your cuts based on the intraoperative assessment of your patient's soft tissues:

Distal Femoral Cutting Guide with +/- 2mm of distal femoral resection depth



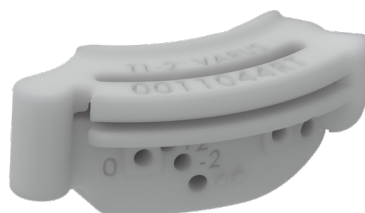
Femoral Varus/Valgus Guide with 2° varus or valgus adjustment and +/- 2mm of distal femoral resection depth



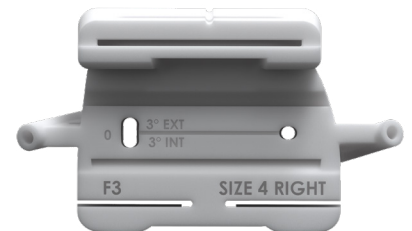
Tibial Adjustment Guide with +/- 2mm of proximal resection depth



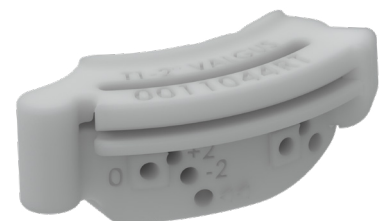
Tibial Varus Guide with 2° varus adjustment and +/- 2mm of proximal tibial resection depth



Femoral 4-in-1 Cutting Guide with up to 3° internal or external femoral rotation



Tibial Valgus Guide with 2° valgus adjustment and +/- 2mm of proximal tibial resection depth



One reusable instrument case

Triathlon AS-1 offers a streamlined set of single-use cutting guides and size-specific trials, so you can get down to one rigid container-compatible reusable instrument case. Compared to manual TKA, this reduction in instrumentation may offer you the following benefits:



Improved procedure and turnover time

- Triathlon AS-1 requires 16 fewer surgical steps than traditional manual TKA, a 33% reduction¹ that may save time in the OR.
- Studies using patient-specific guides have been shown to save up to 13 minutes of operative time and 90 minutes of sterile processing time.²⁻⁴



Reduced sterilization and storage burden

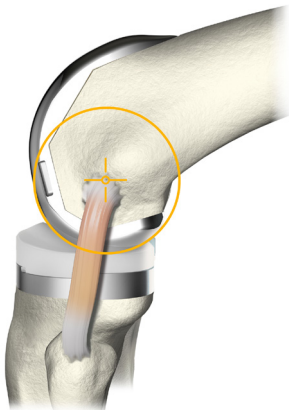
- The total number of reusable instrumentation cases may be reduced by as much as 88% with Triathlon AS-1,¹ which can help reduce cleaning and sterilization needs.
- In most cases,⁵ Triathlon AS-1 instruments and implants require 75% less storage space than traditional manual surgery,¹ a key benefit for sites with limited available space.



Reduced instrumentation weight

- Triathlon AS-1 reduces TKA instrument weight by up to 85%¹ compared to conventional manual trays, which may lead to less physical strain on staff.

Demonstrated implant performance



With over 15 years of use and more than 3 million implantations worldwide,⁵ Triathlon has a long clinical history. Studies and joint registries have shown that Triathlon offers stability,⁶⁻⁹ satisfaction¹⁰ and survivorship.¹¹⁻¹⁴

Triathlon's single radius is designed to restore the knee's single center of rotation during active flexion, where most motion occurs.¹⁵⁻¹⁶ This allows for constant ligament tension and stability in flexion.⁶⁻⁹

With Triathlon AS-1, you have access to our cementless Triathlon Tritanium technology, the latest evolution in the Triathlon knee portfolio. Triathlon Tritanium combines the kinematics of Triathlon with the latest in highly porous biologic fixation technology. Triathlon Tritanium has demonstrated:

- Excellent clinical outcomes at five years postoperative¹⁷⁻¹⁸
- Shorter OR time and no differences in blood loss, pain and early patient-reported outcome measures versus cemented Triathlon¹⁹



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Joint Replacement

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