



SENSOR-ASSISTED TKA

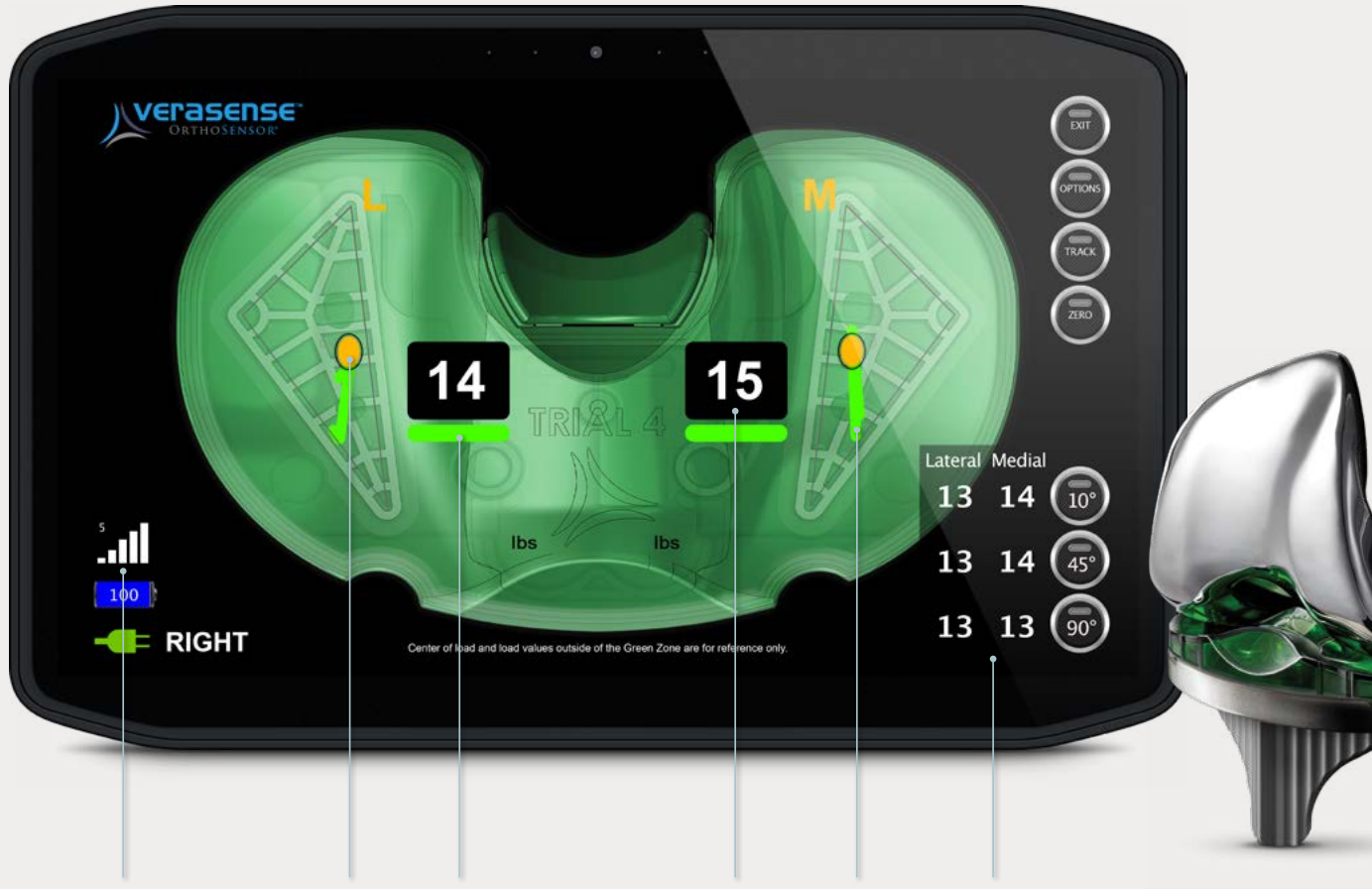


**stryker®**  
TRIATHLON®

SIMPLIFYING SOFT TISSUE BALANCE

# VERASENSE SENSOR-ASSISTED TECHNOLOGY

VERASENSE™ Sensor-Assisted Total Knee Arthroplasty offers proven clinical and economic advantages for surgeons and hospitals.



WIRELESS COMMUNICATION

CENTER OF LOAD INDICATORS\*

VERASENSE CALIBRATION INDICATORS

LOAD VALUES

KINETIC TRACKING\*

POSITIONAL DATA CAPTURE TABLE



BALANCED



UNBALANCED



\*Center of load, kinetic tracking and load values outside of the Green Zone are for reference only.

OrthoSensor's VERASENSE™ sensor technology is a disposable instrument that delivers evidence-based data wirelessly to an intra-operative monitor, enabling surgeons to perform real-time, quantified soft tissue balancing and implant positioning during TKA. As a result, patients whose knees have been balanced through the use of VERASENSE show statistically significant improvements in joint function, pain, activity level and patient satisfaction.<sup>1,2</sup> VERASENSE is the next evolution in Total Knee Arthroplasty.

A MULTI-CENTER RANDOMIZED CONTROLLED TRIAL PROVED THAT - **WITHOUT VERASENSE** - TKAs ARE ONLY BALANCED APPROXIMATELY **50%** OF THE TIME<sup>3</sup>

## CLINICAL AND ECONOMIC ADVANTAGES

### PROVEN RESULTS:

**98%** OF BALANCED PATIENTS REPORT BEING SATISFIED TO VERY SATISFIED **3 YEARS POST-OP**<sup>4</sup> 

VERASENSE PATIENTS REQUIRE LESS PT AND **67%** FEWER MUAs POST-OP<sup>5-7</sup>

DECREASED THE NEED FOR **ALL-COMPONENT REVISION** BY **88%** FACILITATING IMPLANT COST MITIGATION<sup>8</sup>

ALMOST **75%** LOWER RATE OF SOFT TISSUE BALANCE-RELATED **EARLY REVISION TKA (<2 YEARS)** COMPARED TO NATIONAL AVERAGES<sup>4,9-13</sup>

**2.6%**  UNITED STATES AVERAGE **0.7%**  VERASENSE MULTICENTER STUDY

## VERASENSE SENSOR-ASSISTED TKA

REAL-TIME QUANTIFIED SOFT TISSUE BALANCING — CONSISTENT OUTCOMES<sup>14-15</sup>

Easy-to-adopt: minimal-to-no change to surgical technique or workflow

Cost-effective, sterile, one-time use disposable



## VERASENSE FOR STRYKER IS AVAILABLE FOR THE TRIATHLON KNEE SYSTEM



- Gustke K, Golladay G, Jerry G, Roche MW, Elson LC, Anderson CR. Increased Patient Satisfaction After Total Knee Replacement Using Sensor-Guided Technology. *Bone Joint J.* 2014 Oct;96-B(10):1333-8.
- Gustke KA, Golladay GJ, Roche M, Elson L, Anderson C. Primary TKA patients with Quantifiably Balanced Soft-Tissue Achieve Significant Clinical Gains Sooner than Unbalanced Patients. *Adv Orthop.* 2014; 628695.
- VERASENSE Multicenter Randomized Controlled Trial. Pending Publication. Data on file at OrthoSensor, Inc.
- 2-Year, 3-Year Clinical Outcomes, OrthoSensor Multicenter Evaluation. Pending Publication. Data on file at OrthoSensor, Inc.
- Chow et al. The use of intraoperative sensors significantly increases the patient-reported rate of improvement in primary total knee arthroplasty. *Orthopedics* 2017.
- Geller JA, Lakra A, Murtaugh T. The Use of Electronic Sensor Device to Augment Ligament Balancing Leads to a Lower Rate of Arthrofibrosis after Total Knee Arthroplasty. *J Arthroplasty.* 2017 May; 32(5): 1502-1504.
- Golladay et al. Does a Balanced TKA Produce a More Forgotten Joint? ISTA / AAHS 2017.
- Leone W, Geller J, Chow J, Branovacki G, Mariani J, Golladay G, Meere P. Using Sensors to Evaluate Revision TKA: Treating the "Looks Good; Feels Bad" Knee. *EC Orthopaedics.* 3.5 (2016): 381-385.
- Bozic K, Kurtz S, Lau E, et al. The epidemiology of revision total knee arthroplasty in the United States. *Clin Orthop Relat Res.* 2010. 468: 45-51.
- Thiele K, Perka C, Matziolis G, Mayr HO, Sostheim M, Hube R. Current failure mechanisms after knee arthroplasty have changed: polyethylene wear is less common in revision surgery. *J Bone Joint Surg.* 2015; 97(9): 715-720.
- Lombardi AV, Berend KR, Adams JB. Why knee replacements fail in 2013: patient, surgeon, or implant? *Bone Joint J.* 2014;96-B(11 Suppl A): 101-104.
- Schroer WC, Berend KR, Lombardi AV, et al. Why are total knees failing today? Etiology of total knee revision in 2010 and 2011. *J Arthroplasty* 2013;28(8 Suppl):116-119.
- Sharkey PF, Lichstein PM, Shen C, et al. Why are total knee arthroplasties failing today—has anything changed after 10 years? *J Arthroplasty.* 2014;29(9):1774-1778.
- Roche M, Elson L, Anderson C. Dynamic Soft-Tissue Balancing in TKA. *Orthopedic Clinics of North America.* 2014 Apr; 45(2):157-65.
- Roche MW, Elson LC, Anderson CR. A Novel Technique Using Sensor-Based Technology To Evaluate Tibial Tray Rotation. *Orthopedics.* 2015 Mar 1;38(3).

Surgeons must always rely on one's own professional clinical judgment when deciding on whether to use a particular product for patient care. OrthoSensor does not dispense medical advice and recommends that surgeons be trained in the use of any particular product before surgical use. No portion of this should be redistributed, duplicated or disclosed without the express written consent of OrthoSensor, Inc. Information presented is intended to demonstrate the breadth of OrthoSensor product offerings. Surgeons must always refer to the package insert, product label and/or IFU before using any OrthoSensor product. OrthoSensor product may not be available in all markets because product availability is subject to the regulator and/or medical practices in individual markets. For additional product information, including indications, contraindications, warnings, precautions and potential adverse effects, see the package insert and OrthoSensor website. All trademarks herein are property of OrthoSensor, Inc. or its subsidiaries unless otherwise indicated. ©2018 OrthoSensor, Inc.



[www.OrthoSensor.com](http://www.OrthoSensor.com)

Tel +1 888.75.ORTHO (+1 888.756.7846) | +1 954.577.7770 | Fax +1 954.337.9222  
OrthoSensor, Inc. | 1855 Griffin Road, Suite A-310 | Dania Beach, FL 33004 USA