





#### Equinoxe<sup>®</sup> by the Numbers



### OUR RESULTS ARE OUR STRENGTH

Innovations that have improved the art of shoulder arthroplasty:



2011 2012

rTSA r glenoid augments

rTSA prosthesis design classification system<sup>4,5,8</sup> ASTM standard for rTSA glenoid loosening

2014

### 15,000+ Patient Database

Since 2004, the Equinoxe Shoulder System has both evolved and remained steadfast to its founding principles and design.

Over the last 16 years, we've worked toward creating the world's largest and most established single-shoulder prosthesis database. Our portfolio highlights the strength of this data and our perpetual pursuit of innovation.

Explore the numbers with us.

2015

Expanding the indications of rTSA with the Humeral Reconstruction Prosthesis to address proximal humeral bone loss 2016

- the first

platform

shoulder

navigation

system

**GPS** Shoulder VERASENSE™ Wireless Humeral Load Sensor for rTSA, in partnership with OrthoSensor (2020) the first commercially available load sensor in the shoulder

2020

Predict+®, in partnership with KenSci (2020) the first machine learning-based clinical decision support tool for the shoulder

Humeral Augmented Tray (2021) - the first rTSA to address posterior proximal humeral bone loss by facilitating metallic replacement of the tuberosity

2021

2022

Equinoxe Laser Cage Glenoid: the next generation cage glenoid

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By the Numbers

**U.K. & Australian** 

registries

9,136 aTSA/rTSAs

over 10 years

In addition to our database, the largest registries in the world also tell the Equinoxe story.

According to data from the U.K. and Australian registries, the Equinoxe Shoulder System demonstrates low rates of failure for both aTSA and rTSA designs over a 10-year period. In addition, there were zero reported revisions for poly wear or lysis.

# The value of shoulder replacement is increasing.<sup>2</sup>

Diving deep into our database, both aTSA and rTSA prostheses demonstrated positive clinical results over 15 years, irrespective of the year of implantation, in a longitudinal analysis.

This study also highlighted the economic factors impacting shoulder surgery. While Equinoxe implant prices continue to decrease, clinical outcomes are improving, highlighting the value of shoulder replacement (especially rTSA) despite the cost of adding new technologies like the cage glenoid, GPS shoulder navigation, and more.

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By the Numbers<sup>2</sup>

Equinoxe prices are decreasing, but clinical outcomes are improving

4,968 TSAs over 15 years

Purple: 46mm

Screw Navigation

Data from six high-volume clinical sites

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### **The Premier Glenoid Solution:** Equinoxe Cage Glenoid<sup>3</sup>

#### **EQUINOXE** By the Numbers

#### 1,802 aTSA glenoids

Lower revision, aseptic loosening and radiolucent lines for the cage glenoid Another study from our database explores our wide range of glenoid solutions. It demonstrates that our aTSA glenoid components are a reliable treatment option from short to long-term.

It also explores results between our peg, keel and cage glenoids to patients with cemented peg and keel glenoids. Our cage glenoid showed:

- Lower revision rates
- Lowest rate of aseptic loosening
- Significantly lower rates of radiolucent glenoid lines
- Significantly fewer complications and revisions

# **Next Generation** Cage Glenoid

Our original cage glenoid launched in 2011 and performed beyond the required ASTM testing standards for aTSA glenoids.<sup>4</sup> With our newest design, we went even further.

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The Laser Cage Glenoid went through extreme preclinical testing:<sup>5</sup>

- Cyclic testing was performed on a completely unsupported extra-large 16-degree augmented glenoid with a 5mm gap between the backside of the implant and the test fixture. The Laser Cage Glenoid withstood 200,000 cycles at 225lbs, well beyond the ASTM standard requirements for the number of cycles and implant seating.
- The Laser Cage Glenoid's bond strength between the metal cage/pegs and polyethylene was compared to the Legacy Cage Glenoid. Testing showed the Laser Cage Glenoid is 2X stronger in shear and 5X stronger in peg pull-off strength.

#### **EQUINOXE** By the Numbers<sup>5</sup>

Able to withstand 225lbs for 200,000 cycles (~20 years of use)

2X stronger in shear resistance and 5X stronger in peg pull-off compared to the original Equinoxe Cage Glenoid

### **An onlay implant** for varying patient sizes.<sup>6</sup>

In a recent study from our database, researchers compared clinical outcomes from short to long-term follow-ups of patients of short and average heights who were treated with the Equinoxe Reverse Shoulder. The study showed:

- No significant differences between small and average-stature patients
- Small stature patients had three times lower revision rate compared to average-sized patients

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By the Numbers

#### 2,154 rTSAs

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0.6% revision rate in smaller stature patients vs. 1.8% revision rate for average stature patients



## An onlay device with market-defying results<sup>7</sup>

9,079 rTSA with 1.52% acromial/scapular fracture rate

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By the Numbers

As one of the first convertible systems on the market, the Equinoxe Reverse Shoulder is one of the most-studied onlay devices. In a recent study, researchers concluded:

- 1.52% rate of acromial and scapular fractures
- Patients with fractures were more likely older, female, diagnosed with rheumatoid arthritis and CTA, and less likely to have diabetes.

## Beyond implant solutions



#### Implant innovation is just the beginning.

Exactech has a full suite of technologies to help you throughout the continuum of patient care.



From personalized patient outcome predictions to surgical planning to intraoperative navigation to patient text-messaging service to a mobile application for clinical exchange, we've got you covered.





"Without data, you're just another person with an opinion."

— W. Edwards Deming



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4. Roche C. et al. Analysis of Glenoid Fixation with Anatomic Total Shoulder Arthroplasty in an Extreme Cyclic Loading Scenario. *Bulletin of the Hospital for Joint Diseases*. 2015; 73 (Suppl 1): S57-62.

5. Vanasse T. Et al. Extreme Bending Fatigue Testing of a New Hybrid Anatomic Glenoid Implant. ORS Poster. 2023.

6. **Elwell J. et al.** Is a Lateralized Onlay Humeral Reverse Total Shoulder Prosthesis Equally Effective in Treating Patients of Shorter Height: A Comparison of Patients of Short and Average Height at Short and Long-Term Follow-Up. 2022.

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\* In Vitro (bench) test results may not necessarily be indicative of clinical performance.



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