

## Exactech Celebrates 15 Years of Clinical Use: Equinox<sup>®</sup> Reverse Shoulder

**GAINESVILLE, Fla. (March 31, 2022)** – Exactech, a developer and producer of innovative implants, instrumentation, and smart technologies for joint replacement surgery, commemorates today the 15<sup>th</sup> anniversary of the launch of the Equinox<sup>®</sup> reverse prosthesis, a groundbreaking implant that has improved clinical outcomes and reduced complication rates<sup>1</sup> relative to published meta-analyses<sup>2</sup>- and has served as the platform for several additional innovations in reverse shoulder arthroplasty.

One of the first systems to utilize a platform humeral stem, the Equinox reverse builds off all of the Equinox humeral stems, providing intraoperative flexibility and enabling surgeons to convert a well-fixed stem to a reverse without stem removal. From a biomechanical standpoint, this system was designed to lateralize the deltoid through the humerus to increase the deltoid moment arm length and create a more deltoid wrapping around the greater tuberosity, which aids stability, and better tensions the remaining cuff, to improve active rotation.<sup>3,4</sup>

“The Equinox reverse system was designed the right way from the very beginning,” said Joseph Zuckerman, MD, a founding shoulder design team surgeon. “Biomechanically, it has performed so well that the original design is still in clinical use, and it has helped more than 140,000 patients. Exactech’s focus is on solving unmet clinical challenges, and the Equinox system is a perfect example of that. Now our shoulder team is using what we’ve learned to develop new products, such as innovative new options for proximal humeral bone loss, machine learning technologies that pull from the vast collection of data gathered over 10+ years, and new Active Intelligence<sup>®</sup> solutions such as ExactechGPS<sup>®</sup> navigation and preoperative planning for the humeral and glenoid sides.”

The team designed the Equinox reverse prosthesis beginning in 2005 by first optimizing Dr. Paul Grammont’s reverse shoulder prostheses using some novel computer modelling techniques.<sup>5</sup> By independently adjusting humeral neck angle, glenosphere center of rotation, glenosphere thickness, glenosphere offset, and humeral liner constraint, the Equinox design team was able to identify the combinations of parameters that minimized scapular impingement, maximized range of motion, and maximized stability - all while maintaining a medialized center of rotation near the glenoid face.<sup>5</sup> This new Equinox design leveraged Dr. Grammont’s revolutionary medialized center of rotation fixed-fulcrum design concept.

“After 15 years of clinical experience, I am exceedingly proud of the positive outcomes that this product has achieved, which are well documented in 180+ published peer-reviewed journal articles,” said Chris Roche, Sr. Vice President, Extremities. “Because of these successes, we have continued to advance the art of innovation and science, by expanding our product offering over the past 15 years to build a complete line of shoulder arthroplasty solutions for straightforward to challenging cases. We were the first to offer several other products – reverse augments, a biomechanically designed humeral reconstruction system, the first platform

shoulder navigation system, and a machine learning-based patient-specific outcome predictor. Congratulations to the surgeon team and product development group for this significant milestone.”

Key research highlights include:

- Low instability rate of <1.0%.<sup>1</sup>
- Low aseptic glenoid loosening rate of <1.0%.<sup>1,6</sup>
- Very low aseptic humeral loosening rate of <0.5%.<sup>1,6</sup>
- Acromial/scapular fracture rates of 1.8% at 2-year minimum follow-up.<sup>1,7</sup>
- Scapular notching rates <15% at 5-year minimum follow-up.<sup>8</sup>
- 78% convertibility from anatomic to reverse shoulder.<sup>9</sup>
- >34% of patients achieve ceiling scores with the Simple Shoulder Test.<sup>10</sup>
- >80% of rTSA patients achieve internal rotation to the sacrum or higher.<sup>11</sup>
- 97.3% clinical survivorship at 8-year follow-up.<sup>12</sup>

Visit [exac.com/15years](https://www.exac.com/15years) for more information.

### About Exactech

Exactech is a global medical device company that develops and markets orthopaedic implant devices, related surgical instruments and the Active Intelligence® platform of smart technologies to hospitals and physicians. Headquartered in Gainesville, Fla., Exactech markets its products in the United States, in addition to more than 30 markets in Europe, Latin America, Asia and the Pacific. Visit [www.exac.com](https://www.exac.com) for more information and connect with us on [LinkedIn](#), [Vumedi](#), [YouTube](#), [Instagram](#) and [Twitter](#).

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

ExactechGPS, Equinox Planning App and Predict+ are developed by Blue Ortho, an Exactech subsidiary, and distributed by Exactech, Inc.

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