

Zimmer Biomet Introduces the World's First CE Marked, X-Ray-Based Patient Specific Instrument System for Total Knee Replacement Surgery

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WARSAW, Ind., June 28, 2017 /PRNewswire/ -- Zimmer Biomet Holdings, Inc. (NYSE and SIX: ZBH), a global leader in musculoskeletal healthcare, today introduced its X-ray-based Patient Specific Instrument, X-PSI™ Knee System, which is the world's first CE Marked surgical planning system that allows for patient specific implant positioning solely utilizing X-ray technology. X-PSI Knee System, for use with Zimmer Biomet's flagship total knee brands, allows surgeons to use X-ray images to generate three-dimensional anatomic models. Zimmer Biomet's Patient Specific Instruments Planner is then used to view the patient's anatomy and develop a 3D customized surgical plan. That plan is used to manufacture patient-specific guides and bone models intended to improve implant fit and placement accuracy. This new generation of Zimmer Biomet Patient Specific Instruments can now leverage standard of care preoperative X-ray imaging instead of Magnetic Resonance Imaging (MRI) and Computerized Tomography (CT) scans.



"The use of innovative preoperative planning to enable patient-specific customization has the potential to become the gold standard in joint replacement care; however, its widespread clinical utility has been limited by its reliance on MRI and CT imaging, which are less accessible and not typically used for preoperative evaluation," said Dan Williamson, Zimmer Biomet's Group President, Joint Reconstruction. "Conversely, virtually every candidate for joint replacement surgery undergoes X-ray imaging, so we are thrilled to debut the first CE Marked, X-ray-based Patient Specific Instrument System, and extend the benefits of customized surgical planning to joint replacement patients across the European Union. This new offering was conceptualized and developed in collaboration with Dr. Mohamed Mahfouz,

Professor of Biomedical Engineering at the University of Tennessee, who pioneered the original concept."

X-PSI Knee System, the company's fourth patient specific guide offering in its Personalized Solutions franchise, will be initially launched in five countries across the European Union.

"The growing use of MRI and CT-based planning software to customize implant placement has meaningfully improved patient outcomes in joint replacement surgery¹⁻⁵," said Raju S. Ghatge, M.D., lead investigator of the X-PSI Knee System Investigational Device Exemption study, and a practicing orthopaedic surgeon at NorthShore University HealthSystem in Evanston, Ill. "Our study⁶ found that X-PSI Knee System, which uses X-ray imaging with Zimmer Biomet's Patient Specific Instruments Planner, yields comparably high implant placement accuracy as MRI and CT-based systems, while significantly improving accessibility and clinical utility to a broader patient population."

About Zimmer Biomet

Founded in 1927 and headquartered in Warsaw, Indiana, Zimmer Biomet is a global leader in musculoskeletal healthcare. We design, manufacture and market orthopaedic reconstructive products; sports medicine, biologics, extremities and trauma products; office based technologies; spine, craniomaxillofacial and thoracic products; dental implants; and related surgical products.

We collaborate with healthcare professionals around the globe to advance the pace of innovation. Our products and solutions help treat patients suffering from disorders of, or injuries to, bones, joints or supporting soft tissues. Together with healthcare professionals, we help millions of people live better lives.

We have operations in more than 25 countries around the world and sell products in more than 100 countries. For more information, visit www.zimmerbiomet.com or follow Zimmer Biomet on Twitter at [www.twitter.com/zimmerbiomet](https://twitter.com/zimmerbiomet).

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6. Data on File at Zimmer Biomet. Protocol No. CSU2015-12K.

Disclaimer

X-Patient Specific Instrument, X-PSI™ Knee System, is not available in the U.S.

For complete prescription information, please contact Zimmer Biomet. Check for country product clearances and reference product specific instructions for use. Not for distribution in France.

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This news release contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include, but are not limited to, statements concerning Zimmer Biomet's expectations, plans, prospects, and product and service offerings, including new product launches and potential clinical successes. Such statements are based upon the current beliefs and expectations of management and are subject to significant risks and uncertainties that could cause actual outcomes and results to differ materially. For a list and description of some of such risks and uncertainties, see Zimmer Biomet's periodic reports filed with the U.S. Securities and Exchange Commission (SEC). These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in Zimmer Biomet's filings with the SEC. Zimmer Biomet disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be set forth in its periodic reports. Accordingly, such forward-looking statements speak only as of the date made. Readers of this news release are cautioned not to place undue reliance on these forward-looking statements, since, while management believes the assumptions on which the forward-looking statements are based are reasonable, there can be no assurance that these forward-looking statements will prove to be accurate. This cautionary statement is applicable to all forward-looking statements contained in this news release.

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