Prospective Clinical Advantages of Trabecular Metal(TM) Technology Highlighted in Comparative Study

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--Clinically Significant Bone Preservation and In-Growth Around Implants Made With Zimmer's Trabecular Metal Material May Improve Long Term Biologic Implant Fixation and Simplify Revision Procedures

WARSAW, Ind., July 20, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- Zimmer Holdings, Inc. (NYSE: ZMH; SWX: ZMH) today announced that data from a comparative clinical study conducted by researchers at the Mayo Clinic and the Joint Replacement Surgeons of the Indiana Research Foundation describes the low stiffness and osteoconductive properties of Zimmer's Trabecular Metal Technology. The study, published in The Journal of Arthroplasty, found significant reductions in acetabular bone loss adjacent to the Trabecular Metal device compared to the titanium component, and a significant relative increase in bone mineral density (BMD) after total hip arthroplasty (THA) using implants made with Zimmer's proprietary Trabecular Metal Technology.

Researchers followed 17 THA patients over the course of 6 to 9 years and compared bone loss around highly porous Trabecular Metal cups versus titanium cups with a similar geometry. This is the first study to quantify bone-remodeling around hip implants at an intermediate term (mean of 7.7 years) follow-up. Bone mineral density adjacent to acetabular implants was evaluated using quantitative computed tomography (QCT). The data demonstrated that stress-shielding around standard titanium cementless acetabular components continues well beyond the short-term. The study revealed that patients with Trabecular Metal monoblock cups experienced up to a 41% increase in mean BMD around certain areas of their implants, compared to a loss of up to 45% in BMD in certain areas of the control hips with titanium cups.

It is well established that a decrease in bone density may compromise the long term success of the primary surgery and may increase the difficulty and expense of revision reconstruction. Acetabular stress-shielding can also exacerbate patients' osteolytic response to bearing surface particles, potentially further reducing the bony support for the implant. The authors of the study suggest that the elasticity (low stiffness) of Trabecular Metal material may induce a transfer of stresses to the

periacetabular bone that more closely replicates the normal physiologic load transfer, thereby decreasing the detrimental effects of stress-shielding by allowing the bone to respond to normal loading patterns. In this study, clinically significant bone preservation and in-growth were observed radiographically around Trabecular Metal implants. These results indicate the potential for improved long term biologic fixation with Trabecular Metal implants and could result in fewer and less complex revision procedures.

"Few studies draw firm conclusions about the performance of cementless components in implants used in total hip arthroplasty, and for the most part, data about bone remodeling after surgery has been limited to short-term follow-up," said David Lewallen, MD, orthopaedic surgeon at the Mayo Clinic and one of the study's authors. "Our findings confirmed initial assumptions that the low stiffness properties of this porous metal --similar to cancellous bone--were better able to transfer physiological stresses, theoretically decreasing the detrimental effects of stress-shielding commonly seen around traditional acetabular implants."

Trabecular Metal material is a structural biomaterial whose cellular architecture resembles bone and approximates its physical and structural properties more closely than other prosthetic materials. The unique, highly porous trabecular configuration is conducive to more normal bone formation and bone in-growth, decreased stress-shielding, and the potential for improved long term implant fixation. Trabecular Metal implants are fabricated using elemental tantalum metal and a patented vapor deposition process that creates a metallic strut configuration resembling cancellous bone with a nano-textured surface. Trabecular Metal Technology is exclusive to Zimmer.

"This clinical study is the first to directly compare bone-remodeling effects of a low stiffness porous metal construct to more rigid traditional titanium hip implants at a mid-term follow-up, and highlights potential advantages attributed to Trabecular Metal technology," said Cheryl R. Blanchard, PhD, Zimmer's Senior Vice President and Chief Scientific Officer. "It demonstrates that Zimmer's unique Trabecular Metal products may significantly reduce bone loss after surgery and may improve long term biologic fixation."

For more information about Zimmer, visit www.zimmer.com

About the Company

Founded in 1927 and headquartered in Warsaw, Indiana, Zimmer designs, develops, manufactures and markets orthopaedic reconstructive, spinal and trauma devices, dental implants, and related surgical products. Zimmer has operations in more than 25 countries around the world and sells products in more than 100 countries. Zimmer's 2008 sales were approximately $4.1 billion. The Company is supported by the efforts of more than 8,000 employees worldwide.

This press release contains forward-looking statements within the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 based on current expectations, estimates, forecasts and projections about the orthopaedics industry, management's beliefs and assumptions made by management. Forward-looking statements may be identified by the use of forward-looking terms such as "may," "will," "expects," "believes," "anticipates," "plans," "estimates," "projects," "assumes," "guides," "targets," "forecasts," and "seeks" or the negative of such terms or other variations on such terms or comparable terminology. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that could cause actual outcomes and results to differ materially. These risks and uncertainties include, but are not limited to, our compliance with the Corporate Integrity Agreement through 2012; the impact of our enhanced healthcare compliance global initiatives and business practices on our relationships with customers and consultants, our market share and our overall financial performance; the success of our quality initiatives; the outcome of the informal investigation by the U.S. Securities and Exchange Commission into Foreign Corrupt Practices Act matters announced in October 2007; price and product competition; changes in customer demand for our products and services caused by demographic changes or other factors; dependence on new product development, technological advances and innovation; shifts in the product category or regional sales mix of our products and services; supply and prices of raw materials and products; control of costs and expenses; our ability to obtain and maintain adequate intellectual property protection; our ability to successfully integrate acquired businesses; our ability to form and implement alliances; challenges relating to changes in and compliance with governmental laws and regulations affecting our U.S. and international businesses, including regulations of the U.S. Food and Drug Administration and foreign government regulators and tax obligations and risks; the impact of temporarily suspending U.S. distribution of one of our key hip replacement products; product liability and intellectual property litigation losses; reductions in reimbursement levels from third-party payors and cost-containment efforts of healthcare purchasing organizations; our ability to retain the independent agents and distributors who market our products; changes in general industry and market conditions, including domestic and international growth rates and general domestic and international economic conditions, including interest rate and currency exchange rate fluctuations; and the costs of defending or resolving putative class action securities litigation and lawsuits, investigations or other proceedings resulting from our September 2007 settlement with the U.S. government and other matters. For a further list and description of such risks and uncertainties, see our periodic reports filed with the U.S. Securities and Exchange Commission. We disclaim 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 our periodic reports. Readers of this document are cautioned not to place undue reliance on these forward-looking statements, since, while we believe 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 document.

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