FOR IMMEDIATE RELEASE

CONTACT: Meghan Grimaldi
Mgrimal4@its.jnj.com

Chris DelOrefice
Office: 732-524-2955

Matt Stuckley
Office: 732-524-2617

DePuy Synthes Expands Comprehensive Offering to Treat Degenerative Spine Disease with Launch of 3D Printed Implant Portfolio for Spine Surgery

CONDUIT Interbody Platform with EIT Cellular Titanium Technology is Designed to Mimic Natural Bone Structure and Facilitate Spinal Fusion

CHICAGO – September 25, 2019 – The Johnson & Johnson Medical Devices Companies* today announced that DePuy Synthes has launched the CONDUIT Interbody Platform with EIT Cellular Titanium Technology, further expanding its comprehensive offering to treat degenerative spine disease. The innovative portfolio, which includes 3D printed titanium interbody implants for spinal fusion surgery is designed to mimic natural bone and help facilitate spinal fusion. The announcement was made at the 34th Annual North American Spine Society (NASS) meeting.

During spinal fusion, a degenerated, collapsed disc is removed and replaced with an interbody spacer along with bone graft with the goal of restoring natural height and alignment between two vertebrae. The concept is to replace the former mobile disc space between two vertebrae with an interbody spacer so that the segment fuses as a single, solid bone. Thanks to 3D printing, CONDUIT Implants are 80% porous—bringing a differentiated cellular structure designed to mimic the properties of bone[1] and assist with intra and post-operative visualization[2,3]. The cellular structure has a modulus of elasticity, or change in stiffness, similar to bone[4]. All of these characteristics aim to help facilitate bone fusion.

“My experience with CONDUIT has been in both the lumbar and cervical spine,” said Dr. Wilson Z. Ray, Neurological Surgeon, St. Louis, Missouri**. “The implant allows for superior visualization, virtually no scatter on CT scan and early fusion assessment as compared to other titanium interbody devices.”

The launch of the CONDUIT Implants portfolio follows Johnson & Johnson Medical Devices Companies’ 2018 acquisition of Emerging Implant Technologies (EIT), a Germany-based developer of 3D printed technologies for spine procedures. The CONDUIT Implants join the recently launched ACIS ProTi 360° Anterior Cervical Interbody System Hyperlordotic Cages, which enhance the PROTI 360° Family of Implants. These platforms strengthen the company’s existing comprehensive portfolio of interbody cages, addressing a variety of surgical needs with a broad range of advanced materials.

“Our goal as a spine business is to focus on the areas with the most potential to solve unmet clinical needs, and we are excited to add advanced materials to our interbody portfolio as another option for surgeons,” said Nadav Tomer, Worldwide President, Spine, DePuy Synthes****. “The launch of the CONDUIT portfolio, together with our comprehensive interbody implant offerings for degenerative disc disease, helps us deliver life-enhancing spine solutions that advance the standard of care for patients everywhere.”

Several features of CONDUIT Implants include:

- Nanoscale surface roughness: in in-vitro studies, similar titanium materials with nanoscale features were shown to lead to an increase in adhesion of osteoblasts compared to conventional titanium materials[5,6]***;
- A porosity of 80%[1], which closely mimics that of human cancellous bone with a porosity of 50%-90%[7];
- EIT Cellular Titanium material with a modulus of elasticity similar to cancellous bone[4] and
- Clear visualization of the space in and around the implant both intra- and post-operatively on X-ray, CT scan and MRI without significant interference as a result of the structure of the interbody cage.

The CONDUIT Platform reinforces Johnson & Johnson’s commitment to 3D printing technology. In collaboration with our extensive network of partners, Johnson & Johnson is emerging as one of the leaders in 3D printing resulting in product design freedom, consumer and patient-specific product personalization, speed to market, global supply chain transformation and materials innovation.

The CONDUIT Platform and PROTI 360° Family will be showcased at NASS as part of DePuy Synthes’ innovative solutions that address unmet needs for surgeons and patients in degenerative disc disease, deformity and complex cervical procedures. The company will also be showcasing enabling technologies, minimally invasive spine (MIS) solutions, and biomaterials to support these procedures, including SENTIO MMG for neuromonitoring, the VIPER PRIME System for MIS, and FIBERGRAFT Family of Products and ViviGen Cellular Bone Matrix biomaterials solutions. Through the company’s collaboration with Brainlab, DePuy Synthes also has the opportunity to feature Cirq Robotic Surgical Assistant, which is now FDA cleared as part of the Brainlab Spinal Navigation System including compatibility with EXPEDIUM and VIPER Systems for navigation in the U.S.

About Johnson & Johnson Medical Devices Companies
At Johnson & Johnson Medical Devices Companies, we are helping people live their best lives. Building on more than a century of expertise, we tackle pressing healthcare challenges, and take bold steps that lead to new standards of care while improving people’s healthcare experiences. In surgery, orthopaedics, vision and interventional solutions, we are helping to save lives and paving the way to a healthier future for everyone, everywhere.

About DePuy Synthes
DePuy Synthes, part of the Johnson & Johnson Medical Devices Companies, provides one of the most comprehensive orthopedics portfolios in the world. DePuy Synthes solutions, in specialties including joint reconstruction, trauma, craniomaxillofacial, spinal surgery and sports medicine, are designed to advance patient care while delivering clinical and economic value to health care systems worldwide. For more information, visit **www.depuysynthes.com**.

Cautions Concerning Forward-Looking Statements

This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 regarding CONDUIT Interbody Platform with EIT Cellular Titanium Technology. The reader is cautioned not to rely on these forward-looking statements. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or known or unknown risks or uncertainties materialize, actual results could vary materially from the expectations and projections of DePuy Synthes, any of the other Johnson & Johnson Medical Devices Companies and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to: uncertainty of commercial success; challenges to patents; competition, including technological advances, new products and patents attained by competitors; manufacturing difficulties and delays; product efficacy or safety concerns resulting in product recalls or regulatory action; changes to applicable laws and regulations, including global health care reforms; changes in behavior and spending patterns of purchasers of health care products and services; and trends toward health care cost containment. A further list and descriptions of these risks, uncertainties and other factors can be found in Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended December 30, 2018, including in the sections captioned "Cautionary Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors," and in the company's most recently filed Quarterly Report on Form 10-Q, and the company's subsequent filings with the Securities and Exchange Commission. Copies of these filings are available online at www.sec.gov, www.jnj.com or on request from Johnson & Johnson. Neither Johnson & Johnson Vision Care, Inc., the Johnson & Johnson Medical Devices Companies nor Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.

*Comprising the surgery, orthopedics, vision and interventional solutions businesses within Johnson & Johnson's Medical Devices segment
**Consultant to DePuy Synthes Spine
***Bench test results may not necessarily be indicative of clinical performance
****Employee of Medical Device Business Services, Inc.

CIRQ is a registered trademark of Brainlab AG in Germany and/or the U.S.
FIBERGRAFT is owned by Prosidyan.
ViviGen is a registered trademark of LifeNet Health.

[1] VAL2016-043 Strut diameter summary rev 0
[2] White paper EIT lumbar implants imaging overview_20102016-Rev.C
[3] White paper EIT cervical implants imaging overview_20102016-Rev.A
[4] Youngs Modulus comparison of various materials GUM00001 rev A/ VAL 2017-007
[5] SEM Report, ADAPTIV #103546250
[6] Webster TJ and EjioforJU. Increased osteoblast adhesion on nanophase metals: Ti, Ti6Al4V and CoCrMo. Biomat 2004; 25:4731-4739
[7] Bostrom M, Boskey A, Kaufman J, Einhorn T. Form and function of bone. In: Orthopaedic Basic Science Biology and Mechanics of the Musculoskeletal System. 2nd ed. Rosemont, IL: AAOS; 2000: 320-369

© DePuy Synthes 2019. All rights reserved.