



SOLIDWORLD GROUP CREATES NEW 3D AORTIC SIMULATOR FOR ENDOVASCULAR ACCESS

The 3-D simulator replicates an aneurysm situation in the area of the aorta near the pancreas from the patient's CT scan and can be used to train new surgeons in cardiovascular surgeries.

The project is the result of a collaboration between Bio3DModel, a subsidiary of SolidWorld Group, with San Giovanni di Dio Hospital in Florence and the Physics Department of the University of Milan.

Roberto Rizzo, Chairperson SolidWorld Group: "3D printing is increasingly important in supporting medical research and surgical training."

Treviso, May 3, 2023 - SolidWorld Group S.p.A. (the "Issuer"), the parent company of the leading Group in three-dimensional digital technologies, industrial 3D printing, and advanced printing services in the aerospace and automotive sectors, informs that has developed a new fully 3D aortic simulator for endovascular access prototype. A tool that can faithfully replicate the structures of a patient's aorta and pathologies from diagnostic images (CT and MRI). This is a unique and 100% Made in Italy biomedical 3D printing project developed by Bio3DModel S.r.l., a subsidiary of the Issuer, a company specializing in 3D printing for the medical health sector, within the Barberino Tavarnelle (FI) technology hub with the most advanced medical 3D printing systems.

Through additive technology, the simulator creates a faithful reproduction of the vascular structure from the aorta to the femoral arteries. From the diagnostic images (for example, from a CT scan), the software processes the information and transmits it to the 3D printer (model: Stratasys J750 Digital Anatomy), which prints a perfect copy of vascular structures using biomedical-specific photosensitive resins. The aortic simulator can be used to perform surgical training. Doctors can then be properly prepared for endovascular access operations, training intervention tests directly on the reproduction of arterial structures, leading up to the placement of a stent inside the aorta in the area where the aneurysm is present, to restore normal blood circulation to the artery.

Roberto Rizzo, Chairperson of SolidWorld Group, comments: "This is a unique project globally and 100% Made in Italy. The collaboration between 3D printing and the medical world is getting closer and closer, enabling extraordinary results, particularly, in the field of research and experimentation. In this case, this new technology also makes it possible to provide new tools for training new surgeons in the treatment of an unfortunately serious and widespread condition such as cardiovascular aneurysm."

The aortic simulator was developed by **Bio3DModel** in collaboration with Dr. Emiliano Chisci, of San Giovanni di Dio Hospital in Florence, Italy. A project that also sees the participation of the Physics Department of the University of Milan and Dr. Francesco Cavaliere. "This is a truly innovative project, which, despite being at the beginning, is already giving really satisfactory feedback and results" Dr. Chisci tells us. "For a physician, being able to have a realistic simulator from both a morphological and biomechanical point of view is essential. Thanks to the ongoing collaboration with Bio3DModel and its medical 3D printing





technologies, the first prototype was already a big step forward, compared to the tools used in the past to treat the same kind of pathology."

Realistic 3D models have, and will have even more so in the future, a central role for the field of surgery, both educationally and training-wise. Therefore, simulators are very useful for increasing medical-surgical skills and allowing training on certain specialties, such as cardiovascular or abdominal. Practicing on a simulator, before on the patient turns out to be crucial. Having the opportunity to also prepare, practice and compare with other physicians, starting from a realistic simulator, allows not only to improve medical-surgical skills, but more importantly, to reduce surgery time and consequently also the risks for patients and hospitalization costs.

These are all factors that drive investment of time and resources toward the creation of 3D models for increasingly high-performance clinical trials. "Having, for example, the ability to cut and suture simulations created through medical 3D printing is a very important factor" concludes Dr. Emiliano Chisci. "In addition, the aorta model created in collaboration with Bio3DModel is even more realistic, as it is surrounded by a transparent gel that mimics the surrounding anatomy, so it comes close to a real simulation of endovascular access on the patient".

The excellent results were also achieved through materials designed for realistic reproductions of human anatomy.

SolidWorld Group S.p.A. is the parent of a group of 11 companies founded in the early 2000s by engineer Roberto Rizzo. Listed on the Euronext Growth Milan segment, the Group is a leading developer and integrator of the latest and most comprehensive digital 3D software and hardware for manufacturing companies, supporting and accelerating their journey to Industry 4.0. Thanks to SolidWorld, all stages of production - as far as sale and recycling - are integrated using technologies that make the production process faster and more sustainable and efficient. It operates through 14 offices and 3 technology hubs and has over 150 employees and more than 8,000 client enterprises. The SolidWorld Group reported revenues of Euro 57.7 million in 2022, with a value of production of Euro 60.8 million and Adjusted EBITDA of Euro 4.1 million. The company has been listed on the Euronext Growth Milan segment of Borsa Italiana since July 6, 2022 (with ticker S3D). www.solidworld.it

CONTACTS:

Investor Relations Manager Elisabetta Cammarata investor@solidworld.it IR Advisor TWIN Srl

Mara Di Giorgio T +39 3357737417

Email: mara@twin.services

Alessandra Capuzzo T: +39 3335461162

Email: alessandra@twin.services

Corporate Media Relations SOLIDWORLD GROUP
TWIN Srl

Daniele Quarello T: +39 3479282119

Email: daniele@twin.services

Chiara Bortolato T:+393478533894

Email: chiara@twin.services





Corporate Media Relations BIO3DMODEL

Promix Srl

Elena Palieri T: +39 3713914409

Email: <u>e.palieri@promixagency.com</u>

Francesco Picazio

Email: f.picazio@promixagency.com

Daniela Faggion

Email: d.faggion@promixagency.com