

PRESS RELEASE

Medacta and InSilicoTrials partner up to take medical device development to the next level

Swiss giant Medacta, a fast-growing global organization specialized in the design and production of innovative orthopaedic products, and European company InSilicoTrials, that offers unique simulation tools for healthcare, signed a partnership to put together their expertise and advanced technologies for the development and validation of a new InSilicoTrials product.

In fact, InSilicoTrials will develop InSilico3DPRINT, a simulation tool that will be validated by Medacta on a number of new products' prototypes. InSilico3DPRINT will run a comprehensive set of Metal AM simulations to reproduce the building configurations provided by Medacta during the trial-and-error phase.

The Metal AM mechanical analysis will offer a fast and reliable identification of parts that may suffer from deformations and shrink lines leading to cracking or compromised surface quality. The Metal AM thermal analysis, on the other side, will give quick and qualitative feedback on parts that could suffer from overheating.

Leveraging the outcomes of these analyses, InSilicoTrials will be able to validate the product, while Medacta will be able to assess the advantages of integrating computational solutions in its Metal AM design and manufacturing process.

Medacta's innovation, forged by close collaboration with expert surgeons globally, began with minimally invasive surgical techniques and has evolved into personalized solutions for every patient.

InSilicoTrials is the first cloud-based platform that provides healthcare companies with easy-to-use tools to perform computational Modeling and Simulation for drug and medical device development. Its brand new simulation tool InSilico3DPRINT offers a user-friendly digital workflow to assess the safety and performance of 3D-printed custom medical devices before manufacturing, reproducing standard testing accepted by regulatory bodies.

"Innovation is the foundation of our present and future success and the basis of our strategy of growth in a competitive market. We believe that the partnership with InSilicoTrials will further strengthen our analytical know-how and expertise, improving efficiency in our production processes, and reinforcing our continuous effort to responsibly innovate", says Francesco Siccardi, CEO of Medacta International.

"We are very excited at the opportunity of working with such an international champion in innovation and research as Medacta", says Luca Emili, CEO and Founder of InSilicoTrials. *"I believe our partnership will benefit both of us and will bring orthopaedic device design, development and manufacturing to a higher level thanks to state-the-art modeling and simulation".*

About Medacta

Medacta is an international company specializing in the design, production, and distribution of innovative orthopaedic products, as well as in the development of accompanying surgical techniques. Established in 1999 in Switzerland, Medacta is active in joint replacement, spine surgery, and sports medicine. Medacta is committed to improving the care and well-being of patients and maintains a strong focus on healthcare sustainability. Medacta's innovation, forged by close collaboration with expert surgeons globally, began with minimally invasive surgical techniques and has evolved into personalized solutions for every patient. Through the M.O.R.E. Institute, Medacta supports surgeons with a comprehensive and tailored program dedicated to the advancement of medical education. Medacta is headquartered in Castel San Pietro, Switzerland, and operates in over 40 countries.

About InSilicoTrials

InSilicoTrials is a Life science tech company founded in 2018 by a team of life sciences, cybersecurity, and digital innovation experts, which aims to revolutionize the Healthcare sector thanks to an innovative digital simulation platform. Today, the very long and expensive development, as well as the subsequent registration/certification processes for new drugs and medical devices, are becoming unsustainable, especially for SMEs. Modeling and simulation can reduce these costs up to 50% and greatly accelerate the go-to-market of new products, allowing companies to exploit patents for a longer period. Regulatory agencies are recommending companies to adopt these practices, but many of these lack the high expertise, expensive software, and IT infrastructure, needed to develop and use models. InSilicoTrials solves these problems by selecting and collecting the best models from top researchers around the world and then by integrating them with the solvers in a scalable IT platform, which makes it easier to use validated models without specific computational knowledge, paying only for the used resources. InSilicoTrials is currently working on five projects funded by the European Union: [In Silico World](#), [SimCardioTest](#), [Brainteaser](#), [TranSys](#) and [Disc4All](#).