

Medical Technology: How Can Germany Become a Leader in Artificial Intelligence?

Germany can become a leader in AI for medical technology—if the groundwork is laid now. Dr. Thomas Becks, Managing Director of VDE DGBMT, will discuss what this entails at MedtecLIVE with Caroline Reißing from Fraunhofer IMS and Prof. Dr. Michael Bortz from Fraunhofer ITWM.

(Frankfurt am Main, April 28, 2026) Artificial intelligence is emerging as a key driver of innovation in medical technology. AI-supported systems improve image analysis, aid clinical decision-making, enable continuous monitoring, and enhance the precision of medical technology applications through automation and robotic assistance. However, Dr. Thomas Becks, Managing Director of the German Society for Biomedical Engineering within VDE (VDE DGBMT), has observed that promising developments in this country all too often remain in the research stage and never — or too late — reach market maturity. He is convinced: “Germany can become a leader in AI in biomedical engineering — if we start off on the right foot.” He will discuss what is needed to achieve this on May 7 at MedtecLIVE at Messe Stuttgart with Caroline Reißing from the Fraunhofer Institute for Microelectronic Circuits and Systems (IMS) and Prof. Dr. Michael Bortz from the Fraunhofer Institute for Industrial Mathematics (ITWM).

More courage, more collaboration

As managing director of the VDE Professional Association for Biomedical Engineering, Thomas Becks is closely connected with numerous industry representatives and attends many events. “In doing so, I see time and again that AI in biomedical engineering is no longer a crazy idea. But much of it gets stuck in the invention phase — and never reaches the implementation phase.” This is due, in part, to the high costs. “To train an artificial intelligence, you need many thousands of training data points,” says Becks. These generally need to have been annotated with additional information by medical professionals. Here, he would like to see more

willingness to take risks — including from companies in the industry. But he also believes that approval processes could be better designed: “Approval processes and criteria for new, innovative medical devices with AI should be in place before product development even begins. Fundamental requirements should already be taken into account during research. This strengthens interoperability and innovation security.”

However, Thomas Becks is also particularly concerned with collaboration across organizational and disciplinary boundaries. “We can only be successful if we bring our domain knowledge together across organizational boundaries. Only in this way can we move from scientifically interesting proof-of-concepts to products for clinical application,” he says. And: “Medicine, engineering, computer science, law, and mathematics must collaborate in an interdisciplinary manner and on equal footing to identify key innovation hurdles and overcome them sustainably.”

Interdisciplinary Discussion at MedtecLIVE

Fittingly, the experts joining Thomas Becks on stage at MedtecLIVE also come from different fields: Prof. Dr. Michael Bortz is Head of the “Optimization – Technical Processes” department and Deputy Head of the “Optimization” division at the Fraunhofer Institute for Industrial Mathematics (ITWM) in Kaiserslautern and approaches the topic from a mathematical perspective — he provides support for the proper use of AI and machine learning, while Caroline Reßing conducts research on non-invasive healthcare and embedded AI at the Fraunhofer Institute for Microelectronic Circuits and Systems (IMS) in Duisburg.

MedtecLIVE 2026 will take place from May 5 to 7, 2026, at Messe Stuttgart. The session “Artificial Intelligence in Medical Technology: Potential and Challenges” begins on Thursday, May 7, 2026, at 12:00 p.m. at Forum (3-520).

About the German Society for Biomedical Engineering within VDE (VDE DGBMT):

The German Society for Biomedical Engineering within VDE (VDE DGBMT) is the scientific and technical society for medical technology in Germany. It was founded in Frankfurt am Main in 1961.

The DGBMT in the VDE brings together experts from all areas of technology applications in medicine and deals with the entire range of topics in biomedical technology. It organizes conferences and workshops for expert audiences and is the sponsor of two international scientific journals: Biomedical Engineering and Current Directions in Biomedical Engineering published by Walter de Gruyter. Position papers, statements and expert contributions discuss current topics independently and neutrally. In addition, the DGBMT awards promotional prizes for young scientists, for scientific excellence and innovation, and for patient safety in biomedical

engineering. Last but not least, it represents German biomedical engineering in international bodies.

For more information, visit www.vde.com/dgbmt

About VDE:

VDE, one of the largest technology organizations in Europe, has been regarded as a synonym for innovation and technological progress for more than 130 years. VDE is the only organization in the world that combines science, standardization, testing, certification, and application consulting under one umbrella. The VDE mark has been synonymous with the highest safety standards and consumer protection for more than 100 years.

Our passion is the advancement of technology, the next generation of engineers and technologists, and lifelong learning and career development “on the job”. Within the VDE network more than 2,000 employees at over 60 locations worldwide, more than 100,000 honorary experts, and around 1,500 companies are dedicated to ensuring a future worth living: networked, digital, electrical. Shaping the e-dialistic future.

The VDE (VDE Association for Electrical, Electronic & Information Technologies) is headquartered in Frankfurt am Main. For more information, visit www.vde.com

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