

SMART.sim

Preclinical testing in the multimodal simulation process.

SMART

 **medizin im grünen**
• forschen • lernen • trainieren
develop • learn • practice



Medical Center of Excellence

Preclinical testing with SMART.sim

From supply requirements to safe application: During the development and approval of novel medical devices, preclinical evaluation for the testing of safety, function and usability enjoys a high level of safety and importance.

Essential for a successful review process - the carefully planned application in a multimodal simulation process, still in a realistic environment of a certified testing laboratory. Use the concentrated peace for undisturbed research and development, surrounded by excellent medical technology and perfect equipment.

Resilient - the project management

From needs assessment to implementation - quality assured processes: Professional project management is our key to success. The company has all the necessary structural, logistical and personnel resources to successfully and on schedule handle all requirements that are the subject of preclinical trials. Our employees, like those of our external partners, are suitably qualified and are planned and deployed at an early stage in accordance with known requirements.



All-encompassing - the analysis

No testing plan without careful day-to-day- and risk analysis
The concept of multi-modal simulation provides a framework for the analysis and verification of the visual, acoustic, embodied and spatial aspects of direct interaction and accompanying communication in the application of the medical device. As is well known, this involves a very complex interaction between the trained user, the medical device and the patient.



Competent

Our medical auditors are experts in their medicinal field of expertise

Objective

Each step in the documentation process is documented in accordance with the test requirements



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Versatile - the applications

With the methodology of multi-modal simulation, preclinical tests become comprehensive and effective events, the best foundations are created for a successful approval and the market introduction of new and further developments in medical technology.

Objective - the process documentation

SMART.avd – safe and objective process documentation During preclinical evaluation it happens that critical events are only noted in the eyes of a few, but not all observers, which results in gaps in the documentation. Then it is a matter of reviewing all sources, sometimes also deepening and repeating in the testing laboratory.

All-encompassing

From analysis to simulation - standardized, quality-assured processes



SMART. Testing

Realistic

A test laboratory similar to a hospital, with excellent medical technology and perfect equipment



File

patients, variety of body replacement

We have made this process more efficient for everyone involved - especially in terms of invested time and costs. Our service SMART.avd allows you to improve planning and documentation in preclinical testing & evaluation.



Competent - the people involved

In dialogue with experienced doctors and engineers: Innovation processes at the beginning of the development of innovative medical devices contribute to a better understanding of the future needs of users in hospitals. Aligned to this, new ideas can be verified early on in a confidential dialogue with experienced users in our test environment.

Our investigators are experts in their medical field. They advise and accompany the development cycle in everyday clinical practice and here in the testing laboratory of the medical competence centre. We are in constant professional exchange with experienced experts in almost all medical fields.

Curious? Please contact us! We will gladly answer any questions and advise you! Your contact person:



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***„An investment in knowledge still yields
the best interest“***

Benjamin Franklin

Good doctors out of passion

Doctor at last!

You are in the profession of your dream and have advanced your career to now being immersed in day-to-day clinical practice? You are passionate about treating patients together with experienced specialists. The lives of many patients depend on the success of your work. You grow your knowledge and skills on a daily basis: You learn from personal experience, the advice of your colleagues and the expertise of the best. You appreciate every moment you can spare to contemplate your work and systematically structure your knowledge.

100% practice

Where can you learn to perform a complex surgical procedure? At our medical centre of excellence. And what's more: You are trained by experienced colleagues, supporting you step-by-step through a complex surgical procedure and the treatment of severe disease. You are the surgeon who performs the operation, while making every decision as part of a team. You keep practicing the surgical procedures until you are fully confident and have mastered the technique to perfection. The patient is a dummy designed with all the features required for the surgery. You are working with state-of-the-art technologies and experienced assistance in a protected space for professionals and masters. With regard to the outcome, you act the same as in day-to-day practice – always measured on success.

A wide range of methods and models

Professional medical training in diagnosis and treatment – but without a patient? Before the start of each seminar, you will reflect on the current knowledge and evidence base – quickly and concisely. Then you will start training in small teams, instructed by experienced colleagues. The focus is on the training of sub-steps or complete procedures, on gaining confidence in handling routine and unexpected situations. The required patient features are simulated. You will be working with carefully and responsibly selected models—from computer-based simulations to animal and human specimens to the anaesthetised animal model. The selection will always be based on what is needed to achieve the agreed learning objectives. Of course, compliance with ethical and legal requirements is ensured. Professional accreditations and regulatory approvals have been obtained for all educational activities.

From professional to master

Solid variety

Our medical education offering is aimed at professionals and masters: career beginners, advanced learners and experts. It is open to individual doctors or entire teams. All lecturers are masters in their specialities and colleagues who are passionate about passing on their experiences and skills. The topics of our seminars are based on the recommendations of the professional societies and your personal learning objectives; they are certified by the German regional medical associations. Our current offering includes seminars for anaesthetists, intensive care physicians, trauma, orthopaedic, general, visceral, thoracic-cardiac and paediatric surgeons, neurosurgeons, urologists, gynaecologic oncologists, pulmonologists, neonatologists, paediatricians, gastroenterologists, plastic surgeons, radiologists, and pathologists.

Focussed stillness

Medizin im Grünen operates a medical centre of excellence for doctors – close to the city life and directly at the Scharmützel Lake. On an area of more than 1,300 square metres, the best conditions for creative learning and thorough training are waiting for you. Far away from the hustle and bustle and responsibilities of the hospital environment, you will find a focussed stillness at Medizin im Grünen, enabling you to concentrate on performing surgeries and work undistractedly. Take advantage of this exceptional opportunity and the expertise of our lecturers. Focus on what matters most – for the benefit of your patients and your medical career.

Transparency succeeds

For us, maximum transparency is part of quality. Just like you, we are passionate about being among the best. That is why we are dedicated to quality assurance and evaluate every seminar according to predefined criteria. We provide a detailed description of each educational content. As a participant, you will always have the opportunity to rate the lecturers and the learning environment at the end of the training. The company is DIN EN ISO 9001:2008-certified. Feel free to compare us with other providers. The feedback given by participants and lecturers is also available at our Quality Monitor on www.medizin-im-gruenen.de. Simply choose the best medical education offering!

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