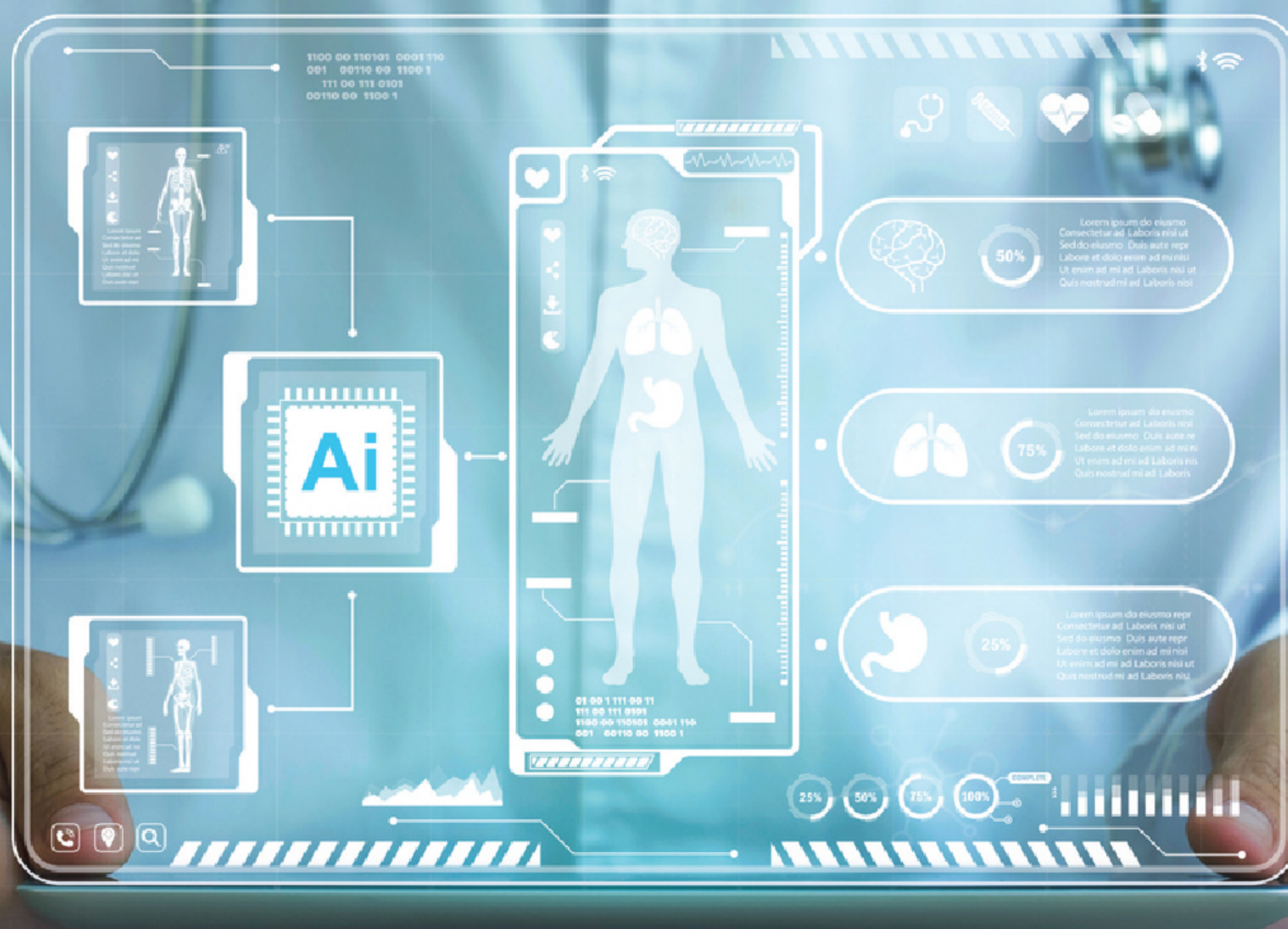


**OUTLOOK**

# SHAPING HEALTH FUTURES

**AI AND ROBOTICS IN SOUTHERN GERMANY  
OPPORTUNITIES FOR DANISH COLLABORATION**



**INNOVATION  
CENTRE  
DENMARK**

**2025**

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# INNOVATION CENTRE DENMARK MUNICH

Innovation Centre Denmark (ICDK) is located in seven global innovation hotspots, each selected for their importance to Danish businesses, researchers, and educational institutions: Munich, Tel Aviv, Bangalore, Seoul, Shanghai, Boston and Silicon Valley, with the aim to elevate Danish science and innovation to a global scale.

Innovation Centre Denmark in Munich is based at the Royal Danish Consulate General in Munich and has, just like all ICDK centres, been established in a partnership between the Ministry of Foreign Affairs of Denmark and the Ministry of Higher Education and Science.

ICDK Munich aims to strengthen the Danish innovation ecosystem by engaging in international activities and forming long-term partnerships between Denmark and, first and foremost, the Southern German (Bavaria and Baden-Württemberg) science and innovation ecosystem. When relevant, this also includes branching out to Germany as a whole, as well as Switzerland and Austria. ICDK seeks to enhance Denmark's innovation capacity and contribute to building a greener, healthier, and smarter future by providing the necessary international network, knowledge, and framework.

Further, ICDK Munich brings insights back to Denmark with the aim to establish strong partnerships across sectors, organisations, and to guide Danish innovation stakeholders through complex environments. One of those environments being the Health Tech sector, with a particular focus on AI and Robotics applications.

With this Outlook we wish to address the opportunities for collaboration for:

- Universities and other research institutions
- Large companies (corporate R&D units, innovation labs, managers, corporate incubators, and accelerators)
- Startups, scaleups and spin-outs (e.g. from research institutions or corporates)



This publication presents a host of different ecosystem players representative of the health AI and robotics field, and this high-level expertise highlights the concentration of knowledge in the Southern German geography. At the same time there are many more relevant and potential ecosystem partners present, that we do not have the space to introduce here. ICDK will keep connecting with new contacts, as the ecosystem evolves and share this network with our stakeholders.

# EXECUTIVE SUMMARY: PIONEERING HEALTH INNOVATION

Investments and initiatives within Health Tech in AI and robotics constitute a large part of the Southern German focus on developing a strong and robust healthcare system. The area is driven by a seamless interplay between academia, industry, and government. This environment fosters breakthroughs that address pressing healthcare challenges, from advanced diagnostics to patient-centered robotic solutions.

At the heart of this ecosystem are globally recognised universities and research institutions, such as the Technical University of Munich (TUM), the Ludwig Maximilian University, the University of Freiburg, and the Max-Planck Institute, to name just a few in this extensive research region of Bavaria and Baden-Württemberg. Furthermore, these institutions lead fundamental research in AI and Robotics and collaborate closely with industry to bring innovative solutions to the market. Academic research translates into real-world applications, benefiting patients and healthcare providers through hubs and clusters like the AI Health Innovation Cluster, Medical Valley, and the Bavarian AI Network Hub for Healthcare in Erlangen.

This Health Tech AI and Robotics value chain, from academia to industry, is supported by and dependent on public and private investments. Programmes such as Bavaria's Hightech Agenda and Baden-Württemberg's AI Strategy emphasise the strategic importance of AI and Robotics in healthcare, allocating resources to foster collaboration between research institutions, industry, and entrepreneurs. In addition, a growing number of healthcare corporates in South Germany demonstrate an increased engagement in Health Tech AI and Robotics - indicat-

ing willingness to invest in these technologies and potential future growth in the market.

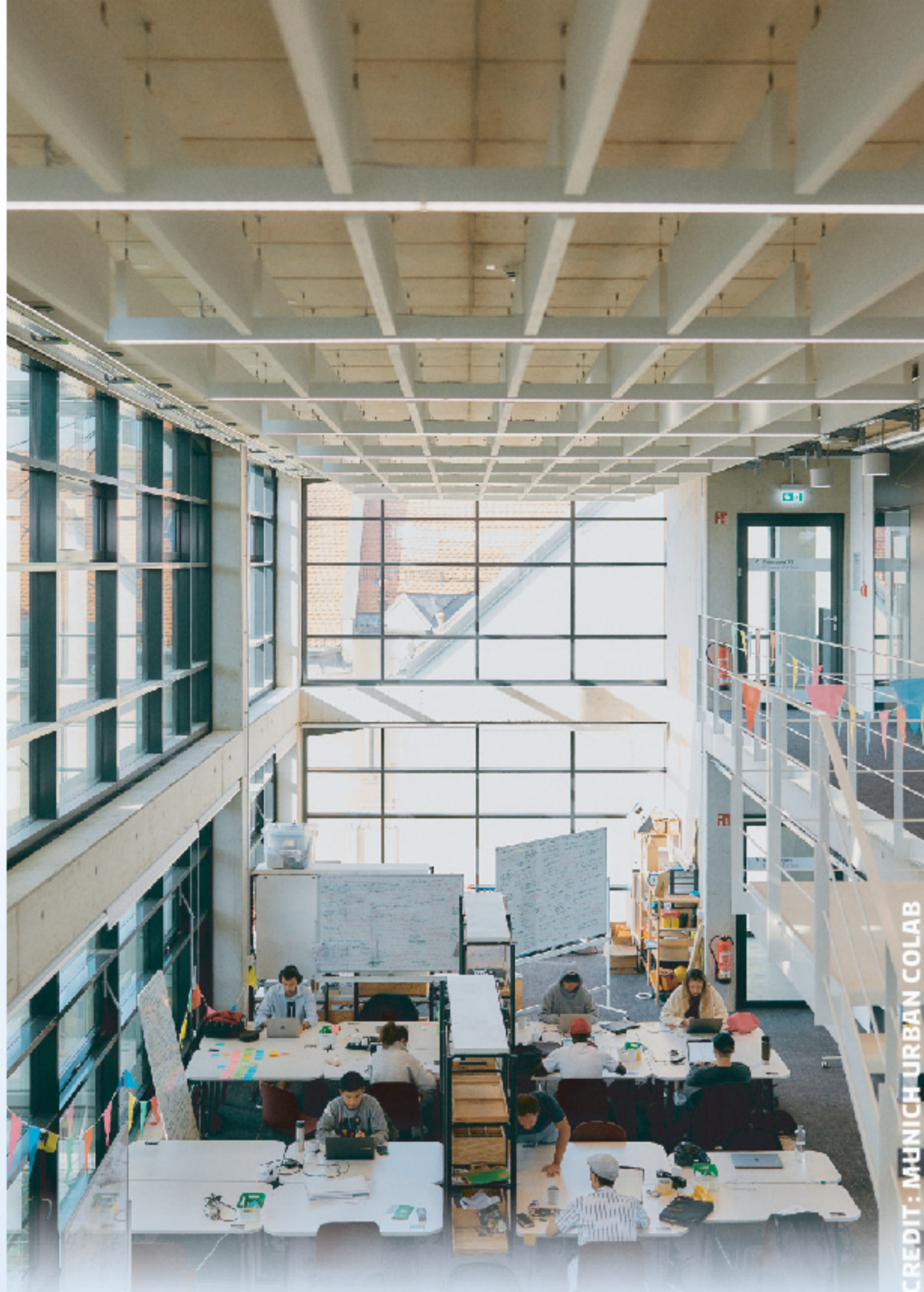
As Europe's biggest healthcare market by far and lagging behind in terms of digitalisation, Germany opens up a wide range of potential developments within healthcare. More new initiatives from government, both at the federal and state levels, together with a positive change in the public attitude towards digitalisation in medicine, create an excellent environment for innovation and collaboration.

This Outlook offers an overview of the health ecosystem, with a focus on AI and Robotics and digressions to digitalisation in Southern Germany. The purpose is to highlight key stakeholders, initiatives, and to present opportunities for collaboration, a roadmap for Danish actors seeking to establish partnerships, and knowledge exchange with this thriving ecosystem.

As we explore the Southern German ecosystem within Health Tech, AI, and Robotics, it becomes obvious that the collaboration opportunities are ample and diverse, catering to many levels of Health Tech innovation. Research and innovation activities are abundant, and incubation and acceleration programmes are of a high calibre. Investments are made on governmental and private levels, and collaboration with corporates offers great potential.

Get in touch with ICDK Munich if you wish to further explore the opportunities of the Southern German innovation ecosystem.

We hope you enjoy our walk through the ecosystem!



## INTRODUCING THE ECOSYSTEM

With this Outlook publication on Health Tech AI and robotics, we would like to showcase the different types of ecosystem partners available for collaboration in the Southern German region. We explore the opportunities for corporates through the eyes of the consultancy agency Alexander Thamm, where working with AI is central to handling hospital data and creating the right solutions for preventive care. Regulation is key to obtaining access to data to drive innovation. Therefore, the connection to policymakers and universities is also central to their needs.

Stemming from the network of the Munich Innovation Ecosystem, the network AI+ Munich supports startups in AI through mentoring programmes and connects relevant university partners, corporates, capital and policy. The federal government funds the

project, which further proves the government's commitment to supporting AI innovation. AI+ Munich offers an extensive network for future collaboration, knowledge exchange and investment for Danish organisations.

As a government agency for health in Baden-Württemberg, BioPro connects international collaborators with policymakers, state institutions in the healthcare industry, including biotechnology, medical technology, and the pharmaceutical industry. BioPro seeks to connect the right partners within Health Tech, including international partners, with their knowledge of the opportunities to use test facilities, living labs, and sandboxes. They are very aware of the regulatory challenges in Germany and are open to learning from Danish experiences on digital health infrastructure and data interoperability.

Putting the patient at the forefront by transforming healthcare with new solutions is a focus area of the Faculty of Medicine at Ludwig Maximilian University Hospital. Paired with awareness of ethical and regulatory constraints, AI and Robotics can enhance healthcare, even in rural areas. But it is important to keep a focus on medical and nursing education, the right investments and to build trust to ensure patients are open to innovations.

Startups like Dehaze GmbH, Devanthro, and Orbit Health benefit from the rich innovation ecosystem in Southern Germany and have strong connections to the universities. Further, funding from the federal government and e.g. the Bavarian state government is fundamental in supporting the first phases of establishing these game changing companies.

TUM Venture Labs Healthcare, one of the many topical deep-tech accelerators, is a key ecosystem partner in leveraging research and bringing it into society. The Venture Labs support researchers with



entrepreneurial tools to bring ideas to market. With their different offers of mentoring, training programmes, and venture capital connections, they signify a support system for commercialising deep tech research. Collaboration and investments are at the core of their activities, while successful entrepreneurs are asked to give back to the system through mentoring.

Venture capital investors like MIG Capital want disruptions that improve efficiency or enhance outcomes. Speed of market penetration is crucial, while the key goal is long term impact. Focusing on groundbreaking AI-driven healthcare solutions, they benefit from the diverse ecosystem in Southern Germany, which supports innovation on different

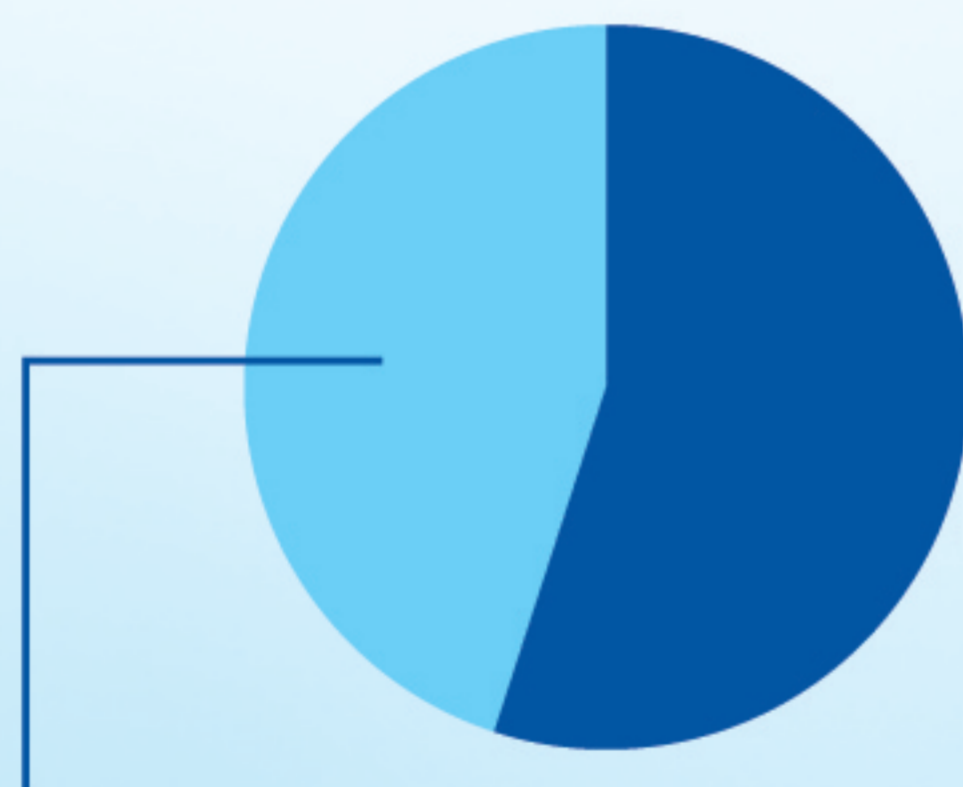
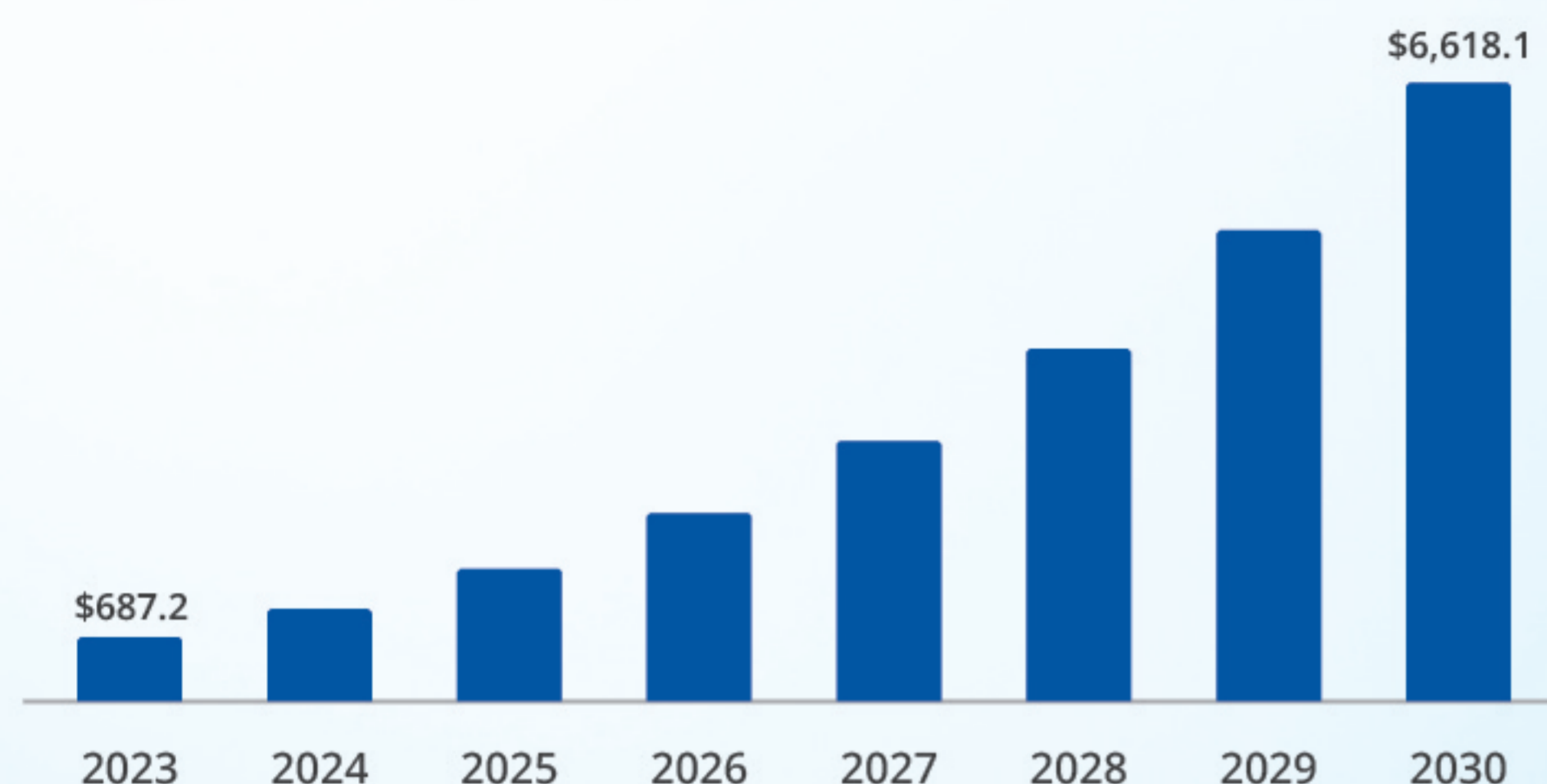
levels. However, collaboration with the Nordics and access to Danish healthcare data would be beneficial to the technological development of Southern German AI healthcare solutions.

The utilisation of the European research and innovation funding programme, Horizon Europe, is supported by the Bavarian Research Alliance GmbH, which supports researchers and innovators in their endeavours to internationalise their work. The programme supports building international relationships and long-lasting collaborations resulting in groundbreaking results. Germany is the European country Denmark has the most collaborations with within Horizon Europe.

# GERMAN AI IN HEALTHCARE MARKET

## German AI in Healthcare Market Revenue, 2023–2030 (USD Million)

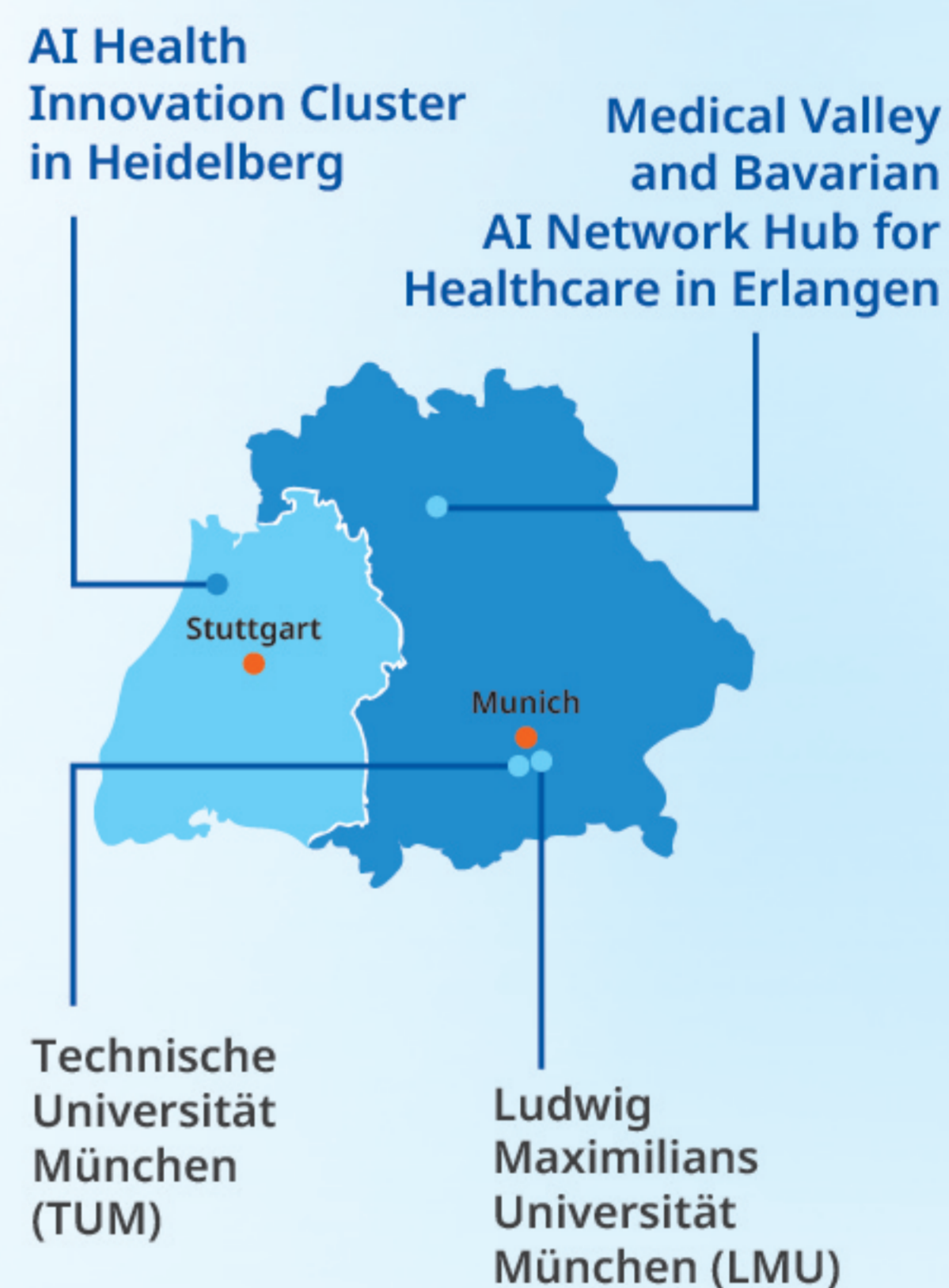
- The AI in healthcare market in Germany generated revenue of USD 687.1 million in 2023 and is expected to reach USD 6,618.1 million by 2030.
- The market is projected to grow at a compound annual growth rate (CAGR) of 38.2% from 2024 to 2030.



Approximately 45% of Germany's government-funded AI research projects are based in Southern Germany, highlighting its significance in AI-driven healthcare advancements.

(Source: Netherlands Innovation Network Germany)

(Grandviewresearch.com)



**Munich Center for Machine Learning (MCML):** A joint initiative by Ludwig-Maximilians-Universität München (LMU) and Technische Universität München (TUM), MCML comprises around 60 professors and over 330 junior researchers.

Approximately one third of the professors are part of the AI professorships funded by the High-Tech Agenda Bavaria, a EUR 5.5 billion investment program. (<https://www.research-in-bavaria.de/>)

# FROM AUTOMATION TO SMART HOSPITALS

*AI is poised to revolutionise healthcare in Southern Germany, making it more innovative, efficient, and patient-focused. With the right strategy and regulatory support, the region can lead Europe in shaping the future of digital health, which will create opportunities for Danish companies.*

Artificial intelligence is not just changing industries it's revolutionising them. Healthcare, in particular, stands to benefit immensely. With escalating administrative burdens, soaring costs, and a growing elderly population, the urgency for effective, data-driven solutions has reached a critical point.

In Southern Germany, AI is increasingly seen as the catalyst for transforming insurance systems, hospital operations, and patient care.

"AI isn't just about technology; it's about solving real business and societal challenges. In healthcare, that means freeing up resources, improving decision-making, and ultimately improving patient outcomes," says Niels Thomsen, a leading expert on artificial intelligence and digital transformation in the Southern German market.

Thomsen has worked extensively with hospitals, insurers (Krankenkassen), and life science companies across Southern Germany, advising them on integrating AI to achieve measurable business impact.

He says one of the region's major pain points is the overwhelming complexity of healthcare administration.

"Many hospitals still rely on outdated, manual workflows. There is a need for AI solutions that can classify, sort, and analyse vast amounts of patient data, speeding up claims processing and reducing bureaucratic overhead," Thomsen explains.

AI systems that automate document handling and support decision-making are already helping German insurance providers process claims faster, reduce administrative costs, and reallocate staff toward more value-adding tasks.



*“In the end, it's about efficiency. If we can cut administrative costs, those resources can be redirected into actual patient care.”*

*Niels Thomsen*



## AI-DRIVEN PREVENTIVE HEALTHCARE AND REHABILITATION

Germany, like much of Europe, faces an ageing population and increasing pressure on its healthcare system. AI-driven preventive care and rehabilitation are emerging as essential tools to ease this burden.

"The trend is clear: Where can we use AI in prevention, so people don't get sick in the first place? And if they do, how can we help them recover faster?" says Thomsen.

One notable example is a collaboration with Selfback, a Danish company specialising in AI-powered rehabilitation for lower back pain. Their platform supports patients with tailored exercise programmes, helping reduce recovery time and prevent chronic issues.

"Preventive healthcare is a massive opportunity for applying AI. By identifying risk factors and enabling at-home recovery can reduce hospital visits and improve long-term outcomes," he notes.

AI's capacity to monitor patient behaviour, suggest lifestyle changes, and guide rehabilitation programs reshapes healthcare from reactive to proactive.

## BUILDING SMART HOSPITALS WITH AI

AI also transforms hospital operations, optimising everything from resource allocation to patient scheduling and treatment planning.

"A modern hospital is a complex system with thousands of moving parts, staffing, bed allocation, and emergency intake. AI can help optimise all of that," says Thomsen.

Intelligent scheduling and forecasting tools are vital in a region where hospitals face both staffing shortages and rising patient demand. These AI-powered systems help efficiently deploy doctors and nurses, easing emergency and outpatient care bottlenecks.

"We are not trying to replace medical professionals. We are giving them tools that help them make better decisions faster," Thomsen emphasises.

Radiology is a case in point. AI-assisted diagnostics now help radiologists detect anomalies in X-rays and MRI scans more quickly and accurately. Predictive models can flag patients at high risk of complications, enabling earlier intervention.

"The ultimate goal is a more intelligent, more responsive healthcare system where AI ensures optimal patient outcomes while reducing costs," Thomsen says.



## OVERCOMING LEGAL AND INFRASTRUCTURE BARRIERS

Despite AI's immense potential, Germany's healthcare sector faces notable challenges, particularly around digital infrastructure and data regulation.

"The biggest hurdle isn't the AI technology itself. It's the legal framework. Many hospitals are still running their on-premise servers instead of cloud-based platforms, which limits scalability," Thomsen explains.

Strict data protection laws make it difficult for hospitals, insurers, and researchers to share and analyse data effectively. Thomsen advocates for data strategies that are both privacy-compliant and innovation-friendly.

"AI needs data, and if we can't access it due to outdated laws, we're limiting progress. That's why we focus on solutions that respect privacy but enable meaningful analysis," he adds.

These discussions are particularly active in Southern Germany. The region is home to top-tier research institutions and industrial innovators, creating fertile ground for progress if legal barriers can be addressed.



# ALEXANDER THAMM PAVES THE WAY FOR DANISH-GERMAN COLLABORATION IN HEALTH AI AND ROBOTICS

*Southern Germany is emerging as a hub for health AI, with Munich-based consultancy Alexander Thamm ([at]) driving healthcare transformation in Bavaria and Baden-Württemberg and eyeing international partnerships with Denmark among them.*

As AI reshapes European healthcare, Southern Germany is emerging as a key innovation hub with [at] and its Senior Principal Data Strategist, Dr. Till Plumbaum, leading efforts in generative AI and digital transformation across sectors.

He observes the region's AI ecosystem advancing rapidly, driven by significant public investment and a thriving network of top-tier research institutions.

"[at] plays a central role in advancing AI in the Southern German healthcare ecosystem. We focus heavily on production-ready, agentic AI systems. For example, we built a care assistant that combines legal texts and expert content in a scalable, low-hallucination setup," says Plumbaum.

In Baden-Württemberg, [at] is leading a comprehen-

sive AI transformation project for a major healthcare organisation.

"We are establishing governance structures, conducting enablement programmes, and implementing use cases like automated audio generation and image captioning," Plumbaum explains.

These solutions are built on reusable components and emphasise security, scalability, and compliance. A key focus for [at] is automating medical documentation, a critical area where clinicians face heavy administrative workloads.

"AI tools that can pre-populate radiology reports or draft patient letters significantly reduce administrative burden," Plumbaum notes.

He also sees growing potential in AI-enabled co-worker assistants' multimodal systems that support doctors during consultations and assist in diagnosis.

Beyond technical implementation, [at] is tackling persistent barriers to AI adoption. "Data quality is one of the biggest challenges in healthcare," says Plumbaum and continues:

"[at] builds robust pipelines for cleansing, standardisation, and validation."

Regulatory compliance is also core to the company's strategy.

"We embed governance and privacy into the design from day one, that's part of our end-to-end 'Data Journey' approach," Plumbaum adds.

## BRIDGING BORDERS WITH AI

As Europe prepares for the rollout of the European Health Data Space (EHDS), opportunities for international collaboration are growing, particularly between Germany and Denmark. Plumbaum sees strong potential in cross-border innovation.



*“Denmark’s advanced digital health infrastructure and high-quality centralised data provide a strong foundation for AI development.”*

*Dr. Till Plumbaum*

This complements Germany's strengths in applied

AI, MedTech, and regulatory expertise. Joint efforts could focus on federated learning, where Danish data accessibility meets German engineering and compliance know-how," Plumbaum says.

By aligning with European values like transparency and patient rights, [at] helps organisations build secure, interoperable AI systems that are audit-ready and privacy-preserving.

"We build federated architectures that allow data to stay within national or institutional boundaries, while still supporting cross-border analysis and innovation," Plumbaum explains.

Looking ahead, [at] expects the Southern German health AI ecosystem to focus increasingly on diagnostics and personalised medicine.

"In the next three to five years, we'll see momentum in AI-assisted diagnostics, genomics, and digital twins for cardiology," says Plumbaum.

He also expects growth in remote monitoring platforms, driven by demographic changes and chronic care needs.

"We don't just deploy AI solutions, we absorb the latest research and bring it into production," he emphasises and adds: "Whether it's autonomous decision agents, sensor-driven models, or new context protocols, we integrate innovations long before they go mainstream."

[at] offers a strong entry point for Danish stakeholders interested in Southern Germany's booming health AI sector.

"We see ourselves as an enabler," Plumbaum concludes. "By bridging technical, regulatory, and strategic gaps, we can help shape a responsible, scalable AI future, together."



## EMPOWERING HEALTH AI: THE ROLE OF REGIONAL INNOVATION HUBS IN SOUTHERN GERMANY

*With strong government backing, cross-sector collaboration, and global outreach, AI+MUNICH fosters an ecosystem that enables AI innovations to scale, attracting international partners – including Danish stakeholders – looking to engage with one of Europe’s most dynamic AI-driven healthcare landscapes.*

Southern Germany has become a key centre for Health AI innovation, partly due to regional programmes like AI+MUNICH that connect researchers, industry, and policymakers, helping startups tackle regulations and technical challenges.

The German government awarded AI+MUNICH EUR 5.9 million to foster collaboration within the Bavarian ecosystem and support AI-driven healthcare solutions through partnerships and specialised programmes.

“By engaging with research institutions, hospitals, and technology companies, we aim to ensure that people collaborate to shape the future solutions,”

says the CEO of Munich Innovation Ecosystem, Frizzi Engler-Hamm.

The collaboration with the leading entrepreneurship centres in Europe, UnternehmerTUM, START2 and Strascheg Center for Entrepreneurship connects AI innovators from academia and industry within Bavaria and globally, fostering trust and accelerating business growth.

“This ensures AI innovations move from the lab into real-world applications, promoting research, development, and the application of AI for the benefit of society and the economy,” Engler-Hamm says.

This collaborative approach extends to events like the Health Tech Trends Event, which convenes startups, investors, and industry experts. Gatherings like these create opportunities for pilot projects, funding, and exchanging expertise, strengthening the ecosystem's foundation for innovation. Companies like CureVision and Infinimol have benefited from these connections, leading to valuable pilot projects and commercial partnerships.

## **A THRIVING AI ECOSYSTEM WITH STRONG GOVERNMENT BACKING**

One of the region's key advantages is its well-supported innovation infrastructure. AI+MUNICH benefits from strong government support, with strong partners like Google.

"The support enables startups and researchers to access grants and commercialisation pathways. The region's robust industrial and healthcare landscape, including major corporations and agile SMEs, further enhances its attractiveness as an innovation hub," says Engler-Hamm.

Through initiatives like the Bridge-to-Market programme, AI+MUNICH guides researchers and startups in refining their product-market fit, assessing technical feasibility, and navigating legal considerations such as data protection. This hands-on approach ensures that AI innovations are well-positioned for scalability and impact.

## **ENCOURAGING CROSS-SECTOR COLLABORATION**

Despite its strengths, the Southern German Health AI ecosystem faces hurdles, particularly in regulatory compliance.

To address this, AI+MUNICH has assembled a network of experts who assist startups in meeting certification and ethical standards while maintaining their innovative edge.

The AI NATION programme, founded by AI+MUNICH and K.I.E.Z., supports early-stage AI ventures through expert mentorship and access to a national network of stakeholders. By bridging Munich and Berlin's dynamic AI startup communities, AI NATION empowers entrepreneurs to turn groundbreaking AI ideas into successful businesses.

A defining feature of AI+MUNICH's strategy is its emphasis on cross-sector collaboration.

"We actively connect startups with corporates through events and mentorship programmes," Engler-Hamm states.

Moreover, AI+MUNICH facilitates access to industry mentors who provide crucial insights into regulatory navigation, strategic decision-making, and business development. By maintaining close ties with venture capitalists and institutional investors, the organisation accelerates fundraising and go-to-market efforts, ensuring that promising AI solutions efficiently reach healthcare applications.

## STRENGTHENING INTERNATIONAL APPEAL AND FUTURE PROSPECTS

Looking ahead, AI+MUNICH is committed to reducing bureaucratic obstacles and making regulatory processes more startup-friendly.



*“We have developed a highly streamlined process that allows teams to quickly and easily receive up to EUR 25,000. This often serves as a crucial starting point for their startup journey.”*

*Frizzi Engler-Hamm*

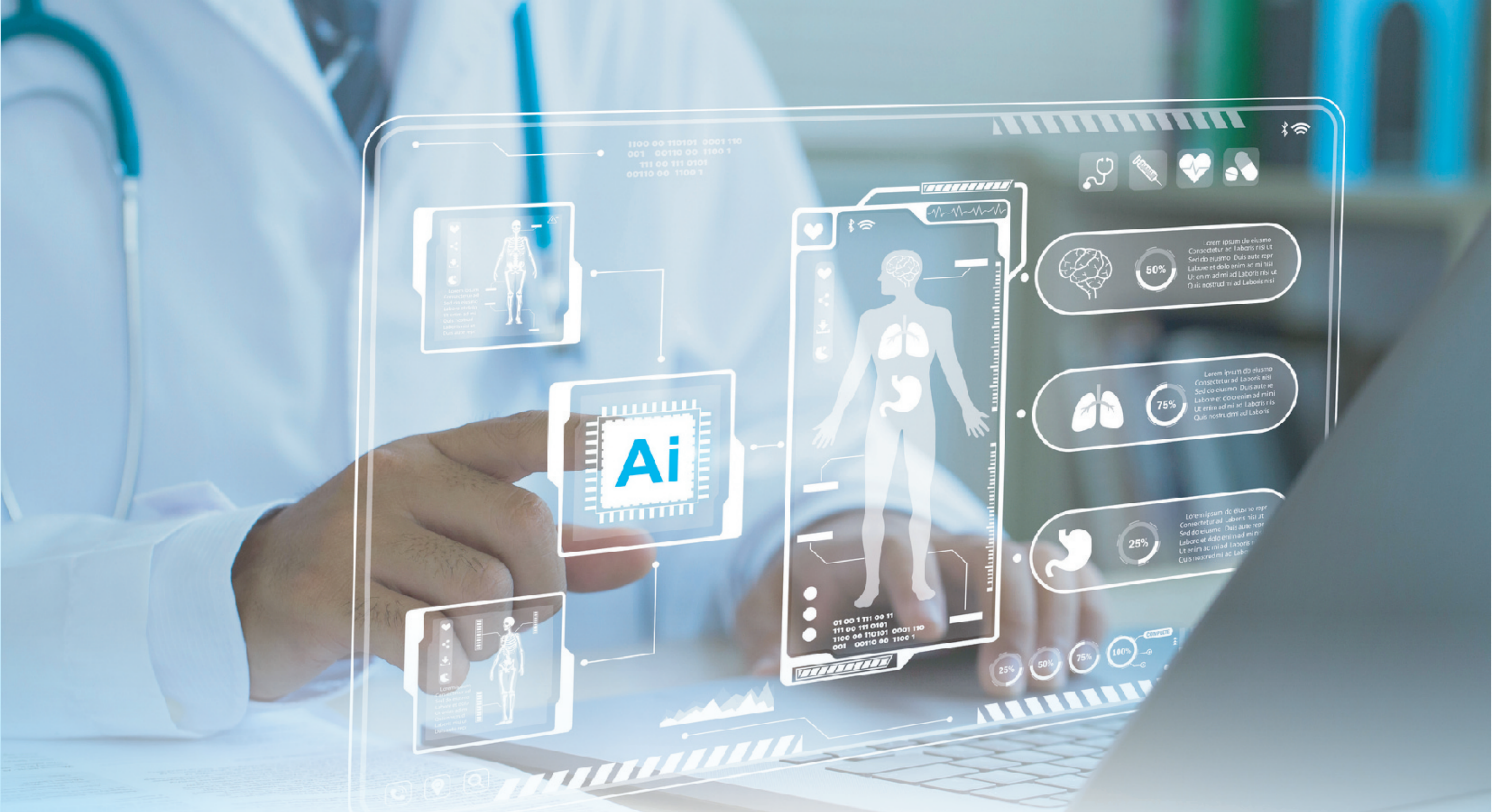
Additionally, AI+MUNICH actively promotes its startups on the global stage by showcasing them at

conferences like Bits & Pretzels and SXSW. These curated networking opportunities allow startups to connect with international investors and partners, expanding their reach beyond Germany.

With its strong government support, rich industrial expertise, and culture of collaboration, Southern Germany is well-positioned to lead in Health AI. As Engler emphasises:

*“AI+MUNICH and AI NATION are at the heart of this transformation, orchestrating partnerships, supporting startups, and aligning stakeholders to drive meaningful AI-driven healthcare innovation.”*

AI+MUNICH offers Danish stakeholders a strategic entry point into one of Europe’s most dynamic AI-driven healthcare landscapes. Through collaboration, knowledge exchange, and investment, Danish companies and researchers can tap into the region’s expertise and infrastructure, fostering international partnerships that will drive the future of healthcare AI.



# DRIVING HEALTH AI INNOVATION IN SOUTHERN GERMANY


*Southern Germany is emerging as a key hub for Health AI innovation, driven by institutions like BIOPRO Baden-Württemberg, which fosters collaboration between research, industry, and policymakers to accelerate AI-driven healthcare solutions.*

As Europe accelerates its adoption of artificial intelligence in healthcare, a recent European Commission survey reveals a stark reality: while progress is being made, challenges persist in industry collaboration and regulatory clarity.

Nowhere is this dichotomy more apparent than in Southern Germany, a region brimming with cutting-edge research institutions and tech-driven enterprises striving to redefine Health AI.



*“Our mission is to drive the transformation of the economy by promoting technological, digital, and sustainable advancements within the healthcare industry.”*  
*Dr. Claudia Luther*



At the heart of this is BIOPRO, an agency based in Baden-Württemberg committed to bridging these gaps by cultivating innovation, fostering strategic partnerships, and driving sustainable growth in the region's thriving healthcare ecosystem.

As the coordination body for the Forum Gesundheitsstandort Baden-Württemberg, BIOPRO facilitates collaboration among over 700 experts from hospitals, care facilities, research institutions, universities, and industry players.

"The Forum plays a pivotal role in uniting experts from different sectors to advance the state's healthcare economy," Dr. Claudia Luther, Managing Director – Sector analysis and location development of BIOPRO explains

## **COLLABORATION AND INNOVATION IN HEALTH AI**

One of BIOPRO's key responsibilities is fostering cross-sector partnerships.

"We bring together research and industry by acting as a bridge. For example, if a scientist has an idea but lacks an industrial partner, we help find suitable companies that match their innovation needs," Luther says.

BIOPRO collaborates with leading AI institutions, including Cyber Valley, Europe's largest AI research

network, to explore AI applications in healthcare, such as predictive diagnostics and robotic assistance. It also engages with the AI Alliance Baden-Württemberg, which connects research, industry, and healthcare providers to accelerate AI-driven medical innovation.

Through these partnerships, BIOPRO drives advancements that enhance patient outcomes, optimise clinical workflows, and ensure AI technologies align with ethical and regulatory standards.

"We know that many small and medium-sized enterprises in the medical technology sector struggle with digital transformation. Our goal is to ensure they have access to the right information and training," Luther says.

## **STRENGTHS AND CHALLENGES OF THE ECOSYSTEM**

The ecosystem's strength lies in interdisciplinary collaboration, according to Luther. She emphasises that its success stems from the seamless integration of expertise across various fields and points to the region's strong research foundation, noting that institutions such as the Fraunhofer Institutes, the Max Planck Institute for Intelligent Systems, and the Karlsruhe Institute of Technology play a crucial role in driving innovation.

The region also benefits from established industry leaders.

"Companies like Bosch and Zeiss contribute to a thriving startup scene in AI and healthcare technology. Their expertise in mechanical engineering and automation further strengthens our ecosystem," Luther says.

Despite these advantages, the ecosystem faces challenges. One major issue is the regulatory complexity.

"Germany over-fulfils regulatory requirements, leading to long approval times for AI-driven healthcare solutions. This makes it particularly difficult for startups to navigate the system," she adds.

To address this, BIOPRO provides guidance through its Wegweiser Regulatorik Gesundheitswirtschaft BW platform, helping companies understand regulatory pathways and connect with legal experts.

"We also support access to test facilities, living labs, and sandboxes to facilitate early-stage validation," Luther adds.

Another significant challenge is data accessibility. AI in healthcare relies on high-quality, standardised data, but strict regulations make this difficult in Germany.

"Through the Forum Gesundheitsstandort, we advocate for harmonized data protection regulations and improved research access," she says.

## FUTURE OUTLOOK AND OPPORTUNITIES FOR DANISH STAKEHOLDERS

Looking ahead, BIOPRO aims to strengthen the region's international appeal.

*"We believe that there's a lot to learn from Denmark, particularly in digital health infrastructure and data interoperability, Denmark is far ahead in electronic patient records and the efficient use of healthcare data."*

*Dr. Claudia Luther*

BIOPRO provides valuable support for Danish companies looking to enter the German market. If a Danish company is interested in Baden-Württemberg, Luther and the team can help find suitable partners and navigate the ecosystem.

"We are always open to collaborations that drive technological advancements in healthcare," Luther explains.

As BIOPRO continues to support innovation in Health AI and Robotics, it remains a crucial facilitator of partnerships, ensuring Southern Germany remains a leader in healthcare technology.

"Our role is to create connections, provide expertise, and drive healthcare transformation. By working together across borders, we can achieve even greater advancements," Luther concludes.

# AI-DRIVEN HEALTHCARE: HOW SOUTHERN GERMANY IS SHAPING THE FUTURE OF MEDICINE

*Southern Germany is emerging as a leader in AI-driven healthcare, with LMU Klinikum pioneering innovations in nursing, wound care, and intensive care. These advancements enhance patient outcomes, optimise medical processes, and address workforce challenges while navigating ethical and regulatory landscapes.*

Southern Germany, known for its engineering prowess and innovation-driven industries, is rapidly becoming a hub for AI applications in healthcare. With strong governmental support and a robust academic infrastructure, universities and research institutions in Bavaria and Baden-Württemberg are at the forefront of integrating AI into medical and nursing practices. Among these, Ludwig Maximilians University (LMU) Klinikum in Munich is pivotal in shaping the future of AI-driven healthcare solutions.

Like many European nations, the German healthcare system faces mounting challenges. An ageing population, increasing chronic disease burdens, and an ongoing shortage of nursing professionals demand innovative solutions. AI has the potential to alleviate these challenges by improving efficiency, optimising treatments, and enhancing patient outcomes. However, integrating AI into clinical practice requires more than technical innovation. It demands a collaborative ecosystem of researchers, healthcare providers, and policymakers.

## LMU KLINIKUM'S CONTRIBUTION TO AI IN HEALTHCARE

LMU Klinikum, one of Germany's leading university

hospitals, has been at the forefront of research and implementation of AI-driven solutions in medicine and nursing. Professor Dr. Ulrich Fischer, head of the hospital's Department of Quality Management and Nursing Research, emphasizes AI's unique role in enhancing nursing care and treatment outcomes.



*“Nursing technology is a particular field, and AI allows us to optimise processes and improve patient care in previously unimaginable ways.”*

*Dr. Ulrich Fischer*

From wound detection algorithms to telemedicine applications, AI is becoming a critical component of modern healthcare.

One of the standout projects at LMU Klinikum involves AI-powered wound assessment. Wound care, particularly for chronic wounds such as pressure ulcers and incontinence-associated dermatitis, often requires expert evaluation. Fischer and his team have developed an AI-based image recognition tool to differentiate between similar-looking wounds and suggest tailored treatment plans. This tool is handy for ambulatory care settings, where access to

specialised wound therapists is limited.

“Many nurses in-home care are not trained wound specialists,” Fischer explains. “By using AI, we can provide them with a reliable second opinion, ensuring that patients receive the right treatment sooner.”

This innovation is a technological leap and a significant cost-saving measure for the healthcare system. Training an AI model to identify wound types requires thousands of accurately labelled images, which Fischer acknowledges is both time-consuming and expensive. However, the long-term benefits like reduced misdiagnosis rates, improved healing times, and lower hospital readmission rates far outweigh the initial investment.

## AI'S EXPANDING ROLE IN INTENSIVE CARE AND NEONATAL UNITS

Beyond wound care, LMU Klinikum is actively integrating AI in intensive care units (ICUs). An average ICU patient generates approximately 10,000–12,000 data points per minute from medical devices monitoring vital signs, medication dosages, and other critical parameters. While this wealth of data has immense potential, deriving actionable insights from it remains a challenge.

“AI can help us process these vast amounts of data and guide us toward individualised treatment plans,” Fischer explains.

*“Rather than relying solely on standardised protocols, AI-driven models allow us to tailor interventions based on real-time patient data.”*

*Dr. Ulrich Fischer*

A particularly promising area of research involves using AI to assess general movements in newborns. By analysing short video clips of an infant's movements, AI can potentially predict developmental disorders years before they become clinically apparent. This early detection could enable timely interventions, improving long-term health outcomes.

“Parents of newborns often experience anxiety about their child's health, especially if there were complications during birth,” says Fischer. “If AI can provide a reliable prognosis based on movement patterns, it could offer both reassurance and early intervention strategies.”

## GOVERNMENT SUPPORT AND THE REGIONAL AI ECOSYSTEM

Bavaria and Baden-Württemberg have been particularly proactive in fostering AI research in healthcare. Programmes like the Bavarian Health Alliance and Zentrum Digitalisierung Bayern (ZDB) provide funding for AI-driven medical innovations. While federal funding exists, Fischer notes that regional support has been instrumental in bridging the gap between research and real-world applications.

“These programmes provide the financial backing needed to move from theoretical AI models to practical, deployable solutions,” Fischer states. “However, challenges remain, particularly in integrating AI into Germany's complex healthcare regulatory framework.”

Infrastructure is another critical factor. While Munich and Stuttgart benefit from robust digital connectivity, many rural areas in Southern Germany lack the necessary infrastructure to support AI-powered healthcare services. “Telemedicine and AI-driven diagnostics rely on stable internet connections,”

Fischer notes and continues: “Without sufficient digital infrastructure, even the most advanced AI applications cannot be fully utilised.”

## ADDRESSING ETHICAL AND DATA PRIVACY CONCERNS

Data privacy and ethical considerations are central to AI adoption in German healthcare. Stringent regulations rooted in historical concerns over personal data security require AI developers to navigate a complex landscape of compliance requirements.

“We follow the highest standards, including the Declaration of Helsinki and GDPR, to ensure that patient data is handled responsibly,” Fischer affirms. “However, there is often a disconnect between patient willingness to share anonymous data for research and the legal restrictions imposed on data usage.”

Despite these challenges, LMU Klinikum is committed to maintaining transparency and trust in its AI initiatives. “Patients generally support AI-driven advancements if they understand the potential benefits,” Fischer observes. “Our responsibility is to ensure these technologies are implemented ethically and effectively.”

## THE FUTURE OF AI IN NURSING AND HEALTHCARE

Fischer envisions a future where AI seamlessly integrates with everyday medical practices. Like ChatGPT, large language models could assist nurses with documentation and patient communication, especially in multilingual settings. AI-enhanced telemedicine platforms may enable more effective remote consultations, particularly in underserved rural areas.

However, Fischer emphasises the importance of preparing healthcare professionals for this shift. “We need to integrate digital competencies into nursing education now,” he states. “Existing nurses also require training to understand AI-generated recommendations and make informed clinical decisions.”

AI will not replace human caregivers but augment their capabilities, allowing them to focus on the human aspects of care that machines cannot replicate. As Germany continues to refine its digital health policies and infrastructure, the role of institutions like LMU Klinikum in shaping AI-driven healthcare will only grow.

*“The future of AI in healthcare is not about replacing jobs. It’s about enhancing our ability to deliver high-quality, patient-centred care.”*

*Dr. Ulrich Fischer*

“With the right investments and ethical considerations, AI has the potential to transform healthcare for the better.”

# AI HEALTH STARTUPS THRIVING IN SOUTHERN GERMANY

Southern Germany has long been recognised as a powerhouse of technological innovation, and in recent years, it has become an increasingly fertile ground for AI-driven healthcare startups. With a robust research ecosystem, substantial funding opportunities, and a supportive network of accelerators and public initiatives, the region is fostering the next generation of digital health pioneers. The three startups Dehaze GmbH, Devanthro, and Orbit Health exemplify how AI revolutionises patient care while leveraging the unique strengths of the Southern German innovation ecosystem.

## REVOLUTIONIZING PATIENT HEALTH DATA WITH AI

One of the key challenges in modern healthcare is consolidating and analysing patient health data to enable earlier diagnoses and more personalised treatments. Dehaze GmbH is tackling this issue head-on. Founded in late 2023, the company's approach places patients at the centre, using AI to extract and structure unstructured health data from multiple sources.

"We cannot wait until symptoms show up because this is too late for chronic diseases. We need to identify them sooner and then tackle them individually before the symptoms become present," explains Marius Klages, MD & Founder of Dehaze.

Their prototype, currently being tested with multiple sclerosis patients, is showing promise in improving early diagnosis and treatment personalisation. Supported by public funding such as DATIPilot and the BMBF pediatric oncology project, as well as accelerators like Techstars Berlin, Dehaze is a prime example of how Germany's support system is fueling AI-driven health innovation.

## ENHANCING ELDERLY CARE WITH ROBOTIC AVATARS

With an ageing population and a shrinking caregiver workforce, the need for scalable elderly care solutions has never been greater. Enter Devanthro, a startup that has spent the last eight years developing humanoid robotic avatars, or "Rodies," to assist elderly individuals in their homes.

"Our purpose is to help people age with dignity in the comfort of their home and in caring company. We do this by super-powering caregivers, professionals and relatives, to care for elderlies 24/7 from a distance," says Kim Nilsson, Chief Operating & Commercial Officer of Devanthro.

Their robots, which enable caregivers to provide around-the-clock monitoring and remote personal visits, have already been piloted in five homes, with a commercial rollout expected in 2026/2027.

Unlike many startups that seek external funding early on, Devanthro has been bootstrapped to date, generating EUR 1.4 million through grants and sales. Their success is further amplified by public funding support from the German Ministry of Science, demonstrating how government initiatives actively support AI health innovation in the region.

## TRANSFORMING PARKINSON'S CARE THROUGH AI MONITORING

Another company making waves in the Southern German AI health landscape is Orbit Health. This company focuses on revolutionising Parkinson's disease management through AI-powered continuous monitoring. Their flagship product, Neptune™,

offers minute-by-minute symptom tracking, similar to glucose monitoring for diabetes. It provides doctors with real-time insights to optimise treatment.

“We saw that conventional, snapshot-based treatment models were limiting. Doctors were making decisions based on occasional patient visits and subjective symptom tracking. AI-driven continuous monitoring changes that entirely,” says Patty Lee, CEO of Orbit Health.

Since its founding in 2021, Orbit Health has raised USD 5 million from investors, including EIT Health, MTE VC which are both based in Munich and BioInnovation Institute in Denmark. Additionally, it secured its first reimbursement contract with a statutory health insurer in southwestern Germany, an essential step toward making its technology widely accessible.

## **THE SOUTHERN GERMAN INNOVATION ECOSYSTEM: A LAUNCHPAD FOR AI HEALTH STARTUPS**

What sets Southern Germany apart as a hub for AI health innovation? A combination of world-class research institutions, access to funding, and an interconnected network of accelerators and industry partners. Each of these startups has benefited from collaborations with leading universities and hospitals.

“The development of Neptune was grounded in rigorous research, supported by collaborations with leading universities and hospitals, including LMU Munich and Schön Klinik. Years of algorithm refinement, informed by clinical data and expert insight, have made Neptune a clinically robust solution,” Lee says.

Strengthening collaboration between Denmark and Germany in AI-driven healthcare could unlock new opportunities for innovation and scalability. Given their shared commitment to advancing digital health, fostering cross-border partnerships can accelerate the adoption of transformative solutions.

“The worrying trend of increasing need for care in the population, while the workforce is decreasing, is happening across Europe. The beauty of our solution is that it is geographically independent, and we would love to meet potential customers in our Nordic neighbour,” says Nilsson, highlighting how the company is poised for international expansion.

## **A FUTURE OF AI-DRIVEN HEALTHCARE INNOVATION**

As these startups continue to push the boundaries of AI in healthcare, Southern Germany’s innovation ecosystem remains a key enabler of their success. With cutting-edge research, substantial financial backing, and a growing demand for AI-driven solutions, the region is set to stay at the forefront of digital health transformation.

“Orbit Health is positioned to lead Parkinson’s care innovation. The company’s ongoing collaborations with prestigious institutions in Germany, UK, Singapore, and Denmark aim to showcase the clinical value of Neptune in reducing symptom burdens and advancing treatment options for Parkinson’s patients on an international scale,” says Lee.

From AI-powered patient health records to robotic caregivers and real-time Parkinson’s monitoring, Southern German startups are not just developing new technologies. They are shaping the future of healthcare worldwide.



# TUM VENTURE LAB HEALTHCARE IS SHAPING THE FUTURE OF HEALTH AI

*TUM Venture Lab Healthcare is pivotal in shaping the future of Health Tech AI and Robotics by bridging research with industry, supporting entrepreneurial talent, and fostering a collaborative ecosystem.*

In the heart of Southern Germany's dynamic innovation ecosystem, TUM Venture Lab Healthcare is a beacon for entrepreneurial talent.

As part of the broader TUM Venture Labs network, which supports industries like aerospace, mobility, sustainability, and AI, it provides tailored resources, mentorship, and industry connections.

With rapid advancements in AI and automation, the need for structured frameworks to translate research into real-world solutions is more urgent than ever. TUM Venture Labs play a pivotal role in this transition, creating an environment where early-stage ideas can grow into scalable businesses.

In a conversation with Philipp Gerbert, CEO of TUM Venture Labs, and Maria Sievert, Managing Director for Venture Lab Healthcare, we explore how this key player fosters innovation, bridges research with industry, and strengthens collaboration within the ecosystem.

## DRIVING STARTUP GROWTH IN HEALTH AI AND ROBOTICS

TUM Venture Labs' mission is to empower entrepre-

neurs by offering an integrated support system that guides startups from ideation to commercialisation.

"We operate at the intersection of science, business, and technology," Gerbert explains and continues:




*"Our goal is to provide a structured environment where innovative ideas mature into scalable companies."*

*Philipp Gerbert*

The Venture Lab focuses on deep-tech innovation, including AI, Robotics, and digital health solutions. By leveraging the resources of the Technical University of Munich (TUM), one of Europe's leading technical universities that has as a strategy to be the 'entrepreneurial university', the lab ensures that scientific breakthroughs translate into viable business models.

The programme offers a multifaceted approach to nurturing startups. It includes access to state-of-the-art prototyping facilities, guidance on



strategy to be the 'entrepreneurial university', the lab ensures that scientific breakthroughs translate into viable business models.

## BRIDGING RESEARCH AND INDUSTRY

One of TUM Venture Labs' core strengths is their ability to connect research with industry, facilitating the commercialisation of academic innovations. "Germany has a strong tradition of engineering excellence and applied research," says Sievert and adds:

"However, many groundbreaking ideas never leave the lab. Our role is to bridge this gap and help researchers turn their discoveries into market-ready products."

Through its extensive network, the lab introduces early-stage companies to potential industry partners, helping them refine their technologies in real-world applications. This connection to industry is invaluable, as it allows startups to validate their solutions in clinical or operational settings, receive direct feedback from end-users, and refine their business models.

"Bridging academic excellence with industry expertise, we create an environment where AI-driven solutions can be tested, validated, and scaled to impact real-world healthcare challenges," Gerbert says.

Additionally, TUM Venture Lab Healthcare provides regulatory guidance to help startups navigate the complex landscape of medical device approvals, data privacy regulations, and AI ethics. These considerations are crucial for companies developing Health Tech AI and Robotics solutions, as regulatory compliance can often be a major roadblock to market entry.

## BUILDING A COLLABORATIVE ECOSYSTEM

Networking and collaboration are fundamental to TUM Venture Lab Healthcare's approach. The lab actively cultivates an ecosystem where startups, investors, and industry leaders can engage and co-develop solutions.

"We host regular pitch events, investor meetups, and innovation workshops that bring together key stakeholders. These events give startups the exposure they need to attract funding and strategic partnerships," Gerbert explains.

TUM Venture Labs foster a collaborative environment by connecting startups for peer-to-peer learning, enabling founders to share experiences and build relationships that drive future collaborations. Closely integrated with Munich's broader innovation ecosystem, including UnternehmerTUM, one of Europe's largest startup incubators and a shareholder of TUM Venture Labs, the lab expands access to essential resources.

This ecosystem-driven approach ensures startups

This ecosystem-driven approach ensures startups benefit from mentorship, financial backing, and a strong support network, creating the conditions for long-term success in deep-tech entrepreneurship.

## OVERCOMING CHALLENGES FOR STARTUPS

Despite its strengths, the Southern German innovation ecosystem presents unique startup challenges. Regulatory complexities, access to funding, and the need for cross-disciplinary expertise are among the common hurdles.

“The healthcare sector, in particular, requires a deep understanding of compliance and clinical validation. Startups must navigate complex regulatory frameworks before bringing their solutions to market,” Sievert says.

In addition to regulatory challenges, securing early-stage funding can be difficult for startups working in Health AI and Robotics. Unlike traditional software startups, which often require relatively low capital investment, companies in these fields frequently face high R&D costs and long development cycles.

Recognising this, TUM Venture Lab provides specialised support, including grant application assistance, introductions to venture capital networks, and connections with angel investors with expertise in healthcare innovation.

The lab also offers sector-specific mentorship to support founders further, pairing startups with experienced entrepreneurs and industry experts who can provide strategic insights.

“We believe that having the right guidance at the right time can make a crucial difference,” Gerbert explains and adds: “By equipping founders with the right knowledge and resources, we help them

overcome barriers and accelerate their journey to market entry.”

## OPPORTUNITIES FOR DANISH STAKEHOLDERS

TUM Venture Labs present a valuable entry point into the German market for international stakeholders, including Danish researchers and entrepreneurs.

“We see great potential for collaboration with Danish innovation hubs, such as DTU and the Bio Innovation Institute. Denmark also has a strong reputation in life sciences and digital health, which aligns well with our focus areas,” Gerbert states.

Danish startups and researchers can engage with TUM Venture Labs through exchange programmes, joint research projects, and cross-border investment opportunities.

“We encourage international entrepreneurs to participate in our accelerator programmes and leverage our network to establish a foothold in the German market,” Sievert adds.

Moreover, the lab allows international startups to work within Munich’s innovation ecosystem, gaining exposure to one of Europe’s most robust technology landscapes. Access to German corporate partners, healthcare institutions, and investors can give Danish entrepreneurs the strategic resources to scale their businesses.



*“The synergies between the Danish and German ecosystems can drive innovation at a European scale.”*

*Maria Sievert*

# MIG CAPITAL: BETTING ON AI BREAKTHROUGHS TO TRANSFORM HEALTHCARE

*MIG Capital invests in AI-driven healthcare solutions that enhance R&D and clinical outcomes, focusing on scalable tech bio innovations from Southern Germany and promoting international collaboration and data access to drive transformative impact.*

When assessing AI-driven healthcare investments, Dr. Fei Tian isn't looking for incremental improvements but breakthroughs.

"The first criterion we judge an investment on is whether the solution increases efficiency in the medical system or has a measurable impact on patient outcomes," says Tian, Principal at MIG Capital.

From its base in Munich, MIG Capital is deeply embedded in the Southern German innovation ecosystem. It leverages its robust academic institutions, corporate networks, and startup incubators to advance cutting-edge AI and Robotics solutions in healthcare. MIG Capital's approach is deliberate, focusing on high-impact, scalable technologies that have the potential to transform medical practice and biotech R&D.

AI's role in healthcare is rapidly expanding, from drug discovery to personalised medicine and robotic-assisted surgeries. However, for MIG Capital, not all AI solutions are created equal. Their investment decisions hinge on multiple factors, beginning with the fundamental question: Does this technology improve efficiency or significantly enhance outcomes?

"If a company falls into the 'efficiency gain' category, we expect them to have a holistic approach or a unique development strategy. But we prefer innova-

tions that can significantly impact outcomes," explains Tian.

The potential for disruption is also critical. "We assess the level of disruption and what kind of dramatic or transformative impact this technology can have in the long run," she adds.

While automation of existing workflows is valuable, MIG Capital is more interested in paradigm shifts like technologies that redefine how healthcare operates, rather than simply making it more efficient with patchworks.

Another key criterion is scalability. "Speed of market penetration is crucial. In robotics and AI, competitive advantage often comes down to execution and how fast a team can bring a product to market." MIG Capital looking for startups with strong technological innovation and the execution power to scale their solutions efficiently.



***"Speed of market penetration is crucial. In Robotics and AI, competitive advantage often comes down to execution: How fast a team can bring a product to market."***

*Dr. Fei Tian*

## STRATEGIC INVESTMENTS IN HEALTH AI

MIG Capital's investment strategy has gradually refined its focus within AI-driven healthcare, centering on two primary areas.

The first is infrastructure platforms for AI integration, which provide the foundational backbone for implementing AI solutions across healthcare systems. Rather than investing in fragmented, isolated solutions, MIG Capital seeks platforms to integrate multiple AI applications into a unified and cohesive ecosystem.

"Instead of having multiple small island solutions, we look for platforms that can integrate AI applications into a broader, more cohesive ecosystem," Tian says. These platforms enable hospitals and clinics to leverage AI-driven decision-making more efficiently and effectively, by overcoming the data safety and validation sales cycle bottle neck.

The second key focus area is AI applications in biotech and drug discovery. This involves developing foundation models, using AI to discover new drug targets and new biomarkers, and along the drug development value chain to enhance patient profiling and clinical trial data selection and management, thereby streamlining drug development and increasing the success rates of clinical trials.

***“ We see great value in AI-driven patient profiling to increase the success rate of clinical trials, making drug development more efficient. ”***

*Dr. Fei Tian*

AI's capability to analyse data, predict target discovery and drug efficacy, and optimise clinical trial designs represents a significant opportunity to accelerate drug discovery and improve success rates within the biotech sector.

## THE STRENGTH OF THE SOUTHERN GERMAN ECOSYSTEM

The strength of the Southern German innovation ecosystem bolsters MIG Capital's confidence in health AI investments. The region boasts some of the world's leading academic institutions and research centres in AI and robotics, including Fraunhofer IPA, Max Planck Institute, LMU Munich, and the Technical University of Munich (TUM). These institutions serve as incubators for cutting-edge research and provide a steady pipeline of top-tier talent.

"Southern Germany has some of the world's leading academic centres for AI and Robotics, including Fraunhofer IPA, Max Planck, LMU, and TUM. These institutions are the brain behind much of the innovation," says Tian.

Beyond academia, the region is home to some of the most advanced AI and Robotics companies in healthcare. Established players like Brainlab, a leader in AI-powered surgical technology, and KUKA, a robotics company pioneering automation in medical procedures, provide a fertile ground for collaboration and knowledge exchange. International big tech companies, including OpenAI, Google, Microsoft, Amazon, IBM, Intel, Siemens, SAP, Bosch, and NVIDIA have major AI operations in Munich and Southern Germany.

"Alongside the strong industry and tech player, there are startup incubators like UnternehmerTUM, BioM and IZB, which foster new innovation," Tian explains.

These incubators and innovation hubs help translate groundbreaking research into viable startups, further strengthening the ecosystem.

## CHALLENGES AND OPPORTUNITIES FOR STARTUPS

While Southern Germany offers a highly supportive environment for Health Tech AI startups, challenges remain. One of the primary hurdles is securing early-stage funding.

“One area for improvement is supporting investors more like providing mechanisms to de-risk early-stage investments and incubate promising startups,” says Tian.

Public funding and EU initiatives like EIC and EIT Health are helping to bridge this gap by offering grants and seed funding to promising startups. However, Tian sees room for even greater collaboration, particularly across borders.

*“The region could benefit from deeper international collaboration, particularly with other European hubs like the Nordics.”*

*Dr. Fei Tian*

Access to high-quality healthcare data is another critical factor for AI-driven startups. Tian highlights the advantage of Nordic healthcare systems, which offer well-documented and accessible data repositories.

“Healthcare AI companies can gain a huge advantage by accessing Nordic healthcare data, which is well-documented and open for technological development,” she says.

By leveraging international partnerships, startups can test and refine their AI solutions in diverse healthcare environments, gaining insights that help them optimise their technology for broader adoption. “The Nordics provide a strong test market for digital health solutions. Companies can trial their products in a highly digitalised environment before refining them for other regions like Germany.”

## LOOKING AHEAD: THE FUTURE OF HEALTH AI INVESTMENTS

Despite economic uncertainty and tightening investment conditions, MIG Capital remains optimistic about the future of AI in healthcare.

“AI solutions that help us understand complex diseases, like neural networks or integrating genetic data in oncology, immunology and neurology, are exciting to us,” says Tian.

With continued advancements in AI, robotics, and personalised medicine, the potential for transformation remains immense.

However, Tian emphasises that investment in health AI requires a long-term vision.

“In sectors like healthcare AI, we need to apply different, sector-specific metrics instead of just focusing on margins.”

Success isn’t measured in short-term profitability but in the ability to redefine patient care and deliver long-term value.

As MIG Capital continues to identify and support groundbreaking AI-driven healthcare solutions, its investment philosophy remains clear: look for transformative impact, not just incremental gains. With the right mix of cutting-edge technology, strong execution, and a supportive ecosystem, the future of AI in healthcare looks increasingly promising.



## THE POWER OF INTERNATIONAL COLLABORATIONS

*Horizon Europe is crucial in fostering European innovation by providing substantial research and technological advancement funding, particularly in healthcare and AI.*

In Europe's fast-moving innovation landscape, funding programs like Horizon Europe are crucial in advancing research and technology. As the EU's flagship research initiative, it provides substantial funding to drive scientific excellence, foster international collaborations, and support groundbreaking advancements in healthcare and AI.

For stakeholders in Denmark and beyond, participating in Horizon Europe offers a unique opportunity to

accelerate innovation, tackle complex societal challenges, and access funding beyond national sources.

According to Dr. Mikhail Antonkin, Scientific Officer in the Department of Health Research and Biotechnology at Bavarian Research Alliance GmbH, Horizon Europe is vital for supporting research that may otherwise struggle to find funding.

One of the major advantages of Horizon Europe funding is the scale of financial support it offers. For example, the European Innovation Council's (EIC) Accelerator programme provides up to EUR 2.5 million in grant funding and EUR 10 million in equity financing.

"This level of funding is difficult to secure elsewhere, but for companies that do receive it, they scale up incredibly fast," Antonkin adds.



*“There are areas where there is no national funding at all. For companies that are starting up or have just begun exploring a new field, there is often no national funding at the volumes offered by Horizon Europe.”*

*Dr. Mikhail Antonkin*

## THE SIGNIFICANCE OF INTERNATIONAL COLLABORATIONS

International collaborations are the backbone of Horizon Europe-funded projects. The requirement for multinational consortia – involving at least three countries – ensures that projects benefit from diverse expertise and perspectives.

"Horizon Europe projects don't just provide funding; they also create strong, lasting networks," says Antonkin and continues: "If you participate in one successful project, you will likely be invited to another. Much research that starts in places like Munich or Erlangen becomes international because there are

irreplaceable partners in Denmark, Italy, or the Netherlands."

For instance, in healthcare AI, projects often require interdisciplinary teams, including software developers, medical researchers, ethical experts, and regulatory specialists.

"If you take robotics, for example, there are sometimes ethical or legal aspects that must be considered. Usually, roboticists don't specialise in these areas, but they can collaborate with experts in ethics and law. That's where these partnerships become invaluable," Antonkin notes.

Many researchers and institutions develop lasting relationships that lead to future joint initiatives, funded through additional Horizon Europe grants or other international funding mechanisms.

## OPPORTUNITIES FOR DANISH STAKEHOLDERS

Several key strategies can improve the chances of success for Danish universities, research institutions, and companies participating in Horizon Europe projects. One crucial aspect is starting early.

"One of the biggest mistakes we see is that people start too late," Antonkin warns, adding, "Even great ideas can fail because they weren't given enough time to develop into a strong proposal."

Additionally, Danish stakeholders should leverage existing support structures. National contact points, university support services, and European networks like the Enterprise Europe Network offer valuable guidance and matchmaking opportunities.

Selecting strong partners is another vital factor;

*“Your collaborators should be top scientists or top companies. If your co-creator hasn’t published in five years, they’re probably not the right partner for this.”*

*Dr. Mikhail Antonkin*

Participation in networking events is also beneficial. Engaging in industry events, matchmaking meetings, and European research conferences can provide opportunities to meet potential partners and gain insights into the latest trends in European funding.

Finally, utilising expert feedback can significantly enhance the quality of your proposal.

“Use the available help. Also, in Denmark, in universities, and also from national contact points, there is help. Organisations such as the Bavarian Research Alliance provide valuable support in refining proposals, ensuring that they meet the highest standards required for funding success,” Antonkin advises.

## THE FUTURE OF EUROPEAN INNOVATION

Several Horizon Europe projects have already demonstrated the potential of cross-border collaborations. Initiatives such as ArtPlac, SciFiMed and PRECODE highlight how European collaborative projects drive groundbreaking research.

“Once a researcher or company is part of a Horizon Europe project, they realise they can’t return to purely national research. They’ve built international relationships, and those partners become crucial,” Antonkin says.

As AI and healthcare technologies evolve, Horizon Europe remains a crucial mechanism for fostering innovation and international cooperation. Danish stakeholders stand to benefit immensely by engaging in these programmes, not only through financial support but also through the invaluable connections and knowledge-sharing opportunities that arise from multinational collaboration.

