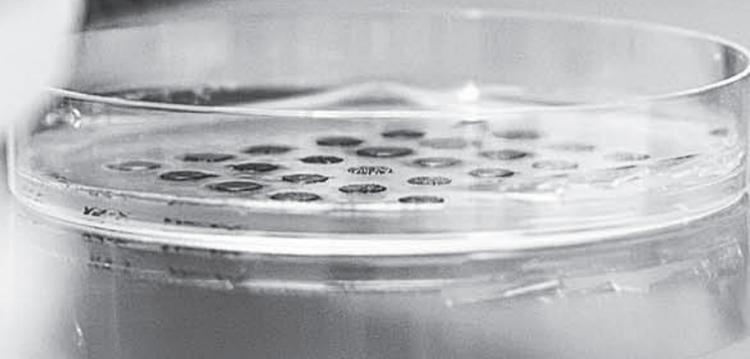


BIO-IT & DIGITAL HEALTH

Company directory of Germany's
data-driven life sciences



Summary

Health – Made in Germany, an initiative of the German Federal Ministry for Economic Affairs and Energy, is publishing this directory of Bio-IT and digital health companies in Germany. The initiative is the first place partners from abroad should look to find out how they can tap into and benefit from Germany's expertise in the field of Bio-IT and digital health.

Health – Made in Germany holds the key to accessing the experience of Germany's medical biotech and digital health companies. It provides information, links partners, and paves the way for applying German know-how to serving people around the globe. In addition to helping locate the right partners in Germany, the initiative provides support when it comes to getting cooperative ventures up and running as well.

Another feature of Health – Made in Germany is its English-language website www.health-made-in-germany.com. The site features news, information and the latest on exhibitions, trade missions, and what is going on in German healthcare. Taking the initiative to find out more from Health – Made in Germany is as easy as clicking a mouse. Please get in touch.

Germany Trade & Invest (GTAI) is implementing the initiative as commissioned by Germany's Federal Ministry for Economic Affairs and Energy. GTAI is the economic development agency of the Federal Republic of Germany.

Content

2 SUMMARY

INTRODUCTION

4 **Smart solutions for data-driven life sciences**

4 Innovations in Bio-IT

6 Digital health boom

6 Young ventures

7 Government initiatives

INDUSTRY ASSOCIATIONS

8 **Industry associations in detail**

MATRIX

12 **Company and technology overview**

COMPANY PROFILES

16 **Companies in detail**

51 IMPRINT



INTRODUCTION

Smart solutions for data-driven life sciences

Big data is everywhere, and the digital change is permeating the life sciences and health sector. The fields of Bio-IT and digital health aim at the creation of information that will be useful to researchers, doctors and even patients. German companies are developing top-notch technology in both fields – a portrait of a smart landscape.

With a seemingly endless stream of biological data being generated across a range of sectors, the need for data analysis and interpretation – a highly dynamic field at the crossroads of biology, statistics, and computer science – is greater than ever.

Today, the generation of data in biosciences and medicine has become relatively easy and less costly, and by far the most challenging task is to make sense of the wealth of available data. Analyzing vast quantities of information and presenting it in a clear manner to decision makers – be they scientists, doctors, or even patients – is considered as key to new and promising business models.

A remarkably high number of companies in Germany is specialized in developing smart solutions for bioinformatics and digital healthcare. Their core tasks include clarification of genomics, proteomics and metabolomics data analyses, the provision

of decision support tools for health professionals in diagnostics and therapy, the development and maintenance of archiving systems and the provision of suitable Bio-IT infrastructure.

This guide will help you gain an understanding of the powerful solutions that German companies in the fields of Bio-IT and digital health have to offer in the analysis and organization of biological data. Due to the size of the German Bio-IT and digital healthcare providers' market, this guide cannot be entirely comprehensive. However, it aims to give a thorough overview of the broad spectrum of their products and services.

Innovations in Bio-IT

High-throughput molecular technologies such as genome sequencing or high-definition-imaging have become routine applications in life sciences

research around the globe. The so-called ‘omics’-technologies, such as genomics, proteomics and metabolomics, produce mountains of digital data that are the essential raw material of biomedical research. Analyzing these data and extracting relevant information has become a core expertise for a great many bioinformatics firms in Germany.

Searching through mountains of biological data

In this guide, companies specialized in data analysis comprise a separate category of their own. In all, a striking number of young firms have found a niche in the B2B market in particular in recent years.

A majority of these are specialized in the field of genomics, namely the analysis of information derived from DNA or RNA sequencing. Next-generation sequencing (NGS) has become the dominant data source, and many companies have developed software and hardware solutions for analyzing the constant stream of data that is supplied by high-throughput sequencing machines.

Protein and proteome analysis is another field that generates vast quantities of data and which demands superior expertise in data mining and data interpretation. The results from mass spectrometry experiments and other protein characterization techniques are fundamental to biomedical research.

The field of systems biology, which aims at the computational simulation and mathematical modeling of complex biological phenomena, for example the nervous system, stem cells or even the brain, represents another level of complexity altogether.

Tools for clinical research and drug developers

Computer-based analysis of experimental data generated by high-throughput technologies not only enables current basic research in the life sciences, but by helping the pharma industry and biotech companies to identify new drug targets and reliable biomarkers, it is also transforming central principles of clinical research.

The identification of genetic variants and their annotation with other health information has become a key procedure in the era of precision medicine. German Bio-IT companies have developed powerful tools and solutions for creating high value out of biological data for clinical research and drug development – be it in the academic sector, in biotech, or the pharma industry.

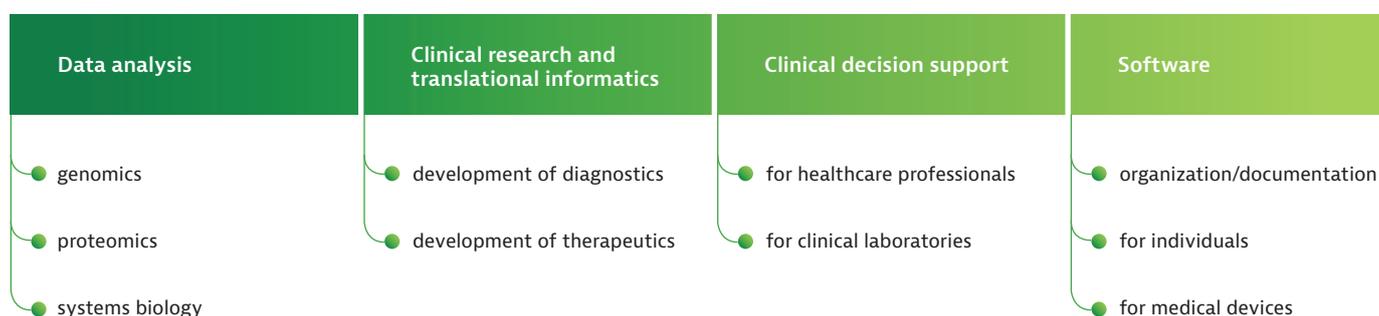
Others provide the IT solutions that are required for performing clinical studies, ranging from study design, patient recruitment and statistical analyses of outcomes. Storing information and archiving digital images and other health data is also an important aspect covered by such companies.

Providing decision support

The emerging field of biomedical informatics aims at the integration of knowledge on patient history, medical history, family history and genomic background, which taken together can provide valuable clinical insights. Thus, specialized IT firms provide a computational decision support structure that helps doctors to either select a drug combination that perfectly matches the patient’s genomic profile, or to gain real-world data on the therapeutic response of a treatment.

Smart path: Bioinformatics and digital health applications

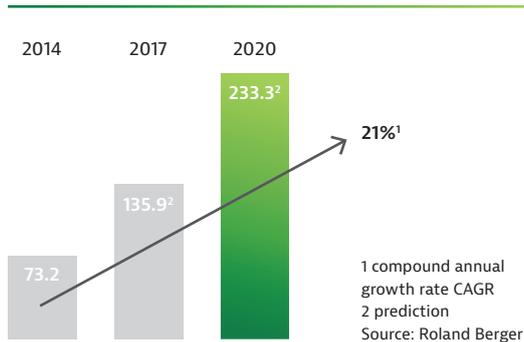
German Bio-IT and digital health companies listed in this guide were identified and categorized by their fields of activity



INTRODUCTION

Digital health market, worldwide

Estimated growth by 2020 (in bn US\$)



Digital health boom

From an economic perspective, digital health is a fast-developing market with estimated annual growth of 21% by 2020, by which time the digital health market is expected to reach US\$233 billion. This growth means new opportunities for pharma and life sciences companies and, as a result, they are expanding activities in bioinformatics and digital health technologies.

The largest driver of this digital transition is the mobile health market. As a consequence of short development cycles and the earlier ready-to-market-status of software solutions, startups at the interface of IT and health are also of interest for investors from outside the traditional life sciences investor community.



According to Deutsches Telemedizinportal there are more than 200 ongoing telemedicine research projects.

Patient engagement

Worldwide, there are more than 170,000 mobile healthcare apps as well as countless websites and on-line portals dedicated to every imaginable aspect of sickness and health. This demonstrates that patients and consumers are open to this kind of technological innovation. This openness also corresponds with a cultural change – people are now more confident in the active shaping of their own way of living.

The propagation of such services is largely driven by ordinary people and less by institutionalized healthcare stakeholders. For instance, a report by the University Medical Clinic Freiburg showed that patients in Germany want to be more involved in decision-making processes during preventive medical care, as well as during disease management.

Until now, pharmaceutical and biotech companies were utilizing digital tools predominantly for sales and marketing purposes. The new concept of

‘service beyond the pill’ aims to create value by embedding products into an integrated overall offer, with the objective of improving patient outcomes, and of course to provide a tangible competitive advantage.

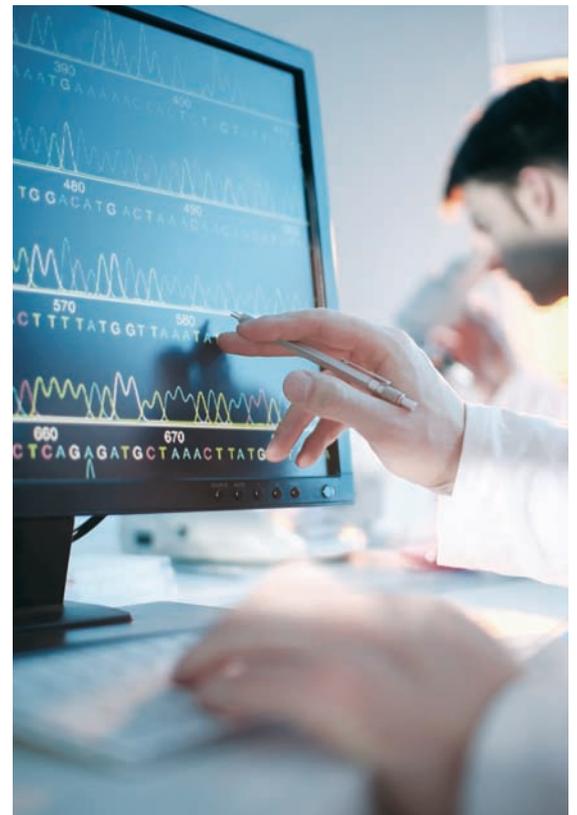
Big Pharma teams up with IT giants

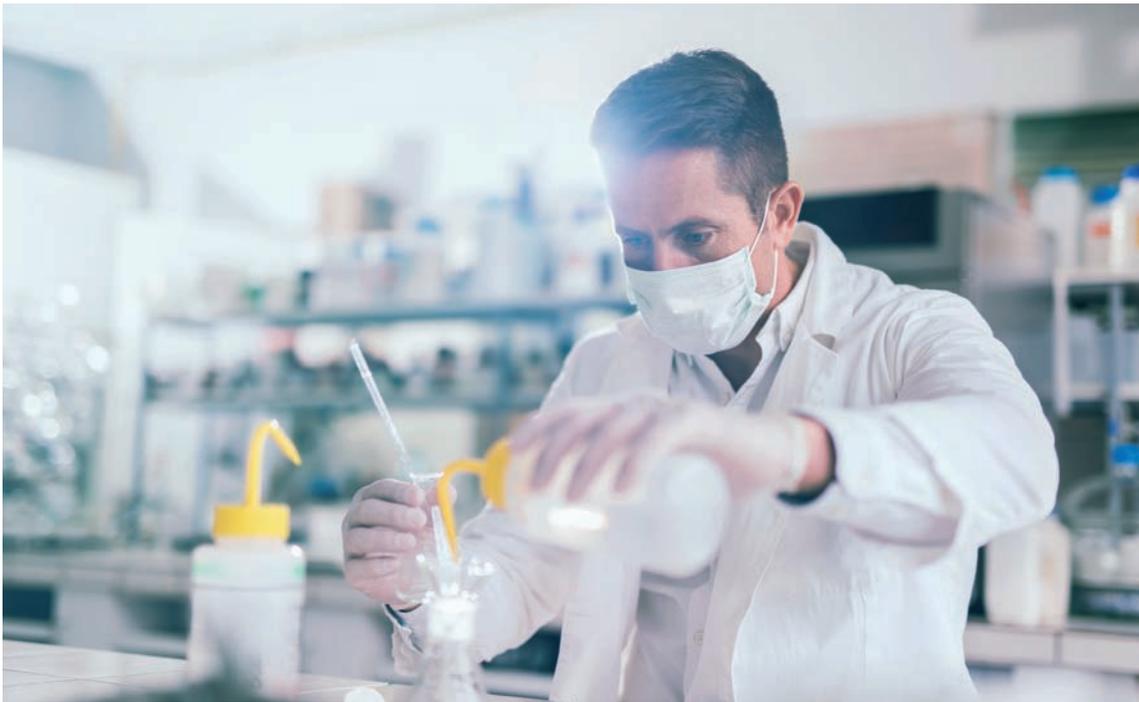
Examples of this integrated approach include telehealth services, wellness programs, and improved chronic disease management with sophisticated smartphone apps and applicators. Most pharma giants have entered collaboration schemes with well-established IT companies.

The key issues in most of these partnerships are big data management and interconnectivity. The advent of easy-to-use mobile health sensors promises more straightforward disease management, as well as more effective clinical trials. Data sharing and connected health have become buzzwords in recent years.

Young ventures

In Germany, this development has served as the backbone for the growth of a lively startup community. Today, the majority of startups based in Germany offer solutions for medical everyday life, diagnosis, and patient therapy. In addition, new IT-based serv-





Genome and protein analysis produce mountains of digital data. It's the raw material to Bio-IT companies.

ices such as video doctor consultancies or medical records for smartphones are entering the stage, as well as coaching apps or therapeutic apps that offer additional support to patients.

Many of these young companies have their roots in academia. To guide their precious products to market, numerous so-called incubators and accelerators have sprung up all over the country. Here, newcomers work under the patronage and with the support of established companies.

Most of these are venture capital enterprises and larger pharma groups, but they can also include IT and insurance companies hoping to benefit from clever ideas nurtured in their specialist sphere of influence.

Mecca for digital health startups

Berlin is well known for its ecosystem of IT and business networks. It thus comes as no surprise that a majority of healthcare-IT-related accelerator programs for startups are based in the German capital. Major pharma companies as well as independent accelerators are further promoting the digital health startup sector.

Government initiatives

As both the virtual doctor-patient-relationship and the use of medical apps for preventive medical care necessitate great confidence in the protection and

safety of personal health data, the German health-care community is establishing a nationwide, technically mature telematics infrastructure for connecting insurers, doctors, hospitals and health insurance companies.

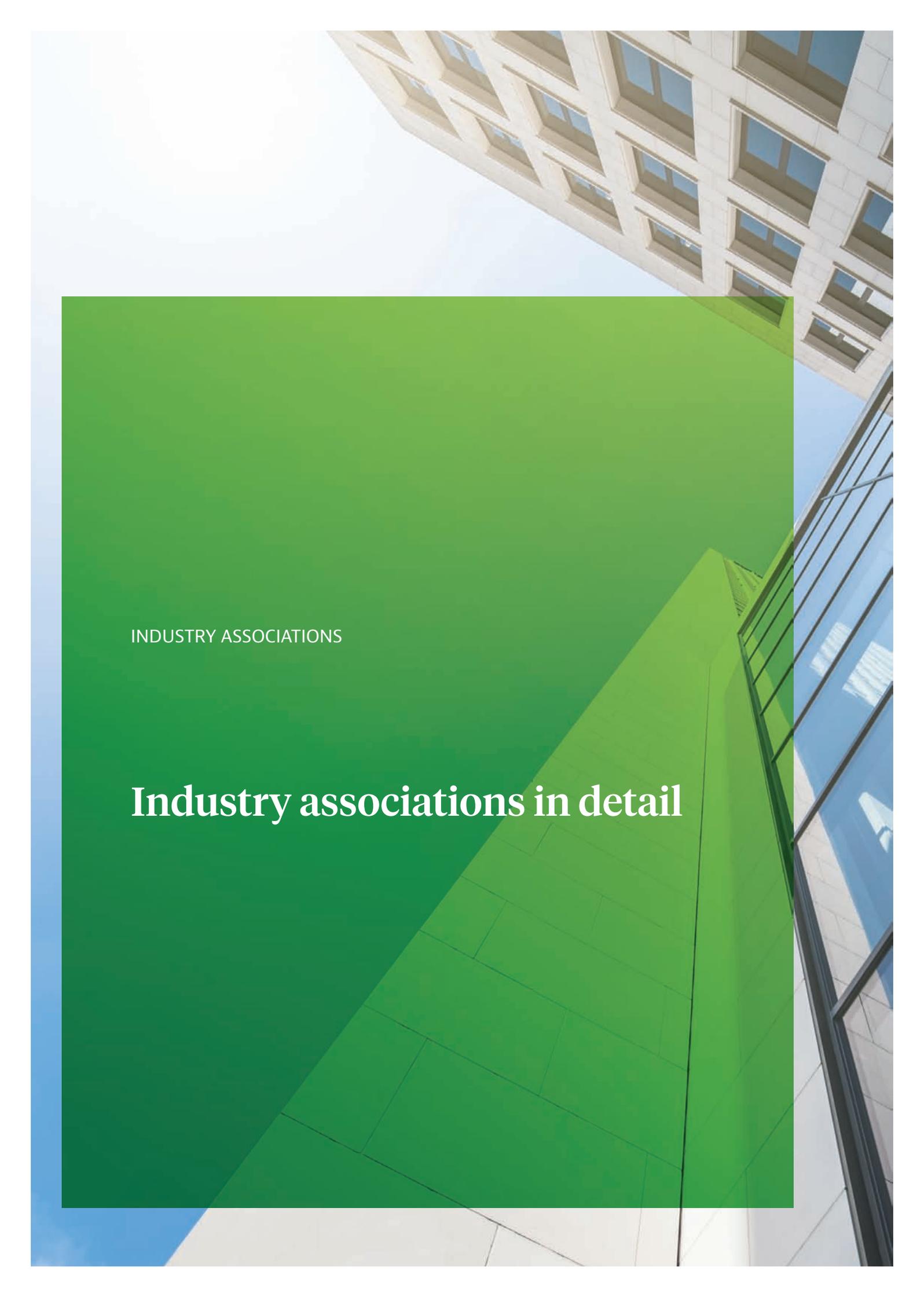
The telematics platform is based on electronic health cards for each insured citizen. Medical data can only be unlocked when both the examining physician and the patient provide their respective key codes.

Telematics infrastructure

In 2015, the German government moved to speed up the implementation of this system with the approval of the so-called eHealth Act. Beginning in mid-2016, the Act lays down fixed dates for the introduction of a variety of subsystems. By 2018, every doctor's office as well as hospitals nationwide should be connected to the telematics infrastructure.



More information:
www.health-made-in-germany.com

A low-angle, upward-looking photograph of a modern building. The top portion of the image shows a concrete structure with a grid of windows. Below this, a large section of the building is covered in a vibrant green facade, which appears to be made of large, rectangular panels. To the right, a glass-walled section of the building is visible, reflecting the sky and other parts of the structure. The sky is a clear, light blue. The overall composition is dynamic, with strong vertical lines and a sense of height and scale.

INDUSTRY ASSOCIATIONS

Industry associations in detail

BIO Deutschland e. V.

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Am Weidendamm 1a · 10117 Berlin

Tel.: +49-30-72625-130 · **Fax:** +49-30-72625-138

Mail: info@biodeutschland.org · **Web:** www.biodeutschland.org

BIO DEUTSCHLAND

The *Biotechnologie-Industrie-Organisation Deutschland* (BIO Deutschland) is an independent organization for innovative biotechnology companies in Germany. At its offices in Berlin, the association is developing and supporting an innovative industry based on modern life sciences. Founded in October 2004, BIO Deutschland currently has more than 320 member companies and several supporting members and sector partners. To support its members BIO Deutschland engages in a broad range of activities, including lobbying, public relations, and offering business development opportunities. Using a wide range of political initiatives, BIO Deutschland lobbies for improvements to legal parameters for innovative small and medium-sized enterprises. The association is also very active in a broad range of events with the aim of providing biotechnology with a platform for discussion and interaction. The German Biotechnology Days, a yearly national forum for biotechnology with more than 800 attendees, is organized jointly by BIO Deutschland, the Council of the German Bioregions and regional hosts.

BIO Deutschland is governed by a managing board of CEOs, CFOs and Managing Directors of companies that represent the German biotech sector. This committee comprehensively represents the various fields in the sector.

BIO Deutschland's member companies and their experts are organized in working groups that deal with a variety of subjects relevant to the biotech sector and small and medium sized companies. The groups meet regularly to discuss current developments, to draft position papers, to exchange ideas and to network. A total of twelve working groups and one network for communication and PR are active in the association.

Working groups for the following topics are currently installed:

- Big data and Bio-IT
- Diagnostics
- Finance and Taxation
- German-US Cooperation
- Licenses and Technical Contracts
- Regulatory Affairs
- Entrepreneurship, Innovation and Jobs
- Human Resources
- Industrial Bio-Economy
- Industrial Cell Technology
- Health Policy and Technology Transfer

BIO Deutschland is also partner of several other associations such as BVMW, The German Association for Small and Medium-sized Businesses, Biosingapore, bts – Biotechnology Student Initiative, BVIZ – German Association of Innovation, Technology and Business Incubation Centers, EAPB – European Association of Pharma Biotechnology, EUCOPE – European Confederation of Pharmaceutical Entrepreneurs, German-Sino Healthcare Group, ICLS- International Council for the Life Sciences and VBIO – German Life Sciences Association. Additionally BIO Deutschland administrates the head office of the Council of German Bioregions.

BIO Deutschland is Germany's biotechnology sector representative at the European association, EuropaBio, in Brussels. BIO Deutschland also collaborates closely with other biotech organizations in Europe and the USA in order to lobby for the interests of the sector in an internationally coordinated way. It is a founding member of the International Council of Biotechnology Associations (ICBA) and (affiliated) member of the Biotechnology Innovation Organization (BIO) USA.

Association of German Biotech Companies (VBU) in DECHEMA e.V.



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Theodor-Heuss-Allee 25 · 60486 Frankfurt am Main
Tel.: +49-69-7564-124 · **Fax:** +49-69-7564-169
Mail: scriba@dechema.de · **Web:** www.v-b-u.org · www.dechema.de

For a culture of innovation

Innovation is at the bottom of it all. Innovation has not only set the basis for the industrial development in Germany, it has also enabled for Germany to stay at the very top so far in the increasing global competition.

Scientific publications and patent registration are often taken as the indicator of the innovative power of a society. But this is not the whole truth. Innovation requires more than the development of a new industrial design, and it means more than research results and even more than a brilliant idea. Innovation implies that this idea or result is brought to real life, that it finds an expression in new products or services that meet a market demand.

A more positive entrepreneurial culture

Germany has excellent academic research, yet it is not really known as a country with a lively founding scene. A report states that education in schools with regards to founding needs to be improved, societal values and standards need to be adjusted for a more positive entrepreneurial culture, and labor supply needs to be increased for new and growing businesses.

In short: Motivating more people to set out on the big adventure of founding a new business is not so much a question of the financial and institutional framework, it is a question of culture and societal values. While in some other countries the founding of a business is seen as a chance for success, for growth and in any case a valuable experience, in Germany founding is regarded more suspiciously – it contradicts widely accepted values such as security, firm structures, and a potential failure is regarded as a stain in one's CV rather than an interesting feature.

Visibility for founders

The challenges have been identified, though, and counter-measures are being taken. A large number of initiatives are dedicated to technology transfer; universities and other research institutions have established technology transfer agencies that scout academic research groups for marketable technologies. Competitions and funding programs such as the GO Bio Initiative of the German Federal Ministry of

Research and Education or the Science4Life competition provide financing, advice and visibility for founders, and their number is increasing. Last year, for example, the AICHEM Gründerspreis was awarded for the first time to innovative entrepreneurs active in the fields of energy, industrial biotechnology and analytics. The nine finalists had the unique opportunity to present their concepts to industry experts from all over the world. This is an invaluable chance as many founders report that one of the hardest tasks is to identify and approach the right people in large companies in order to position themselves as potential suppliers, customers or development partners.

Our mission: innovation

From its beginning, the VBU Vereinigung Deutscher Biotechnologie-Unternehmen set out to enable technology transfer and facilitate networking between academic research and industry. With a special focus on small and medium sized enterprises, the VBU offers advice and organizes events tailored to give information and support to start-ups during their growth and expansion phase, both nationally and internationally. Being a part of DECHEMA, the large network for chemical process technology and biotechnology, it is the home for people active in research whether in universities, independent research institutions, start-ups or "big businesses". The activities of VBU supplement the approximately 120 topical working groups within DECHEMA, around 20 of them covering biotechnology from Omics and Cell Culture to Bio-processing and Single-Use Technologies. The mission of VBU is as up-to-date as it was 20 years ago, and as long as there are people with brilliant ideas, it will always be up-to-date.

GERMAN ASSOCIATION OF BIOTECHNOLOGY INDUSTRIES

within the German Chemical Industry Association

Contact: Dr. Ricardo M. Gent (Executive Director) · Stanislaus Koch (Manager Biotechnology)

Mainzer Landstrasse 55 · 60329 Frankfurt am Main

Tel.: +49-69-2556-1504 · **Fax:** +49-69-2556-1620

Mail: info@dib.org · **Web:** www.dib.org



The German Association of Biotechnology Industries (DIB) and its national, European and global networks are the voice and leading industry representation for the innovative and dynamic biotechnology industry that operates in and from Germany.

DIB is the biotechnology division of the Association of the German Chemical Industry Association (VCI).

DIB is supported by 10 member associations and sector groups of the VCI:

- German Crop Protection, Pest Control and Fertilizer Association
- German Diagnostic Manufacturers Association
- German Cosmetics and Detergents Association
- VCI Sector Group Food Additives
- German Association of Research-Based Pharmaceutical Companies
- German Association for Food Law and Food Sciences
- German Medical Technology Association
- Association of the German Pharmaceutical Industry
- German Animal Health Association
- Association of the German Chemical Industry Association

Member companies and the above listed industry associations and sector groups are members of DIB. They constitute all in all about 95 % of the biotechnology business operating in and from Germany. This includes many different industry sectors such as polymers, plastics, fine and specialty chemicals, crop protection, plant breeding, enzymes, pharmaceuticals, diagnostics, animal health products, personal care products, detergents, animal feeds, foodstuffs, renewables and derived products. DIB is one of the largest biotechnology industry representations worldwide.

Role of DIB

DIB's mission is to advocate national, EU and international policies and legislation that uphold a natural science and risk-based approach, foster innovation, operate in a predictable and proportionate way, enable the industry to perform efficiently, protect intellectual property and reward the introduction of new technologies and practices.

- DIB contributes to the creation of internationally competitive framework conditions for use of biotechnology in research, development, production and products.
- DIB represents the political-economic interests of companies that use biotechnology in order to strengthen sustainable growth and the international competitiveness of biotechnology in Germany.
- DIB represents the interests of their members vis-à-vis high-level representatives of legislative bodies, political decision-makers, regulatory authorities, public administration, media and the general public, both nationally and internationally.
- DIB contributes to further strengthening Germany as an industry location.

DIB is a member of the European biotechnology association EuropaBio, member of the board of EuropaBio and currently chairs the National Association Council of EuropaBio.

Company and technology overview

The table below gives an overview of the listed companies and their field of activity. Services and technologies are marked with a circle.

Company	Data analysis		
	Genomics	Proteomics	Systems biology
Alacris Theranostics GmbH	●	●	●
Alere Technologies Jena GmbH	●		
apoplex medical technologies GmbH			
ASANUS Medizintechnik GmbH			
ATG:biosynthetics GmbH	●	●	●
ATLAS Biolabs GmbH	●		●
bio.logis Genetic Information Management GmbH	●		
BioMath GmbH	●	●	●
Biomax Informatics AG	●	●	●
BodyTel GmbH			
CeGaT GmbH	●		
cellasys GmbH - R&D			●
Centogene AG	●		●
CHILI GmbH			
Computomics GmbH & Co. KG	●	●	●
Cortex Biophysik GmbH			
Cunesoft GmbH			
Curefab Technologies GmbH			
DECODON GmbH			
Dr. Oestreich + Partner GmbH			
Dr. Vetter Medizintechnik			
ecSeq GmbH	●		
EvoCare Telemedizin GmbH			
GenXPro GmbH	●		●
HASOMED GmbH	●		
HealthTwiSt GmbH	●		
I.E.M. GmbH			
IMGM Laboratories GmbH	●		
infoteam Software AG			

Clinical research and translational informatics		Clinical decision support			Software	
Development of diagnostics	Development of therapeutics	for healthcare professionals	for clinical laboratories	organization/documentation	for individuals	for medical devices
●		●	●			●
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		●	●	●		●
						●

MATRIX

Company	Data analysis		
	Genomics	Proteomics	Systems biology
Insilico Biotechnology AG	●	●	●
JPT Peptide Technologies GmbH		●	
Kapelan Bio-Imaging GmbH	●	●	
Lead Discovery Center GmbH			
Lipotype GmbH			●
LOGOPHARM GmbH		●	●
med3D GmbH			
MEDEORA GmbH			●
MEIERHOFER AG			
Metabolomic Discoveries GmbH			●
micro-biolytics GmbH		●	●
microDimensions GmbH	●	●	
MicroDiscovery GmbH	●	●	●
Molecular Health GmbH	●		
NEXUS AG			
nova motum® Services & Consulting GmbH			
OakLabs GmbH	●		
OmicScouts GmbH	●	●	
OPASCA GmbH			
PharmaInformatic			●
Polyquant GmbH		●	●
Preventicus GmbH			
Protagen AG		●	
Proteome Factory AG		●	
QIAGEN	●		●
QuoMedic GmbH			●
Ribocon GmbH	●		
samedi GmbH			
Scopis GmbH			
Siemens Healthineers	●		
Sonormed GmbH			
StarSEQ GmbH	●		
Systasy Bioscience GmbH			
Tembit Software GmbH			
Transinsight GmbH	●	●	●
VISUS Technology Transfer GmbH			
Vitaphone GmbH			
Zentrum für Humangenetik und Laboratoriumsdiagnostik	●	●	

Clinical research and translational informatics		Clinical decision support			Software	
Development of diagnostics	Development of therapeutics	for healthcare professionals	for clinical laboratories	organization/documentation	for individuals	for medical devices
●	●			●	●	
●						
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				●		
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An aerial photograph of a city skyline, likely New York City, viewed from a high vantage point. The image is overlaid with a semi-transparent green filter. In the foreground, the glass and metal railing of a skyscraper's observation deck is visible. The city below is densely packed with buildings of various heights and styles. The sky is a clear, bright blue.

COMPANY PROFILES

Companies in detail

Alacris Theranostics GmbH

Fabeckstr. 60-62 · 14195 Berlin
Tel.: +49-30-8431-225-0 · Fax: +49-30-8431-225-40
Mail: info@alacris.de · Web: www.alacris.de
Founded: 2008 · Employees: 20

ALACRIS
Theranostics GmbH

Alacris is a Berlin-based company with the mission to transform personalized medicine and targeted drug discovery and development through its unique predictive modeling system ModCell™. Rather than testing novel therapeutic strategies on actual patients, responses to any desired therapeutic scenario are simulated using virtual patient technology (ModCell™), with the ultimate goal of targeting the right patient or patient population. With a focus on cancer, the technology is not only helping to improve treatment outcomes but is also set to impact the drug development pipeline, reducing costs and time to approval.

Our approach represents a completely new solution for both personalized treatment of cancer patients and targeted drug development and approval. ModCell™ predictions are based

on simulating drug action within a computer generated model of the highly complex network of biological processes acting within individual tumors. Data generated by in-depth omics analysis of individual tumors are used as a basis for individualized treatment prediction and 'virtual clinical trials'.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Alere Technologies Jena GmbH

Loebstedter Str. 103-105 · 07749 Jena
Tel.: +49-3641-3111-0 · Fax: +49-3641-3111-120
Mail: cct.home@clondiag.com · Web: www.alere-technologies.com
Founded: 1998 · Employees: 400



Alere Technologies GmbH is developing novel point of care diagnostic platforms that move diagnostic testing from the laboratory to the patient. We are committed to establish a testing platform that provides equivalent if not better performance at the point of care if compared to a laboratory test.

In addition, we provide unique microarray-based platforms enabling the development of powerful and competitive multiparameter tests for professional lab diagnostics. Our open platform systems ArrayTube™ and ArrayStrip™ are designed for the development of multiparameter tests for professional lab diagnostics. They allow the efficient conversion of immunological and nucleic acids tests from established formats like ELISA plates or filter membrane strips into a miniaturized

array-based format. Thus, previously time consuming and costly tests become simple and affordable.

Based on these platforms, we provide several kits, customized arrays and services for applications in epidemiology, hygiene management, veterinary medicine and others.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

apoplex medical technologies GmbH

Delaware Avenue 1–3 · 66953 Pirmasens
Tel.: +49-6331-6989980 · **Fax:** +49-6331-69899819
Mail: info@apoplexmedical.com · **Web:** www.apoplexmedical.com
Founded: 2004



The company focuses its activities on the development of applications for the prevention of stroke caused by atrial fibrillation by an improved detection of paroxysmal atrial fibrillation. Several applications are already in use at medical practices and clinics, especially stroke units. The core of the products SRAdoc/SRA24 and SRAclinic is a fully automated detection of atrial fibrillation episodes and the identification of patients with an increased risk for paroxysmal atrial fibrillation with the help of a mathematical algorithm.

The superiority of this method has been proven by clinical studies. The applications are web based and are easy and reliably integrated into each practice or clinic without any major effort.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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ASANUS Medizintechnik GmbH

take off Gewerbepark 2 · 78579 Neuhausen ob Eck
Tel.: +49-7467-9474-0 · **Fax:** +49-7467-9474-50
Mail: info@asanus.de · **Web:** www.asanus.de
Founded: 1998 · **Employees:** 50



The company ASANUS Medizintechnik GmbH develops and offers complete tracking software and information technology solutions including RFID Chip tracking. ASANUS is operating in the field of health care and pharmaceutical production.

ASANUS Medizintechnik GmbH has developed a mature BarCon Software for tracking surgical instruments, medical material supply and its logistics for hospitals and surgery centers. On top of that, due to further development of the ARIS RFID Chip technology ASANUS Medizintechnik GmbH offers a high innovative tool for individual monitoring of medical products and devices with a very high automation potential.

In accordance with tradition and high-tech-innovations, ASANUS creates your ideal platform for economically reasonable solutions in the operational working environment in hospital.

In addition, it enables you a networked operation according to modern industrial standard 4.0.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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ATG:biosynthetics GmbH

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Mail: info@atg-biosynthetics.de · Web: www.atg-biosynthetics.com

Founded: 2001 · Employees: 6



The combination of EvoMAG genomics, proprietary molecular database and the lab platform PeplID are ATG's epitope discovery technologies. At ATG a bio-peptide library technology is used for the identification of epitopes concomitant with the assessment of its value for diagnostics and therapeutics. Especially comparative and subtractive genomics of interrelated pathogens in comparison with non-pathogenic species genomes are highly valuable tools for the reduction of molecular complexity and to increase informational relevance. Thus the biodiversity of pathogens by reduction of gene and epitope redundancy especially also repetitive peptide pattern can be eliminated.

This is combined with protein structures based sub-sequence antibody accessibility and exploration of disordered regions. We are using this system to unravel immunologically relevant epitopes or minimal molecular-immune function for chimeric vaccine development e.g. for Mycoplasma spec.

The tANCHOR expression system was designed for protein membrane translocation and its robust display on the surface of mammalian cells.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

ATLAS Biolabs GmbH

Friedrichstr. 147 · 10117 Berlin

Tel.: +49-30-3198966-0 · Fax: +49-30-3198966-19

Mail: customer-support@atlas-biolabs.com · Web: www.atlas-biolabs.com

Founded: 2006 · Employees: 14



ATLAS Biolabs is a leading European service provider of complex analyses in molecular genetics, including next generation sequencing, target sequence enrichment, microarray analyses and mass spectrometry supplemented by high-level statistics/bioinformatics support and RNA/DNA isolation from biological specimens. It was founded in 2006 as a spin-off of the RZPD, German Resource Center for Genomics, and the CCG, Cologne Center for Genomics. The company is located in Cologne and Berlin. ATLAS Biolabs' services are certified by Affymetrix, Agilent, and NimbleGen. Its customers include clinicians and registered doctors as well as pharmaceutical and biotechnological companies, and academic institutions both in Germany and abroad.

ATLAS Biolabs fulfills the requirements for designing and manufacturing in vitro diagnostic medical devices according to ISO 13485:2012/AC:2012. ATLAS Biolabs' processes are subject to rigorous quality control at all stages according to the international standards of ISO 9001:2008.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

bio.logis Genetic Information Management GmbH

Altenhöferallee 3 · 60438 Frankfurt
Tel.: +49-69-53084370 · **Fax:** +49-69-530843711
Mail: info@gim.biologisgroup.com · **Web:** www.gim.biologisgroup.com
Founded: 2013 · **Employees:** 25



bio.logis Genetic Information Management GmbH translates genetic data into medically leverageable information and makes it available to physicians and patients. To that end, it has developed a special "Genetic Information Management Suite (GIMS)" IT solution which, in the process chain required for genetic diagnostics, focuses on the "last mile" to physicians and patients by merging raw genetic data with clinically leverageable knowledge for prompt application. GIMS supports physicians both in laboratories for automatically generating such expert content, and in hospitals with specific clinical suggestions.

The diagnostic reports and medical recommendations generated with GIMS are delivered straight to the point of care via laboratory and physician information systems as well as electronic health records.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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BioMath GmbH

Schnickmannstr. 4 · 18055 Rostock
Tel.: +49-381-3756610 · **Fax:** +49-381-37566118
Mail: central@biomath.de · **Web:** www.biomath.de
Founded: 1990



BioMath is a service provider for the life sciences, i.e. of mathematical/statistical and technical services for biology, plant breeding, agriculture, medicine, pharmaceuticals or related fields. The company was founded in 1990.

on strategic reorientation at the turn of the millennium due to an increasing economic meaning of biotechnology and biology.

The services offered by BioMath comprise statistical consultation, data management and software development, experimental design and statistical analysis of trials, surveys or experiments, systematic/scoping reviews and training. The company's main fields of competence are statistics and informatics in medicine, pharmaceuticals, biology and agriculture. BioMath has – after gaining practical experience in a ten-year period of mainly working in the field of medicine – additionally specialised to statistical consultations for biologists, agronomists and biotechnologists. This is based

BioMath is certified according to ISO 9001 and operates according to these quality standards.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Biomax Informatics AG

Robert-Koch-Str. 2 · 82152 Martinsried
Tel.: +49-89-895574-0 · Fax: +49-89-895574-825
Mail: info@biomax.com · Web: www.biomax.com
Founded: 1997 · Employees: 50



Biomax Informatics AG is a privately held corporation located in Planegg, Germany just outside Munich. Biomax provides best-in-class, client-focused knowledge management software solutions for the life sciences. Our flagship product BioXM™ allows for Integration, Management and Analysis of data and information— of any format, size and from any location – to yield valuable knowledge for business and research.

The team of highly qualified scientist and engineers, most of them with a PhD, come from more than 10 disciplines. Our nearly 50 employees translate the power of the BioXM product to unique solutions geared toward of our customer needs. With some of our customers we now have a mutual beneficial relationship for more than 15 years.

Founded in 1997 by leading pioneering bioinformaticians with specializations in systematic genome and computational analyses, Biomax was one of the original companies focused on providing computational solutions to the Life Sciences Industry. Our customers are leaders in their field representing all areas of the LifeSciences BioTech, Agro, Food, Pharma and Health.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

BodyTel GmbH

Hufelandstr. 14 · 34537 Bad Wildungen
Tel.: +49-5621-96776-0 · Fax: +49-5621-96776-10
Mail: info@bodytel.com · Web: www.bodytel.com
Founded: 2007 · Employees: 20



BodyTel's telemonitoring solution is used in remote care of patients with cardiac/renal failure, COPD, asthma, diabetes, hypertension and obesity. It consists of: various vital sensors (blood glucose, blood pressure, weight, lung function, etc.), an Android App and a Web Portal for patients and caregivers. The key element is the automatic transmission of measured vital parameters and the easy collection of therapy-relevant activities. Patients are able to allow trusted persons insight into their file, whereas in guided care situations the telemonitoring relationship is firmly implemented. The system offers an elaborate rules- and real-time alert-management.

Rules can range from easy detectable value aberrations beyond predefined limits up to complex medical evaluation standards. Standard interfaces can also forward patient data to specialized care systems. The complete BodyTel system is certified according to European medical regulations (MDD and IVD).

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

CeGaT GmbH

Paul-Ehrlich-Str. 23 · 72076 Tübingen
Tel.: +49-7071-565-4400 · **Fax:** +49-7071-565-4422
Mail: info@cegat.de · **Web:** www.cegat.de
Founded: 2009 · **Employees:** 110



Changes in genetic material can cause serious diseases. CeGaT's top priority is to identify disease-causing mutations in patients. All the steps, from patient and family consultation to examination, genetic testing, and creation of medical reports are carried out by our team of experts. The medical report provides the attending physician with a detailed diagnosis and support for further treatment decisions. In addition it provides a basis for patient and family counseling.

associated DNA, Sequencing (RAD genotyping), RNA Sequencing (Transcriptome Sequencing, smallRNA Sequencing), and Metagenome Sequencing.

CeGaT has also specialized in the use of Next-Generation Sequencing since its foundation. In addition to using it as a tool in the diagnostic services CeGaT offers this technology as a service for customer-specific projects. The services include: Genome Sequencing, Targeted Sequencing (Exome and Panels: Agilent SureSelect; Amplicons), Restriction site

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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cellasys GmbH – R&D

Ohmstr. 8 · 80802 München
Tel.: +49-89-2000110-74 · **Fax:** +49-89-2000110-76
Mail: info@cellasys.com · **Web:** www.cellasys.com
Founded: 2007 · **Employees:** 5



cellasys offers system solutions for microphysiometry. These include services as contract research, research and development and production and maintenance. Furthermore we are consultant for development of applications, data analysis and data interpretation.

The measurement is label-free, parallel, continuous and in real-time. With our BioChip technology you can e.g. determine the efficiency of a drug outside of humans (or animals) prior to the start of the therapy."

The microphysiometric systems monitor different parameters directly at living cells. These parameters are extracellular acidification (pH), cellular respiration (pO2) and morphology (impedance) of the cells.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Centogene AG

Schillingallee 68 · 18057 Rostock

Tel.: +49-381-20365-0 · Fax: +49-381-203652-219

Mail: office@centogene.com · Web: www.centogene.com

Founded: 2006 · Employees: 230



CENTOGENE is a worldwide leader in the field of genetic diagnostics for rare hereditary diseases – with the largest test portfolio worldwide. Testing samples from over 100 different countries allows CENTOGENE a unique insight into epidemiological basis of hereditary disorders, which is crucial in the medical result interpretation process. The company is strictly focusing on offering quality molecular genetic diagnostics, underlined by its multiple international accreditations (ISO, CAP, CLIA).

CENTOGENE's in depth medical expertise is supported by the application of cutting-edge technologies including next generation sequencing, whole exome sequencing (CentoXome®), whole genome sequencing (CentoGenome®) and innovative biomarkers for selected diseases.

CENTOGENE has developed a comprehensive mutation database (CentoMD®) that is pivotal to offering high quality diagnostic reporting and medical interpretation; thoroughly interpret each patient's sequence data.

CENTOGENE is also a pivotal partner for multiple renowned industrials worldwide.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

CHILI GmbH

Friedrich-Ebert-Str. 2 · 69221 Dossenheim

Tel.: +49-6221-18079-10 · Fax: +49-6221-18079-11

Mail: info@chili-radiology.com · Web: www.chili-radiology.com

Founded: 2002 · Employees: 48



CHILI®
Digital Radiology

Historical development

The CHILI GmbH, based in Dossenheim near Heidelberg, develops innovative software for multimedia image management in medicine. This independent company, managed by its founders, was created as a spin-off from the German Cancer Research Center (DKFZ). The three founders are scientists and medical computer scientists, whose solutions for PACS and teleradiology have been on the market since 1997.

Strategy

CHILI grows with each challenge. The young, creative and highly motivated team in the field of medical informatics is the basis for the success of CHILI GmbH. The company's strategy is oriented towards the development of innovative medical software and the cooperation with scientific institu-

tions (e.g. German Cancer Research Center). This helps to ensure the transfer of the most recent research results into current software, which is oriented towards requirements of the market.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Computomics GmbH & Co. KG

Christophstr. 32 · 72072 Tübingen

Tel.: +49-7071-5683-995

Mail: info@computomics.com · Web: www.computomics.com

Founded: 2012 · Employees: 9



Computomics is a team of world-leading experts in genomics research and bioinformatics, offering next-generation sequencing (NGS) analyses for biotech companies and scientists. Our advanced bioinformatics services provide our customers with quality sequencing and phenotyping data interpretation using state-of-the-art genomics tools and machine learning data integration methods.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Cortex Biophysik GmbH

Walter-Köhn-Str. 2d · 04356 Leipzig

Tel.: +49-341-48749-0 · Fax: +49-341-48749-50

Mail: info@cortex-medical.de · Web: www.cortex-medical.de

Founded: 1991



Extending limits

Since 1991, CORTEX is a competent partner in regard to spiroergometry systems and mobile respiratory gas analysis systems. Our solutions record and measure a person's physical fitness and performance. Only if physical limits are known, they can be extended in an efficient and quantifiable manner. CORTEX' systems exactly measure physical limits and help to extend them.

With the main product lines METALYZER and METAMAX CORTEX offers mobile and portable solutions for proven diagnostics in hospitals, doctor's practices and training facilities. Our solutions are used by sport's physicians, cardiologists, pulmonologists, occupational and rehabilitation physicians, coaches and sports scientists around the world.

The head office in Leipzig has a worldwide network of local sales and service partners on all continents. All products are CE certified and meet European standards for quality and safety. All CORTEX partners are quality controlled in sales and service.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Cunesoft GmbH

Marsstr. 4 · 80335 München

Tel.: +49-89-235-14741

Mail: info@cunesoft.com · Web: www.cunesoft.com

Founded: 2013



Cunesoft GmbH is a provider of regulatory master data management software and services for all segments within the life sciences industry. Solutions include a unique connected regulatory operations- and content analysis and data extraction platform. Smart artificial intelligence algorithms create a new dimension of regulatory process automation and lead to significant time and process cost savings as well as compliance for our customers. Software provisioning is provided as Software as a Service (SaaS). The company is headquartered in Munich (Germany) with international offices.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Curefab Technologies GmbH

Landshuter Allee 12 · 80637 München

Tel.: +49-89-78797938-0 · Fax: +49-89-78797938-90

Mail: kontakt@curefab.com · Web: www.curefab.com

Founded: 2008



Curefab Technologies designs medical software and devices. We develop according to international standards and assist in EU and FDA certification.

Software development

- Embedded Software from 8bit RISC to 32bit ARM
- GPGPU computing for High Performance
- Application Software for Linux/Windows

Product Development and Consulting

- Functional and Technical Conception
- Early Prototyping
- Development of hardware and software
- Observing relevant international standards, including tests and certification
- Transfer to series production, support of manufacturing

Image and Tracking Algorithms

- Real-Time 6DOF Position Tracking, sensor fusion
- Object recognition and segmentation, 2D/3D filters, image registration
- 3D Ultrasound reconstruction from 2D devices
- Performance optimization with multiprocessing

Hardware

- Requirements specification according to the experience of your company and practitioners
- Customized and standard solutions for cost-effectiveness and reliability

Research

- Support of medical case studies and research
- International and interdisciplinary cooperations

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

DECODON GmbH

Walther-Rathenau-Str. 49a · 17489 Greifswald
Tel.: +49-3834-5152-30 · **Fax:** +49-3834-5152-39
Mail: info@decodon.com · **Web:** www.decodon.com
Founded: 2000 · **Employees:** 5



DECODON GmbH is a bioinformatics company that develops innovative software for the modern Life Sciences. Its bioinformatics tools are helping scientists to generate knowledge from the massive amounts of data that are accumulated by recent methods in global functional genomics.

The company has its head office in Greifswald, in direct neighborhood to biotech companies as well as the institutes of Micro- and Molecular Biology, and Mathematics and Computer Science at the University of Greifswald. Close cooperation with these and other academic institutions gives DECODON.

The company brings together specialists with diverse backgrounds from Molecular Biology, Computer Science and Mathematics. Software development at DECODON is driven by the needs of leading researchers in the field of functional genomics and realized by using advanced methods from various areas of Mathematics and Informatics. DECODON's products, Delta2D, a program for fast analysis of 2D electrophoresis images, and Protec, an information system for functional genomics studies, prove the efficiency of this approach.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Dr. Oestreich + Partner GmbH

Venloer Str. 47-53 · 50672 Köln
Tel.: +49-221-9128-710 · **Fax:** +49-221-9128-711
Mail: info@OandP-CRO.com · **Web:** www.OandP-CRO.com
Founded: 1991 · **Employees:** 20



We are a full-service CRO operating in Europe with certification according to ISO 9001. We offer comprehensive, complete or individual solutions for clinical studies in the pharmaceutical area (phase II to IV as well as PASS, PAES, NIS, proof of additional benefit, economy studies) for more than 20 years. We also conduct literature research, perform clinical studies and handle tasks in Regulatory Affairs for Medical Devices with the aim of CE-marking, first registration in the market and keeping your product on the market.

Our customers are:

- Pharmaceutical companies
- Manufacturer of Medical Devices
- Manufacturer of cosmetics
- Manufacturer of food products
- Institutions of healthcare

Since more than 15 years we offer our in-house EDC-System OPVERDI (FDA: CFR21 Part 11) as an internet-based user interface and database system for clinical trials. OPVERDI can be individually configured for easy, fast and efficient data collection in clinical studies and proves to be a true alternative to paper CRF.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Dr. Vetter Medizintechnik

Gablonzer Str.5 · 76185 Karlsruhe

Tel.: +49-721-55907-0 · Fax: +49-721-55907-99

Mail: info@dr-vetter.com · Web: www.dr-vetter.com

Founded: 1987



Dr. Vetter Medical Technology

The Dr. Vetter PC-ECG System is being developed by doctors since 1991. Our goal was to build an ECG device which is easy to use, easy to learn and easy to integrate into your daily routines.



ecSeq GmbH

Brandvorwerkstr. 43 · 04275 Leipzig

Tel.: +49-151-22290-391 · Fax: +49-341-33187-962

Mail: support@ecSeq.com · Web: www.ecSeq.com

Founded: 2012



ecSeq GmbH is Europe's leading provider of hands-on bioinformatics workshops and professional, customer-oriented data analysis in the field of Next-Generation Sequencing (NGS). They help their customers to get the most out of their NGS experiments by developing tailored data analysis strategies and on-topic expert consulting. Several times a year, ecSeq GmbH organizes public workshops and conducts on-site trainings on NGS data analysis at well-known companies and academic institutes. Their bioinformatics team consists of research professionals with solid expertise in the analysis of NGS data.

Since up-to-date expert knowledge is the key to generating impactful biological insights, ecSeq GmbH established an extensive network of outstanding scientists, to assure scientific sound analyses and consultations. They offer the advantages of both, academia and industry: Fast and reliable analyses or software solutions, designed and implemented using the priceless experience of experts in the field.



EvoCare Telemedizin GmbH

Muggenhofer Str. 136 · 90429 Nürnberg
 Tel.: +49-911-32380-0
 Mail: info@evocare.de · Web: www.telemedizin.de
 Founded: 1995



Germany enables a new standard in Healthcare using digital Health. The method has been registered as EvoCare-Treatment. The EvoCare-treatment is the only digital treatment covered by cost bearers. This means that patients can be treated at home while the cost bearer pays for it. Clinics and centers treat patients from their telemedical EvoCare departments and earn new money this way. Patients can get treatment at home, become healthy faster, and reintegrate to work faster. Elderly can remain in the privacy of their own home for longer, saver and healthier. EvoCare GmbH enables clinics, care providers, doctors and cost bearers the implementation. At the end evocare realize "digital" treatment for their patients as a running business.

If anyone within the healthcare system is willing to implement digital health, evocare gets it realized as a one stop approach. This includes setting up a digital-treatment-offer to the patient, reimbursement, contracting, doctors training, clinical implementation, hw/sw, certified infrastructure, logistics, patient-devices ...

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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GenXPro GmbH

Altenhöferallee 3 · 60438 Frankfurt am Main
 Tel.: +49-69-9573-9710 · Fax: +49-69-9573-9706
 Mail: pwinter@genxpro.de · Web: www.genxpro.de
 Founded: 2005 · Employees: 15



Excellence in Genomics, Transcriptomics, Epigenetics and Bioinformatics

GenXPro provides state of the Next Generation Sequencing solutions and comprehensive data-analysis for quick and convenient access to the relevant information in your data.

Our service portfolio comprises a large spectrum of techniques for the analysis of DNA, its methylation, as well as coding and non-coding RNA. GenXPro invented "TrueQuant", a technique to avoid PCR-introduced bias, a major problem of all sequence-based quantitative data. Besides the standard NGS techniques like RNA-Seq, smallRNA-Seq, Methyl-Seq we offer "MACE" (Massive Analysis of cDNA Ends) a powerful and cost-efficient technique that implies the "TrueQuant"

method for the analysis of gene expression, alternative poly-Adenylation, allele-frequencies and for genotyping even of small amounts (e.g. from liquid biopsies) and degraded RNA, such as from FFPE samples.

GenXPro's know-how and sophisticated bioinformatics for complex data is currently transferred into pipelines for precision medicine, to provide the best possible treatment in cancer.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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HASOMED GmbH

Paul-Ecke-Str. 1 · 39114 Magdeburg
Tel.: +49-391-62301-12 · Fax: +49-391-62301-13
Mail: info@hasomed.de · Web: www.hasomed.de
Founded: 1991 · Employees: 85



HASOMED GmbH is an owner-managed company focusing on neurological rehabilitation. Originally established in 1991 Kronberg, the company was relocated in 1995 to Magdeburg. Dr. Peter Weber and Matthias Weber are owners and CEOs. HASOMED GmbH are a spin-off from the Department of Science of the Medical Faculty of the University Magdeburg. Thus the focus of activities during first years of establishment was on development and manufacturing of research technology.

The generative environment Magdeburgs led to an accumulation of know-how in human resources and technologies within the company. HASOMED's capacity regarding the development of hardware, software and electronics led to products well established in the market for neurological rehabilitation.

All products of HASOMED GmbH have been developed in close interdisciplinary cooperation with medical partners, especially with rehabilitation clinics.

For 25 years, the system RehaCom has evolved and used for the rehabilitation of brain injured individuals. Nowadays RehaCom is market leader in computer-assisted cognitive rehabilitation.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

HealthTwiSt GmbH

Lindenberger Weg 80 · 13125 Berlin
Tel.: +49-30-450-540807 · Fax: +49-30-450-540988
Mail: info@healthtwist.de · Web: www.healthtwist.de
Founded: 2003 · Employees: 3



HealthTwiSt is providing cutting-edge services for data management as well as statistical analyses.

Our framework provides you with field-tested web-based Electronic Case Report Forms (eCRF) tailored to your needs. Our eCRFs give advantages in terms of progress monitoring, data consistency, and speed of access to results. Our in-house development brought together clinicians, study nurses, statisticians, and programmers, driven by our own research needs. Data management services are available for clinical as well as basic research.

Statistical analyses are based on the principles of reproducible research. Scripts bundle all steps from raw data import, coding, filtering, applying statistics, up to presenting results in tables and highly informative figures.

Data science as provided by HealthTwiSt leads to thinking with data. It is more than 'just' statistics: In combination with data mining techniques it can unveil structures in research results beyond hypotheses.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

I.E.M. GmbH

Cockerillstr. 69 · 52222 Stolberg
Tel.: +49-2402-9500-0 · **Fax:** +49-2402-9500-11
Mail: info@iem.de · **Web:** www.iem.de
Founded: 1993



I.E.M. is a researcher, developer and manufacturer of validated medical products and services in the field of cardiovascular screening, diagnostics and follow-up management.

As cutting-edge technologies I.E.M. has integrated the pulse wave analysis algorithm, being thereby able to capture central hemodynamic parameters by an upper-arm cuff measurement over a circadian cycle with the Mobil-O-Graph® 24h PWA Monitor.

I.E.M. for years now maintains the technology leadership in e-health telecommunication systems, allowing for remote monitoring of vital parameter data.

In addition to information on products and services I.E.M. offer matching concepts and information around the topic of hypertension, in several languages.

Its global network provides I.E.M. with know-how, information and suggestions that take direct impact on the development, product design and marketing concepts.

Complying with a broad variety of national and international certifications and registrations, I.E.M. successfully implemented its products and services on global markets.

Made in Germany since 1993.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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IMGM Laboratories GmbH

Bunsenstr. 7a · 82152 Martinsried
Tel.: +49-89-4524667-0 · **Fax:** +49-89-4524667-410
Mail: info@imgm.com · **Web:** www.imgm.com
Founded: 2001 · **Employees:** 17



IMGM Laboratories, founded 2001, is a genomic service provider focusing on BIOMARKER DISCOVERY, METAGENOMICS, BIODISTRIBUTION and PHARMACOGENETICS. Our broad technology portfolio includes NEXT GENERATION SEQUENCING (Illumina MiSeq, NextSeq and HiSeq), MICROARRAYS (Illumina, Agilent and Affymetrix) and qPCR (TaqMan) as well as ddPCR (BioRad). Expert bioinformatics and comprehensive reporting complete our services.

Most novel methodologies encompass all sequencing steps derived from FFPE material as well as development of "enteralis-kit" in connection to MVZ Martinsried, our sister company.

IMGM holds a GLP certificate and an ISO 17025 accreditation for Sanger sequencing and gene expression analysis and SNP genotyping using both real-time PCR and microarray technologies and is certified service provider for Illumina (CSPRO), Agilent and Affymetrix. Should you be interested in gene expression analysis, 16S rRNA or gene panel sequencing, we are looking forward to hearing from you. For further information please visit www.IMGM.com.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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infoteam Software AG

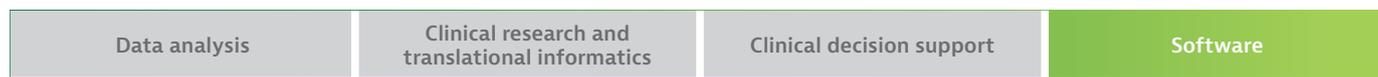
Am Bauhof 9 · 91088 Bubenreuth
Tel.: +49-9131-7800-0 · Fax: +49-9131-7800-50
Mail: info@infoteam.de · Web: www.infoteam.de
Founded: 1983 · Employees: 174



infoteam Software AG is an established provider of software solutions and services in industry, life science and medical engineering with an international base of customers. The company employs 174 staff members in its headquarters in Bubenreuth near Erlangen and in other branches in Germany, Switzerland and China. The company is certified according to ISO 9001 and ISO 13485.

ISO 14971 and FDA standards as CFR 21 Part 11, 510(k) etc. On this basis the company realises 3D visualisation of medical data, embedded software engineering for medical devices and platform independent software applications for mobile devices called medical apps.

Related to medical devices infoteam provides software engineering, testing and realisation. Whether for device software, operating software, image processing or integration in higher level networks, devices in medical technology without customised software solutions are simply unimaginable. infoteam uses its process for standard-compliant software development according to IEC 62304, IEC 62366,



Insilico Biotechnology AG

Meitnerstr. 9 · 70563 Stuttgart
Tel.: +49-711-460594-19 · Fax: +49-711-460594-10
Mail: info@insilico-biotechnology.com · Web: www.insilico-biotechnology.com
Founded: 2001 · Employees: 20



Insilico Biotechnology is a market-leading company providing predictive solutions for the Bioeconomy. An interdisciplinary team of experts offers mechanistic models, customized software, and a high performance computing platform for the simulation of living cells.

For world-leading pharma and biotech companies Insilico's technology lowers time, risk and costs of development processes. Founded in 2001, Insilico is a privately held company based in Stuttgart, Germany. For further information, please visit www.insilico-biotechnology.com.



JPT Peptide Technologies GmbH

Volmerstr. 5 · 12489 Berlin
Tel.: +49-30-6392-5500 · **Fax:** +49-30-6392-5501
Mail: info@jpt.com · **Web:** www.jpt.com
Founded: 2004 · **Employees:** 60



JPT Peptide Technologies is a leading provider of innovative peptide-based services (e.g. custom peptide synthesis), and catalog products & kits (e.g. Peptide Pools and SIL Peptide Standards), as well as a partner for projects in Immunology, Proteomics and Drug Discovery.

Over the past decade, JPT has developed a portfolio of proprietary technologies and a series of unique products and services which support research efforts in proteomics, all development phases of novel vaccines or immunotherapies and peptides based drug discovery.

JPT's head office and production sites are located in Berlin, Germany. All of its production and services are performed in Berlin/Germany in accordance with DIN EN ISO 9001:2015 guidelines. JPT is serving a worldwide customer base in the pharmaceutical and biotechnology industries, as well as researchers in universities, governmental and non-profit organizations.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Kapelan Bio-Imaging GmbH

Prager Str. 60 · 04317 Leipzig
Tel.: +49-341-35599-770 · **Fax:** +49-341-35599-779
Mail: info@kapelanbio.com · **Web:** www.kapelanbio.com
Founded: 2000 · **Employees:** 6



Kapelan Bio-Imaging is a bio-imaging company from Leipzig, Germany. We develop and distribute software and imager for digital image analysis in research and routine. Our software LabImage provides a unique approach for all bio-imaging needs from image analysis up to automation and device controlling. LabImage provides the world only Imaging Application Pool.

The LabImage Application Pool is a set of Apps that can be loaded directly into the LabImage Software. The LabImage Application Pool is a set of Apps that can be loaded directly into LabImage.

In combination with the LabImageR reader series we create custom solutions for use in routine diagnostics mainly. The readers are made to work in close combination with the LabImage software. They are built to deliver a fully integrated workflow to provide a more efficient and flexible process.

You probably know the concept from your smartphone running iOS, android or Windows Phone or others on the market. You can select from a huge list of specific apps according to your needs.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Lead Discovery Center GmbH

Otto-Hahn-Str. 15 · 44227 Dortmund

Tel.: +49-231-9742-7000 · Fax: +49-231-9742-7039

Mail: info@lead-discovery.de · Web: www.lead-discovery.de

Founded: 2008 · Employees: 62



The Lead Discovery Center (LDC) is a translational drug discovery company which takes on promising early-stage projects from academia and transforms them into innovative pharmaceutical leads that address unmet medical needs.

In close collaboration with high profile partners from academia and industry, LDC is building a strong and growing portfolio of preclinical assets with exceptional medical and commercial potential.

LDC sustains a preferred partnership with the Max Planck Society and has formed alliances with AstraZeneca, Bayer, Boehringer Ingelheim, Daiichi Sankyo, J&J Innovation, Merck/EMD, Qurient and Roche as well as leading academic drug discovery centers around the globe.

The LDC offers core expertise in Cellular Biology, Assay Development & Screening, Pharmacology and Medicinal Chemistry in a collaborative risk-sharing model. The LDC team consist of industry-trained experts with solid experience in project management and drug discovery.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Lipotype GmbH

Tatzberg 47 · 01307 Dresden

Tel.: +49-351-796-5345 · Fax: +49-351-796-5349

Mail: info@lipotype.com · Web: www.lipotype.com

Founded: 2012 · Employees: 11



Lipotype is a spin-off company from the Kai Simons and Andrej Shevchenko labs of the world-renowned Max-Planck-Institute of Molecular Cell Biology and Genetics in Dresden, Germany. Drawing on many years of cutting edge research experience, Lipotype delivers comprehensive, absolutely quantitative lipid analysis services for clinical and biological samples on a high-throughput scale.

Lipotype offers high quality lipid analysis services for a wide range of customers and applications including biomarker identification for clinical researchers, pharma and biotech companies, functional food development for the food industry, as well as for the small-scale profiling needs of academic researchers.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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LOGOPHARM GmbH

Schloßstr. 14 · 79232 March

Tel.: +49-761-203-5127 · Fax: +49-761-203-5191

Mail: info@logopharm.com · Web: www.logopharm.com

Founded: 2005 · Employees: 4



LOGOPHARM GmbH is an innovative biotech company that provides specialized services and tools for proteomic target and biomarker R&D. The company located at Freiburg (Germany) was established 2005 by a team of leading scientists and business experts. It combines proprietary proteomic technologies, long-term experience in functional membrane protein analysis and innovative drug development concepts with focus on membrane proteins and protein complexes.

rate than current high-throughput approaches. Based on this we offer advanced proteomic services, research consulting and implementation of technology, individually adapted to our customers' needs.

Our proprietary developments include the CompleXio technology for identification of protein-protein interactions in native tissue, microproteomic analysis with ultimate sensitivity and label-free quantitative mass spectrometry. The used strategies are broadly applicable to targets and biomarkers, require very small amounts of sample and show a lower error

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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med3D GmbH

Lutherstr. 59 · 69120 Heidelberg

Tel.: +49-6221-5027-50 · Fax: +49-6221-5027-51

Mail: info@med3D.de · Web: www.med3D.de

Founded: 2000



med3D GmbH is a company focused on software development and clinical research. Very strong in 3D image processing and 3D visualization, surgical navigation and robotics. Spin-Off from Heidelberg University Hospital in 2000, located next to campus. Main product: 3D planning system for dental implantology based on computertomographic 3D image data (using data aquired with CT and Cone Beam CT). Actively involved in research for telemedicine and early warning systems for sepsis and atrial fibrillation.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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MEDEORA GmbH

Hansaring 1 · 50670 Köln
Tel.: +49-221-9883-0360 · Fax: +49-221-9883-0361
Mail: info@medeora.de · Web: www.medeora.de
Founded: 2004



MEDEORA GmbH (a University Hospital of Cologne spin-off) is for more than 12 years a privately owned company, which specializes in the development of solutions for the pharmaceutical industry and medical science.

Our products include software solutions for managing biological samples and patient data, solutions for the implementation of scientific research projects and pharmaceutical studies (NIS/PASS: website solutions for physicians and patients and much more). In addition, we have a national and international network of partners in the areas of communications and marketing, market research and media (www.quomedic.com).

As an ISO 9001 2015 certified company we place great emphasis on structured and sustainable processes.

Our Biobanking Software "BioARCHIVE" is a user friendly, customizable sample management solution that supports the flow in a lab and it is ideal for small and mid-sized Biobanks in the areas of medicine and life sciences. BioARCHIVE (medicine and science) is available as Cloud version, On Site-version and as Freeware version (www.cloud-biobanking.com).

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

MEIERHOFER AG

Werner-Eckert-Str. 12 · 81829 München
Tel.: +49-89-442316-0
Mail: info@meierhofer.de · Web: www.meierhofer.de
Founded: 1987 · Employees: 200



The MEIERHOFER Group is a European technology company that provides solutions for managing medical and administrative processes in health care facilities. The scalable information system MCC is a leading hospital information system in Germany, Austria and Switzerland. Currently, about 80,000 users work in about 220 installations with MCC.

Starting in 1987 as a student start-up, today nearly 200 MEIERHOFER employees fill the company's fundamental ideas with life: connecting people, medicine and IT. We place great emphasis on software suitable for daily use.

Short distances and direct contact: as a medium sized enterprise we know our customers and assist them with their projects at any time. Our offices in Munich, Leipzig, Berlin, Bern (CH) and St. Valentine (AT) ensure proximity to MCC users from Germany, Switzerland and Austria.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Metabolomic Discoveries GmbH

Am Mühlenberg 11 · 14476 Potsdam

Tel.: +49-331-95143881

Mail: info@metabolomicdiscoveries.com · Web: www.metabolomicdiscoveries.com

Founded: 2009 · Employees: 15



Metabolomic Discoveries is a research company in the field of metabolomics. The metabolomics platform allows the identification of biomarkers in diagnosis of disease, for well-being and health prevention.

Metabolomic Discoveries develops biomarkers in the field of precision medicine, nutrition, exercise and aging. Here, artificial intelligence approaches such as deep learning to identify patterns and develop predictive models.

The company developed a unique single blood drop at home sampling kit, which allows to analyse about 1000 metabolites in blood. The platform, named Kenkodo, provides direct to consumer tests, as well as it enables clinical studies to increase blood sampling resolution and monitoring of participants by mobile applications and wearable devices.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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micro-biolytics GmbH

Schelztorstr. 54-56 · 73728 Esslingen

Tel.: +49-711-901-211-20 · Fax: +49-711-901-211-900

Mail: info@micro-biolytics.com · Web: www.micro-biolytics.com

Founded: 2001 · Employees: 12



Digitization of liquids is a gap which still exists in a world of digital information. Until today no valid method is available to close this gap and to provide all the benefits to industries and organizations.

The information is stored in a Big Data storage for further information. The digital image of a liquid is unlimited and available at any time for further analysis.

This gap can be closed – today.

- AquaSpec™ is:
- Easy (no special skills or environment required, no sample preparation)
 - Fast (result in less than 3 min.)
 - Reliable (each AquaSpec™ device provides for the same liquid, the same result)
 - Best in class price performance ratio

Micro-Biolytics has developed a new analytical method named AquaSpec™. Each liquid has a specific infrared spectrum, individual as a fingerprint.

AquaSpec™ can solve many problems in many application areas.

With AquaSpec™ any liquid (e.g. blood serum or pharmaceutical drugs) is analysed at once with previously unattained reproducibility of measurements, accuracy and detection sensitivity. All compounds are detected at once and – digitized.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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microDimensions GmbH

Rupert-Mayer-Str. 44, Gebäude 64.07 · 81379 München
Tel.: +49-89-1894253-30 · Fax: +49-89-1894253-31
Mail: info@micro-dimensions.com · Web: www.micro-dimensions.com
Founded: 2011 · Employees: 10



microDimensions develops and distributes software for microscopic image processing and analysis. Their solutions and services can be tailored to individual requirements and seamlessly integrated into digital pathology workflows.

They enable pharmaceutical and biotech companies to accelerate early drug testing and allow research organizations to gain new insights into cancer, multiple sclerosis, chronic infections, and other diseases."

microDimensions' cutting-edge products Voloom[®], Slidematch[™], Outspace[™], and Zoom are the world's fastest tools for convenient and accurate 3D histology reconstruction, whole slide image alignment, stereology, and digital pathology viewing.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

MicroDiscovery GmbH

Marienburger Str. 1 · 10405 Berlin
Tel.: +49-30-44350-900 · Fax: +49-30-44350-9010
Mail: gregor.keeve@microdiscovery.de · Web: www.microdiscovery.de
Founded: 2000 · Employees: 20



MicroDiscovery develops and produces software and hardware solutions for mHealth, in-vitro-diagnostics and biomedical research enabling personalized medicine.

Our innovative analysis system, mo:Test, a smartphone based user friendly reader for lateral flow test evaluation makes diagnostics mobile. Quick high quality readout, quantification and reliable documentation are guaranteed in all applications. Intelligent integration of a smartphone makes the system fully autonomous and reduces maintenance effort.

MicroDiscovery has a strong track record in creating analysis systems for molecular data, image analysis, classification and medical device control. This includes the design and realization of dedicated algorithms in the fields of Genomics, Pro-

teomics and Metabolomics. Solutions can be developed and documented as required for CE certification and FDA compliance (21 CFR part 11, IEC 62304). Complementary bioinformatics and biostatistics services support your study planning, biomarker validation, data processing, data integration and data management.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Molecular Health GmbH

Kurfürsten-Anlage 21 · 69115 Heidelberg

Tel.: +49-6221-43851-0

Mail: germany@molecularhealth.com · Web: www.molecularhealth.com

Founded: 2004 · Employees: 70



Molecular Health is a data and analytics precision medicine company based in Heidelberg, Germany with affiliates in Boston and in The Woodlands, USA. As a medical device company we strictly follow the associated regulations. We capture, integrate, and analyze the most recent scientific and medical knowledge using our comprehensive biomedical data warehouse (Dataome).

(Dataome) that turns the latest biomedical information into clinically actionable knowledge to improve individual patient outcomes.

We exploit Dataome to match individual patient genetic profiles with state-of-the-art biomedical knowledge to identify safe and effective therapies.

Our goal is to empower physicians with evidence base to make better treatment decisions for their cancer patients. Molecular Health provides a fast and scalable platform

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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NEXUS AG

Irmstr. 1 · 78166 Donaueschingen

Tel.: +49-771-22960-0 · Fax: +49-771-22960-999

Mail: info@nexus-ag.de · Web: www.nexus-ag.de



NEXUS is one of the leading European software companies for the healthcare industry with more than 2,500 customers in 19 countries.

endoscopy or cardiology – which can also be used independently of NEXUS/HIS.

NEXUS offers Patient Management, Billing, Electronic Medical Record, CPOE, Medication, Charting, Medication, Nursing, Picture Management, Operation Theatre, PDMS-ICU and many other medical modules. The software is designed for ease of use, without requiring menus, to guide the user with one click to the required information.

For the specific requirements of acute, mental health, rehabilitation and home care facilities, NEXUS offers customer focused solutions by providing individual process support and specific modules and functions. In Germany, Austria and Switzerland, more than 60% of all mental health institutions use NEXUS.

NEXUS provides a complete and integrated software suite to healthcare institutions. Highlights: in addition to the hospital information system (HIS) NEXUS is offering premium medical diagnostic (DIS) modules – like solutions for radiology,

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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nova motum® Services & Consulting GmbH

Goerzallee 299 · 14195 Berlin

Tel.: +49-30-915 757-20 · Fax: +49-30-915 757-21

Mail: info@novamotum.net · Web: www.novamotum.net

Founded: 2013



Know-how and experience

nova motum® offers more than 18 years experience in the development and design of Mobile Connectivity software. We know how to expand your business strategy with the help of Mobile Connectivity, based on solutions for iOS, Android, as well as OS X and Linux, clients and servers alike. Our customer base includes Vodafone Global, Phonak, Medisana, and Gigaset, amongst others.

Network

nova motum® has access to the eHealthCare markets as an active member of bvitg – German Association of Health IT Vendors and of SPECTARIS, section medical technology; of COCIR in Brussels, electromedical and HealthCare IT industries. also of ZVEI, German Electrical and Electronic Manu-

facturers' Association as well as of the SIBB – Berlin with Business Apps Network BAN/BA4MW – Business Applications for the Mobile World.

Interdisciplinarity

nova motum® has got eHealthCare and medical technology skills about mobile platforms, operating systems, Mobile Connectivity hardware and software solutions as well as the viewpoint from a physician or medical doctor and a patient.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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OakLabs GmbH

Neuendorfstr. 16b · 16761 Hennigsdorf

Tel.: +49-3302-2265-479 · Fax: +49-3302-209-2705

Mail: info@oak-labs.com · Web: www.oak-labs.com

Founded: 2011 · Employees: 12



OakLabs has been offering high-quality gene expression analysis and biotechnology solutions since 2011. Numerous satisfied customers worldwide trust in our broad range of products and services, including different pharma, biotech and plant breeding, medical and microbiology research institutions and companies.

The portfolio includes:

- carefree packages for gene expression analysis
- comprehensive data analyses and diagnostics
- development of custom software solutions

Our competent team of biologists, physicists and biochemists makes sure to constantly achieve the best possible results for all kinds of projects – reliably, fast and cost-efficient. The OakLabs headquarters are located in Hennigsdorf near Berlin.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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OmicScouts GmbH

St.-Valentin-Str. 5 · 85356 Freising
 Tel.: +49-8161-714-265 · Fax: +49-8161-714-264
 Mail: info@omicScouts.com · Web: www.omicScouts.com
 Founded: 2014 · Employees: 7



OmicScouts is a proteomics company providing innovative proteomics and integrated bioinformatics solutions for key issues in drug and biomarker discovery. Founded in 2014 as spin-off of the TU München, the company supports drug discovery, disease and systems biology and (pre-)clinical research with a broad portfolio of advanced mass-spectrometry-based technologies.

OmicScouts' chemical proteomics technologies alongside the licensed Cellular Thermal Shift Assay (CETSA) technology reveal cellular drug targets and selectivity profiles in an unbiased and comprehensive manner. Other technologies enable the proteome-wide profiling of posttranslational modifications and signalling mechanisms for drug mode-of-action analyses or biomarker discovery studies.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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OPASCA GmbH

Julius-Hatry-Str. 1 · 68163 Mannheim
 Tel.: +49-621-150282-70 · Fax: +49-621-150282-71
 Mail: kontakt@opasca.com · Web: www.opasca.com
 Founded: 2010 · Employees: 30



OPASCA – business activity

OPASCA realizes a smart interconnection and workflow optimization for the medical sector on the basis of a diverse and flexible platform concept in close collaboration with our users in public, church-related or privately operated hospitals and practices. At present, our business operations focus on radiation therapy facilities.

Our highly modular concept combines essential functional modules for room surveillance in radiation therapy facilities into one integrated complete solution. Technological highlight is the worldwide unique personal safety system that prevents unintentional radiation collisions without the need for any marking.

Above all, OPASCA's focus always remains with human beings: while efficient patient management and practical assistance systems specifically for radiation therapy facilities purposefully support and release professional staff, various components of the universal platform enable patient-customized care during the entire treatment cycle for the purpose of increasing the patient's well-being.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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PharmaInformatic

Friesenstr. 36 · 26721 Emden

Tel.: +49-4921-993360 · Fax: +49-4921-993361

Mail: mail@pharmainformatic.com · Web: www.pharmainformatic.com

Founded: 2004



PharmaInformatic was founded in 2004 and provides software and databases to improve drug discovery and development. The company is based in Emden, Germany.

Since twelve years we develop large & comprehensive databases on ADME/Tox properties of drugs & compounds (Absorption, Distribution, Metabolism, Excretion, Toxicology, Bioavailability, Protein binding, etc).

By using Artificial Intelligence we create software (Expert Systems) which predicts above properties solely by compound structure. Pharmaceutical companies use the software IMPACT-F to evaluate drug-uptake in humans prior to clinical trials.

Our research replaces animal tests: Drug uptake is tested in animals such as dogs, rats, monkeys or mice to estimate uptake in humans. But human and animal drug uptake is often different. The expert system IMPACT-F evaluates oral drug uptake significantly more reliably than animal tests. Pharmaceutical companies use the technology to optimize the development of future drugs.

For customers testimonials & further info, see:
<http://pharmainformatic.com>

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Polyquant GmbH

Industriestr. 1 · 93077 Bad Abbach

Tel.: +49-9405-96999-10 · Fax: +49-9405-96999-28

Mail: info@polyquant.com · Web: www.polyquant.com

Founded: 2007 · Employees: 8



PolyQuant offers a wide range of products, services and supporting bioinformatics solutions for quantitative proteomics.

The proprietary QconCAT technology enables absolute quantification of proteins using proteotypic peptides which are isotopically labeled, and as such function as internal standards in LC-MS analysis. QconCATs are overall beneficial: they facilitate simple handling from sample preparation to data analysis, and they enable highly reproducible throughputs (multiplexing to 1000's of samples/data points scalable). Additionally, inherent features of the polypeptide are stability, quantification accuracy, and general robustness. Therefore, QconCATs are valuable research tools for biomarker discovery and validation.

Building on our in-depth expertise, we offer:

- customized QconCATs as internal standards for absolute protein quantification
- calibration kits "RePLiCal" and "QCAL" for LC and MS instrument standardization
- entire assay development (full fee-for-services)
- technical support for the implementation of targeted proteomics assays.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

Preventicus GmbH

Tatzendpromenade 2 · 07745 Jena
Tel.: +49-3641-559845-0 · **Fax:** +49-3641-559845-9
Mail: info@preventicus.com · **Web:** www.preventicus.com
Founded: 2014 · **Employees:** 8



Preventicus offers eHealth solutions for preventing lifestyle-related diseases like stroke and burnout. The USPs of Preventicus include unique algorithms based on biosignal analytics and high-level clinical evidence that enable risk screening via smartphones. Personalized prevention measures are derived from the individual's health profile, while their effectiveness is monitored and users networked to health providers.

We turn smartphones into medical measuring devices. That is how we empower users to carry out previously complex screening examinations at home via smartphone and to maintain their own health through perfectly matched preventive measures.

Lifestyle-related diseases like heart attack, burnout and stroke are usually not detected until serious symptoms become manifest. This encumbers effective prevention and generates enormous costs. Smartphones and Smartwatches represent the ideal screening instrument. However, currently, there are hardly clinical, evidence-based applications for early detection, preventive care and risk assessment available.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Protagen AG

Otto-Hahn-Str. 15 · 44227 Dortmund
Tel.: +49-231-9742-6300 · **Fax:** +49-231-9742-6301
Mail: bd@protagen.com · **Web:** www.protagen.com
Founded: 1997 · **Employees:** 40



Protagen AG improves Personalized Patient Care

We are an ISO 13485 certified diagnostic company, passionate about validation and development of novel biomarkers for better diagnostic (Dx) and companion diagnostic (CDx). Our SeroTag® technology enables differential diagnosis and patient stratification for Rheumatoid Arthritis (RA), Systemic Lupus Erythematosus (SLE), Systemic Sclerosis (SSc) and others.

Protagen has developed the NavigAID concept. The first product, NavigAID SLE, separates and defines patient subgroups in SLE, overcoming patient heterogeneity and enabling new approaches for successful drug development.

At Protagen, we are dedicated to the development of novel diagnostic tests that aid successful therapeutic development and better treatment strategies for autoimmune diseases.

Our first CE marked tests for SSc were launched in Q2/2016 and further tests in SLE and RA will follow. Protagen is also developing diagnostics products that predict a patient's response to treatments to some of the best selling drugs in the world. Together with our Pharma and Biotech partners,

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Proteome Factory AG

Magnusstr. 11 · 12489 Berlin

Tel.: +49-30-206162-65 · Fax: +49-30-206162-67

Mail: service@proteomefactory.com · Web: www.proteome-factory.com

Founded: 2000



Proteome Factory (PFA) is a contract research organization providing protein analysis, quality control, proteomics, metabolomics and high resolution mass spectrometric services to all fields of biological, biomedical and chemical research and recombinant/ therapeutic protein production.

PFA provides a comprehensive array of chromatographic, electrophoretic (including 2DE analysis), protein chemical and mass spectrometric techniques to match customer's analysis requirements with tailored solutions for their projects. Therefore, PFA is a preferred partner of customers from pharmaceutical, biotech and research institutes for R&D projects especially in the field of proteomics and biomarker discovery, quantification of proteins in products, drugs or biological samples, full amino acid sequencing of proteins (e.g. mono-

clonal antibodies) and characterization of (recombinant) proteins, biosimilars and biobetters.

Apart from contract research PFA offers high quality fee-for-service analytical and mass spectrometric services which can be delivered also as express services.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

QIAGEN

Qiagen Str. 1 · 40724 Hilden

Tel.: +49-2103-29-0 · Fax: +49-2103-29-22000

Mail: pr@qiagen.com · Web: www.qiagen.com

Founded: 1984 · Employees: 4,600



QIAGEN N.V., a Netherlands-based holding company, is the leading global provider of Sample to Insight solutions that enable customers to gain valuable molecular insights from samples containing the building blocks of life. Our sample technologies isolate and process DNA, RNA and proteins from blood, tissue and other materials. Assay technologies make these biomolecules visible and ready for analysis. Bioinformatics software and knowledge bases interpret data to report relevant, actionable insights. Automation solutions tie these together in seamless and cost-effective workflows.

QIAGEN provides solutions to more than 500,000 customers around the world in Molecular Diagnostics (human healthcare), Applied Testing (forensics, veterinary testing and food safety), Pharma (pharma and biotech companies)

and Academia (life sciences research). As of March 31, 2016, QIAGEN employed approximately 4,600 people in over 35 locations worldwide. Further information can be found at <http://www.qiagen.com>.

Data analysis

Clinical research and translational informatics

Clinical decision support

Software

QuoMedic GmbH

Am Mediapark Hansaring 1 · 50670 Köln
Tel.: +49-221-988-303-70 · Fax: +49-221-988-303-61
Mail: info@quomedic.de · Web: info@www.quomedic.com
Founded: 2013



QuoMedic is the result of 12 years experience of Medeora GmbH, a technology company with focus on software solutions to support studies and research projects (EDC solution, website for patients and physicians). Our combination of expertise and experience in supporting patient- and site-based activities across multiple countries makes us an invaluable resource that strengthens every recruitment effort.

We compose fresh solutions to achieve your goals through: TCN-System (data input and management solutions), My Clinical Study Buddy (Appointment reminders, Visit overviews, EC-approved study materials), Protocoll Pal (Pre-screening tool, Regulatory-approved documents), RSG Card (Ready.Set.Go. Card Global Patient Reimbursement Program).

Partnership means trust. As an agency that relies on successful cooperation with partners, we rely on our affiliate Medeora in all technical matters and our American partner BBK Worldwide in the field of adaptive patient recruitment, a specialist with more than 30 years of innovative recruitment success in 72 countries and more than 50 languages.



Ribocon GmbH

Fahrenheitstr. 1 · 28359 Bremen
Tel.: +49-421-2487-053 · Fax: +49-421-2208-150
Mail: contact@ribocon.com · Web: www.ribocon.com
Founded: 2005 · Employees: 8



Ribocon is a bioinformatics company committed to the computational aspects of molecular identification and community profiling of microorganisms with a focus on (i) high-quality DNA sequence reference databases and data sets (marker genes such as the ribosomal RNA, as well as genomes) and (ii) bioinformatics tools and services for off-the-shelf data processing based on standardized processes.

Ribocon's mission is to transform and extend academic state-of-the-art resources and solutions to finally comply with the requirements of e.g. highly regulated user environments such as in pharmaceutical industry.



samedi GmbH

Hessische Str. 11 · 10115 Berlin

Tel.: +49-30-21230707-0

Mail: info@samedi.de · Web: www.samedi.de

Founded: 2008 · Employees: 20



The samedi GmbH offers an interdisciplinary, web-based software for collaboration of healthcare providers. It is based on a common workflow scheduling and patient coordination fulfilling the highest security requirements. Hospitals, clinics and other medical providers can use the online platform www.samedi.de to manage their workflows and resource planning without any additional hardware and by that achieve an optimized utilisation. The integrated online booking system offers the possibility to book appointments via internet and without making any telephone calls.

The relationship between doctor and patient becomes easier, more cost-effective, more time-saving and more service-oriented at the same time. The administrative effort is reduced and on the other hand the patient care gets optimised.

Hereby samedi® supports doctors and hospitals to fulfill their requirements concerning quality management. The system is financed without advertising, by a monthly subscription of the customers. samedi® is a completely independent, privately funded provider of technological services.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Scopis GmbH

Heinrich-Heine-Platz 10 · 10179 Berlin

Tel.: +49-30-20169-380 · Fax: +49-30-20169-3820

Mail: info@scopis.com · Web: www.scopis.com

Founded: 2010



Scopis® GmbH, based in Berlin (Germany), develops and manufactures surgical planning and navigation systems for Neuro, Spine, ENT and maxillofacial surgery. Scopis Target Guide Surgery (TGS®) is a unique “next-generation” solution for navigated endoscopic surgery that offers surgeons highly advanced image guidance and visualization capabilities.

Scopis TGS® is provided by the Scopis Hybrid Navigation® system that is the first clinical navigation platform that offers electromagnetic, optical and simultaneous hybrid tracking technology in a single integrated control unit. Scopis operates in over 50 countries.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Siemens Healthineers

Henkestr. 127 · 91052 Erlangen

Web: www.healthcare.siemens.com

Employees: 44,000



Siemens Healthineers is one of the world's largest suppliers of technology to the healthcare industry and a leader in medical imaging, laboratory diagnostics and healthcare IT. All supported by a comprehensive portfolio of clinical consulting, training, and services available across the globe and tailored to customers' needs.

In fiscal 2015, Siemens Healthineers had around 44,000 employees worldwide and posted revenue worth 12.9 billion euros, and profits of more than 2.1 billion euros.

Further information is available on the Internet at <http://www.healthcare.siemens.com>

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Sonormed GmbH

Neuer Kamp 30 · 20357 Hamburg

Tel.: +49-40-609451195

Mail: service@tinnitracks.com · **Web:** www.tinnitracks.com

Founded: 2012



Sonormed, founded in 2012, is based in Hamburg, Germany. An interdisciplinary team of sound engineers, computer scientists, psychologists and neurobiologists is constantly working on further developing and distributing the medical products Tinnitracks and Tinnimatch. The company has won numerous innovation and entrepreneur awards and was honored, e.g., by the German Federal Ministry of Economics and Technology. In 2015 Tinnitracks could win the Great Prize at the SXSW Accelerator competition in the category "Digital Health Life Science".

Sonormed started Tinnitracks as a web application but soon advanced the service to smartphone apps on iOS and Android. In September 2015, Tinnitracks became the first mobile therapy app in Germany to be reimbursed by a statutory

health insurance company. To broaden access to Tinnitracks, Sonormed is now targeting the US market. With its technological infrastructure and direct market access, Sonormed is ideally positioned to promote change in digital patient care and to benefit from the convergence of consumer electronics and healthcare in audiology.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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StarSEQ GmbH

Johann-Joachim-Becher-Weg 30a · 55099 Mainz
Tel.: +49-6131-39232-87
Mail: info@starseq.com · Web: www.starseq.com
Founded: 2008 · Employees: 8



StarSEQ is a research and service oriented enterprise.

Although founded only in 2008, StarSEQ unites a considerable measure of technical competence. Starting 1 January, 2014, StarSEQ GmbH has taken over the operative business of GENterprise GmbH. As a result of the takeover of additional fields of business, StarSEQ GmbH has broadened its services to encompass molecular biology, biotechnology and diagnostics. The founders of GENterprise have decades of experience in nucleic acid analysis. Their experience ranges from the first gene technological applications of the mid-1970s to the decoding and characterization of genes with the most modern high throughput technology in the framework of genome projects.

StarSEQ aims to offer a complete service in the analysis of genetic material. Our main priorities are our orientation towards our customers and our careful advisory service.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Systasy Bioscience GmbH

Adams-Lehmann-Str. 56 · 80797 München
Tel.: +49-151-51263366
Mail: info@systasy.de · Web: www.systasy.com
Founded: 2012 · Employees: 10



Systasy, a growing start-up company founded 2012 in Munich, provides cost-effective and highly innovative solutions to address critical and unmet needs of the pharmaceutical industry. Systasy's products and services are ranging from the analysis of cellular target activities and specificities up to the simultaneous analysis of multiple pathway in living cells, based on their proprietary splitSENSOR and EXTassay technologies.

Systasy takes advantage of their EXTassay technology to deliver profile analyses for a multitude of simultaneously occurring cellular events to customers. Thus, Systasy's services and products are designed to match customers' needs in the early phases of drug discovery and personalized medicine.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Tembit Software GmbH

Am Borsigturm 42 · 13507 Berlin
Tel.: +49-30-60988-3111 · **Fax:** +49-30-60988-3122
Mail: info@tembit.de · **Web:** www.tembit.de



Tembit Software GmbH advises the pharmaceutical industry as well as hospitals on the use of biobanks, their interfaces with clinical information systems, incorporating biobanks into the existing infrastructure as well as on the integration of the necessary process steps into day-to-day work taking into account data protection, technology and organizational aspects. In cooperation with our customers, we develop individual procedures, analyze and optimize existing processes and implement programmatic requirements in a timely and validated manner.

Our focus is on the following questions:

- In an international environment, how can human specimens, collected in small to large projects, be stored securely and in keeping with data protection requirements?
- What measures are to be taken to ensure effective international data protection for data and patients?
- How can clinical parameters be used to find human and or *omics-specimens efficiently?
- How can the required re-validation effort pursuant to 21 CFR part 11 be handled economically?
- We provide convenient answers.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Transinsight GmbH

Tatzberg 47-51 · 01307 Dresden
Tel.: +49-351-79657-80
Mail: info@transinsight.com · **Web:** www.transinsight.com
Founded: 2005



Transinsight is the leading provider for bioinformatics solutions. The ESI® Technology is a semantic search technology for enterprises. It is highly flexible and modular, which allows us to create the right solution for your unique needs. This technology operates according to principles which go far beyond common search strategies. It combines knowledge based semantic technologies with exceptionally intuitive navigation. The well known semantic search engine GoPubMed.com shows all principles online for free.

Selected customers are: Bayer, Unilever, BASF, the German Federal Institute for Risk Assessment, Statoil, Wintershall, Abcam, EMBL, Adipogen, and the European Centre for Disease Prevention and Control.

In acknowledgement of the technologies developed by the company, Transinsight has repeatedly been honoured with international awards i.e. the reddot design award best of the best 2009 and the German Industry Prize 2010.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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VISUS Technology Transfer GmbH

Universitätsstr. 136 · 44799 Bochum

Tel.: +49-234-93693-400 · Fax: +49-234-93693-499

Mail: info@visus.com · Web: www.visus.com

Founded: 2000 · Employees: 120



VISUS is one of the leading providers of process-oriented solutions for imaging and diagnostic management. The JiveX product family covers the full range of imaging and diagnostic data communication, from PACSs for radiology clinics to hospital solutions spanning multiple departments and sites. Thanks to their use of internationally recognized standards, VISUS solutions – all of which are developed in Germany – can be readily integrated into existing systems.

A key feature of JiveX products is an open system structure that allows for seamless integration in existing IT architectures, regardless of the manufacturer. This is made possible by consistently implementing internationally recognized IHE standards. The use of standards creates transparency and serves as a prerequisite for an expandable, forward-looking IT infrastructure that offers users the development flexibility they need.

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Vitaphone GmbH

Markircher Str. 22 · 68229 Mannheim

Tel.: +49-621-178918-100 · Fax: +49-621-178918-101

Mail: info@vitaphone.de · Web: www.vitaphone.de

Founded: 1999



vitaphone has been a leading company in the area of telemedicine since its foundation in 1999. The company offers e-health solutions in four main segments. The first segment is monitoring, which involves monitoring vital data for chronic conditions with the help of medical devices and supporting software. The second one constitutes telemedical services provided by our specialized callcenter and its qualified medical personnel. The third segment is providing vital data monitoring, support and reporting in the context of clinical trials. Finally, vitaphone is involved in consulting work regarding the entire telemedicine process.

are to connect regional and national healthcare stakeholders and develop new innovative healthcare models that improve the patient's quality of life and can furthermore be effective tools to face challenges posed by the ageing population and decreasing amounts of medical professionals.

All of these different areas of work are made possible through vitaphone's telemedical infrastructure (software and devices) at the base level. The main goals of vitaphone

Data analysis	Clinical research and translational informatics	Clinical decision support	Software
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Zentrum für Humangenetik und Laboratoriumsdiagnostik

CENTER FOR HUMAN GENETICS AND LABORATORY DIAGNOSTICS (ZHG)
Dr. Klein, Dr. Baur and Colleagues



Lochhamer Str. 29 · 82152 Martinsried

Tel.: +49-89-895578-0 · Fax: +49-89-895578-780

Mail: info@medizinische-genetik.de · Web: www.medical-genetics.de

Founded: 1998 · Employees: 100

Center for Human Genetics and Laboratory Diagnostics

The Center for Human Genetics and Laboratory Diagnostics in Martinsried is specialized in advanced laboratory testing in genetics, clinical chemistry and immunology (in particular: HLA testing). The laboratory is accredited according to DIN EN ISO/IEC 17025 and ISO 15189. The institution's clinical consultation focuses on pediatric genetics, infertility and inherited diseases. Among the applied technologies are: PID, NIPT (Prenatalis®), Next Generation and Sanger Sequencing as well as Array technologies, Blotting, FACS, FISH, HPLC, pyrosequencing, real-time PCR and tandem mass spectrometry. Since 2016 the portfolio includes the molecular genetic analysis of the human microbiome (enteralis).

Data analysis

Clinical research and
translational informatics

Clinical decision support

Software

Imprint

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Health – Made in Germany is an initiative of Germany's Federal Ministry for Economic Affairs and Energy. Our mission is to strengthen the competitiveness of the German healthcare industry and actively promote the internationalization of the sector. Particular emphasis here is on the support of small and medium enterprises.

Health – Made in Germany is conducted by Germany Trade & Invest, the economic development agency of the Federal Republic of Germany.

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