Bavarian Biotech News

October 2018





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Bio^M for BioEntrepreneurs



Biotech in Bavaria is thriving



Dear Readers,

Bavaria's biotech industry is doing very well. In the past year, there were nine new companies, more than 120 Projects in clinical trials, employment figures are higher than ever and a drug from Bavaria received EU and US approval.

In our new quarterly Bavarian Biotech News, we would like to summarize the current development of the Bavarian biotech scene, highlight special news and events and introduce promising companies. In addition we will give you an overview of the broad offer Bio^M is providing as the network organization of the biotechnology sector in Munich and in Bavaria.

So stay tuned and enjoy reading the first edition of our quarterly Bavarian Biotech News.

Your Bio^M-Team

Bavaria in numbers

Leading Germany - Bavaria's economy at a glance

Bavaria

- Population: 12.9 mio
- 594 bn € GDP
- No 1 in Germany
- Growth rate 2.8%
- Unemployment Rate 2.7%
- 31% of German Patent Applications
- **388.893** Students
- 26,850 Medical Doctors
- 49,900,000 Passengers (flight)
- 94,370,000 Overnight stays



Outstanding biopharma ecosystem (*)

364 Biopharma Companies



33,500 Employees



10 Marketed Drugs (**)



(**) invented in Bavaria

^(*) medical engineering numbers are NOT included

Spotlight: Munich – the innovation hub



Roche's first Digital Health Accelerator: in Munich!

Roche has initiated the first accelerator for digital health start-ups in Munich. The program aims to advance the digitization of the healthcare system. Together with its partner WERK1 and Plug and Play, Roche wants to strengthen Munich as a location for innovation and to support the development of sustainable networks. Following the successful pilot phase, Plug and Play entered with Roche the next round in September starting the health innovation platform "Startup Creasphere" in Munich.

www.werk1.com/digitalhealth/ and www.startupcreasphere.com/



Approval for Tremfya®



Dr. Simon E. Moroney CEO, MorphoSys AG

"In 2017, MorphoSys took an important step on its way to being an integrated biopharmaceutical company. A first milestone was the approval of Tremfya® by our license partner Janssen for the treatment of psoriasis, thus making the first drug of our antibody library available to patients. Another milestone was the FDA conferring the

designation Breakthrough Therapy to our antibody MOR208, and we were also able to publish clinical data on blood cancer which gives us hope for a bright future to come for this compound." www.morphosys.com

GNA Biosolutions wins AACC Disruptive Technology Award 2018

The award honors innovative diagnostic procedures that improve patient care through increased diagnostic quality or easier access to powerful diagnostic procedures. GNA Biosolutions convinced with their proprietary "Pulse Controlled Amplification" technology. This laser PCR technology accelerates molecular diagnostic detection by combining ultrafast nucleic acid amplification with integrated sample preparation. It provides a powerful solution for stationary and mobile applications. www.gna-bio.com



Into the 'Center of biological drug research in Germany'

Dortmund Lead Discovery Center GmbH (LDC) has established a branch in the Munich biotech cluster, LDC Biologics. While the team in Dortmund concentrates on small molecules, the focus in Munich will be on the development of therapeutic antibodies.

www.lead-discovery.de

Nanotemper again "Innovator of the Year"

For the 2nd time in a row, Munichbased NanoTemper Technologies took 1st place in its size category - the first time in the 25-year history of the "TOP 100"-Award. NanoTemper's technology massively reduces time and effort involved in biophysical laboratory measurements.

www.nanotemper.de



Dr. Philipp Baaske CEO, Nanotemper Technologies GmbH

Bio^M for BioEntrepreneurs in Bavaria











Bio Angels



Boot Camp





Pitch Doctor

Mentor Circle

www.bio-m.org/en/for-start-ups

"Biotech entrepreneurs are the spirit of our ecosystem. They are the drivers for the translation of ideas into success stories."



Prof. Dr. Horst Domdey, CEO Bio^M Biotech Cluster Development GmbH



BioEntrepreneur Bootcamp

design and validate your business concept





Bootcamp 2018

- 10 teams
- 8 weeks
- 2-3 days per week on-site
- 500 expert meetings in 4 different European locations



m⁴ Award create the future of medicine

The Bavarian pre-seed grant program m4 Award addresses academic research projects with spin-off potential in the area of medical biotechnology. Academic research groups from Bavaria can apply for project funding of up to 500,000 € for two years. Find more information about the award online.



Bio Angels invest in Bavarian biotech

Do you want to invest in Bavarian biotech? BioAngels is an exclusive match-making event series for European life-science investors. Selected start-ups and pre-seed teams present their innovative ideas.

Bavaria – a leading biopharma ecosystem



Spot on: Top news in immunotherapy

iOmx Therapeutics raised EUR 40 million in series A round

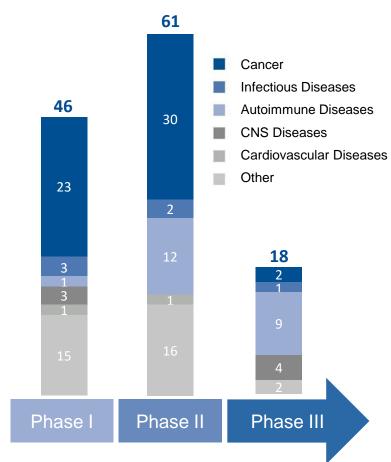
Immunic added new investors and completes series A financing round of total EUR 31.7 million

Medigene and *Structured Immunity* announce collaboration aimed at improving T Cell receptor development

Immunic reports start of enrollment into clinical phase 2 study with IMU-838 in patients with Ulcerative Colitis

Secarna's proprietary antisense oligonucleotide platform combined with *Firebrand Therapeutics* targets mechanisms of cancer metastasis

Clinical pipeline of Bavarian SMEs



Recent headlines from Pieris, Medigene, MorphoSys, 4SC, ITM...

Pieris Pharmaceuticals Announces Dosing of First Patient in Phase I Combination Trial for PRS-343 Plus Anti-PD-L1 Immunotherapy, www.pieris.com

MorphoSys and I-Mab Biopharma Announce China IND Submission of TJ202/MOR202, www.morphosys.com

4SC: First patient enrolled in 2nd dose cohort of Phase Ib/II study SENSITIZE of domatinostat (4SC-202) + pembrolizumab in melanoma, www.4sc.com

ITM – the theranostics company: FDA Acceptance of IND to advance Phase III Clinical Trial COMPETE with Solucin® for Treatment of GEP-NET in the U.S., www.itm.aq

New Phase 3 Clinical Trials by **MorphoSys's** Partner with Gantenerumab in Early Alzheimer's Disease now Underway, <u>www.morphosys.com</u>

Medigene significantly expands TCR alliance with bluebird bio in cancer immunotherapy, www.medigene.com









medigene

Want to see more? We are happy to receive your wishlist!

Technologies you must have seen





www.bio-m.org/database

Assay.Works GmbH

__ as**say.wo**rks

Our mission is to accelerate our partner's research programs by developing and executing predictive and scalable assays to quantify the bioactivity of novel chemical and biological entities. We combine scientific rigor with our domain expertise in laboratory automation, informatics, and industry best practices to turn challenging assays into quantitative, reproducible results.

www.assay.works

SIRION BIOTECH GmbH



SIRION Biotech was founded in 2006 in Munich. It stands for sophisticated custom virus engineering that caters to academic groups as well as the industrial gene-therapy and immune-oncology markets. All major virus systems, AAV - Lentivirus - Adenovirus, can be fully customized to the specific goals of the customer to optimize their vector strategies and increase their success in pre-clinical and clinical applications. SIRION Biotech technology has been validated in more than 250 projects with more academic and industrial organizations worldwide. Commercial arrangements range from fee-for-service over exclusive rights on specific developments, all the way to milestone & licensing arrangements. The latter are suited for longer term complex product developments in the areas of gene therapy, immune-oncology and vaccines. Molecular biologists experienced in the field stand ready for a personal project discussion.

www.sirion-biotech.com



JENS KLEIN
Managing Director / CEO
AMSILK GmbH

Amsilk GmbH



AMSilk is the world's first industrial supplier of synthetic silk biopolymers. Sustainably produced using a patented biotechnological process. The high-performance biopolymers are distrubuted in the form of Silkbeads (microparticles), Silkgel (hydrogel) or Biosteel® fibers. In August 2017, AMSilk was named one of the 50 most innovative companies worldwide by Technology Review and among the three finalists in the "Technology" category.

www.amsilk.com

All Company Profiles of the Bavarian Biotech Cluster in our annual report:



apceth

apceth Biopharma GmbH

apceth - The cell engineering company!

PROPRIETARY TECHNOLOGY & PRODUCTS

- Clinical stage biopharmaceutical company
- Leader in the development of cell-based gene therapies
- Genetically engineered mesenchymal stem cell therapeutics
- Immunomodulation, major chronic diseases, cancer

www.apceth.com

BIOPHARMA

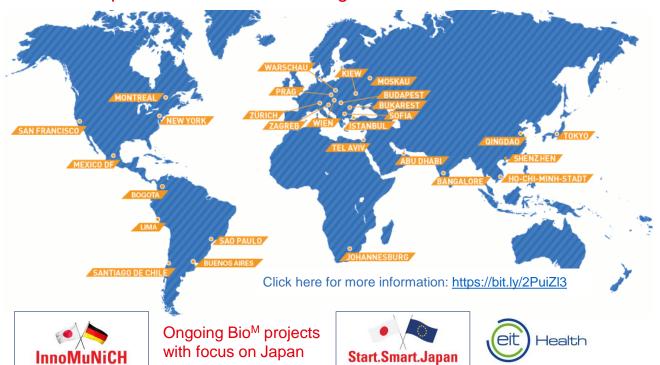
CONTRACT DEVELOPMENT & MANUFACTURING ORGANIZATION

- Reliable, experienced and high-performance partner
- Complex cell-based and gene therapy products (ATMPs)
- Process, product and assay development
- Clinical and commercial GMP manufacturing
- GMP-certified since 2010

Bavaria worldwide



Bavarian representations worldwide: get in touch with us



Promoting collaborations between Bavarian biotechnological companies and Japanese pharmaceutical companies as well as scientific institutions in Japan.





Again in 2018, Bio^M was represented at the BioJapan at the German Pavilion. The central fair of the Japanese life science industry is attended by the most important representatives of the Japanese pharmaceutical and biotechnology industry.

Meet Bavarian life science companies



Oktober INVESTfest

7th Annual Bavarian-American Investors and Partnering Conference October 17, 2018 - New York

BIO-EUROPE

Europe's largest partnering conference for the global biotech industry November 05 to 07, 2018 - Copenhagen



The "Ois Easy" Start-up Package. Bavarian for a carefree business landing.

You are an innovative start-up that is planning to expand into the German/ European market?

Get in touch:

Start.Smart.Japan is an exclusive, high quality training course that provides a starter kit for executives of

European life sciences SMEs, helping them to

www.invest-in-bavaria.com



Get in touch with the Bavarian biotech community



Next opportunity!



Save the dates in 2019/2020:

- German Biotech Days 2019, Würzburg, April 9/10 Meet all stakeholders of the German biotechnology scene. Bio^M will be the host bioregion.
- FORUM Science & Health 2019, Munich, July 3/4 Deep insight into the Bavarian health sector, organized by Bio^M.
- BIO 2019, Philadelphia, June 3/4
- BioEntrepreneurship Summit 2019, Munich, October Meet Bavarian life science players and international peers
- BIO-Europe 2019, Hamburg
- BIO-Europe 2020, Munich Europe's Largest Life Science Partnering Event to be held in Bavaria's capital!



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