Bavarian Biotech News

December 2025

BAVARIAN
BIOTECH CLUSTER
DEVELOPMENT

Dear reader,

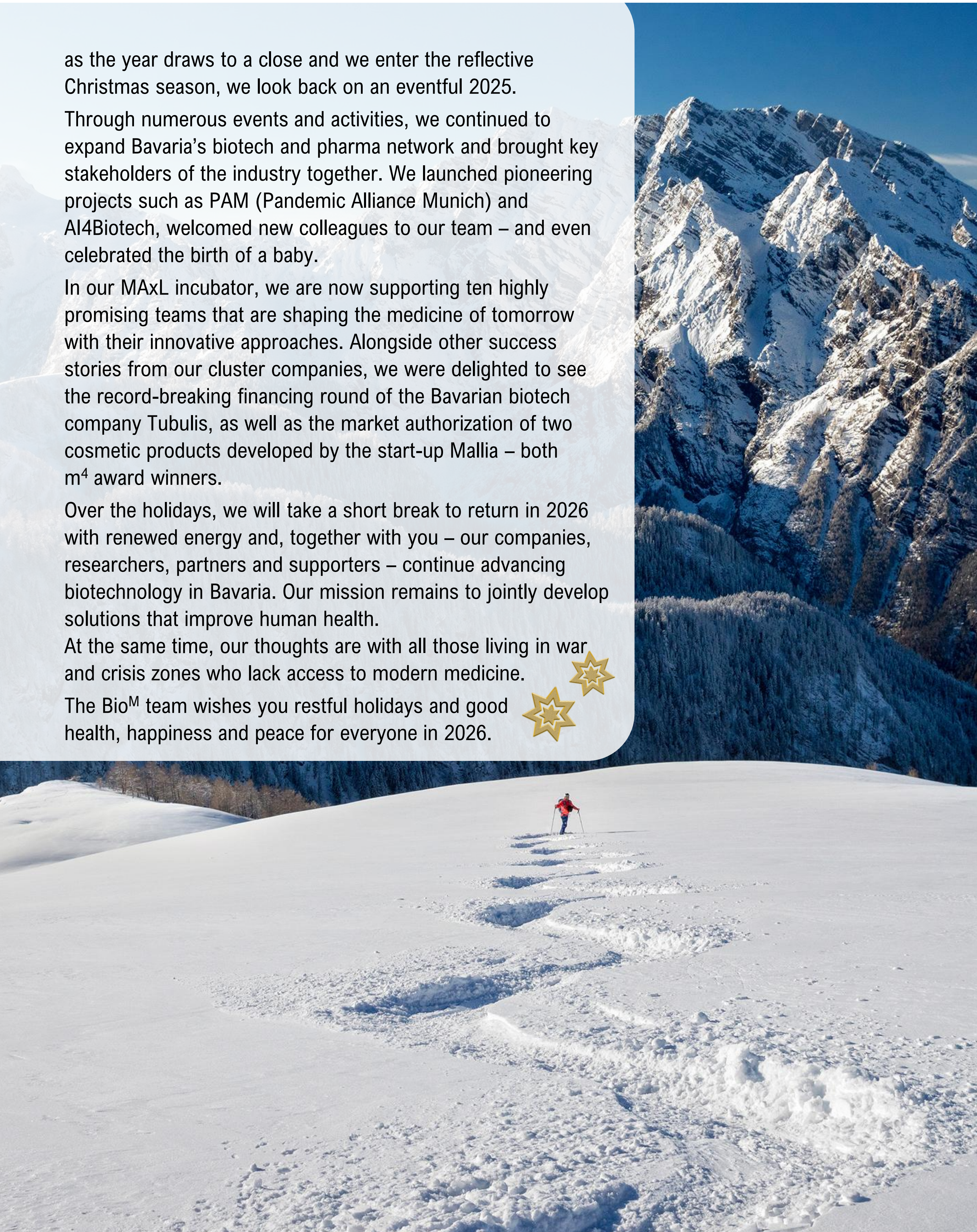
as the year draws to a close and we enter the reflective Christmas season, we look back on an eventful 2025.

Through numerous events and activities, we continued to expand Bavaria's biotech and pharma network and brought key stakeholders of the industry together. We launched pioneering projects such as PAM (Pandemic Alliance Munich) and AI4Biotech, welcomed new colleagues to our team – and even celebrated the birth of a baby.

In our MAxL incubator, we are now supporting ten highly promising teams that are shaping the medicine of tomorrow with their innovative approaches. Alongside other success stories from our cluster companies, we were delighted to see the record-breaking financing round of the Bavarian biotech company Tubulis, as well as the market authorization of two cosmetic products developed by the start-up Mallia – both m^4 award winners.

Over the holidays, we will take a short break to return in 2026 with renewed energy and, together with you – our companies, researchers, partners and supporters – continue advancing biotechnology in Bavaria. Our mission remains to jointly develop solutions that improve human health.
At the same time, our thoughts are with all those living in war and crisis zones who lack access to modern medicine.

The Bio^M team wishes you restful holidays and good health, happiness and peace for everyone in 2026.



TUM researchers show: Weight loss injections improve heart health

So-called weight-loss injections can reduce the risk of serious cardiovascular disease in people with type 2 diabetes. This has been proven in a study conducted by researchers at the Technical University of Munich (TUM) and Harvard Medical School using insurance data. Semaglutide and tirzepatide, known under the trade names Ozempic and Mounjaro, reduced the risk of serious cardiovascular events by up to 18 percent.

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The study shows clear **benefits for the heart health** of high-risk patients with type 2 diabetes. Compared with sitagliptin, a diabetes drug that studies show has no effect on heart health, semaglutide reduces the risk of stroke and heart attack by 18 percent. Treatment with tirzepatide reduces the risk of stroke, heart attack, and death by 13 percent when compared to treatment with the long-approved GLP-1 drug dulaglutide. “Both substances have a cardioprotective effect. Our data also show that this effect sets in early and thus goes beyond the effects of pure weight loss,” says **Dr. Nils Krüger**, first author of the study and assistant physician at the **Clinic for Cardiovascular Diseases at the TUM German Heart Center**. The exact mechanisms behind the protective function are still unknown.

Read more

AI prediction model estimates risk of complications after kidney transplantation – FAU develops ethical guidelines

In the GeGe4Nephro research project, scientists are working on the development of an AI-supported prognosis model that will help doctors to better assess the individual risk of complications after a kidney transplant in the future. The Chair of Systematic Theology II (Ethics) at Friedrich-Alexander University Erlangen-Nuremberg (FAU) is responsible for incorporating ethical considerations.

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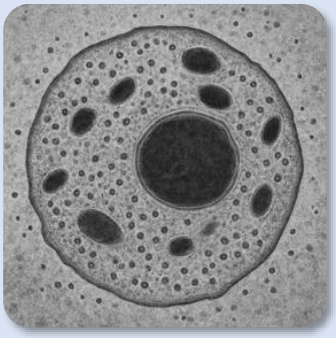
The project is being funded by the **Federal Ministry of Research, Technology, and Space (BMFTR)** over three years with around 1.5 million euros as part of the funding guideline “Interactive Technologies for Gender-Specific Health” (GeGe).
The FAU team, led by **Dr. Max Tretter**, is developing guidelines on how AI prediction models can be designed to be **fair, gender-sensitive, and responsible**: “A prognostic model that quantifies the gender-specific risks after a kidney transplant has a direct influence on clinical decisions. It is therefore all the more important that we have reliable ethical guide rails: How can we ensure that AI recommendations really do pay justice to the patients’ circumstances and needs? And how can we prevent gender-specific bias from influencing the model unintentionally? We must consider questions such as these if we are to succeed in developing an instrument that is effective from a medical point of view and that also makes a contribution towards fairer patient care,” explains Max Tretter. Read more

Helmholtz Munich's C-COMPASS tool maps proteins and lipids using AI-based software


© Computer generated

A new tool developed by Helmholtz Munich, the German Center for Diabetes Research, and the University of Bonn simplifies the application of spatial proteomics and lipidomics - without any programming knowledge required. With C-COMPASS, scientists can precisely analyze where proteins and lipids are located within cells and how these patterns change under the influence of diseases or other factors. By removing technical barriers, the software makes "spatial omics" accessible to a wider circle of researchers.

Previous tools in spatial proteomics were often inadequate because they could neither precisely record **multiple localizations of proteins** nor reliably quantify their distribution across different cell compartments. In addition, technical barriers to entry, such as a lack of user interfaces and the need for programming skills, made it difficult to use. Lipidomics has also lacked practical solutions for subcellular localization.

C-COMPASS closes this gap: Using neural networks, the software predicts multiple subcellular protein localizations and combines this information with total proteome data to analyze protein distributions and organelle frequency. The integrated workflow and user-friendly interface facilitate reproducible analyses – even for researchers without programming skills.

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University Hospital Würzburg provides central database for international ADHD study


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The University Hospital of Würzburg (UKW) has made a significant contribution to an international study that has identified rare genetic variants that significantly increase the risk of ADHD. The study was led by Aarhus University (Denmark) and published in the journal Nature. Alongside international partners such as the Broad Institute (USA) and Radboud University (Netherlands), the UKW played a central role in diagnostics and sample collection.

Genetic data from around **1,000 patients from Würzburg** was included in the analysis. This meant that Würzburg provided one of the largest patient data sets for the study.
Prof. Klaus-Peter Lesch, senior professor at the Clinic for Child and Adolescent Psychiatry and former head of the Chair of Molecular Psychiatry, emphasizes: "I am very pleased that we in Würzburg were able to make a significant contribution to these important findings."
Dr. Georg Ziegler, senior physician and head of the research group on ADHD in adults at UKW, also emphasizes the significance of the findings: "With our research, we therefore aim to gain a better understanding of the neurobiological and psychological causes of ADHD and its frequent comorbidities in order to support the urgently needed development of additional therapeutic approaches in the long term."

Read more

Interview with Dominik Schumacher, co-founder and CEO of Tubulis

With its record-breaking EUR 344 million Series C financing, Tubulis has set a new benchmark for European biotech. Bio^M spoke with Dr. Dominik Schumacher, co-founder and CEO of Tubulis GmbH, about the company's growth strategy, its ambitions in the global ADC market, and the pivotal role of the Munich-Martinsried biotech hub in Tubulis' success.

© Tubulis

Bio^M: EUR 344 million – congratulations on the largest Series C financing round ever raised by a European biotech company. What does this achievement mean for Tubulis from a financial and strategic perspective, particularly in terms of its positioning in the global ADC market?

Dr. Dominik Schumacher: This level of financial support means that a highly experienced group of biotech specialist funds were convinced to invest in the company based on what we have achieved to date with our technology and clinical-staged programs, and how we intend to move our programs forward toward advanced clinical evaluation. Our goal is to be a global ADC leader bringing a range of novel and differentiated ADC medicines to patients. This financing enables us to execute on the next steps in clinical development and technology optimization from a position of strength.

Read the whole interview

m^4 Award winner Mallia launches products to combat hair loss

The Erlangen-based start-up Mallia Aesthetics, winner of the 2021 m^4 Award, has launched two cosmetic products for hair loss. These are the first products to promote hair growth based on the immunomodulatory mechanism of action of sCD83.

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The global market for hair growth products has been growing for years, and the demand for effective solutions is high. Hormone-related **hair loss** in men and women (androgenetic alopecia or AGA) is the most common form of hair loss. Worldwide, more than 70% of men and 50% of women beyond menopause are affected by androgenetic alopecia. Another 147 million people suffer from immune-related, circular hair loss.

However, only two active ingredients with scientifically proven efficacy are currently available for treatment. The team led by Mallia co-founder **Prof. Alexander Steinkasserer** has developed a new active ingredient based on a soluble form of the CD83 molecule for the topical treatment of hormone-related hair loss. While conducting research on arthritis, Steinkasserer and his team discovered by chance that CD83 regulates inflammation, promotes wound healing, and activates hair follicles. Read more

RNhale wins Daiichi Sankyo Golden Ticket for Bio^{M} incubator MAxL

The Golden Ticket 2025 supported by [Daiichi Sankyo] for the Bio^{M} incubator [MAxL] has been awarded to [RNhale]. This award provides the Martinsried-based start-up the opportunity to advance its research on RNA-based therapies for lung diseases free of charge for one year at the MAxL incubator in the Martinsried [Biotechnology Innovation and Start-up Center (IZB)].

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The **Bio^{M} incubator MAxL (Munich Accelerator Life Sciences & Medicine)**, funded by the [Bavarian Ministry of Economic Affairs], offers a unique infrastructure on 900 m² for pre-seed teams and early-stage start-ups in the fields of life sciences and health tech. In this state-of-the-art, fully equipped laboratory and co-working spaces, start-up RNhale can now further develop its **inhalable RNA therapeutics** based on their proprietary platform technology. The focus of RNhale is on the targeted treatment of severe lung diseases such as asthma, COPD and viral infections through direct administration of a therapeutic into the lungs, which involves embedding RNA-loaded lipid nanoparticles into an inhalable dry powder form.

With the **Golden Ticket**, RNhale benefits from state-of-the-art infrastructure and Bio^{M}'s customized mentoring and networking program, as well as access to the global network of experts at Daiichi Sankyo.

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Bavaria's brightest innovators take the stage at BayStartUP & Bio^{M} Pitch Day

Bavaria's rising life science entrepreneurs stepped into the spotlight today during the BayStartUP & Bio^{M} Pitch Day, connecting high-potential start-ups with leading venture capital investors and business angels. Eight teams from Bavaria's cutting-edge biotech, digital health, medtech, and diagnostics landscape presented their innovations in a compact six-minute format aimed at delivering maximum clarity and investor relevance.

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The program showcased start-ups working on breakthrough solutions – from augmented reality in surgery to ultra-fast bacterial detection, inhalable RNA therapeutics, and next-generation digital patient support. The Pitch Day builds on the success of previous joint events held by Bio^{M} and [BayStartUP], reinforcing Bavaria's position as one of Europe's most dynamic innovation hubs.

The concluding networking lunch provided investors and founders with the opportunity for deeper conversations, feedback, and initiating partnerships that may shape tomorrow's therapies and technologies.

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RevoBITs receives EXIST research transfer funding – EUR 1.25 million for the first smart bioprinter

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m^4 Award winner RevoBITs impresses in the nationwide selection process of EXIST Research Transfer and receives EUR 1.25 million in funding. With its smart bioprinter, the start-up aims to significantly improve biological reproducibility.

Biotech start-up **RevoBITs** from Erlangen, winner of the **m^4 Award 2023**, has been selected for the renowned EXIST Research Transfer funding program run by the German Federal Ministry for Economic Affairs and Energy. The award is one of the most prestigious public funding instruments for deep tech start-ups in Germany. Only projects that demonstrate technical excellence, clear value creation prospects, and a high degree of innovation are eligible for this funding.

With the **EUR 1.25 million in non-dilutive funding provided**, RevoBITs is pushing ahead with the development of the **world's first smart bioprinter**. The team plans to implement intelligent hardware and software modules that enable unprecedented biological reproducibility.

In addition, the bioprinter's functions are to be validated in specific use cases with pilot customers, and important steps are to be taken on the path from prototype to product and ultimately to market.

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Amplifold secures oversubscribed EUR 5 million Seed Round to Launch Ultra-Sensitive Lateral Flow Diagnostics.


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Biotech start-up Amplifold, based in Martinsried, Germany, has completed an oversubscribed seed financing round of EUR 5 million for the market launch of its highly sensitive lateral flow diagnostics. The start-up combines DNA origami nanotechnology with cost-effective lateral flow assays (LFAs). Lead investors are Matterwave Ventures und XISTA Science Ventures.

“Affordability meets Accuracy”: Amplifold GmbH, a spin-off from **Ludwig-Maximilians-Universität München** (LMU), has closed an oversubscribed seed round of EUR 5 million to industrialize its DNA origami-based signal amplification platform for lateral flow assays (LFAs). The round is co-led by Matterwave Ventures and XISTA Science Ventures, with participation from **Bayern Kapital**, **b2venture** and **Becker Ventures** (part of the Labor Becker Group).

The funds will be used to expand product development and regulatory activities, as well as for the IVDR approval of Amplifold's first in vitro diagnostic product in Europe. Amplifold will also relocate to the Innovation and Start-up Center for Biotechnology (IZB) in Martinsried, one of Europe's leading life sciences start-up centers, which offers excellent infrastructure and proximity to world-class academic and clinical partners. Read more

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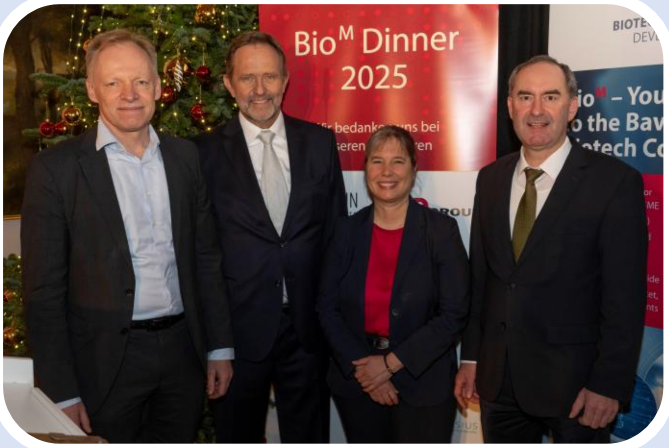
Event review – Bio^{M} Dinner

At the traditional Bio^{M} year-end dinner, Managing Director Prof. Ralf Huss reviewed key developments in the Bavarian biotechnology ecosystem and outlined Bio^{M}'s upcoming strategic priorities. This year's speakers – Bavaria's Minister of Economic Affairs Hubert Aiwanger, ifo President Prof. Clemens Fuest, and LMU AI researcher Prof. Gitta Kutyniok – provided incisive insights into economic competitiveness, technological change, and the role of artificial intelligence for Bavaria and Germany.



[Picture galery]

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BIO-Europe - Vienna

From November 3 - 5, 2025, BIO-Europe brought more than 5,700 participants from over 3,000 companies to Vienna - once again positioning the event as Europe's leading partnering forum for biotech and pharma.

At the German Pavilion, we were delighted to welcome many visitors to the Bio^M booth. Alongside Bio^M, several innovative Bavarian companies joined the conference, contributing to a dynamic and forward-looking presence from the region.

Key highlights included the strong European networking via the Council of European BioRegions (CEBR), an engaging roundtable moderated by EuropaBio, and important debates on the global innovation race. A central theme echoed throughout: *How can we maintain confidence in biotechnology despite current challenges, knowing its vast potential for the future?*
Vienna – with its warm hospitality and impressive venues at the Rathaus and Hofburg - offered the perfect backdrop for these reflections.

[Read more on LinkedIn]

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Events

[Health.tech Basel](#)
3 - 5 March 2026 I Basel, Switzerland

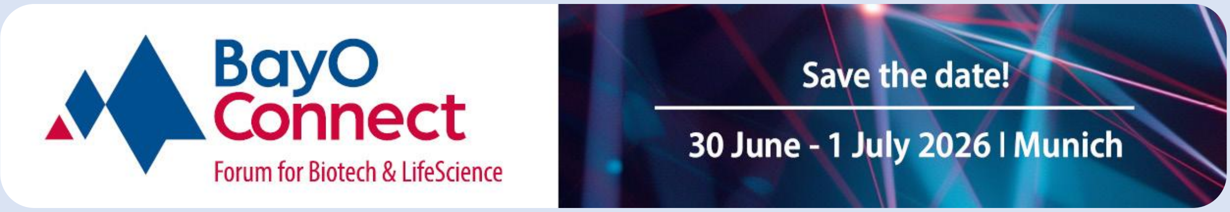
[BIO-Europe Spring](#)
23 - 25 March 2026 I Lisbon, Portugal

[LSX Europe](#)
25 - 26 March 2026 I Lisbon, Portugal

[Swiss Biotech Day 2026](#)
4 - 5 May 2026 I Basel, Switzerland

[Bio€quity Europe](#)
4 - 6 May 2026 I Prague, Czech Republic

[BIO International Convention](#)
22 - 25 June 2026 I San Diego, USA



Please find current event information on our website www.bio-m.org/en/events

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