
YUMAB and ISAR Bioscience Collaborate to Develop a Novel Transferrin Receptor Antibody Platform for Delivering Therapeutics Across Blood-Brain Barrier

YUMAB GmbH (“YUMAB”), a leading antibody discovery contract research organization headquartered in Braunschweig, Germany, and ISAR Bioscience GmbH (“ISAR Bioscience”), a regenerative and translational medicine driven company based in Planegg, Germany, announced their collaboration to develop a novel transferrin receptor (TfR) specific antibody for the delivery of biotherapeutics across the blood brain barrier (BBB).

The collaboration combines the complementary expertise and technologies of both companies. ISAR Bioscience focus on developing innovative therapies for (neuro-)degenerative and immune diseases. The company leverages advanced platforms, including induced pluripotent stem cell technology and RNA-based therapeutics, to address unmet medical needs. YUMAB has 14 years of industry experience and supported more than 650 projects in antibody discovery, engineering and manufacturing.

YUMAB and ISAR Bioscience share a common vision of overcoming the restrictive nature of the BBB to enable more effective treatments for diseases of the central nervous system (CNS). The BBB is a highly selective biological barrier that tightly regulates the transport of molecules between the blood stream and the brain. While this barrier protects the CNS from invading toxins, pathogens, drugs and other unwanted macromolecules, it also severely limits the delivery of therapeutic agents. As a result, many CNS targeted therapies reach the brain in insufficient quantities and, therefore, require invasive administration routes to achieve therapeutic concentrations.

A natural transport mechanism across the BBB is a receptor-mediated transcytosis via the transferrin receptor, which usually mediates the transport of iron into the brain. YUMAB and ISAR Bioscience will join forces to exploit this physiological pathway and develop a platform based on a TfR-specific antibody capable of transporting a broad range of cargos across the BBB enabling a non-invasive transport of agents into the CNS.

“We’re excited about this collaboration which represents an important opportunity to further validate the capabilities of our antibody discovery platform in a highly innovative therapeutic field,” said Dr. Thomas Schirrmann, CEO, YUMAB. “Combining our expertise in antibody engineering with ISAR Bioscience’s strengths in CNS biology and translational medicine creates an excellent foundation for developing novel delivery solutions for patients with neurological diseases.”

“The transport of therapeutic antibodies is key to developing successful Alzheimer’s drugs” said Dr. Miriam Christlmeier, head of ISAR Bioscience’s neurodegeneration team. “We are happy to team up with the experienced YUMAB team to achieve this goal,” adds Prof. Martin Lohse, CEO of ISAR Bioscience. “This will be a perfectly synergistic collaboration”.

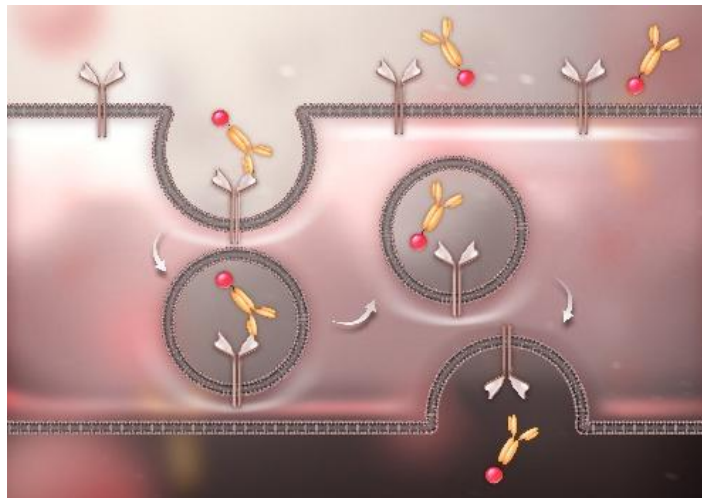
About YUMAB

YUMAB GmbH, a leading provider of contract research, technologies, and R&D services for the development of fully human, therapeutic antibodies, was founded in 2012 by leading antibody researchers of the University of Braunschweig. A global player in human monoclonal antibody development, YUMAB is focused on the use of fully human and humanized antibodies for immunotherapies. For more information, please visit www.YUMAB.com.

About ISAR Bioscience

ISAR Bioscience GmbH is a Bavarian research company with a worldwide network. We develop regenerative therapies against dementia, immune and cardiovascular diseases using iPS cells and differentiated human cells derived from them. We use them to test new therapeutic principles. Our drug candidates range from therapeutic antibodies to mRNA/LNP-based therapies and have received the support of regulatory authorities. For more information, please visit www.IsarBioscience.de.

IMAGE



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Caption:

YUMAB GmbH and ISAR Bioscience GmbH join forces to develop a novel transferrin receptor antibody shuttle for crossing the blood brain barrier.

MEDIA CONTACTS

YUMAB GmbH

Thomas Schirrmann, PhD
Th.Schirrmann@yumab.com
Phone: +49 531 4811 70-0

ISAR Bioscience

Prof. Dr. Martin Lohse
martin.lohse@isarbioscience.de
Phone: +49 89 356475400