

Biomax Informatics - Press Release

for immediate release

***Biomax Informatics: Universities use NeuroXM™ to study the connectome
in drug-resistant epilepsy***

Planegg, Germany, 20 May 2021 - Using Biomax Informatics' NeuroXM knowledge management platform, scientists from the Universities of Nottingham, Newcastle, Qingdao, Shanghai and Munich have studied the change in the connectome in drug-resistant epilepsy patients. They discovered that connectivity between and within brain regions can be a precise predictor for disease progression and epilepsy surgery outcome.

The NeuroXM Brain Science Suite of Biomax was used to develop a knowledge model for high-resolution intra-areal connectivity with more than 50,000 cortical nodes and several million connections, as well as corresponding automated processing pipelines. This connectivity network could then be visualized and accessed via the web portal of NICARA™, the neuroimaging solution offered by Biomax. "Our experience shows us that our software can be easily deployed in hospitals," explained project leader Dr. Markus Butz-Ostendorf of Biomax. "In addition, it can also be combined with other data from genetics or from other imaging approaches such as PET, CT or EEG."

Dr. Marcus Kaiser, Professor of Neuroinformatics at the University of Nottingham, confirms, "The use of NeuroXM and NICARA is central to this research project. With the help of this advanced neuroimaging solution, we can analyze and evaluate the changes in the local network within brain regions and thus assess whether surgery will be successful or not."

The results from this study have now been published in the journal Human Brain Mapping.

End of Press Release

Academic Paper

Chen, X., Wang, Y., Kopetzky, S. J., Butz-Ostendorf, M., & Kaiser, M. (2021). Connectivity within regions characterizes epilepsy duration and treatment outcome. Human Brain Mapping, 1–15. <https://doi.org/10.1002/hbm.25464> CHEN ET AL. 15.

About the NeuroXM Brain Science Suite

The NeuroXM Brain Science Suite provides comprehensive information from neuroimaging, molecular biology, neuro-genomic data, public ontologies and data sets integrated in a unified knowledge model. The extendible network of interrelated neuroscience concepts gives users a single interface to collect knowledge, focus on specific questions and get a greater return on investments in expensive neurological data.

About Biomax Informatics

Biomax Informatics offers software solutions for better decision-making and optimal knowledge management in the life sciences industry. Using the company's software, customers can generate added value through the integration of information from their own and public resources, enabling them to achieve a knowledge-based approach for the development of innovative life sciences products. Biomax's global customers include clinics, companies, and research institutions successful in the fields of research into active substances, diagnostics, fine chemicals, and food and plant products. The company, which was founded in 1997 and currently has 45 members of staff, is headquartered in Planegg near Munich. Further information can be found at www.biomax.com.

Your contact at Biomax Informatics:

Press Contact:

Bettina von Klitzing-Stückle

Marketing Manager

e-mail: bettina.klitzing-stueckle@biomax.com

Scientific Contact:

Dr. Markus Butz-Ostendorf

Innovation Manager Brain Science

e-mail: markus.butz-ostendorf@biomax.com