

New Hybrid Technology for Faster Stroke Diagnosis



Researchers in Europe will develop a new hybrid device that combines different imaging technologies and will help stroke patients in particular to receive quicker diagnosis and treatment. The project "Predictive Prevention and Personalised Interventional Stroke Therapy - P3 Stroke" is being undertaken by University of Erlangen-Nuremberg (FAU), in collaboration with Siemens Healthcare GmbH, Universitätsklinikum Erlangen and other European partners.

See Also: [4D Imaging Software Predicts Stroke Risk](#)

"With the P3 Stroke project we want to improve the diagnosis and interventional treatment of strokes on a fundamental level by combining the use of magnetic resonance imaging and angiography," explains Dr. Heinrich Kolem, CEO of Advanced Therapies at Siemens Healthineers.

This innovative approach will be used for diagnosis and immediate treatment, reducing the time needed for patient transfers and saving valuable time when treating stroke patients. Conducting separate examinations using different devices takes time, particularly due to the need to transfer patients between locations. An average of two million neurons are destroyed every minute, thus every minute counts during efforts to prevent major damage after a stroke.

"The pioneering system enables an exact picture of the development of the condition to be obtained without delay, allowing for effective treatment," says Prof. Dr. Arnd Dörfler, head of the Department of Neuroradiology at Universitätsklinikum Erlangen, and a leader of the research team. The clinical evaluation of the new methods will be led by the Department of Neuroradiology at Universitätsklinikum Erlangen in close collaboration with the Department of Neurology.

Meanwhile, the Pattern Recognition Lab at FAU is responsible for developing the software. "We have been conducting research in various areas of medical imaging for many years and can therefore contribute a considerable amount of expertise," according to Prof. Dr. Andreas Maier, head of the lab and co-leader of the research team.

The new technology is expected to benefit not just stroke patients but other patient groups as well. As Professor Dörfler points out: "The system will also have applications in minimally invasive treatment for other neuro- and cardiovascular disorders and in oncology."

The P3 Stroke project is being funded by the European Institute of Innovation and Technology for Health (EIT Health), a publicly financed initiative that aims to ensure sustainable development of innovative healthcare solutions.

Source: [University of Erlangen-Nuremberg](#)
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