

Biomarkers for the prognosis of Ischemic Stroke

A method of predicting the clinical outcome of patients suffering from ischemic stroke based on the expression of certain biomarkers from patient samples. Partners to develop the technology through co-development or license agreements are sought.

The Need

In an Ischemic Stroke (IS), blood supply to part of the brain is decreased, leading to dysfunction of the brain tissue in that area. This is the third cause of death and the major cause of disability worldwide. 40% of survivors experience moderate to severe impairments requiring special care, and about 10% require care in long-term care facilities. Predicting outcome in individuals, however, remains difficult and it is a challenge for the skilled clinician.

The Solution

The inventors have identified blood biomarkers that can be used to determine the degree of brain damage during IS. The invention relates to an *in vitro* method to measure and identify biomarkers to provide an estimation of the clinical outcome of a stroke patient and it can be used to design an individual therapy for a subject suffering IS. For example, depending on the biomarkers present and their level against a reference measure, the patient could be a candidate for a therapy.

Innovative Aspects

Current prediction methods for IS patients involve the use of neurological scales or neuroimaging techniques, but they are not precise enough to take clinical decisions. Blood biomarkers might add information to improve the prediction of stroke outcome. However, no known biomarker or biomarkers panel exist nowadays that provides a higher sensitivity and specificity than clinical predictor models. On the contrary, the current invention aids in determining:

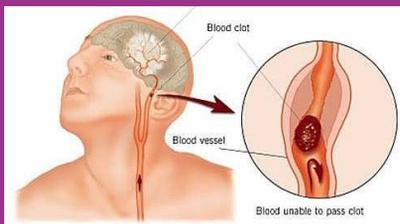
- ✓ the clinical outcome of a patient suffering ischemic stroke
- ✓ the design of an individual therapy for a subject suffering ischemic stroke
- ✓ the diagnosis of a silent cerebrovascular disease with high risk of having a future stroke.

Stage of Development

International replication studies are being conducted.

Target Market

Diagnosis companies.



Cartoon depicting an ischemic stroke caused by a blood clot.



The therapy must be started within three hours of the onset of stroke symptoms.

IP rights

EP priority application.

Portfolio of technologies

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We are looking for...

A company partner to further develop the technology through a co-development and license agreement.

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