

## A new biomarker to diagnose brain injury

New diagnostic *in vitro* method to detect brain injury in an early stage of patients suspicious of suffering brain diseases. Partners to develop the technology through co-development or license agreements are sought.

### The Need

The most typical brain injury is the acquired, in which the injury suddenly happens. The most common causes are stroke, the third leading cause of death and the most common cause of permanent disability in adults; and Traumatic Brain Injury, one of the principal causes of death in children and adults. In all these pathologies it is crucial to recognize symptoms at an early stage, since a late diagnostic can result in systemic injuries or the death of the patient.

### The Solution

The researchers have developed an *in vitro* method for an early diagnosis of brain injury in patients that are suspected to be suffering from one. This diagnostic method consists of the detection of a specific protein that appears in blood at high levels at early stages of brain injury. This allows physicians to obtain a fast diagnosis and to start the right treatment earlier. Moreover, this marker might be an ideal surrogate marker to evaluate action of drugs from brain diseases.

### Innovative Aspects

There have been many efforts to identify appropriate diagnostic biomarkers for brain injury, but many of those appear in late stages of the disease. Here we provide an *in vitro* method for its early diagnosis.

### Stage of Development

All the tests were carried out with patients who arrived at the emergency department of the Vall D'Hebron University with acute focal neurologic symptoms initiated in the previous 24 hours and healthy individuals were used as controls. The biomarker prognostic capacity was tested in patients with stroke (cerebral ictus) and different stroke subtypes, traumatic brain injury or damage (TBI), brain damage in Alzheimer Disease, brain damage of various etiologies and other neurological diseases.

### Target Market

Diagnosis companies.



A brain injury consists on the destruction or degeneration of brain cells caused by several internal and external causes.



Brain injury generally leads to a disability, which in serious cases will most likely become permanent.

### IP rights

PCT application.

### Portfolio of technologies

[www.vhir.org/innovacio](http://www.vhir.org/innovacio)

### We are looking for...

- ✓ A company to submit a license agreement.
- ✓ Resources for expanding the clinical indications from acute brain damage (stroke and TBI) to other brain diseases (Alzheimer Disease, migraine, etc).

### Contact details

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