

Blood-based Biomarker test for mild Traumatic Brain Injury stratification

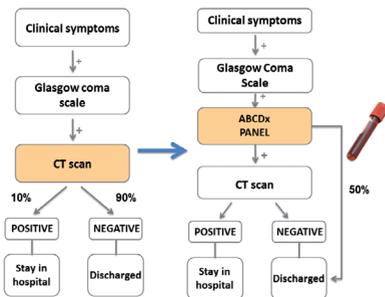
A new method for ruling out mild traumatic brain injury in patients without imaging and enabling rapid discharge

Facts about Traumatic Brain Injury

- Traumatic brain injury (TBI), according to the WHO, will surpass many diseases as a major cause of death and disability by the year 2020.
- TBI is the leading cause of death and disability in young adults. The incidence in elderly patients is increasing.
- In younger patients, Road Traffic Accidents are the most frequent cause of injury; in older patients, falls.
- Sports, army and juveniles are vulnerable collectives.

Current situation on mild TBI

In particular, mild traumatic brain injury (mTBI) is responsible for high health costs. In contrast to severe TBI, mTBI is not obvious to detect. Current practice for patients presenting with mild head trauma is to perform CT scan where available, to determine presence of brain lesions. However, CT scan is expensive, can only be carried out in appropriately equipped facilities and carries some risk to the patient. Generally, only a small proportion (6-8%) of patients will have confirmation of a brain injury requiring hospital stay.



The use of a simple blood test to rule out absence of brain injury could render 50%+ of these CT scan unnecessary and be very cost effective to healthcare systems as well as reducing stress and inconvenience to patients and relieving burden on over-stressed emergency departments.

Different blood biomarkers such as S100b, Tau, UCHL1 and GFAP have been postulated to enable definitive blood biomarker testing in mTBI. S100b was commercialized but failed to win regulatory approval for the indication with its ability to only rule out 25% of "negative" CT patients.

ABCDx Solutions For mTBI diagnosis

- ABCDx has identified H-FABP alone or in combination with other known biomarkers with higher performance enabling better discrimination and for the first time, more than 50% of presenting patients can be ruled out for brain injury with a simple blood test, which could be carried out in virtually any location.
- Within the small proportion of patients with brain injury, ABCDx's marker panel also has the ability to identify patients at risk of severe long-term complications, thus enabling some triage ability for urgent cases.
- ABCDx offers the ability to both substantially reduce the cost of mild head trauma diagnosis, and at the same time, improve patient care.

Intellectual Property status

ABCDx secured exclusive commercial rights to families of patent applications protecting the use of multiple-parametric tests for patients presenting with symptoms of head injury.

This IP places ABCDx as a leading company offering new approaches to assessing clinical decisions and rapidly selecting therapeutic intervention, even in decentralised locations.

Markers and their use in Brain Injury (WO2016/055148)

Company overview & Licensing opportunity

- ABCDx is a company dedicated to transforming brain injury care by the use of biomarker panel tests for the assessment and indication in patients suffering from mild traumatic injury to stroke and post-stroke complications.
- ABCDx has established multi-parametric biomarker panels, which have the potential to transform the monitoring of patients, offering more rapid and specific decision making diagnosis to a much wider range of health care sites, including point-of-care.
- ABCDx is positioned to grant market exclusivity in a number of important segments, positioning the company as an IP and collaboration source of choice for both diagnostic system manufacturers and therapy providers.