

Technology: Biomarkers for Stroke

Morehouse School of Medicine (MSM) Case No.: IP-0020

Patent Applications: US 13/204,358 and PCT/US2011/46777

Abstract:

Investigators at MSM have developed a cost effective, rapid clinical diagnostic test for the identification of (acute/pre-symptomatic or chronic) ischemic stroke. Preliminary studies have confirmed serum protein and genetic biomarkers presented 3, 12, and 24 hours after injury in non-human primates. Importantly, the proprietary test panel can discriminate between ischemic and hemorrhagic strokes as well as transient ischemic attacks and silent cerebral infarcts.

Applications:

- Clinical diagnostic test for the identification of (acute/pre-symptomatic or chronic) ischemic stroke
- Hospitals, commercial laboratories, blood banks, physician offices, public health labs, and ambulatory settings

Value Proposition:

- Biomarker panel prototype for rapid serum test to detect episodes of neurologic dysfunction due to disruption of cerebral blood flow.
 - Biomarker panel confirmed to reliably (> 99.99% accurate) detect stroke using both non-human primate models and retrospective human samples.
 - A dominant patent position for methods and compositions to detect ischemic, hemorrhagic, transient ischemic attack (TIA), silent cerebral infarct (SCI) strokes.
 - Current tests required radiologist and MRI or CT instruments.
 - The current technology is inexpensive, presents no occupational health hazard, and detects host proteins as soon as 3 hours after insult.
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