



Innovating diagnostics for the detection of brain injury and disease

Company

Banyan Biomarkers, Inc. is creating the first blood test to diagnose traumatic brain injury (TBI). The company was founded by scientists from the University of Florida McKnight Brain Institute with the vision to commercialize *in vitro* diagnostic tests for the detection of brain injury and neurological diseases. Banyan Biomarkers has made significant progress in developing and clinically validating novel enzyme linked immunosorbent assays (ELISAs) for traumatic brain injury. Banyan scientists have created an extensive pipeline of potential biomarkers and the company has a robust intellectual property portfolio. Banyan has an experienced team of medical technology executives and has secured over \$100M in grants/contracts and private investment of approximately \$20M. The company recently completed enrollment of 2,000 patients in the ALERT-TBI pivotal trial and results are expected in Q2 of 2017.

Technology

Following a brain injury, a destructive cascade of biological events continue over hours and days that may worsen the patient's condition. Banyan Biomarkers has discovered two protein biomarkers that rapidly appear in the blood of patients soon after injury and has developed biomarker assays to quantify these proteins. The identification and quantification of these two biomarkers will be used by physicians to rapidly detect the presence of TBI and improve the medical management of head injured patients.^{1,2}

Traumatic Brain Injury

Currently, no simple point-of-care blood test exists for use by physicians in the emergency room or in the hospital to detect the presence and severity of brain trauma. There is a multi-billion dollar market for the Banyan Biomarkers point-of-care blood test. The US alone has a 10M test per year market and ED visits as a result of TBI have spiked 30% in the last year due to heightened awareness of associated risks of concussions.³ Traumatic brain injury is one of the most common neurological disorders and a leading cause of death and disability claiming over 50,000 lives each year in the US.⁴ Automobile accidents, falls, sports related injuries, and assaults are common causes of TBI. Service members have a higher rate of experiencing TBI, in fact, the U.S. Defense Department estimates that as many as 20% of veterans suffered some degree of brain injury due to bomb blasts while in Iraq or Afghanistan - a staggering 360,000 men and women.⁵



Product Pipeline

Banyan Biomarkers has developed a novel product pipeline for neural injury diagnostics. The company's product pipeline includes biomarkers for: stroke, depression, hypoxic ischemic encephalopathy (HIE), neuro ICU monitoring, and subacute / chronic TBI.

1. J Trauma Acute Care Surg. 2012 May;72(5):1335-44.
2. Ann Emerg Med. 2012;59:471-483.
3. Marin J., Journal of American Medical Association, 5/14/14
4. www.cdc.gov/ncipc/tbi/TBI.htm
5. www.msnbc.msn.com/id/29513359

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