RANDOX

NEUROVASCULAR DYSFUNCTION BIOCHIP

EARLY DIAGNOSIS CAN MAKE A DIFFERENCE

Powered by Biochip Array Technology

Biochip enables rapid and precise multianalyte detection from a single patient sample, utilising a biomarker algorithm to offer a highly sensitive screen to stratify neurovascular dysfunction.

Biochip enables clinicians to **accurately identify stroke, classify stroke subtypes**, triage, and intervene immediately.

Biochip **monitors patient response to treatment** in real-time, enabling faster tailored clinical intervention.

Biochip **improves patient outcomes through** rapid targeted treatment plans and trials.

Biochip could **save UK hospitals over £500 million/ year** through shorter ICU stays, efficient resource use, and fewer complications and readmissions.

Used in research settings to date

Data-Driven Risk Stratification

The Neurovascular Dysfunction Biochip provides clinicians with rapid quantitative results of 8 key biomarkers, facilitating fast and accurate classification of neurovascular dysfunction in an ICU setting.

APPLICATIONS

- Epilepsy
- Alzheimer's Disease
- Brain Inflammation
- Parkinson's Disease
- **Stroke Research**
- Down Syndrome
- Brain Injury
- Delirium

Studies have shown that Biochip can stratify patients into stroke and non-stroke categories, and ischaemic or haemorrhagic phenotypes.

CT scans provide good sensitivity for identifying haemorrhagic strokes (~90%), but poor sensitivity for identifying ischaemic strokes (~20%). The Neurovascular Dysfunction Biochip can be used in conjunction with MRI and CT scans to enhance the phenotype identification accuracy of stroke patients.

Biomarkers

Glutathione S-transferase Pi (GSTPi)	Glial Fibrillary Acidic Protein (GFAP)	Soluble Tumour Necrosis Factor Receptor 1 (sTNFR1)
Parkinson Disease Protein 7 (PARK7)	Fatty Acid Binding Protein 3 (FABP3)	D-Dimer
Nucleoside Diphosphate Kinase A (NDKA)	Interleukin-6 (IL-6)	-

Product Information

Sample Type
Plasma

Samples Per Cartridge
2

Sample Volume
400µl

Result Type
Quantitative

Time to Result
39 Minutes

Neurovascular Dysfunction Biochip – *For use on the Evidence MultiSTAT analyser*

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