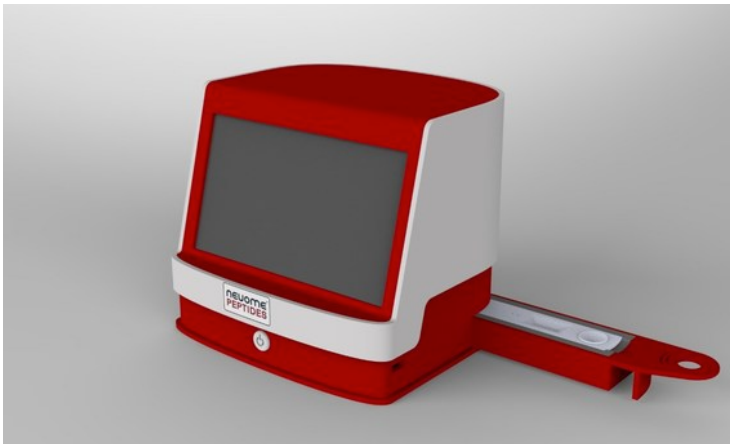
BioSpectrum
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ASIA EDITION

Possible breakthrough in cardiovascular disease diagnostics for Southeast Asia

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The startup has scheduled clinical trials in five hospitals in India, and in the process of securing a large site in the US and five sites in Europe



Neuome Peptides, a Singapore-based startup, with operations in India as well, has established an assay-development platform, powered by machine learning and novel, patented algorithms for the quantifiable detection of biomarkers.

The company has successfully designed specific peptides to bind to pre-established, proven biomarkers for cardiovascular diseases and is currently developing effective diagnostic assays. The use of small peptides, conjugated with gold nanoparticles, allows a balance of high specificity and sensitivity, giving highly accurate and fast results.

According to the World Heart Federation, cardiovascular disease accounts for nearly one third of all deaths inSoutheast Asia, killing 4 million people every year. Therefore, frequent testing with enhanced diagnosis is required for preventive care.

This is made possible with the product TruHeart, a point-of-care assay to diagnose Acute Coronary Syndrome that can give quantifiable results within 3-5 minutes, using a finger-prick sample to test for the crucial biomarkers, Troponins I and T, and Myoglobin (eventually expanding to D-Dimer and Brain Natriuretic Peptide). It is in the advanced stages of R&D and progressing to global clinical trials. It will be submitted for FDA approval and then introduced to the market upon approval.

In comparison to industry standards, it will be uniquely affordable; its peptide-coated cartridges will cost only~$2, while the quantitative electronic reader will cost ~$80. This is in contrast to existing point-of-care devices also giving quantitative results for cardiac biomarkers, but at a costs of up to $4,500, with cartridges ranging from $18-37.