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STRESS AND STROKE PREDICTOR ALGORITHM FOR DISEASE AND LIFESTYLE MANAGEMENT

An algorithm that predicts chronic stress and stroke in patients for disease management and wellness using biomarkers on a digital platform.

Technology Overview

The invention is a digital prediction tool that uses 3 biomarkers and blood pressure readings to accurately predict and quantify future risk of chronic stress and resulting diabetes, ischemic heart disease and stroke.

Using a proprietary algorithm, formulated from 30 years of clinical research on this topic, the assessment tool is easy and fast to use. It delivers scientifically validated results, enabling quantification of risk severity in patients.

Market Opportunity

Patients who are unknowingly at risk of chronic stress, diabetes, and stroke, as well as their clinicians, would have great benefit from this technology. Advance warning would enable patients to submit themselves to preventative treatment regimens and avoid significant health and quality of life setbacks and costs.

In addition, life insurers, disability insurers and medical aid schemes would be able to adjust their risk models for particular members or clients, based on their true risk profiles for stroke, chronic stress and diabetes.
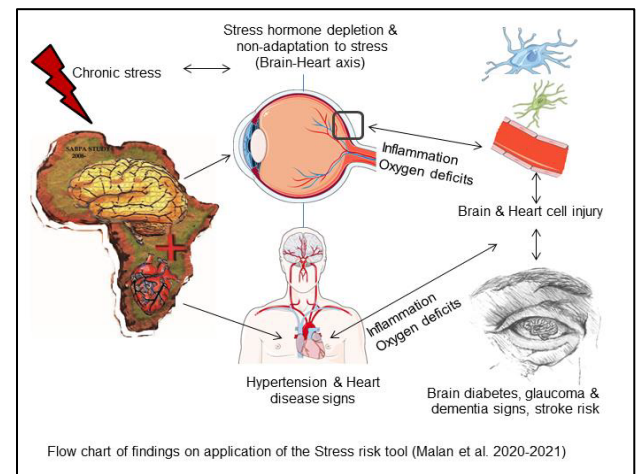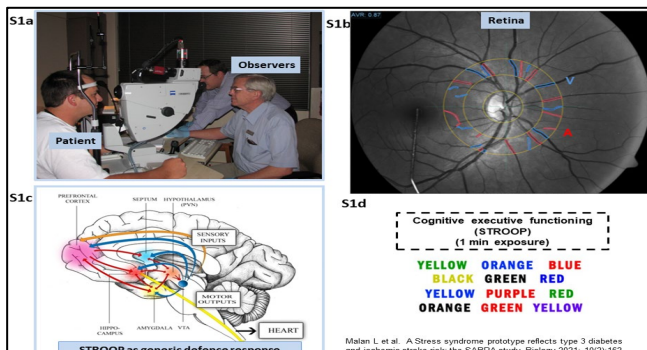
Technology Benefits

- Digital Medical assessment tool for wellness
- Accurate prediction tool
- No questionnaires,
- True risks profile using blood tests
- Science backed quantifying prediction model for stress, and diabetes

Project Status

A minimum viable product has been developed, further refinement and integration may be required by licensees, approval / acceptance under standard treatment guidelines required.

PCT Patent application PCT/IB2020/057269 has been granted and international country patents pursued in USA, Europe, Canada, Australia, and South Africa

Flow chart of findings on application of the Stress risk tool (Malan et al. 2020-2021)

Malan L et al. A Stress syndrome prototype reflects type 3 diabetes and ischemic stroke risk: the SABPA study. Biology 2021; 10(2):162.

Contact: North-West University Technology Transfer & Innovation Support Office

Mesuli Mbanjwa   +27 (0)18 299 4902

Mesuli.Mbanjwa@nwu.ac.za