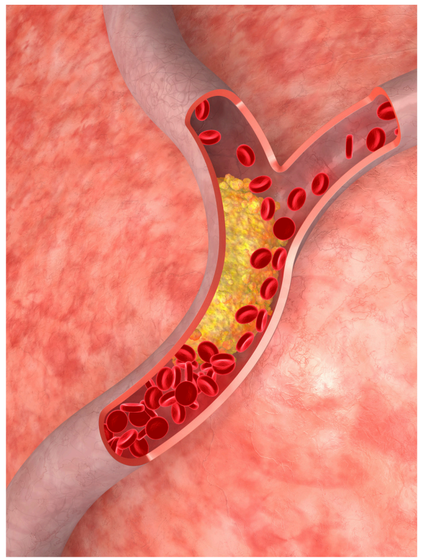
BIOMARKERS FOR THE PREDICTION AND DIAGNOSIS OF SEVERE ATHEROSCLEROSIS



Protection

This technology is protected by a patent, safeguarding the intellectual property of the invention, the identified biomarker panel, and its corresponding clinical uses.

Development Status

The protein biomarker panel is backed by already conducted clinical studies, which have yielded positive results.

What is it?

It is an innovative protein biomarker panel within the medical field, specifically in the area of cardiovascular diseases. Unlike current conventional imaging techniques—which serve to identify vulnerable plaques but require expensive equipment and expert technical personnel to interpret the results—this invention offers an accessible alternative. It consists of a tool based on the in vitro analysis of the differential expression of various proteins. This panel allows these proteins to be measured easily and quickly from fluid biological samples, such as blood, plasma, serum, or even urine. Its scientific basis is supported by the comparison of serum samples from patients with severe atherosclerosis, patients with dyslipidemia, and healthy individuals (control group), which allowed researchers to identify which specific proteins show significantly different expression levels between these groups.

Objetive

The main objective is to predict and/or diagnose advanced stages of the atherosclerotic process and the onset of atherosclerotic cardiovascular diseases (ASCVD) before the first symptoms appear, especially in at-risk patients such as those with dyslipidemia. By detecting subtle changes at the molecular level, it aims to enable prevention, early treatment, and proactive medical intervention that significantly improves the patient's prognosis. Furthermore, it aims to be used for screening, the development of personalized medicine (identifying which patients will benefit from a specific treatment), and the monitoring of the patient's health.