CArdioVAascular Research Information System (CAVARIS)

Research Areas

- Tool Development
- Biomarker Research
- Data-Sharing Enabler

At a Glance

- Status: Completed Consortium
- Year Launched: 2007
- Initiating Organization: Netherlands Heart Foundation
- Initiator Type: Government
- Location: Europe

Abstract

The CAVARIS Consortium aims to demonstrate that linkage between cardiovascular disease, and the molecular, functional, and molecular characteristics on circulating blood cells. It is hoped that these characteristics can serve as a biomarker for the initiation and progression of atherosclerotic disease.

Sponsors & Partners

The CAVARIS Consortium aims to test the hypothesis that cellular responsiveness of blood cells will function as sensors for plaque and patient destabilization. The consortium intends to conduct research into biomarkers that identify patients at risk for primary and secondary manifestations of the disease; stratify patients to reach individualized therapy; and establish efficacy of newly developed drugs for managing atherosclerotic disease. If successful, then the consortium hopes to develop and validate technologies that evaluate these characteristics of circulating cells in patients at risk.
To do this, the consortium will coordinate the following activities:

Apply target discovery technologies and bioinformatics in a well-defined patient group to discover genetic and proteomic biomarkers of the patients at risk for cardiovascular disease. These newly discovered targets will be implemented in nine units where technology development is executed and where 75 percent of the total budget will be invested. In these technology units, new devices will be constructed that identify targets of interest and that will lead to clinically applicable technological approaches to identify the patient at risk.

Among these technologies are a biosensor that will analyze protein and secretome signatures of circulating cells, dedicated chips revealing expressions of genes that are demonstrated to be expressed in patients at risk, FACS combi-kit with antibody cocktails for fast screening of circulating cells of patients in a clinical setting, and a light-electron microscope to search for morphological and co-expression of markers of interest. The outcome will be evaluated using standard operational procedures for medical technology assessments.

Other website  http://www.cavaris.nl/

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