The following three patents and their divisionals are expected to be issued in the United States, Canada, Belgium, Finland, France, Germany, Great Britain, Ireland, Italy, Netherlands, Spain, Sweden, Switzerland, Japan, Australia, and New Zealand.

United States Patent
Holvoet, et al
7,390 627
June 24, 2008

Assays, antibodies, and standards for detection of oxidized and MDA-modified low density lipoproteins

Abstract

Immunoassays for malondialdehyde-modified low density lipoprotein (MDA-modified LDL) and oxidized low density lipoprotein (OxLDL), monoclonal antibodies (and the cell lines for them) for use in the assays, and a storage-stable standard (which may be used as a calibrator and/or control) are disclosed. MDA-modified LDL and OxLDL are implicated in atherosclerosis and its etiology.

United States Patent
Holvoet, et al.
6,309,888
October 30, 2001

Detection and determination of the stages of coronary artery disease

Abstract

A method having clinically sufficient degree of diagnostic accuracy for detecting the presence of coronary artery disease in a human patient from the general population and for distinguishing between the stages of the disease in that patient is disclosed. The stages are, first, the non-acute stage, which is either asymptomatic coronary artery disease or stable angina, second, the acute stage known as unstable angina, and, third, the acute stage known as acute myocardial infarction. The diseased state (as opposed to the non-diseased state) is indicated by the clinically significant presence of a first marker in a sample from the patient. The presence of one of the two acute stages, unstable angina or acute myocardial infarction, is indicated by the clinically significant presence of a second marker in a sample from the patient. The presence of the more severe acute stage known as acute myocardial infarction is indicated by the clinically significant presence of a third marker in a sample from the patient. Preferably the first marker comprises OxLDL, the second marker comprises MDA-modified LDL, and the third marker is a troponin. Preferably the OxLDL and MDA-modified LDL are detected using monoclonal antibodies that can detect the presence of those markers in undiluted human plasma at concentrations as low as 0.02 milligrams/deciliter.
ABSTRACT

A method of assessing the likelihood that a person who is asymptomatic for coronary artery disease does in fact have the disease disclosed. The levels of an atherogenic protein and acute phase reactant and optionally of an anti-atherogenic protein for an individual are obtained and compared to one or more cut points related to those substances and, based on the comparison(s), an assessment is made of the likelihood that the individual has coronary artery disease. The atherogenic protein may be OxLDL, the acute phase reactant may be C-reactive protein or fibrinogen, and the anti-atherogenic protein may be HDL.