

# TITLE:   DIAGNOSIS   AND   TREATMENT   OF ATHEROSCLEROSIS

## FIELD OF INTEREST

Biotechnology (Treatment, Diagnosis, Atherosclerosis)

## CLINICAL NEED

Atherosclerosis is a chronic inflammatory disease that underlies thrombosis and cardiovascular events, but it can remain asymptomatic for long periods of time. Therefore, it is critical to explore new therapeutic and diagnostic avenues in this area. The presence of antibodies in the atherosclerotic plaque was described decades ago, and the connection between autoimmunity and atherosclerosis is well accepted. However, the immunogenic trigger and the impact of the antibody immune response during atherosclerosis are not well understood.

Therefore, despite of the progress in understanding the atherogenic molecular basis thus opening horizons for several promising novel targets, new and more efficient targeting agents for the diagnosis and treatment of atherosclerosis are in ever-increasing demand. There is an unmet medical need of identifying novel biomarkers that can be efficiently used to detect atherosclerotic plaque, thus constituting the basis for developing new clinical tools dedicated to molecular imaging and therapy of human atherosclerosis.

## DESCRIPTION OF THE INVENTION

Researchers propose a method for the diagnosis and/or treatment of atherosclerosis. They discover a new antigenic trigger for the antibody immune response associated with atherosclerosis and opens new avenues for diagnostic and therapeutic interventions in cardiovascular disease.

## TECHNOLOGY KEYWORDS

Antibodies, atherosclerosis, biomarkers, diagnosis.

## IPR STATUS

Patent application number: EP19382817.

Applicants: CNIC, UAM and IIS-FJD.

## TYPE AND ROLE OF PARTNER

Looking for commercial partners interested in licensing.

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