



# METHOD, IMMUNOSENSOR AND KIT FOR NON-TRADITIONAL CARDIOVASCULAR RISK ASSESSMENT BY DETECTING AUTO- ANTIBODIES TO HIGH DENSITY LIPOPROTEINS

## TECHNOLOGY OFFER



### COMPETITIVE ADVANTAGES

- ✓ **Growing scope of market**, affecting all countries.
- ✓ **Diversification of applications** (immunosensor in pharmaceuticals or in primary care fields; immunoassay kit in specialized care field).
- ✓ It enables the **design of microbeads-based multiplex arrays** that can be implemented for the simultaneous quantification of different autoantibodies associated with non-traditional cardiovascular risk.
- ✓ **Technical and implementation simplicity**, not requiring a major investment for implementing.

### INNOVATIVE ASPECTS

- ✓ New tool based on a novel concept, as it provides a new approach for the assessment of cardiovascular risk.
- ✓ Diagnostic accuracy, as it also provides the inflammatory status and the activity of the disease.
- ✓ Use in hospital routines: the analytical determination is done through a common analytical technique, so there is no need of adapting means or training staff.
- ✓ Miniaturization, portability and independence of infrastructure by implementing the method through the immunosensor.
- ✓ Non-invasive: it uses blood, serum or plasma samples. It does not require standardization of the preclinical phase.

### PATENTS

ES patent applied.  
In time to seek international patent extension.

### TYPE OF COLLABORATION

Licence agreement.

### ABSTRACT

The present invention relates to a method for determining cardiovascular risk not associated to traditional factors by quantifying the levels of auto-antibodies against the high-density lipoproteins (HDL). The invention also includes an immunosensor and a kit for the quantification of anti-HDL in blood samples, serum or plasma.

The presence of these auto-antibodies is associated with an alteration of HDL and to an increase of several mediators involved in different inflammatory proatherogenic responses that cannot be detected by current methods for assessing cardiovascular risk but are relevant for their correct evaluation. More info (in Spanish): <http://bit.ly/29CzSu1>

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