TECHNOLOGY OFFER

New method of diagnosis of autoimmune diseases





INTELLECTUAL PROPERTY RIGHTS

The invention is protected by National Patent P201730972, dated July 26, 2017, with the title "Diagnostic procedure for autoimmune diseases", jointly owned by the Polytechnic University of Valencia and the University of Valencia



CURRENT STATE OF DEVELOPMENT

Currently, the invention is protected by a patent, fulfilling its 5th annuity.



MARKET APPLICATION SECTORS

The field of application of the present invention is focused on hospitals and clinics specialized in autoimmune diseases



COLABORATION SOUGHT

Inventors are interested in licensing the technology.

DESCRIPTION OF THE TECHNOLOGY

New method of rapid detection (diagnosis) and measurement of the level of disease activity (prognosis) in autoimmune diseases related to complete Ro / SSA, such as Systemic Lupus Erythematosus (SLE), Lupus dicolde, Singren syndrome, rheumatoid arthritis and others.

The invention comprises a new feature characteristic of the interfacial process that takes place on the sensing surface of a piezoelectric element. It involves the in situ calculation of the function that relates the changes in the surface density of the mass deposited on a resonator with the changes associated with the viscoelastic properties of the media deposited on the crystal.

The interest of this function is demonstrated through its use, as a proof of concept, in the monitoring of an interfacial process of antigenantibody molecular recognition, as well as in the screening of autoimmune patients.

ADVANTAGES

- Rapid detection test
- Diagnosis and prognosis in a single platform
- There are no alternative methodologies such as point-of-care.