

# A method for determining responsiveness to anti-inflammatory agents



## Available to license: Method for determining responsiveness to anti-inflammatory agents

IDIVAL has developed a tool for predicting disease severity or prognosis in inflammatory diseases, including RA, and/or predicting responsiveness to a treatment with anti-inflammatory agents, such as anti-TNF $\alpha$  agents

### A Method for determining responsiveness to anti-inflammatory agents

Despite significant advances having been made in recent years in the discovery of prognostic and/or predictive markers related to RA and inflammatory diseases, there is an on-going need for improved methods for assessing disease severity and prognosis, for predicting disease progression and risk of recurrence or relapses, for enabling to classify the patients' population according to prognosis and to select the most appropriate treatment accordingly. It is also desirable to identify polymorphic regions within a gene, such as human TLR10, that are associated with the response to one or more drugs used in the treatment of RA and other inflammatory diseases, such as disease-modifying antirheumatic drugs (DMARDs) or biological therapies, including TNF $\alpha$  inhibitors.

The inventors analysed the association of the missense variant of human TLR10, I473T, which is located in the LRR18 domain, with RA and showed that the I473T variant is not associated with susceptibility to RA, but it significantly correlates with erosive disease in patients seropositive for antibodies to citrullinated protein antigens and with a lower response to Infliximab treatment as measured by the change in disease activity score) and by the EULAR criteria.

### Competitive advantages

The main competitive advantages of the tool are:

- Provides information to the rheumatologist on the prognosis and response to the patient treatment with anti-inflammatory agents, such as anti-TNF $\alpha$  agents. Thus, it will allow a more personalized therapy.
- The results may be applicable to other chronic inflammatory diseases.

### Supporting Data

The results has been tested in a cohort of more tan 1500 patients at Valdecilla Biomedical Research Institute– IDIVAL.

### Market insight

This technology will be of interest to companies involved in the development of inflammatory diseases therapies.

### Patent Protection

A patent application covering this technology has been filed through Spanish patent application P201600636. IDIVAL would like to talk to companies interested in commercializing this tool or in a research cooperation agreement to develop it.



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