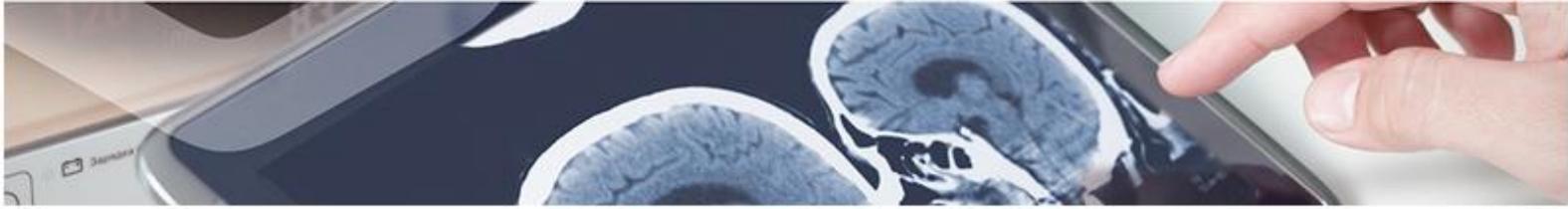


## ICT

# Predictive model for assessing refractoriness in patients with temporal

A research group of the Andalusia Public Health System has developed a predictive model for assessing refractoriness in patients with temporal lobe epilepsy.



## Description

Temporal lobe epilepsy (TLE) is among the most common type of epilepsy in humans (15-20%). Some 20-40% of TLE cases are refractory, ie where the epileptic seizures have persisted in the face of drug therapy strategies. For such patients, non-pharmacological treatments options exist, such as surgery, which has high rates of success.

Surgery is also the only solution in cases of progressive refractory epilepsy, in order to halt their progress. The problem is that most patients do not opt to undergo surgery within the first 20 years of having the condition. As a result, they are exposed to the adverse effects of long-term use of complex combination therapies, resulting in secondary cognitive and systemic impairments and a lower quality of life.

The research group has developed a diagnostic model for predicting TLE refractoriness, based on a simple algorithm involving clinical features and laboratory tests. It can be applied from the first moments of care.

The validation of the research involved a cohort of 163 patients (83 refractory TLE cases and 80 non-refractory cases).

- 3- Helps to decide whether to refer the patient for a pre-surgical assessment or to pharmacological testing.
- 4- Avoids both a secondary loss of quality of life associated with the evolution of the condition itself, and the use of pharmacological treatments with adverse effects, in cases where surgery may be recommended.



## Intellectual Property

This technology is protected by patent.



## Aims

We are looking for a partner interested in a license and/or a collaboration agreement to further develop and exploit this innovative technology.



## Advantages

This assessment model:

- 1- Is a unique and innovative tool for assessing the refractoriness of epilepsy.
- 2- Helps to speed up the diagnosis of refractory epilepsy to a high degree of reliability.



## Classification

Area: ICT

Pathology: Central nervous system