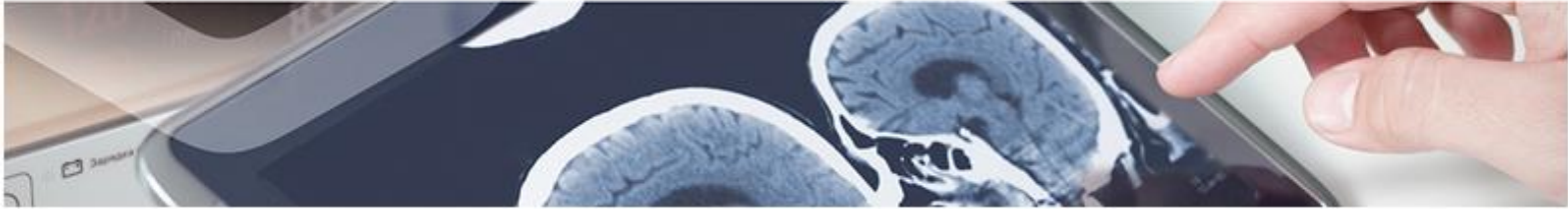




## Diagnosis.

### Method for predicting response to immunotherapy in cutaneous melanoma patients.

A research group of the Andalusian Public Health System, the University of Malaga and the Biomedical Research Network Center have developed a method to predict a patient's response to immunotherapy treatment, based on a ceRNA profile.



## Description

Cancer is one of the most studied diseases in recent years, due to its high incidence and mortality. There are different types of cancer depending on the tissue and/or organ affected, one of them is melanoma, which is an aggressive malignant tumor of the epidermal melanocytes.

**Cutaneous melanoma** has an increasingly higher incidence rate in the western world. If cutaneous melanoma becomes metastatic, treatment options and chances of survival decrease dramatically.

Today, there are different treatments depending on the type of cancer. Among these, **immunotherapy treatments based on immune checkpoint inhibitors (PD-1 and CLTA4)** have been a breakthrough in the treatment of metastatic cutaneous melanoma.

The problem is that **a percentage of patients are insensitive or develop resistance**, so it is necessary to have a pattern of predictive biomarkers to decide whether or not to use anti-PD1 and CLT4.

To this end, a research group has identified **a ceRNA molecular biomarker profile, which allows patients to be classified according to their response profile, based on gene expression variations.** This profile makes it possible to classify patients into responders (partial, complete or stable) or non-responders (severe or not severe), allowing for more individualized treatment and follow-up for each patient.



## Advantages

- **It allows to determine in advance whether anti-PD1/anti-CLT4 treatment is appropriate** for the patient with metastatic cutaneous melanoma.
- It reduces the economic costs and adverse effects associated with the use of unresponsive treatments for certain patients.
- **It improves** personalized treatment options and therefore the healthcare and **quality of life of patients.**



## Industrial Property

This technology is protected by a national patent application with international extension.



## Objectives

Collaboration is sought for the development and exploitation of the technology.



## Classification

**Area:** Diagnostics

**Pathology:** Oncology