

## METHOD FOR PREDICTING THE RESPONSE TO IMMUNOTHERAPY IN PATIENTS WITH CUTANEOUS MELANOMA

### 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 epidermal melanocytes. Cutaneous melanoma is presenting increasingly higher incidence rates in the Western world. If cutaneous melanoma becomes metastatic, treatment options and chances of survival are dramatically decreased. 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 that makes it possible to decide whether or not to use anti-PD1 and CLTA4. To this end, a research group has identified a ceRNA molecular biomarker profile, which makes it possible to classify patients according to their response profile, based on gene expression variations. This profile makes it possible to classify patients as responders (partial, complete, or stable) or non-responders (severe or non-serious), allowing more individualized treatment and follow-up to be established based on each patient.

### Keywords:

[Immunotherapy](#), [Metastasis](#), [Cerna](#), [Cutaneous Melanoma](#)

### Sectors:

[Health](#)

### Areas:

[Health Sciences](#), [Diagnosis](#)



### Advantages:

- Allows for early determination of whether anti-PD1/anti-CLTA4 treatment is appropriate for the patient with metastatic cutaneous melanoma.
- Decreases the economic costs and adverse effects associated with the use of treatments without response for certain patients.
- Improves personalized treatment options and therefore healthcare and quality of life for patients.

### Uses and Applications:

The application of the invention is in the field of oncology, specifically in the detection of pathologies associated with cutaneous melanoma. Currently, melanoma is one of the most aggressive types of skin cancer, accounting for up to 80% of skin cancer-related deaths globally. The present invention makes it possible to facilitate the clinical management of patients with cutaneous melanoma. It can help decision-making when deciding whether to use immunotherapy treatment in patients.

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