

Diagnostics.

Method to predict cancer response to anti-PD1 immunotherapy treatment.

A research group from the Andalusian Public Health System, Málaga University and Karolinska Institute have developed a method to predict cancer response to anti-PD1 immunotherapy treatment, based on biomarkers.



Description

Cancer is one of the most studied diseases nowadays because of its mortality and incidence. There are several treatments for this disease, but its effectivity depends on the cancer type and the patient profile.

Cancer treatment with immune checkpoint blockade (ICB) has a long response in responder patients and an acceptable toxicity, so it is a very good treatment for cancer. It is very usual the administration of a ligand of programmed cell death protein 1 inhibitor (anti-PD1) as a treatment for advanced melanoma patient. This treatment has a 20% high response than chemotherapy and patients are usually more tolerable.

However, a percentage of the patients are insensible or develop resistance to the treatment. To prevent the use of this treatment with non-response patients, a research group has developed a biomarker profile based on difference in gene expression to classify patients by their response profile.



Advantages

- This enables doctor to determine if anti-PD1 treatment is suitable in advance.
- It reduces the economic costs and adverse effect of treatment for non-response patients.



Industrial Property

This technology is protected by national patent application with possibility of international extension (PCT).



Aims

The research group is looking for partnership and/or license agreement.



Classification

Area: Biotech-Pharm: Biological molecules.

Pathology: Oncology

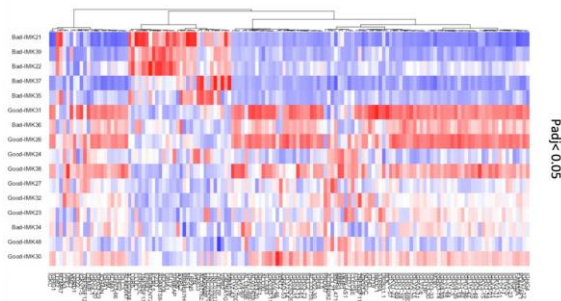


Figure 1: Gene expression heat map of responses vs non-responses patients.