

## Cancer informative biomarker signature

CSIC, in collaboration with HCB, IDIBAPS, UB and ICREA, has developed a method for personalizing combined therapeutic strategies with immune check-point inhibitors (ICI) in patients suffering from cancer, based on a 10-marker immune-metabolic signature that classifies tumor samples into 3 distinct clusters according to the combined expression levels of these markers. This method could be used for immune-metabolic classification, prognosis and monitoring or as a drug screening tool in a variety of tumor types.

Industrial partners from the pharmaceutical or diagnostics industry are being sought to collaborate through a patent licence agreement.

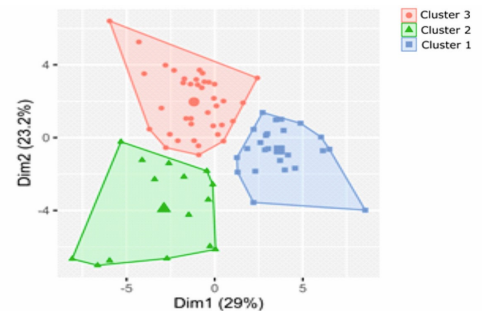
### An offer for Patent Licensing

#### Predictive biomarker signature for solid tumors

The efficacy of immune check-point inhibitor (ICI) therapy ranges from 30-40% in sensitive tumors to <5% in immune-resistant tumors. Current predictive methods have low sensitivity and poor specificity identifying patients that could benefit from ICI therapy.

Cancer informative biomarker signature is an immune-metabolic signature that classifies patients suffering from different solid tumors in 3 clusters depending on their immune-metabolic profile. This 10-gene signature improves the identification of patients with solid tumors who could benefit from the combination with ICI and drugs that tackle immune-microenvironment and cancer-metabolism.

This signature has been tested in FFPE samples (n =4001) from cancer patients; FFPE samples (n=7000) in CRC in conjunction with CMS signature and in FFPE samples (n=303) in cancer patients treated with pembrolizumab in conjunction with GEP signature.



Partitioning clustering plot

#### Main innovations and advantages

- The immune-metabolic signature constitutes a great advance for the selection of the best treatment strategy for each patient suffering from a solid tumor.
- This method could be also used as prognostic biomarker, clustering patients according to their responsiveness to ICI treatments.
- Readily implemented to assist in decision making for therapeutic approaches tailored to a tumor's likely responsiveness to ICI in combination with metabolic interventions, thus improving the management of oncological patients and, notably, expediting therapeutic decision making, a critical determinant of outcome.

#### Patent Status

PCT application filed

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