

THE VALUE OF IMMUNOCONTEXTURE ON THE NEW DEVELOPED IMMUNOGRAM FOR PROGNOSTIC, PREDICTIVE AND THERAPEUTIC DECISION

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The impact of cancer immunotherapy on clinical cancer care is growing rapidly. However, different immunotherapies relay in different points of interactions between cancer and the immune system and there is not a reliable way to measure this impacts, outcomes, prognostics or predictive which patients are going to respond. We propose a framework for describing the different interactions between cancer and the immune system in individual bases. Our aiming is to focus on biomarker research and to enhance immune response. The proposed cancer immunogram assumes that T cell activity is the ultimate effector mechanism in human tumours (CD8+ GranzymeB+ and TH1 cells). Our immunogram takes into account 11 parameters which allow us to evaluate comprehensively the immunological context of our patients. We measure this parameters: Cellular infiltration; Immunochemistry (bad prognosis proteins); ELISA (humoral response) T Cell Expansion (T cell response), ELISPOT (GranzymeB, IL-10, Gamma Interferon), DTH (Skin Biopsy), Tumoral Stroma, Blood Parameters (ALC, RLC, AMC, AEC), Soluble inhibitors (Fibrinogen, ESR, PCR), Tumor metabolism (DHL), T Cell subtype (CD8, Granzyme B, TH1, TH2, T. REG, DC, CD20, CD45RO, CD45RA). They are still waiting to further introduce factors like Microbiota, oral immunology (mouthwashes) and Flow cytometers, Liquid Biopsies, etc. We have performed this immunogram on prevention patients to see how we can modulate and predict possible tumours, we also used in recurrence prevention patients to monitor immune response to treatments and prevent possible recurrence; in active and refractory patients helps us to determine the best immunotherapy treatment and individualization of patients. This new approach gave us a complete panorama of the immunocontexture and will be very effective as a Pan biomarker for immunotherapy respond rate as a prognostic marker as well.

Biography

Jose Antonio Matute Briceño is currently the Submedical Director, Chief Pathologist and Investigator from the Binational Sonora Cancer Research Center (CICS) in Seattle/Sonora. One of its main functions is to carry out; immuno-advanced cancer reports, molecular pathology and immunological studies such as ELISA, ELISPOT, T cell expansion, and Immunogram. In the research area, developing scientific projects with Clinic relevance and performed experiments focused on patient's immune response against cancer. He received specialist training in Pathology at the University of Monterrey; in 2014, began training in Immuno-Oncology at the OMA/CICS group, where he developed a diagnostic chart for the Immunocopathology evaluation with prognostic and therapeutic implications. He has participated in numerous international conferences of molecular pathology, oncology, USCAP, ASCO, ESMO, where he has made oral and posters presentations. He has been involved in some published scientific articles of the OMA group / CICS and 5 more in preparation.

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