

Antibodies titers against CMV putative predicts outcome in breast cancer patients

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Clinically speaking is mainly unknown the association of antibodies against Cytomegalovirus (CMV) and the prognosis in cancer patients. We studied (n=25) samples of breast cancer patients in different stages to address the possible link between high load viral titers using ELISA and we correlated with several clinical parameters including but not limited to OS, ECOG and stage. One of the possible pathways that the chronic presence of CMV in breast cancer patients can affect the outcome as potentially this type of virus may distract the immune system specially when the treatment is based with the combination of immunogenic chemotherapy, treat locally and systemically, multi-peptide active antigen specific immunotherapy and immunomodulation of cytokines. With this in mind we make a retrospective analysis identifying breast cancer patients (n=25), measuring the titers against CMV antigens and its relation with the mentioned clinical parameters. We found statistical significance in patients with high viral titles and OS. However, there is no pattern at this point with this preliminary data in all the studied cases, which may have to be related with the tumor microenvironment, breast cancer subtype and previous lines of ablative chemotherapy received as all of them where studied in refractory status as mentioned previously. This data could be useful to include for all cancer patients not just limited to breast cancer to include the titers of several viruses other than CMV such as EBV, HTLV-1/2, HCV, HBV and potentially some microbiota for instance *Fusobacterium nucleatum*. If we validate this data we will propose to include some broad spectrum antiviral agents in patients with potential clinical benefit.

Recent Publication

1. J P Marquez-Manriquez, J A M Briseno, K Quayle, L M Fernandez, I R Barajas, G Torres-Montano, F A Durazo-Bustamante, A Durazo-Acuna, L-A Rangel-Reyna, D Lopez-Hernandez, Rodriguez-Jasso, M-A Trujillo-Acosta, E Ramos-Garcia, S Icedo-Zamora and P A L Diaz (2017) Clinical and immune effects patients with progressive disease treated with low dose of anti-CTLA-4, bortezomib, gemcitabine, naproxen and meloxicam. *Annals in Oncology* 28:5.

Biography

Leonel Alexander Rangel Reyna has completed his education at La Salle University Victoria and training in General Hospital "Dr. Manuel Gea Gonzalez" in Mexico City. Currently, he is based in Ciudad Obregon, Sonora working on oncologic prevention with Binational Sonora Cancer Research Center (CICS) in Seattle/Sonora since 2016. He also works in the research area of the group identifying biologically and clinically relevant proteins for some neoplasia through immune assays as ELISA, ELISPOT, T-Cell Expansion, etc. Currently, he is in formation in the pathway to becoming a physician scientist to perform clinical relevant research in both pediatric and adult tumors, also he is involved in clinical oncology as attending physician.

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