

Double Immune Checkpoint Inhibition in Patients with MDS

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Hi, I am Guillermo Garcia-Manero from the Department of Leukemia at MD Anderson Cancer Center. I am here live in San Diego at the ASH 2018 Meeting. I am going to summarize for you Presentation 1831 of double immune checkpoint inhibition in patients with myelodysplastic syndrome (MDS).

As you may have heard on prior presentations, PD-1 and CTLA-4 are expressed in the C34 positive cell of patients with MDS. This expression actually is up-regulated by treatment with the hypomethylating agent. My group at MD Anderson has been exploring the activity and safety of this type of treatment in patients with MDS following of course the latest solid tumor malignancies. In another presentation, we presented data with single-agent azacitidine with nivolumab and ipilimumab in the relapsed frontline setting, but part of this trial actually is a very aggressive program combining both PD-1 and CTLA-4 inhibition in patients with MDS. We were not sure of the doses of this combination, so we use a higher dose compared to what you may be using in solid tumors. It was like 3 mg/k for both agents, and what we have seen in this pilot trial that was presented on this poster is very significant clinical activity that is not only morphological but also cytogenetic and molecular. The issue though is that these combinations can be associated with guite significant inflammatory toxicity, so we are further investigating the dosing of these doublets probably decreasing the dose significantly to 1 mg and we are going to expand in combination of azacitidine. We think that an immune checkpoint inhibitory approach either with a single agent or in combination is going to be important for patients with myelodysplastic syndrome, both in the frontline and in the relapse setting. Again, thank you from San Diego.

Reference: Garcia-Manero, G, Montalban-Bravo G, Sasaki K, et al. Double Immune Checkpoint Inhibitor Blockade with Nivolumab and Ipilimumab with or without Azacitidine in Patients with Myelodysplastic Syndrome (MDS). ASH 2018. Abstract 1831.