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Immunotherapy combination and chemotherapy show encouraging results in Phase II acute myeloid leukemia study

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A triple therapy combining two immune checkpoint inhibitors (ICPIs) with the standard-of-care chemotherapy, a hypomethylating agent called azacitidine, has shown promising results for treatment of relapsed or refractory acute myeloid leukemia (AML), according to findings from a Phase II study at The University of Texas MD Anderson Cancer Center.

Findings from the study, led by Naval Daver, M.D., associate professor of Leukemia, are being presented at the 60th American Society of Hematology Annual Meeting & Exposition in San Diego.

The study compared two patient cohorts—the first included 70 patients who received chemotherapy azacitidine (AZA) plus nivolumab. The second cohort with 20 patients was given a triple therapy employing the same two drugs with ipilimumab. Cohort 1 is now closed while cohort 2 continues to enroll patients.

The triple therapy showed promising results with a complete response rate of 43 percent and a projected one-year overall survival of 58 percent. The AZA plus nivolumab cohort reported a complete response rate of 22 percent with a projected one-year overall survival of 40 percent. Responses in both cohorts included best response within three months of therapy initiation.

"The response rate and survival in patients with relapsed AML treated

with azacitidine with both nivolumab and ipilimumab, appears encouraging and potentially superior to azacitidine with nivolumab in a small cohort of patients," said Daver. "However, we need to study more patients with longer follow-up to make firm conclusions. Immune related toxicities are more common and may be more severe with this double checkpoint approach, and awareness and close monitoring, therapy interruption, and aggressive treatment of immune toxicities is critical if such approaches are to be successful."

Adverse side effects were reported in 11 percent of the AZA plus nivolumab group, with the most common events being pneumonitis and colitis. The triple therapy cohort reported grade 3 or 4 immune side effects in 35 percent of patients, including pneumonitis, skin rash, pituitary hormone and liver enzyme irregularities, and colitis.

"The current triple therapy cohort will enroll up to 30 patients, and after that we plan to open a new cohort that will evaluate a higher dose of ipilimumab and a lower dose of nivolumab in 30 patients," said Daver. "Once we analyze both cohorts and select the appropriate dosing approach, we hope to evaluate this approach in a larger multi-center study."

Detailed correlative analysis to identify biomarkers of response and resistance will be conducted on pre- and on-treatment bone marrow and blood samples for all patients in MD Anderson's Immunotherapy Platform under the supervision of Padmanee Sharma, M.D., Ph.D., professor of Genitourinary Medical Oncology.

Provided by University of Texas M. D. Anderson Cancer Center

https://medicalxpress.com/news/2018-11-immunotherapy-combination-chemotherapy-results-phase.html