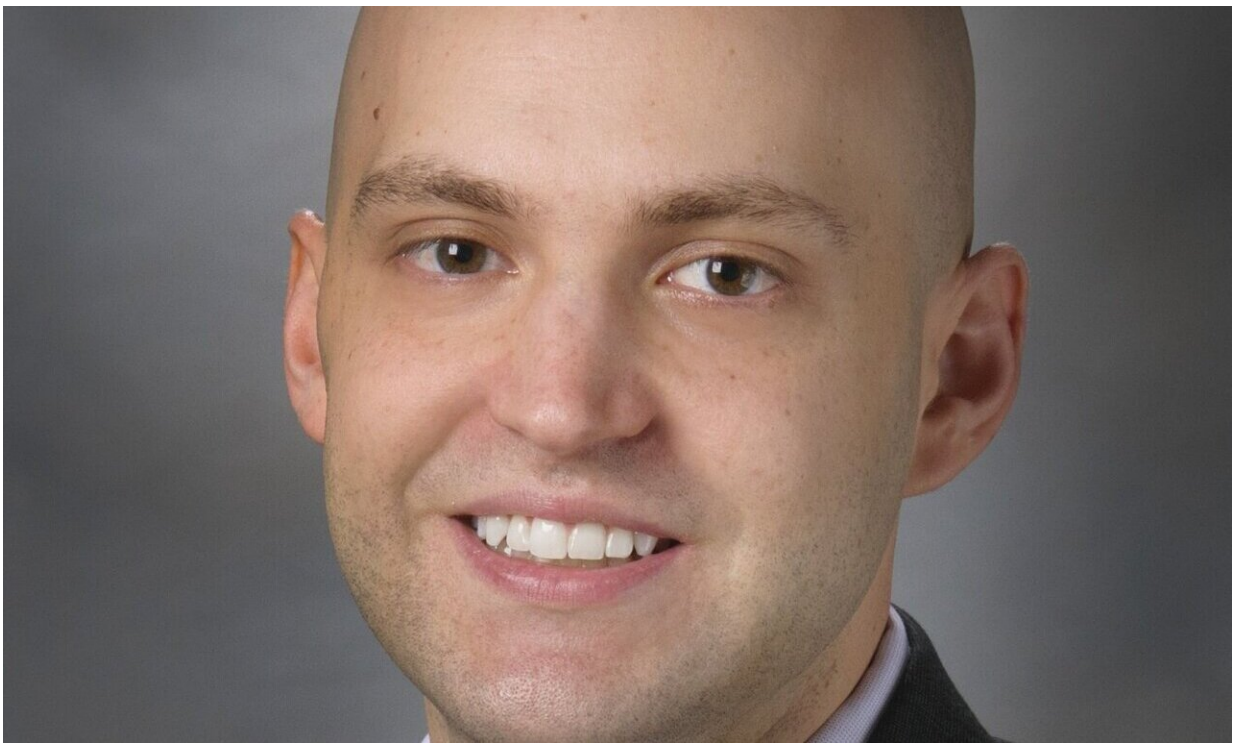
Combination therapy results in 98% response rate for some newly diagnosed leukemia patients

December 10 2019



Nicholas Short, M.D Credit: MD Anderson Cancer Center

A study led by The University of Texas MD Anderson Cancer Center showed that treatment combining lower doses of chemotherapy with the monoclonal antibody inotuzumab ozogamicin (INO), with or without the

drug blinatumomab, is safe and effective in patients over 60 years of age who were newly diagnosed with a high-risk form of acute lymphoblastic leukemia (ALL) known as Philadelphia chromosome-negative ALL.

Findings from the study were presented by Nicholas Short, M.D., assistant professor of Leukemia, Dec. 9 at the 61st American Society of Hematology Annual Meeting & Exposition in Orlando, Fla. The study was led by Elias Jabbour, M.D., professor of Leukemia.

"This study demonstrated that reduced-intensity chemotherapy, when combined with INO, resulted in a 98% response rate and three-year survival rate of 54%," said Short. "Ninety-five percent of all patients who responded showed no detectable minimal residual disease, which is an important endpoint in ALL therapy that has been shown to correlate with reduced risk of relapse and better long-term survival."

Previous international studies, both led by MD Anderson investigators, showed that blinatumomab and INO given as single agents were more effective than standard chemotherapy for treatment of advanced ALL, and are now being added as frontline treatment options.

"Older patients with Philadelphia chromosome-negative leukemia have historically had very poor outcomes, with long-term survival less than 20% in several prior studies," said Short. "This is driven both by higher risk disease features and poorer tolerance of intensive chemotherapy."

The study treated 64 patients with a median age of 68 years. Among the 59 evaluable patients, 58 or 98% of them achieved a complete response. With a median follow up of 37 months, the three-year overall survival rate was 54%, with 30 patients in complete remission with no signs of minimal residual disease.

"The outcomes of patients who did or did not received blinatumomab

were similar, although we will need more follow-up to determine whether the addition of blinatumomab will improve outcomes in the long-term," said Short. "This trial resulted in significantly higher three-year survival rates compared to the 32% survival rates observed in a similar historical cohort of older patients treated with intensive chemotherapy. These findings may represent a new standard of care in this older population."

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