Reasons for ibrutinib therapy discontinuation in patients with chronic lymphocytic leukemia

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About 10 percent of patients with chronic lymphocytic leukemia (CLL) discontinued therapy with the Bruton tyrosine kinase (BTK) inhibitor drug ibrutinib because of disease progression during clinical trials, according to a study published online by *JAMA Oncology*.

CLL is the most prevalent leukemia in adults and it is not considered curable without an allogeneic (donor) stem cell transplant. However, advances in therapy have been made, notably the emergence of kinase inhibitors for patients whose disease relapsed, according to the study background.

Jennifer A. Woyach, M.D., of Ohio State University, Columbus, and coauthors described the characteristics of patients who discontinued ibrutinib therapy and their outcomes in a group of 308 patients participating in four trials at a single institution.

The study results show that with a median (midpoint) follow-up of 20 months, 232 patients (75 percent) remained on therapy, 31 (10 percent) discontinued because of disease progression and 45 discontinued for other reasons (including 28 because of infection, eight for other adverse events and nine due to other medical events).

Disease progression included Richter's transformation (RT, when the cancer becomes an aggressive lymphoma) or progressive CLL. RT appeared to occur early and CLL progression later. Median survival after RT was 3.5 months and 17.6 months following CLL progression, the results indicate.

"This single-institution experience with ibrutinib confirms it to be an effective therapy and identifies, for the first time, baseline factors associated with ibrutinib therapy discontinuation. Outcomes data show poor prognosis after discontinuation, especially for those patients with RT. ... Patients with RT remain a high research priority to identify new targets and new therapies," the study concludes.

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