# Targeted drug helps leukemia patients who do not benefit from initial therapy

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A new study has found that patients with chronic myeloid leukemia (CML) who have not responded to interferon treatments experience long-term benefits when they switch to the targeted drug imatinib. Published early online in *Cancer*, a peer-reviewed journal of the American Cancer Society, the study indicates that imatinib is the treatment of choice for these patients.

Imatinib, a drug that blocks the protein made by a particular cancer-causing gene, has revolutionized the treatment and prognosis of patients with CML. Now up to 93 percent of patients who take the drug as initial therapy for CML survive at least eight years, whereas prior to imatinib, patients survived an average of only three to six years.

While imatinib is now the standard drug given after a diagnosis of CML, approximately 15,000 to 20,000 patients in the United States may have started taking imatinib after failing to respond to the previous standard drug for CML, interferon. Like patients who now take imatinib as initial therapy for their cancer, these patients seem to respond well to imatinib, at least in the short term; however, little is known about their long-term prognosis.

To investigate, Hagop Kantarjian, MD, of the University of Texas MD Anderson Cancer Center in Houston, and his colleagues analyzed 368 CML patients from their institution who started taking imatinib after failing to respond to interferon. The team estimated that 68 percent of patients survived for at least 10 years. Previous research indicates that

only 20 to 30 percent of patients who do not respond to interferon therapy and have no access to imatinib survive this long.

According to the authors, these findings suggest that most patients can benefit from imatinib after unsuccessful interferon treatments, and they do not have to consider other therapeutic options.

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