Impact of genetic targets on cancer therapy in acute myelogenous leukemia.

Abstract:

Acute myelogenous leukemia (AML) is characterized by uncontrolled proliferation of the cells of myeloid origin. It can present at all ages, but is more common in adults. It is one of the most common leukemias in adults and continues to pose significant challenge in diagnosis and long-term management.AML is a disease at the forefront of genetic and genomic approaches to medicine. It is a disease that has witnessed rapid advances in terms of diagnosis, classification, prognosis and ultimately individualized therapy. Newly diagnosed AML patients are now routinely stratified according to cytogenetics and molecular markers which guides long-term prognosis and treatment. On the other hand, with few exceptions, the initial treatment (also known as induction treatment) of AML has been 'one-size-fits-all'. It remains a great challenge for patients and physicians to consolidate and translate these advances into eventual success in clinic [1, 2].