Effects of the dual JAK2 and AURKE A inhibitor DMZ-3B on the biological behaviors of acute myeloid leukemia cell lines

Acute myeloid leukemia (AML) is a malignant tumor of the hematopoietic system, characterized by the clonal expansion of immature "blast cells" in the peripheral blood and bone marrow, leading to ineffective erythropoiesis and bone marrow failure . AML is a heterogeneous disease, with more than half of the patients not achieving complete remission after initial treatment and continuing to progress to relapsed/refractory AML. With the ongoing research into the genetic changes, molecular mutations, and pathogenesis of AML, the development of small molecule targeted inhibitors has continuously made new breakthroughs, rapidly expanding the personalized treatment options for AML patients.This article aims to explore the effects of novel AURORA inhibitors and their combination with traditional chemotherapy drugs on the biological behavior of leukemia cells.