

YANLI CUI
Zhejiang University
China

Bispecific CeY-B1 treatment for relapsed and refractory acute myeloid leukemia

Abstract:

Based on years of research, a synthetic molecule CeY-B1 had designed and screened that effective against various tumor cell studies. After two rounds of in vivo animal experiments, treating leukemia was focused, which inhibiting abnormal activation of FLT3 related signaling pathways, inhibit malignant proliferation of acute myeloid leukemia (AML) cells, and can be orally administered. The IC₅₀ is in the nanomolar range (6.95 nmol/L), and acute toxicity experiments have shown that it is non-toxic. At the same time, compared with current clinical inhibitors, CeY-B1 induces leukemia cell differentiation. Meanwhile, CeY-B1 promoted apoptosis of SiHa solid tumor cells and inhibited their proliferation, migration, and invasion abilities. After 48 hours of action on SiHa cells, ceramides and dihydroxysphingolipids were upregulated in the sphingomyelin signaling pathway. It demonstrated that CeY-B1 may function through different pathways than usual. All animal experiments have licenses. An invention patent was granted in February 2021.

Biography

Cui Yanli, Ph.D. in Medicinal Chemistry, a leader of Carbohydrate Medicinal Chemistry at Zhejiang University. Hosted multiple national research projects. Participate in the development of the EU Horizon 2020 guidelines. Reviewer for multiple journals such as European Journal of Medicinal Chemistry, etc. Having multiple core construction active molecule intellectual property rights.