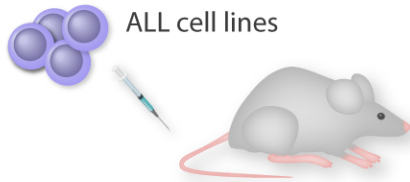


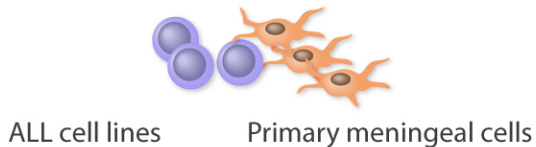
Disrupting the leukemia-meningeal adhesion in the central nervous system attenuates leukemia chemoresistance in acute lymphoblastic leukemia

1 Xenotransplanted mice



- Leukemia cells reside in the meninges of the mouse CNS and associate with the meningeal cells

2 Co-culture experiments



- Leukemia cells were significantly more resistant to cytarabine and methotrexate-induced apoptosis
- Meningeal cells shift the apoptotic balance toward survival in leukemia cells
- Meningeal cells increase leukemia quiescence
- Chemoresistance is overcome by detaching the leukemia cells from the meninges

3 Co-culture adhesion assay to identify drugs that disrupt leukemia-meningeal adhesion



Me6TREN

hematopoietic stem cell mobilizing compound

- Disrupts leukemia-meningeal adhesion in vitro and in vivo.
- Enhances the efficacy of cytarabine in treating CNS leukemia in xenotransplanted mice