Adult B-cell acute lymphoblastic leukemia cells display decreased PTEN activity and constitutive hyperactivation of PI3K/AKT pathway despite high PTEN protein levels.

Healthy bone marrow cells:
- CK2
- PTEN
- PI3K
- AKT
- Other signals (transient) → cell survival

Adult B-ALL cells:
- CK2
- PTEN
- PI3K
- AKT
- Cell survival

CX-4945/Silmitasertib treatment reduces CK2 activity and restores the inhibitory effect of PTEN.

CX-4945/Silmitasertib treatment has limited effect on normal bone marrow cells.