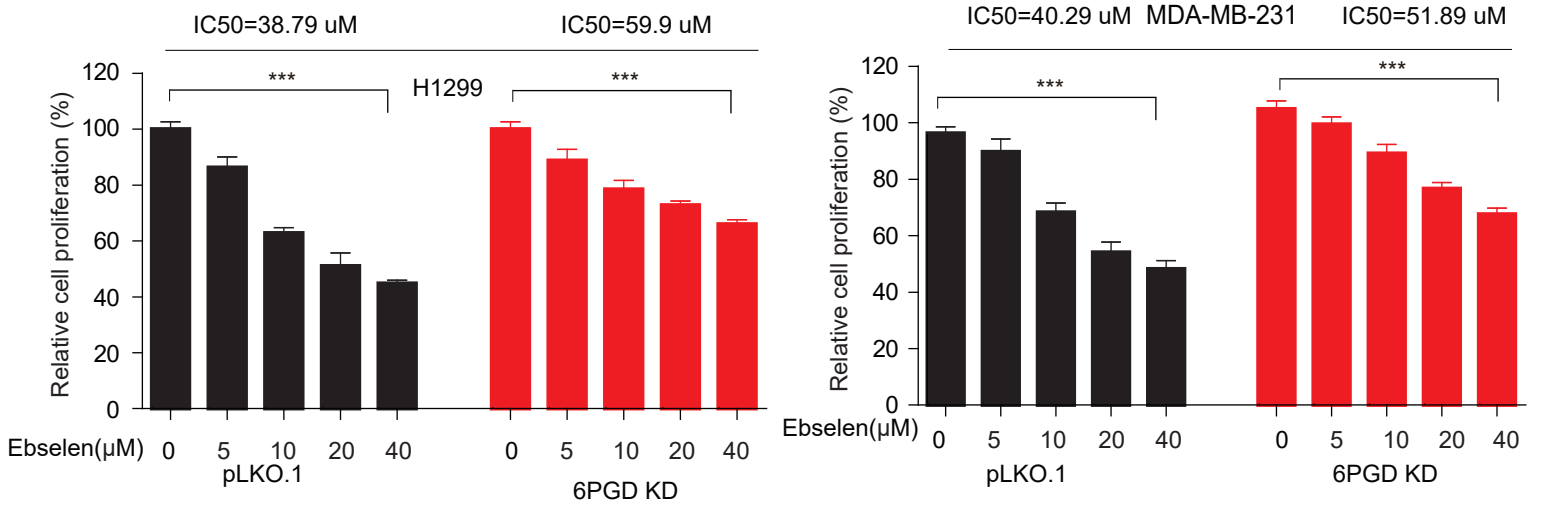
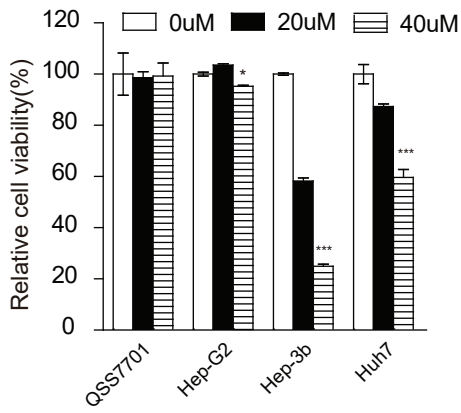


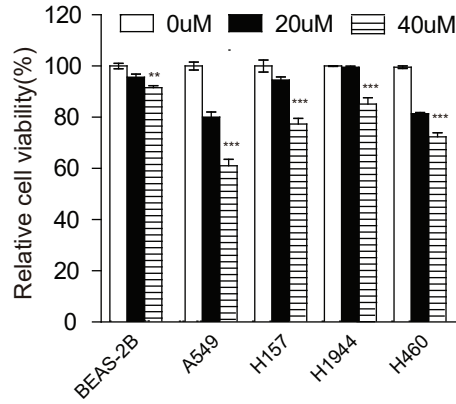
A



B



C



D

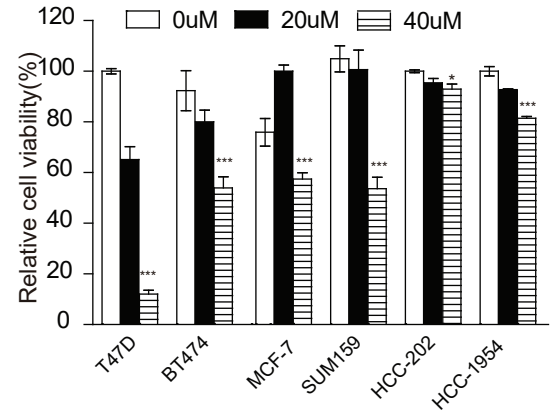
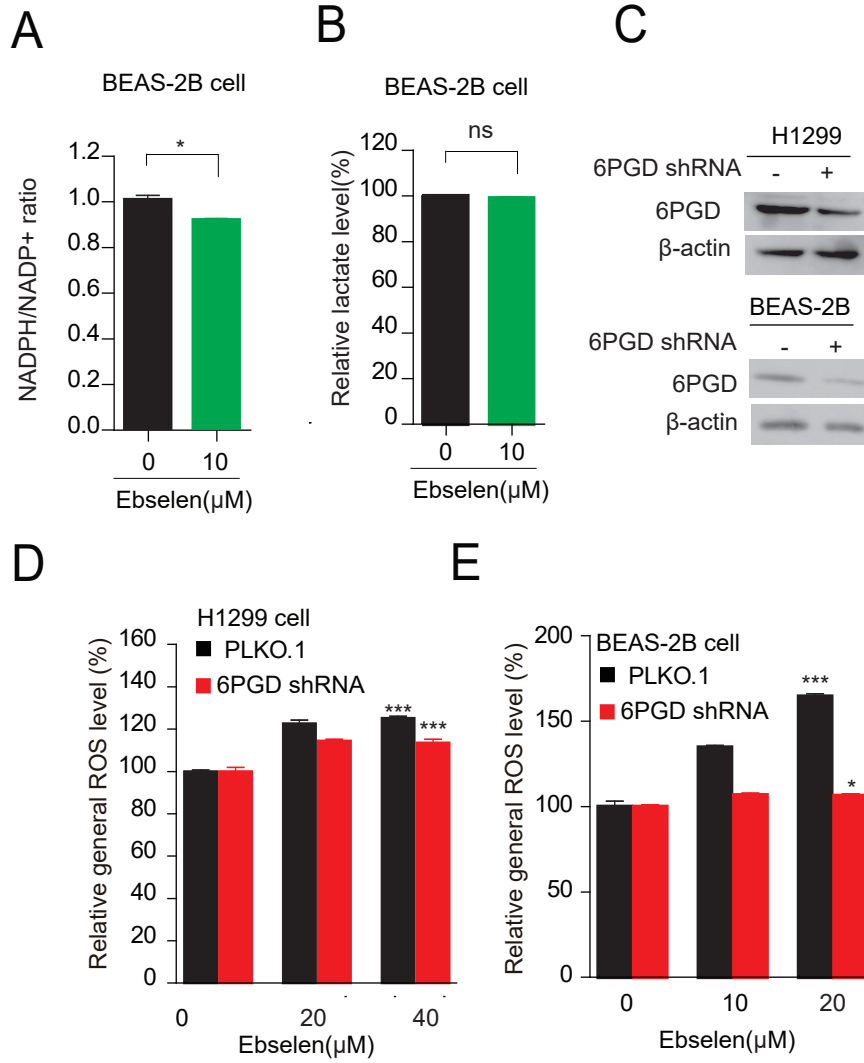
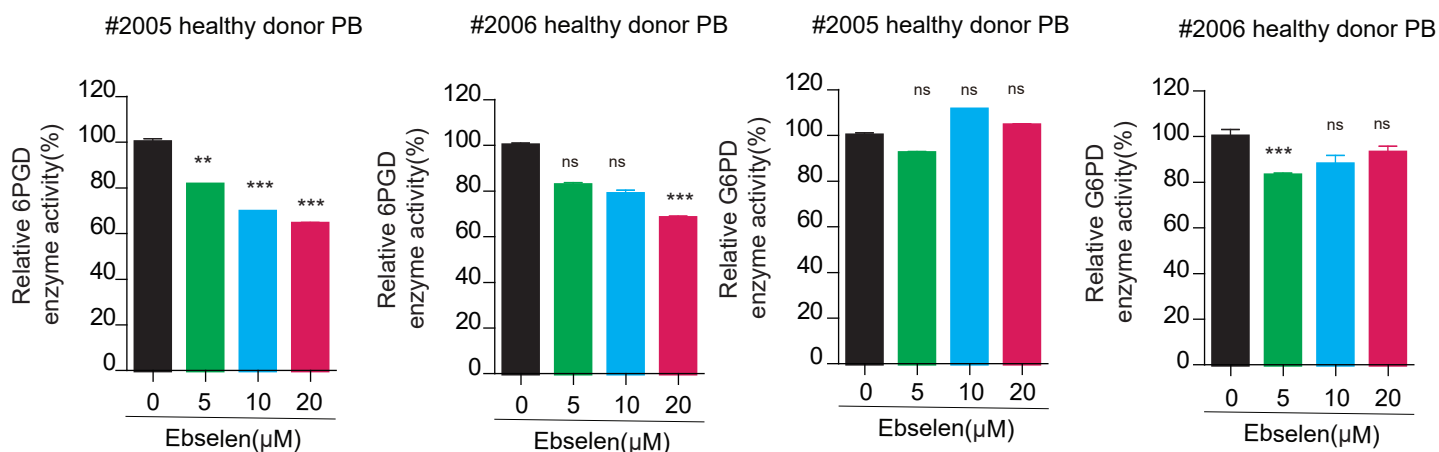


Figure S2

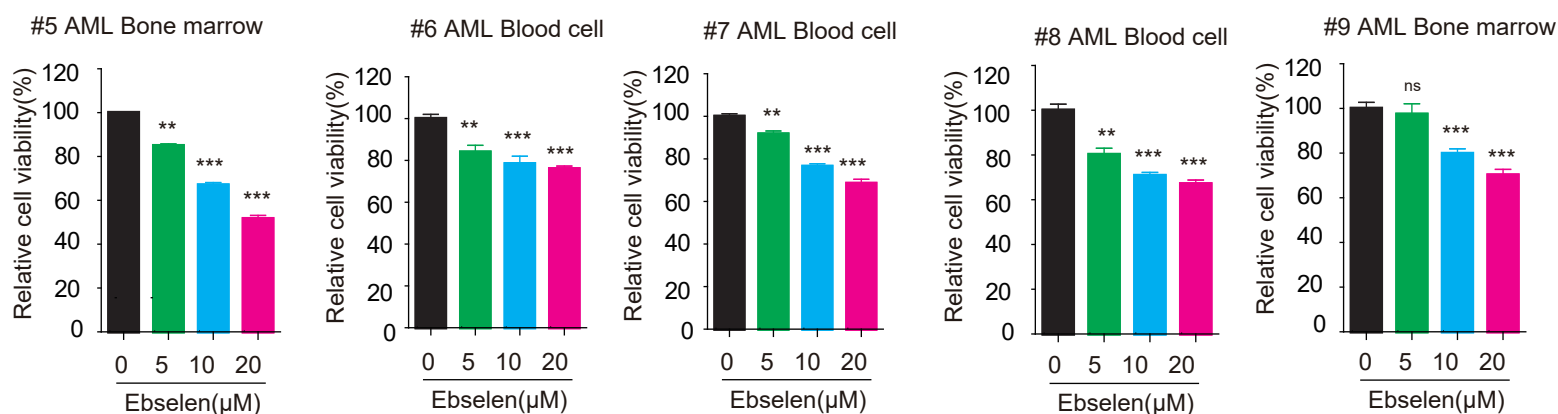


A

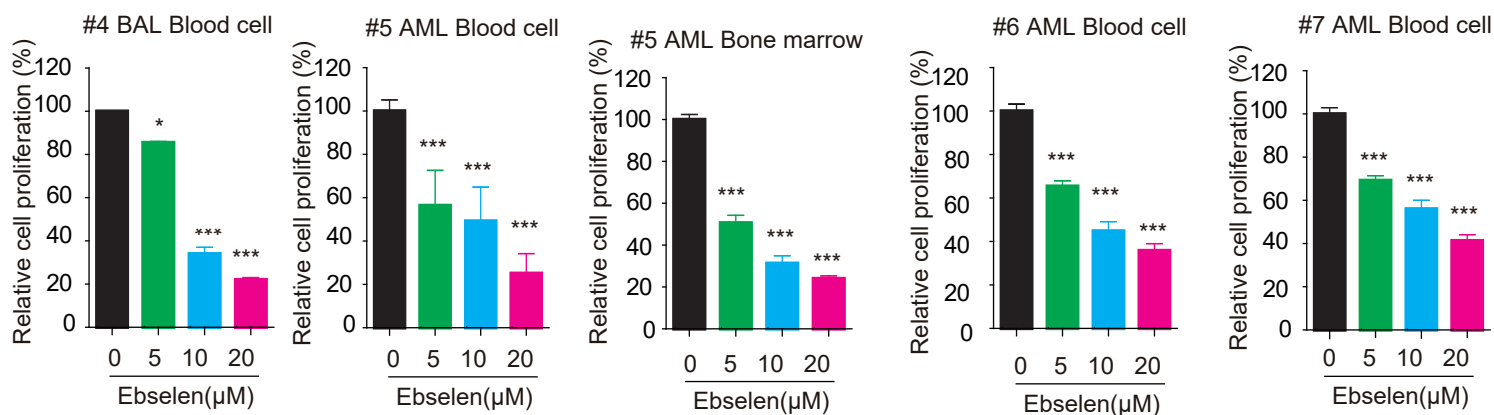


B

C



D



Supplementary Figure S1 Identification of Ebselen as 6PGD inhibitor and inhibits cancer growth. (A) H1299 and MDA-MB-231 6PGD knockdown cells followed by cell proliferation assay based on cell numbers in the presence of Ebselen. (B) Ebselen-treated normal liver and liver cancer cell for were assayed for cell viability. (C) Ebselen-treated normal lung and lung cancer cell for were assayed for cell viability. (D) Ebselen-treated breast cancer cell for were assayed for cell viability. The data represent mean values \pm SD from three independent experiments (* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$).

Figure S2 Ebselen regulates cancer cell metabolism. (A) BEAS-2B cells were assayed for NADPH/NADP⁺ ratio (A) and lactate production (B) in the presence and absence of Ebselen. (C) 6PGD protein levels was determined by western blotting in 6PGD knockdown and control H1299 cells. (D) ROS levels was determined in 6PGD knockdown and control H1299 cells in the presence and absence of Ebselen. (E) ROS levels was determined in 6PGD knockdown and control BEAS-2B cells in the presence and absence of Ebselen. The data represent mean values \pm SD from three independent experiments (* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$).

Supplementary Figure S3 Ebselen inhibits leukemia patient cell survival. (A) Ebselen-treated cells from bone marrow samples from healthy donors were assayed for 6PGD activity. (B) Ebselen-treated cells from bone marrow samples from healthy donors were assayed for G6PD activity. (C) Ebselen-treated leukemia patient cells were assayed for cell viability. (D) Ebselen-treated leukemia patient cells were assayed for cell proliferation. The data represent mean values \pm SD from three independent experiments

(* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$).