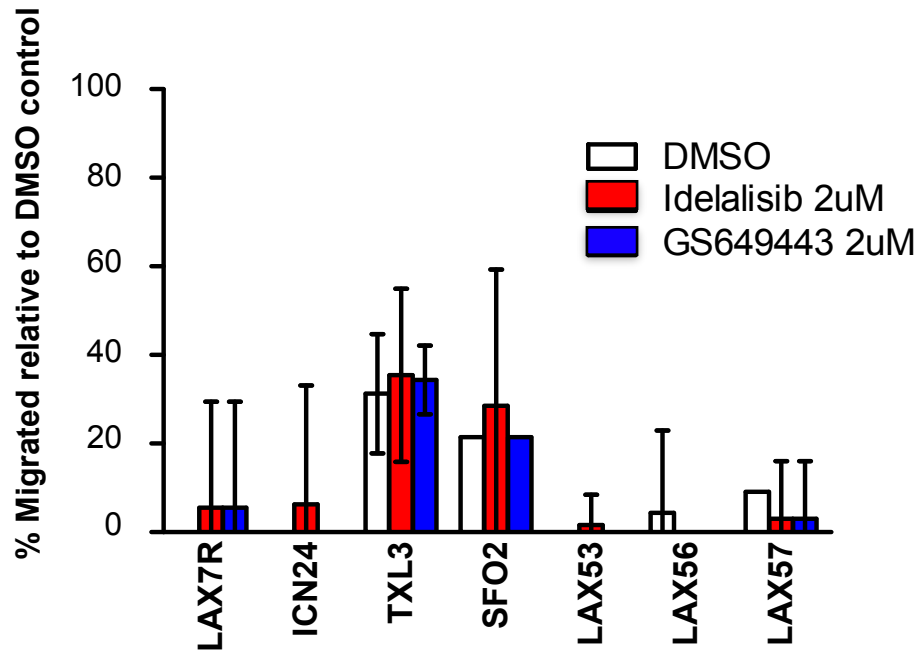


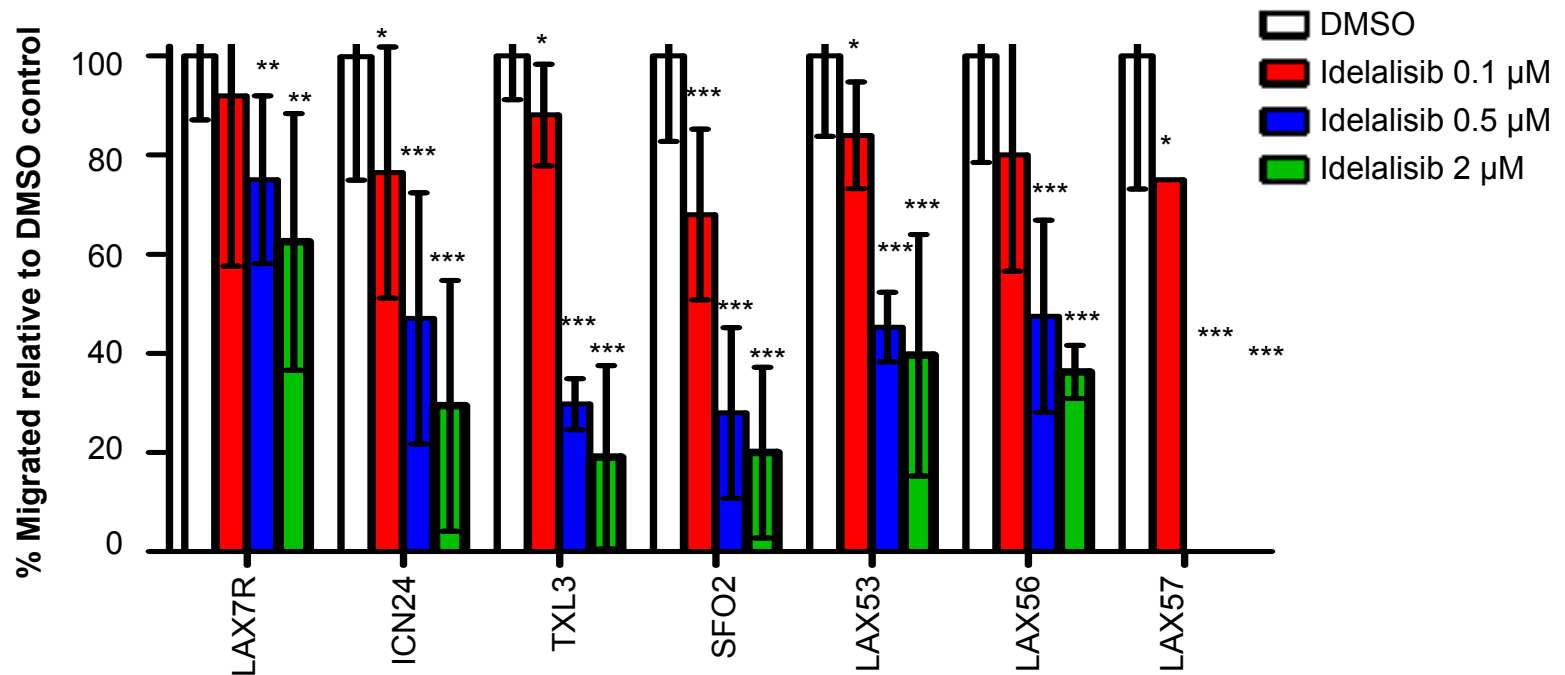
Supplementary Table S1: Characteristics of Human ALL cells

Human leukemia ID	Immuno-phenotype	Sample type	Cytogenetics
LAX7	Pre B ALL	Diagnosis	Normal
LAX7R	Pre B ALL	Relapse of LAX7	KRASG12V
ICN24	Pre B ALL	Diagnosis	Unknown
LAX53	Pre B ALL	Diagnosis	Unknown
LAX56	Pre B ALL	Relapse	t(Y;7)(p1.3;p13)
LAX57	Pre B ALL	Diagnosis	t(1;9)(q44;p22)
TXL3	Pre B ALL	Diagnosis	BCR-ABL1 p210
SFO2	Pre B ALL	Relapse	BCR-ABL1 p210
ICN12	Pre B ALL	Diagnosis	E2A-PBX1
ICN13	Pro B ALL	Diagnosis	MLL-AF4 t(4;11)(q21;q23)
BEL-1	Pro B ALL	Diagnosis	MLL-AF4 t(4;11)(q21;q23)
RS4;11	Pro B ALL	Diagnosis	MLL-AF4 t(4;11)(q21;q23)
Kasumi-2	Pre B ALL	Diagnosis	E2A-PBX1

S1. ALL cells migrate less to medium control than to SDF-1 α and this migration is unaffected by PI3K δ inhibitors. Transwell migration assay of ALL cells treated with a PI3K δ inhibitor compared to DMSO control, all without a chemoattractant. This experiment was run in parallel to the one with SDF-1 α and serves as a control – the percentages graphed are all relative to the DMSO control migration towards SDF-1 α from Figure 4. Mean of triplicates \pm 95% CI. There is no significant difference in migration using this assay between treated and untreated samples for ALL cells without SDF-1 α .



S2. Treatment with PI3Kδ inhibitors idelalisib decreases migration toward SDF-1α (200ng/ml). Transwell migration assay of ALL cells towards SDF-1α (200ng/ml) comparing cells treated with different doses of idelalisib (0.1 μM, 0.5 μM and 2 μM) to DMSO control. Mean of triplicates +/- 95% CI. All samples treated with 0.5μM and 2μM idelalisib show significant decrease in migration compared to untreated samples (*= p<0.05, **=p<0.001, ***=p<0.005).



S3. Effect of Idelalisib on proliferation of ALL cells alone and in combination with different concentrations of Vincristine. Mean of 3 counts under trypan blue exclusion is graphed +/- SD for days 3 and 5, day 0 is plotted based on amount of cells first plated. 3 different doses of Vincristine (VCR) (0.5, 1 and 5 nM) were tested. Idelalisib (Idela) concentration is 2µM in all instances below where it is used. Also inset is a table of p-values from t-test comparisons of results of different conditions at Day 5. P-values >0.05 are listed as not significant (N/ S).

