

Table S1: Summary of available information on CML patients samples utilized in this study

Patient	Age / Sex	Classification	BCR-ABL1 mutation	Cytogenetics (% Ph+)	FISH (% Ph+)	BCR-ABL1 transcripts (%)	Additional karyotypic abnormalities	Prior ABL1 TKI therapy
CML-01	53 y.o. / M	CML myeloid blast crisis	None	100%	74%	200%	+8, +8, i(17),+del(22)t(9;22)	imatinib, dasatinib
CML-02	66 y.o. / M	CML myeloid blast crisis	T315I	100%	70%	44%	t(9;22;16)	imatinib, dasatinib, nilotinib
CML-03	57 y.o. / M	CML, newly diagnosed	None	100%	98%	150%		None
CML-04	30 y.o. / N/A	CML, newly diagnosed	None	N/A	N/A	N/A		None
CML-05	49 y.o. / N/A	CML, newly diagnosed	None	N/A	N/A	N/A		None
CML-06	N/A	CML, newly diagnosed	N/A	N/A	N/A	N/A		None
CML-07	73 y.o. / M	CML lymphoid blast crisis	T315I	95%	N/A	N/A		nilotinib
CML-08	55 y.o. / M	CML	N/A	N/A	N/A	N/A		imatinib

Table S2: Summary of available information on AML patient samples utilized in this study

Patient	Age / Sex	Classification	FAB	Cytogenetics	Known fusions/mutations
AML-01	46 y.o. / F	AML	NOS	del(X), inv(16)(p13;q22), +22	CBFB-MYH11
AML-02	80 y.o. / F	AML transformed from MDS	M4	t(3;12)(p23;q24)	
AML-03	64 y.o. / F	AML	M2	N/A	
AML-04	61 y.o. / F	AML, relapsed	NOS	Normal	FLT3-ITD, NPM1 insertion
AML-05	71 y.o. / M	AML	M5	+8, t(9;11)(p22;q23)	
AML-06	N/A	AML, relapsed	NOS	N/A	FLT3-ITD (D385T)
AML-07	57 y.o. /M	AML transformed from MDS		45~46,XY,+1,add(1)(p13),del(6)(q21q23),add(7)(p13),add(7)(p15),-22[cp15]/46,XY,del(7)(q22q32)[cp5]	
AML-08	67 y.o. / M	AML transformed from aCML/MDS	NOS	Normal	
AML-09	60 y.o. / M	AML	M1	del(17)(p13)	FLT3-ITD