Supplementary Table 2

Compound Name	Known Protein Target	Relevance to AML therapy	Class	General group
Azacitidine	DNA methyltransferase	in clinic	HMAs	epigenetic modifiers
Valproic acid	HDAC histon deacetylase	phase II	HDAC inhibitor	epigenetic modifiers
Tretinoin	retinoic acid receptor	in clinic	Differentiation	Other
Navitoclax	bcl2, bcl-xl, bcl-w	preclinical	bcl2 inhibitors	apoptotic
ABT 737	bcl2, bcl-xl, bcl-w	preclinical	bcl2 inhibitors	apoptotic
Selumetinib	MEK1/2	phase II	MEK inhibitor	MEK inhibitor
Dactolisib	mTOR/PI3K	preclinical	mTOR/PI3K inhibitor	Signaling inhibitors
Palbociclib	CDK6	preclinical	CDK4/6 inhibitor	Cell cycle inhibitor
Dasatinib	bcr-abl, src, c-kit	phase III	Kinase inhibitor	Kinase inhibitors
Lenalidomide	unclear	phase II	Other	Other
Barasertib	Aurora B	phase I	Aurora B inhibitor	Cell cycle inhibitors
Rigosertib	ras mimetics	phase I/II	PLK inhibitor	Signaling inhibitors
Vismodegib	SMO	preclinical	PLK inhibitor	Signaling inhibitors
Quizartinib	flt3, c-KIT, PDGFR	phase III	FLT3 inhibitor	Kinase inhibitors
SGI-1776	pim kinase	preclinical	FLT3 inhibitor	Kinase inhibitors
BKM120	PI3K	preclinical	PI3K inhibitor	Signaling inhibitors
Trametinib	mek1/2	ras mutated preclinical	MEK inhibitor	MEK inhibitor
INK 128	mTORC1/2	preclinical	mTOR inhibitor	Signaling inhibitors
Crenolanib	Flt3, PDGFRα/ß	flt3 mutated	Flt3 inhibitor	Kinase inhibitors
Venetoclax	BCL2, bcl-xl, bcl w	in clinic	bcl2 inhibitors	apoptotic
Panobinostat	HDAC	combination with HMA phase I/II	HDAC inhibitors	epigenetic modifiers
OTX015	Bromodomain and extraterminal (BET) proteins	phase I	BET inhibitor	epigenetic modifiers
AZD1208	pan pim kinase	preclinical	PIM kinase inhibitor	Kinase inhibitors
JQ1	Bet protein bromodomain	preclinical	BET inhibitor	epigenetic modifiers

Selinexor	XPO1	phase I	XPO1 inhibitor	
PTC-209	BMI1	preclinical	BMI1 inhibitor	epigenetic modifiers
Bortezomib	proteosome	phase II	Proteosome inhibitor	Proteosome inhibitor
Carfilzomib	proteosome	preclinical	Proteosome inhibitor	Proteosome inhibitor
Cytarabine	cytosine deoxyribose	in clinic	antimetabolites	chemotherapy
Clofarabine	purine nucleoside analogue	phase II	Purine analogue	chemotherapy
Decitabine	deoxynucleoside analogue of cytidine HMA	in clinic	HMAs	epigenetic modifiers
Fludarabine	purine analog	in clinical	Purine analogue	chemotherapy
Ruxolitinib	JAK1/2	phase II	JAK1/2 inhibitor	Kinase inhibitors
Etoposide	Topoisomerase II	in clinic	Topoisomerase II inhibitor	chemotherapy
Temsirolimus	mTOR	phase I	mTOR inhibitor	Signaling inhibitors
Everolimus	mTOR	phase Ib	mTOR inhibitor	Signaling inhibitors
Cladribine	purine analogue	phase II	Purine analogue	chemotherapy
Volasertib	Polo-like kinase 1	Phase III	PLK1 antagonist	Cell cycle inhibitor
LSD1	lysine specific demethylase 1(LSD-1)	preclinical	LSD1 inhibitor	epigenetic modifiers
PU-H71	HSP90	preclinical		
Pinometostat	histone 3 lysine 79 (H3K79) methyltransferase DOT1L	MLL, DNMT3A mutant	DOT1L inhibitor	epigenetic modifiers
G-749	flt3	FLT3 mutation	FLT3 inhibitor	Kinase inhibitors
Pexidartinib	CSF1R, kit,flt3	FLT3 mutation	FLT3 inhibitor	Kinase inhibitors
RG7112	MDM2 antagonist	phase II	MDM2 antagonist	Cell cycle inhibitor
Midostaurin	Flt3, c-KIT, PKC, PDGFR, VEGFR	in clinic	FLT3 inhibitor	Kinase inhibitors
Ivosidenib	mutated isocitrate dehydrogenase type 1 (IDH1)	differentiation in IDH1 mutated	IDH1 inhibitor	epigenetic modifiers