

Supplementary Material

Energy Metabolism and Drug Response in Myeloid Leukaemic Stem Cells

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Acute myeloid leukaemia (AML), Myelodysplastic syndrome (MDS)

Table SI. Published anti-LSC clinical trials targeting cell surface molecules

LSC Targets	Agent(s)	Disease(s)	Trial Identifier	References
<i>Cell Surface Molecules</i>				
CD123	CSL360	AML	NCT00401739	He et al. 2015
	SGN-CD123A	AML	NCT02848248	Li et al. 2018
CD33	Vadastuximab	AML	NCT01902329	Stein et al. 2018
			NCT02326584	Fathi et al. 2018 Erba et al. 2016
	CAR-T cells	AML	NCT01864902	Wang et al. 2015
	Gemtuzumab ozogamicin	AML	NCT01407757	Vujkovic et al. 2017
			NCT00909168	Candoni et al. 2018 Gottardi et al. 2017 Iacobucci et al. 2013
	Lintuzumab (HuM195)	AML, MDS	NCT00672165	Jurcic et al. 2013
NCT00038051			Borthakur et al. 2013	
NCT00014495			Rosenblat et al. 2010	
NCT00283114			Raza et al. 2009	
CD44	RG7356	AML	NCT00528333	Sekeres et al. 2013
			NCT01641250	Vey et al. 2016
CXCR4/CXCL12	Plerixafor (AMD3100)	AML	NCT00512252	Uy et al. 2012
		AML	NCT00906945	Uy et al. 2017
		AML, MDS	NCT01319864	Cooper et al. 2017
		AML	NCT01435343	Martinez-Cuadron et al. 2018
		AML	NCT01352650	Allan et al. 2018

AML, acute myeloid leukaemia; CAR-T cells, chimeric antigen receptor-T cells; CD, cluster of differentiation; CML, chronic myeloid leukaemia; CMML, chronic myelomonocytic leukaemia; CXCR4/CXCL12, chemokine receptor type 4 / chemokine ligand 12; LSC, leukaemic stem cell; MDS, myelodysplastic syndrome.

Table SII. Published anti-LSC clinical trials targeting cell signaling and metabolism

LSC Targets	Agent(s)	Disease(s)	Trial Identifier	References
<i>Cell Signaling Molecules</i>				
PI3K/AKT	Perifosine, UCN-01	CML, AML, MDS	NCT00301938	Gojo et al. 2013
	MK-2206	AML	NCT01253447	Konopleva et al. 2014
	Buparlisib (BKM120)	AML	NCT01396499	Ragon et al. 2017
NF- κ B	Bortezomib	AML, MDS	NCT00580242	Attar et al. 2013
			NCT00666588	Horton et al. 2014
			NCT01174888	Walker et al. 2016
			NCT01371981	Hanley et al. 2017
Sonic Hedgehog	Glasdegib (PF-04449913)	AML, MDS	NCT01546038	Savona et al. 2018 Cortes et al. 2018 (1) Cortes et al. 2018 (2)
<i>Cellular Metabolism</i>				
BCL-2	Venetoclax	AML, MDS	NCT02287233	DiNardo et al. 2017
		AML	NCT02203773	DiNardo et al. 2018
IDH1	AG120	AML	NCT02074839	Birendra et al. 2016 DiNardo et al. 2018
IDH2	Enasidenib (AG221)	AML, MDS	NCT01915498	Stein et al. 2017 Fathi et al. 2018 Stein et al. 2019 Pollyea et al. 2019
<i>Histone Modifiers</i>				
DOT1-L	Pinometostat (EPZ-5676)	AML, MDS	NCT01684150	Stein et al. 2018

AML, acute myeloid leukaemia; BCL-2, B-cell lymphoma 2; CML, chronic myeloid leukaemia; IDH, isocitrate dehydrogenase; DOT1-L, disruptor of telomeric silencing 1-like; LSC, leukaemic stem cell; MDS, myelodysplastic syndrome; NF κ B, nuclear factor kappa B; PI3K/AKT, phosphoinositide 3-kinase/alpha threonine-protein kinase.