

Model List _Humanized Model

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Model List_1ST Generation Humanized Model

No.	Cell Line	Cancer Type	Growth Curve	PD-L1 Expression (LOG2 FPKM)	TILs	Efficacy (TGI%)
1	HCC1954	Breast, Ductal carcinoma	√	3.2145	/	PD-1(15.5%), Herceptin(43%), Bi-specific (Her/SIRPa)
2	JIMT-1	Breast, Ductal carcinoma	√	4.5996	√	Opdivo (42%), Herceptin(58%),
3	T47D	Breast, Ductal carcinoma	Failed	-2	/	/
4	MDA-MB-231	Breast, TNBC	√	/	√	艾瑞卡PD-1, 派格宾单用, 派格宾放疗联用, /PD-L1+ IFN-a, IFN-a + radiotherapy (ongoing), TGF-β+PD-1
5	Raji	Burkitt's Lymphoma	√	-0.4520	√	Bi-specific(CD3+CD19)
6	COLO320	Colon	√	-2	/	/
7	HCT-116	Colon	√	0.3781	/	/
8	HT-29	Colon	√	-1.7269	/	/
9	ECA-109	Esophageal squamous carcinoma	√	/	/	Oncolytic virus (ongoing)
10	MKN-45	Gastric, adenocarcinoma	√	-2	/	Unknown
11	NCI-N87	Gastric, Adenocarcinoma	√	1.0132	/	Bi-specific(CD3+HER2)
12	NUGC-4	Gastric, Adenocarcinoma	√	-1.0319	√	PD-1
13	U87MG (luc)	Glioma	√	2.5741	/	PD-1(54%), PD-1+VEGF(Bi-specific), LAG3
14	THP-1-luc	Leukemia, monocytic leukemia	√	-1.7919	/	/
15	MV-4-11	Leukemia, AML	√	-2	/	Bi-specific(CD123+CD19)
16	Nalm-6	Leukemia, AML	√	1.1897	/	/
17	Hep3B	Liver, HCC	√	-2	√	PD-1, Oncolytic virus (40%)

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Model List_1ST Generation Humanized Model

No.	Cell Line	Cancer Type	Growth Curve	PD-L1 Expression (LOG2 FPKM)	TILs	Efficacy (TGI%)
18	NCI-H596	Lung	√	2.3837	/	
19	A549	Lung, NSCLC	√	0.9758	/	PD-1(14.4%), PD-1+TIM3 (14.1%),
20	HCC827	Lung, NSCLC	√	4.2192	√	PD-1(46%), PD-L1(63%), PD-1+EGFR, PD-L1+VEGF(Bi-specific), Oncolytic virus(73%); 4-1BB (25%), TGF-β
21	NCI-H1975	Lung, NSCLC	√	3.2313	/	Unknown
22	NCI-H446	Lung, SCLC	√	-2	√	PD-1(20%)
23	NCI-H82	Lung, SCLC	√	-1.4557	/	/
24	SHP-77	Lung, SCLC	√	-0.0124	/	/
25	A-375	Melanoma	√	1.4749	/	/
26	GAK	Melanoma	ongoing	/	Ongoing	Ongoing
27	SK-MEL-5	Melanoma	√	-0.3419	/	PD-1(13%)
28	RPMI8226	Multiple myeloma	√	1.9023	/	Bi-specific(CD3+BCMA; CD3+CD20)
29	OV-CAR-3	Ovary	ongoing	-2		
30	ES-2	Ovary	√	4.5130	Ongoing	PD-1 (Ongoing)
31	OV-90	Ovary	Failed	/	/	/
32	BxPC-3	Pancreas, PDAC	√	1.8984	√	PD-1(49%)

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Model List_2nd Generation Humanized Mice

Cell Line	Cancer Type
MDA-MB-231	Breast, Ductal carcinoma
MDA-MB-436	Breast, Ductal carcinoma
HT-29	Colon
A549	Lung, NSCLC
A375	Melanoma
JIMT-1	Breast, Ductal carcinoma
HCC827	Lung, NSCLC

Model List_hPBMC Humanized Model

No.	Cell Line	Cancer Type	TILs	Positive Control
1	HT-1376	Bladder carcinoma	√	/
2	MDA-MB-231/luc	Breast adenocarcinoma, TNBC	√	Tecentriq
3	HT-29	Colon adenocarcinoma	√	Opdivo
4	SKGT4	Esophageal adenocarcinoma	√	/
5	KYSE-510	Esophageal squamous cell carcinoma	√	/
6	NCI-H929	Multiple myeloma	√	/
7	Raji	Burkitt Lymphoma		
8	WSU-DLCL2	Diffuse large B-cell Lymphoma	/	Keytruda
9	A375	Amelanotic melanoma	√	Keytruda, Tecentriq
10	SK-MEL-28	Cutaneous melanoma		
11	RPMI-8226	Multiple myeloma	/	
12	NCI-H292	Lung mucoepidermoid carcinoma	√	
13	ES-2	Ovarian clear cell adenocarcinoma	√	
14	BxPC-3	Pancreatic ductal adenocarcinoma	√	Tecentriq
15	PANC-1	Pancreatic ductal adenocarcinoma	/	/
16	22RV1	Prostate carcinoma	/	/

Comparison of 1st and 2nd Generation of HIS Mice

	2 nd Generation Humanized Mice	1 st Generation Humanized Mice	
HIS Mouse model	HSC-NOG-EXL	HSC-NOG	hPBMC-NOG
Mouse stain	NOG-EXL	NOG/NPG/NCG	
Source of human immune cells	Human umbilical cord blood		Peripheral blood mononuclear cells
Injection routes	i.v.		i.v.; i.p.; admix
Preconditioning	Sublethal γ -irradiation		None
Study window	> 26 weeks	> 40 weeks	4-6 weeks
Immune reconstitution (cell subtypes)	T. B. moderate NK & Myeloid cells; T cell mature in a mouse thymus	T. B. low levels NK & Myeloid cells; T cell mature in a mouse thymus	Predominantly mature T cell engraftment, with activated phenotype; minimal myeloid & NK cells
Major applications	Suitable for T cell & some myeloid-engaging therapeutics	Suitable for T -engaging therapeutics	Suitable for T -engaging therapeutics

Thanks!

