

Table 1. Targeted Toxins directed against CSC markers currently under investigation.

Target	Name	Toxin	Cancer	Phase of Development	Reference
IL3	DT ₃₈₈ IL3	Diphtheria Toxin	AML	Phase I	[9]
CD123	26292(Fv)-PE38-KDEL	Pseudomonas Exotoxin A	AML	Preclinical	[10]
CD44	Bivatusumab Mertansine	Maytansine Derivative	HNSCC	Phase I	[16,17]
EpCAM	chiHEA125-Ama	α -Amanitin	Pancreas	Preclinical	[24]
EpCAM	Ec4-ETA	Pseudomonas Exotoxin A	Colon	Preclinical	[26]
EpCAM	Opportuzumab Monatox	Pseudomonas Exotoxin A	Bladder HNSCC	Phase II Phase I	[27,28] [29]
EpCAM	VB6-845	deBouganin	Breast	Preclinical	[30]
EpCAM/Her2	DTEpCAM23	Diphtheria Toxin	Colon	Preclinical	[23]
CD133	CdtA ^{C149A, C178A} BC-CD133MAb	Cytolethal Distending Toxin	HNSCC	Preclinical	[35]
CD133	dCD133KDEL	Deimmunized Pseudomonas Exotoxin A	HNSCC Breast	Preclinical Preclinical	[36] [38]

Notes: Several laboratories are now investigating a range of different approaches and toxins targeting cancer stem cell associated markers. In several of the preclinical studies, more than one cancer type was investigated.

Table 2. A summary of the cancer and model types used to date by our group in evaluating the efficacy of dCD133KDEL.

Cell Line	Cancer Type	Model Type	Response Obtained	Reference
UMSCC-11B	HNSCC	Flank	Regression	[36]
MDA-MB-231	Breast	Systemic	Partial Regression	[38]
OVCAR-5	Ovarian	Interperitoneal	Regression	Unpublished Data

Notes: Our group has published independent reports using 3 different xenograft models to assess the efficacy of dCD133KDEL in immunodeficient mice.