Companies Involved in Neoantigen Therapy Development

BACK BAY LIFE SCIENCE ADVISORS

COMPANY	EXAMPLE ASSET(S)	HIGHEST PHASE OF DEVELOPMENT	TUMOR TYPES	PUBLIC/ PERSONAL	TECHNOLOGY DESCRIPTION
Aduro	pLADD	Phase 1	CRC	Personal	Attenuated Listeria platform to prime; neoantigen discovery platform in-licensed from Stanford
Advaxis	ADXS-NEO, ADXS-HOT	Preclinical	NA	Both	Listeria-based priming vector to prime CD4/CD8s; research collaboration with MSKCC for neoantigen identification
Agenus	AutoSynVax	Phase 1	Multiple Solid Tumors	Both	Proprietary adjuvant administered with vaccines that can be either private or public neoantigens
Argos	Rocapuldencel-T (AGS-003)	Phase 3	mRCC	Personal	DCs transfected with RNA isolated from the patient tumor
BioNTech	Multiple: IVAC mutanome, et al	Phase 1	Cutaneaous Melanoma, TNBC	Both	Predictive technologies combined with mRNA vaccine
Bright Path	GRN-1301	Preclinical	NA	Public	Peptide vaccine targeting the T790M mutation
CureVac	Preclinical collaboration w/Eli Lilly	Preclinical	NA	TBD	mRNA-based therapy
Evaxion	Pioneer platform	Preclinical	NA	Personalized	AI approach to neoantigen identification development
GENEOS	no lead yet	Preclinical	NA	Personalized	Spinoff from Inovio using DNA-based personalized vaccines
Genocea	GEN-009	Preclinical	NA	Personal	Personalized peptide- and adjuvant-based vaccine
GlobeImmune	Gi-400	Phase 2	Pancreatic Cancer	Public	S. cerevisiae yeast expressing mutant RAS epitopes
Gradalis	Vigil	Phase 1	Ewing's sarcoma	Personal	Gene-modified autologous tumor cell vaccine
Gritstone	TBD	Preclinical	NA	Personal	Individualized vaccine based on predictive bioinformatics platform, vaccine based on lipid nanoparticle- delivered RNA vaccines
Heat	Viagenpumatucel-L	Phase 2	NSCLC	Public	Tumor cell vaccines modified to secrete gp96
Immatics	IMA201	Phase 1	NSCLC- SCCHN	Public	Proprietary target database combined with ACT capabilities, also products focusing on autologous T cells with engineered TCRs
Immunovative	HSP vaccine	Phase 2	HCC, SCCHN	Personal	T-cell infusion with chaperone-enriched tumor lysate
Iovance	LN-144-01, LN-145-03, & others	Phase 2	Melanoma, SCCHN, Cervical	Both	Polyclonal autologous T-cell infusion
ISA	MyISA	Preclinical	NA	Personal	Personalized synthetic long peptides
MedImmune	R&D stage	Preclinical	NA	TBD	Research collaboration with University of Washington for personalized neoantigen vaccines
Moderna	mRNA-4157	Phase 1	Multiple Solid Tumors	Personal	Bioinformatics-based predictive capabilities and mRNA vaccine technology
Neon	NEO-PV-01, NEO-PTC-01, NEO antigen select	Phase 1	Melanoma, NSCLC, Bladder	Both	Individualized vaccine based on predictive bioinformatics platform; priming technology spans traditional vaccines and cell therapies
NexImmune	TBD	Preclinical	NA	Personal	Nanoparticle-based artificial Antigen Presenting Cells (aAPC) to produce T-cell products
Nouscom	NOUS-209/NOUS-100	Preclinical	NA	Personal	Virus-based approach
ORYX	Vaccine MSI	Phase 2	MSI-H CRC	Public	Frameshift mutation peptides delivered via Viral vector
OSE	Tedopi	Phase 3	NSCLC	Public	Tedopi undisclosed antigen—appears to be public
Persimmune	PACTN	Phase 1	MDS	Personal	Autologous T-cell vaccine
Stemirna	mRNA vaccine	Phase 1	Esophageal	Personal	Personalized mRNA tumor vaccine
Targovax	TG01; TG02	Phase 2	Pancreatic Cancer, CRC	Public	Peptide-based vaccine targeting RAS mutations
Vaccibody	VB10.Neo	Preclinical	NA	Personal	DNA-based module including antigen and targeting moiety
Vaximm	VXM-NEO	Preclincial	NA	Public	Defined antigens combined with vaccine technology based on Salmonella typhi vector
Vaxon	VX001	Phase 2	NSCLC	Public	Cryptic peptides targeting hTERT
ZIOPHARM	Sleeping Beauty TCR Program	Preclinical	NA	Personal	Neoantigen TCR-based approach; collaboration with NCI