

Immatics and Adaptimmune show that T-cell receptor deals aren't dead



[Amy Brown](#)

Two deals in as many days featuring engineered T-cell receptors (TCRs) show that interest in this approach is alive and well, with companies able to command respectable sums for a technology that has yet to deliver any notable clinical breakthroughs. [Immatics announced today](#) that Celgene had handed over \$75m up front for options over three research projects; the targets were not disclosed, though solid tumours are the focus. Celgene's cell therapy focus, via its Juno acquisition, has mainly been on CAR-T, though it has one TCR project in the clinic; Bristol-Myers Squibb has said that a key reason why it wanted to buy Celgene was to gain a foothold in cell therapy, and the big pharma group has presumably signed off on this transaction, though Immatics declined to confirm that. Yesterday, the UK's [Adaptimmune unveiled a collaboration with Noile-Immune Biotech](#) to develop TCRs that co-express IL-7 and CCL19, also aiming at solid tumours; the deal is worth up to \$312m to the Japanese company. Adaptimmune is arguably one of the leaders in this field, but its work has been [blighted by patient deaths](#); perhaps this deal is an acknowledgement that its technology needs a tweak.

Selected engineered TCR projects

Company/group	Project	Target	Status	Trial ID
Adaptimmune	MAGE-A10 TCR	MAGE A10 (deprioritised Aug 2019)	Phase I	NCT02592577
	MAGE-A4 TCR	MAGE A4 (linked to one patient death)	Phase I	NCT03132922
	AFP TCR	Alpha-fetoprotein	Phase I	NCT03132792
Gilead	KITE-718	MAGE A3/A6	Phase I	NCT03139370
	KITE-439	HPV-16 E7	Phase I	NCT02858310
	KRAS TCR	G12V variant of mutated RAS	Phase I	NCT03190941
	SSX2 TCR	SSX2	Preclinical	NA
NCI (NIH)	HPV-16 E6 TCR	HPV-16 E6	Phase I	NCT03197025
	MAGE A3 TCR	MAGE A3	Phase I	NCT02153905
Glaxosmithkline	GSK3377794*	NY-ESO-1	Phase I	NCT02992743
	PRAME TCR	PRAME	Preclinical	NA
Celgene	JTCR016	WT-1	Phase I	NCT02408016
Bellicum	BPX-701	PRAME (rimiducid-activated suicide switch)	Phase I	NCT02743611
Cell Medica	CMD-602	WT-1	Phase I	NCT02550535
	CMD-601	Survivin	Preclinical	NA
Tmunity	NYCE T cells	NY-ESO-1 (Crispr-edited, TCR-deleted, PD-1-deleted)	Phase I	NCT03399448
	H3.3K27M TCR	H3.3K27M	Preclinical	NA
Immatics	IMA201	Undisclosed	Phase I	NCT03247309
	IMA202	Undisclosed	Phase I	NCT03441100
Medigene	MDG1011	PRAME	Phase I	NCT03503968
	TCR-IIT	MAGE A1	Preclinical	NA
Medigene/Bluebird	None	Six undisclosed targets	Preclinical	NA
Regeneron/Adicet Bio	None	Undisclosed targets for allogeneic use	Preclinical	NA
Regeneron/Bluebird	None	Six undisclosed targets	Preclinical	NA
Zelluna	TCR-CRC-001	TGFβII	Preclinical	NCT03431311

*Licensed from Adaptimmune. Source: company filings & clinicaltrials.gov.

[More from Evaluate Vantage](#)

Evaluate HQ
44-(0)20-7377-0800

Evaluate Americas

+1-617-573-9450

Evaluate APAC
+81-(0)80-1164-4754

© Copyright 2022 Evaluate Ltd.