Evaluate Vantage

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It’s official: Roche is a Car-T player

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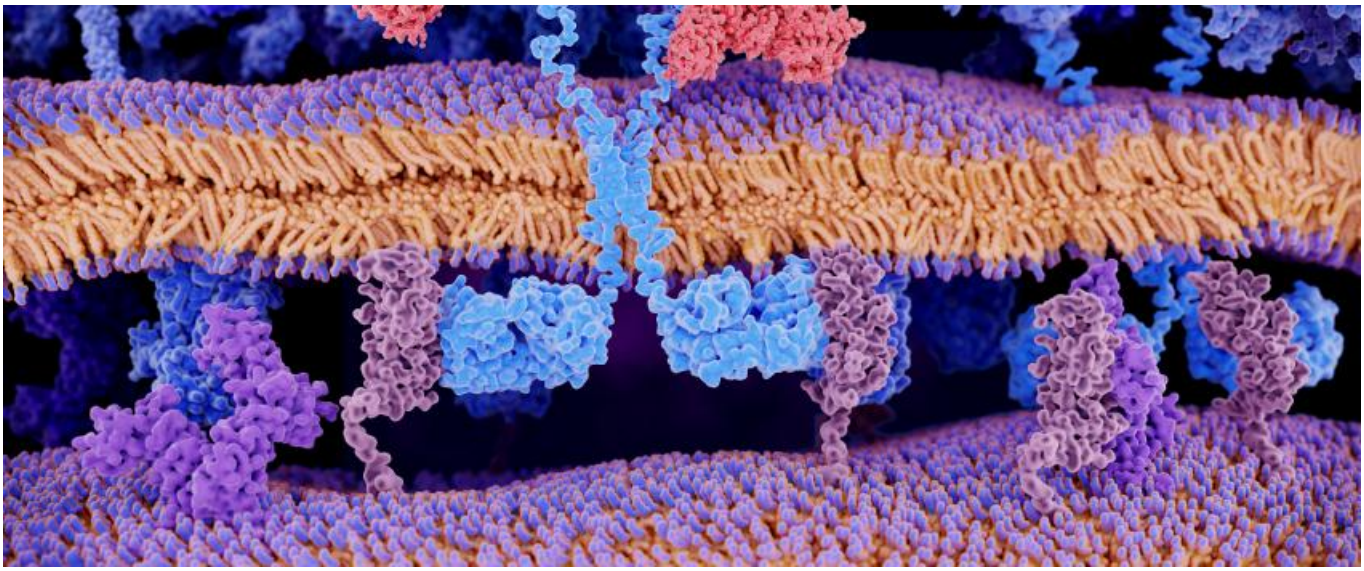

Asset prices fall sufficiently to persuade Roche to sign up to Poseida’s allogeneic cell therapies.

When in the middle of the last decade Car-T took off there was a major elephant in the room: Roche, the world’s biggest oncology player, was refusing to buy in. After the Swiss group handed $110m to Poseida today investors no longer need to fret about this problem.

Of course, behind the scenes Roche was understood to like cell therapy, and its biz dev teams had spent much time investigating assets, but prices proved to be a deal breaker. The fact that it took a biotech market crash for prices to fall enough for a deal to get done shows how overblown asset prices had been, and many might see in this another sign that the biotech bear market is bottoming out.

There was already evidence that Roche was no enemy of cell therapy – and that assets were becoming affordable – when the Swiss company struck a low-key oncology discovery collaboration with the engineered T cell specialist Adaptimmune last September. At the time Adaptimmune was 75% below its peak, and before today’s deal Poseida was about 85% off its own zenith.

Allo not auto

There is another common thread between the two deals, namely that they both concern off-the-shelf therapies.

A day after Gilead reported 68% sales growth of its Yescarta and Tecartus brands, to $368m in the second quarter, it is still anyone’s guess when cell therapy might become profitable; going allogeneic rather than autologous is seen by many as one answer to lowering cost of goods.

Specifically Roche is buying into Poseida’s blood cancer projects P-BCMA-ALLO1 and P-CD19CD20-ALLO1, and securing an option over P-CD70-ALLO1 and P-BCMACD19-ALLO1. This leaves Poseida free to work on the solid tumour targets Muc1C and PSMA, as well as any autologous Car-T therapies; a small gene therapy tie-up with Takeda also remains in play.

Poseida’s early claim to fame had been the use of artificial antigen-binding scaffolds, courtesy of a deal with Johnson & Johnson. And the roll call of big pharma players the biotech managed to attract included Novartis, which in 2019 led a private funding round that put off the need for Poseida to go public on Nasdaq.

But it is fair to say that, along with other biotechs, Poseida has at times struggled, for instance last year scrapping its autologous project P-BCMA-101 in the face of competition. Its current distinguishing features

include use of a stem cell memory T cells as a source, and gene editing via Cas-Clover (a derivative of Crispr-Cas9).

Poseida is also a proponent of non-viral gene transfer, using the Piggybac "jumping gene" system rather than, say, lentiviruses. Piggybac is related to Sleeping Beauty, the transposon tech with which Alaunos has struggled for years.

Poseida's Car-T pipeline			
Project	**Allogeneic?**	**Target**	**Detail**
P-PSMA-101	N	PSMA	Phase 1 showed ≥50% PSMA declines in 5/14 prostate cancer patients
P-MUC1C-ALLO1	Y	Muc1C	Phase 1 in solid tumours
P-BCMA-ALLO1	Y	BCMA	Phase 1; licensed to Roche
P-BCMA-101	N	BCMA	78% ORR in multiple myeloma (Rituxan combo); discontinued in favour of allo version
P-CD19CD20-ALLO1	Y	CD19 & CD20	Preclinical; licensed to Roche
P-BCMACD19-ALLO1	Y	BCMA & CD19	Preclinical; Roche has option rights
P-CD70-ALLO1	Y	CD70	Preclinical; Roche has option rights
P-PSMA-ALLO1	Y	PSMA	Preclinical
Source: company presentations & Asco-GU.			

In a sense the Roche deal, as well as giving Poseida yet more big pharma validation, shows that the future for many cell therapies lies in allogeneic use. However, backing for Poseida's work comes from a trial of the autologous project P-PSMA-101, and the company's allogeneic assets have yet to generate clinical data.

With Allogene, Crispr Therapeutics, Precision Biosciences, Caribou, Fate, Nkarta and Adicet all struggling to show that an allogeneic approach has long-term persistence, whether Roche has picked the right horse remains an open question. At least Poseida has not broken the bank.