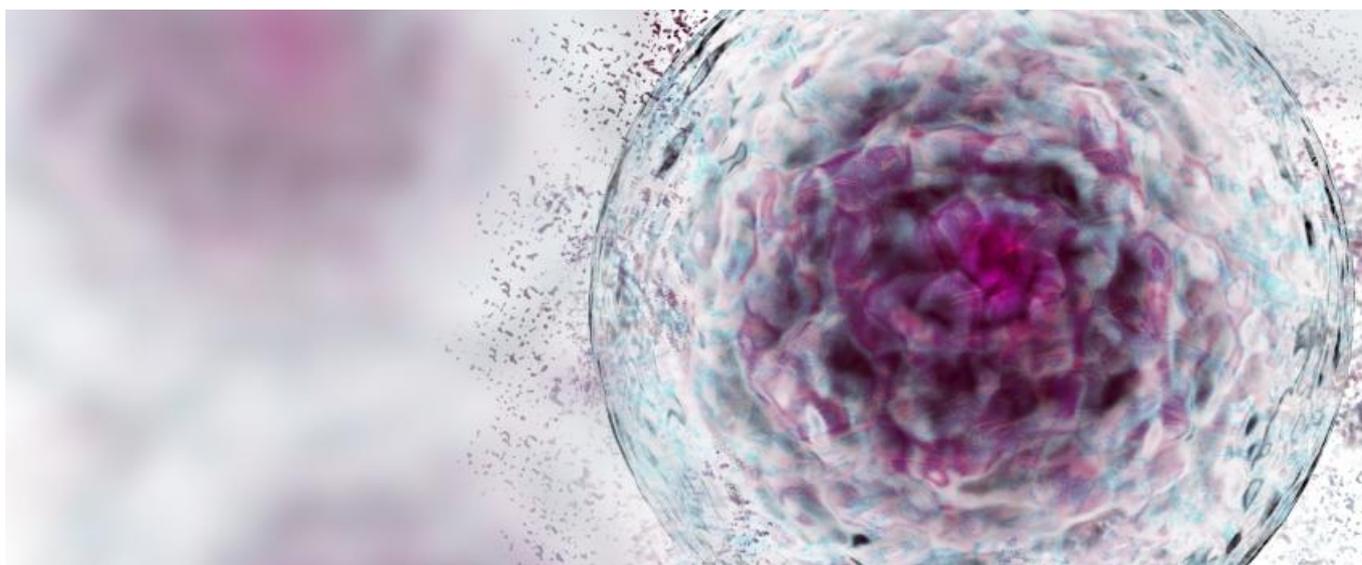


April 17, 2019

Kiadis moves to reduce reliance on its in-house lead



[Jacob Plieth](#)



Perhaps sensing trouble ahead Kiadis diversifies beyond ATIR101 by buying Cytosen, but it is a scientific appointment that will cause real excitement.

Given Molmed's problems in trying to sell Zalmoxis, a product for averting stem cell transplant complications, it is understandable that Kiadis should try to diversify beyond its competing offering, ATIR101. However, it is debatable whether Cytosen Therapeutics, which Kiadis bought this morning, holds the answer.

Cytosen is a specialist in natural killer (NK) cell therapeutics, an area that has promised much and delivered virtually nothing so far. Perhaps investors will be much more excited about the fact that, as part of the deal, the cell therapy pioneer Dr Carl June is joining the combined company's scientific advisory board.

Dr June and his colleagues at the University of Pennsylvania were the scientific originators of Novartis's Kymriah, the first CAR-T therapy to secure US approval. He does not appear to have been involved with Cytosen before, and will be seen as providing a strong endorsement of the combined company.

Coup

His appointment is quite a coup, given the documented problems of NK cell therapeutics. Ziopharm and Nantkwest are two groups that have talked up the potential of NK cells transduced to express CAR constructs, but they have stalled clinically.

One problem is NK cells' plasticity, meaning that their phenotype is relatively unstable and their function unpredictable; it is also debatable whether they can be frozen and thawed efficiently, making the prospect of commercial manufacturing very problematic.

Perhaps this is where Cytosen comes in: the group claims to have discovered and patented a method of using nanoparticle-bound 4-1BBL and IL-21 to stimulate and expand NK cells. This, it says, enables production at highly potent and therapeutically effective dosages.

Its lead asset using this technology is coded CSTD002, and is this year supposed to start phase II as a treatment for AML relapse in high-risk post-transplant patients. This is based on the results of [early clinical work carried out at MD Anderson Cancer Center](#).

Cytosen is a private, virtually operating company that was incorporated in Florida five years ago. Another advantage for Kiadis is that its acquisition will not cost it anything: the takeover is structured as an all-stock

move worth 1.94m Kiadis shares now, followed by up to 5.82m based on future milestones.

A valid question is why, if Cytosen's technology holds such promise, the company could not apparently raise the cash it needed from venture capitalists, thus remaining independent.

Diversification

Cytosen should provide a welcome diversification away from Kiadis's ATIR101, and on an investor call today Kiadis said it had been looking for an acquisition target for the past year.

ATIR101 is a procedure that allows stem cell transplantation to take place when only a haploidentical – half-matched – but not fully matched donor is available. It is awaiting EU approval, though the CHMP's decision on it [has been put back](#).

Particularly worrying is the precedent set by Molmed, whose Zalmonox has failed to generate significant sales since being launched for the same use, and this fact has also unnerved investors in Bellicum, whose EU filing for the Rivo-cel procedure has been delayed ([Is Molmed the canary in Bellicum and Kiadis's coalmine?, July 31, 2018](#)).

Kiadis will now have a chance to show that NK cells do, after all, have commercial potential. Among other NK cell players, Nantkwest has managed to start clinical trials of a product based on the [disputed NK-92 cell line](#), while clinical CAR-NK work is being advanced by MD Anderson and Chinese groups like Persongen and Allife Medical Science.

Nantkwest had promised to start clinical trials of CAR-NK cells targeting CD19 and Her2 in 2016, but its investors are still waiting.

[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.