

## VTV's diabetes reinvention gains some ground



[Madeleine Armstrong](#)



**After crashing on a late-stage Alzheimer's failure last year VTV Therapeutics has taken a small step forward in type 1 diabetes.**

VTV Therapeutics looked dead and buried after the Alzheimer's project azeliragon flopped in its pivotal study last year, but the company's reinvention as a diabetes drug developer gained some ground today.

Still, VTV still has a long way to go. Data from a phase II trial of the group's oral glucokinase activator TTP399 in type 1 diabetes look promising, but the results so far are in just a handful of patients, and it might take more to convince the markets.

VTV's shares initially opened up 14% today, but these gains had soon faded, perhaps as investors took the opportunity to sell on the news. And the company's current market cap of \$84m is well off what it was before the azeliragon blowup ([VTV pivots to diabetes after Alzheimer's flop, 10 April 2018](#)).

### Insulin add-on

If VTV does get TTP399 to market in type 1 disease, it is likely to have little competition – insulin is the only option for these patients, and they often still struggle to keep glucose levels under control.

The [Simplici-T1 trial](#) tests TTP399 on top of insulin. Its primary endpoint is 12-week change in glycated haemoglobin, or HbA1c, a measure of blood sugar levels.

The first part of the study found a mean 0.6% reduction in HbA1c in eight patients receiving TTP399, versus a 0.1% rise in the 11 given placebo; the difference was significant, with a p value of 0.03.

VTV hopes to replicate these results in part two of the study, in a broader population; results are due in the first quarter of 2020.

TTP399 also reported positive data from a [phase II trial in type 2 diabetes](#) in 2016, but things have gone quiet since, which led Bernstein analysts to suggest a lack of enthusiasm at VTV for this indication.

The type 2 space is much more crowded, which could explain any reluctance from the company to move forward here.

The only other glucokinase activator in active development, according to *EvaluatePharma*, is Hua Medicine's dorzagliatin, also known as HMS5552, which is in phase III trials in China. The company has said it will look to partner the project outside the country after the pivotal data report in the second half of this year.

Other glucokinase activators have been discontinued owing to lack of efficacy and side effects including hypoglycaemia and liver steatosis.

VTV has another mid-stage candidate in the form of its small-molecule GLP1 agonist TPP273, for type 2 diabetes; however, even if this progresses it could have a hard time competing against Novo Nordisk's oral semaglutide.

And, remarkably, VTV has not given up on azeliragon, [with plans to start a phase II trial](#) in mild Alzheimer's and type 2 diabetes this month.

TTP399 looks at present to be the group's best shot at success, but it still has a lot to prove.

VTV's pipeline			
Project	Description	Indication	Status
TTP399	Glucokinase activator	Type 1 & 2 diabetes	Phase II
TPP273	Oral GLP-1 receptor agonist	Type 2 diabetes	Phase II
Azeliragon	Rage antagonist	Mild AD and type 2 diabetes	Phase II imminent
HPP737	PDE 4 inhibitor	COPD	Phase I
HPP593/REN001*	PPAR-delta agonist	Mitochondrial diseases	Phase I
Unnamed	Nrf2/Bach1 modulator	Undisclosed	Phase I

*\*Licensed to Reneo Pharmaceuticals. Source: EvaluatePharma & company website.*