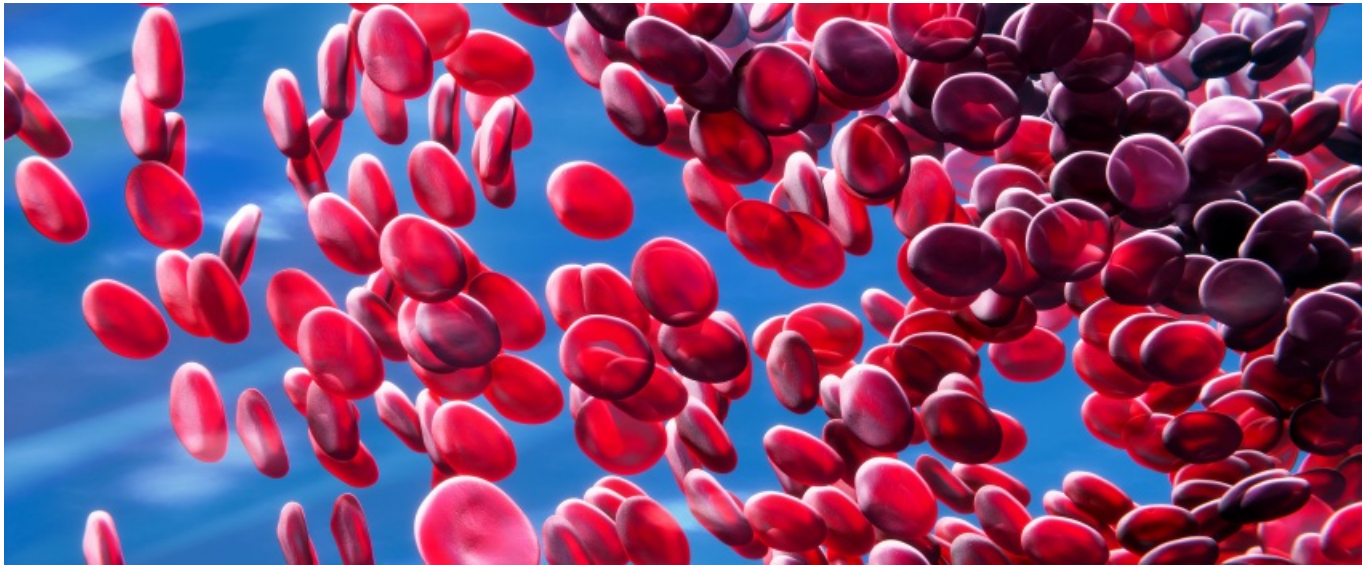


## Rubius confirms the worst



[Amy Brown](#)



### **The collapse of Rubius's first attempt to demonstrate the worth of its red blood cell platform proves that this company should never have gone public.**

Investing in drug developers that have yet to put their projects through human testing is always a high risk business. This is why it is typically done in the private sphere, away from the glare of quarterly conference calls and demands of quick and demonstrable progress.

But the huge amount of money available to fledgling companies in the past few years has pushed these start-ups into the hands of public investors earlier and earlier. Rubius was one of the more egregious examples of this trend – floating in mid-2018 with [an eye-watering \\$1.8bn valuation](#), despite being little more than a company formed around a scientific hypothesis.

Yesterday the company confirmed what was becoming increasingly clear: its phenylketonuria (PKU) project RTX-134 is a bust, having failed to generate any meaningful signals of efficacy in the first patient dosed, an event that itself happened months later than investors wanted ([First blood: Rubius approaches its big test, October 30, 2019](#)).

Perhaps RTX-134 was always heading to the scrapheap; even if it had made it all the way, Rubius would have been going up against stiff and entrenched competition in PKU from Biomarin. But away from the rigours of public life the company would have been able to progress this project at a more natural pace, potentially with a different outcome.

### **The pivot**

Rubius claims to have a platform that can genetically engineer red blood cells to express therapeutic proteins or, in the case of cancer and autoimmune conditions, stimulatory molecules, cytokines and antigens. The company will now pivot to these two areas, having walked away from work in other rare diseases alongside abandoning the PKU project.

The company's rationale here is that working on chronic, high-dose therapies required in the rare disease space will be much more costly than developing treatments for cancer. With little hope of raising money by selling shares in the near future, Rubius needs to get the most bang from what buck it has left.

This amounts to \$283m, which the company says should last until 2022. The cash will be directed at two cancer projects: RTX-240 should start phase I in the coming months while a follow-on asset is unlikely to enter the clinic before next year. Work on an autoimmune project is only very loosely described at this stage with

Rubius saying it is focusing on T cell-mediated diseases.

None of these projects are close to demonstrating proof of concept, something that the company's entire platform has yet to show. Leerink analysts generously wrote today that the preclinical oncology data have so far been "encouraging", but investors still have little to go on, except for some vague timelines for progress to which Rubius will once again find itself held.

With a market cap of \$318m, much of which reflects the company's cash, Rubius currently looks much more appropriately valued for a preclinical company. The group has yet to prove it is even worth this much money, of course; the next time the public market is confronted with such an early-stage idea, perhaps more investors will think twice.

#### Rubius's pipeline

RTX-240	Allogeneic 4-1BBL and IL-15TP cell therapy; solid tumours	IND approved
RTX-321	Artificial antigen-presenting cell for HPV+ cancers	IND to be filed by YE'20
RTX-224	Allogeneic 4-1BBL and IL-12 cell therapy; solid tumours	Research project
RTX-T1D	Type 1 diabetes, no further details	Research project