

Palleon unveils PhI look at 'lawnmower' approach to glycoimmunology: #AACR23

by Nicole DeFeudis on April 18th, 2023



For more than 50 years, it's been known that some patients' tumors have an abundance of sialoglycans, complex carbohydrate chains attached to proteins and lipids, and those patients tend to do a lot worse.

It was later discovered that the upregulation of sialoglycans suppresses the immune system in more than 50% of cancer patients, [according to](#) Palleon Pharmaceuticals. Led by research from Nobel laureate Carolyn Bertozzi's lab, the team at Palleon is now working on a way to use glycans as a form of checkpoint therapy – and they offered a look at their first-in-human data at this year's American Association for Cancer Research Conference.

“If you understood the glycoscience, it's in retrospect obvious, hiding in plain sight,” Bertozzi told *Endpoints News*. “I anticipate that history will look back on this with the big question like, ‘Why didn't people look at this sooner?’”

Palleon raised \$47.6 million in 2017 from some big-name backers, including SR One, Pfizer Ventures,

Vertex Ventures, Takeda Ventures and AbbVie Ventures, and a \$100 million [Series B round](#) in 2020. The company has attracted other top scientists, including CMO Dave Feltquate, who spent more than 14 years at Bristol Myers Squibb.

[Backed by Big Pharma VCs, Palleon ramps up a new approach to immuno-oncology with a \\$48M startup round](#)

Sialoglycans bind to inhibitory receptors called siglecs, which plays a role in helping cancer evade the immune system. The idea at Palleon is to cleave off the sialic acid at the end of sialoglycans, preventing it from binding with siglecs. Bertozzi and Feltquate compared their experimental therapy to a lawnmower, clipping off the sialic acid.



David Feltquate

“Because of all this grass that’s growing, it [the immune system] is engaging with those inhibitory receptors, and so every time an immune cell gets near there, it’s being told to stop, don’t mess around here,” Feltquate said.

In the Phase I GLIMMER-01 trial, Palleon’s E-602 showed signs of dose-dependent desialylation and immune system activation, the company announced at AACR, and was “well-tolerated across the entire dose range evaluated with no dose limiting toxicities.”

“This is a big deal,” Feltquate said, adding that while the data are early, “it’s proof of mechanism for something that no one has really understood or thought much about as a form of regular immune regulation.”

The company's waiting for "a little bit more data" before deciding which dose to bring into Phase II, Feltquate said.

"We're going to do Phase II work looking at activity of monotherapy, but ultimately where this drug belongs is to combine it with other therapies to cure patients," he said. "We know with immune therapies you can build very active regimens and treat earlier in the disease course, that's how you increase the cure fraction."

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