

COMMENTARY

NeOnc Noses Into Novel Brain Cancer Treatment

by [Les Luchter](#), Staff Writer, July 25, 2024

Treatment for brain cancer patients typically consists of surgery, radiation and an oral drug called Temozolomide, developed by Merck and now generic. The most serious cases, however, still have less than a three-month survival rate, Dr. Thomas Chen, director of surgical neuro-oncology at the University of Southern California, tells *Pharma & Health Insider*.

But what if you could solve this dilemma with a nasal spray?

NeOnc -- a biotech company founded by Dr. Chen, who serves as its chief executive officer -- is currently in clinical trials with two products designed to break through the blood-brain barrier that normally inhibits cancer drugs from getting to their intended targets.

Both products use plant-based perillyl alcohol and have received both fast-track and orphan drug status from the FDA, due to brain cancer's designation as a rare disease.

One of the products, currently recruiting seriously ill recurrent brain cancer patients for phase 2 tests, uses perillyl alcohol at full concentration, but Dr. Chen notes that down the road it can be combined with other drugs to help carry them across the blood-brain barrier.

One of those drugs, for instance, could be Velcade, currently used for myeloma, which Dr. Chen says also works on brain cancer cells. He notes that Velcade given to mice intravenously has no effect on brain cancer, but when given in combination with NeOnc's product, gets into the brain.

The other product, now in phase-one trial, uses perillyl alcohol in combination with Temozolomide, which Dr. Chen notes on its own has "some permeability through the blood-brain barrier" in oral form.

The NeOnc combination is said to deliver that drug to the brain ten times better than the oral-alone version.

NeOnc's reformulation of Temozolomide is patented, one of some 135 patents the startup has received.

The company plans to hold on to those patents, per Executive Chairman Amir F. Heshmatpour, with Big Pharma partners expected on the distribution side.

"After we have positive data in phase 2," he adds, "we would start looking at strategical partners like an Amgen, like a Merck, to come in and partner up with us and help us to get this out to the market."

You can also expect NeOnc to go public, with Heshmatpour saying, "we are anticipating to come to the market before the year end."

The company last month announced it had raised \$18.5 million in funding to support its clinical trials.

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