



Pharmaceuticals

Pharmos' Disappointing Brain-Injury Treatment

Andy Stone, 12.20.04, 7:25 PM ET

Hopes for an experimental treatment that had the potential to help the 85,000 Americans who suffer long-term disability each year due to traumatic brain injury were dashed this morning when **Pharmos** said that its drug, dexanabinol, failed to show statistically significant improvement in a pivotal late-stage clinical trial.

The phase 3 trial involving 846 patients aimed to determine whether dexanabinol, based on a derivative of the active ingredient in marijuana, would help patients regain more of their memory and other high-level function following a severe blow to the head. (See: "[After The Accident](#).")

The drug had been under development since the mid-1990s, at a cost of \$50 million. Shares of Pharmos (nasdaq: [PARS](#) - [news](#) - [people](#)) closed down 66% to \$1.18 per share following the news.

"I'm surprised that the results are a flat-out zero," said Harris Nesbitt biotechnology analyst Thomas Shrader. "Everything about the clinical trial was biased to give the drug the chance to succeed."

One of the key difficulties that Pharmos faced, and had appeared to overcome, in putting its drug through clinical trials was to establish concrete measures to determine the efficacy of the drug versus a placebo. Traumatic brain injury (TBI) may affect overall behavior, which can become erratic and unpredictable.

However, Pharmos chose during the trial to focus primarily on quantifiable aspects of memory loss, which nevertheless did not show improvement, compared with control groups, at three- or six-month intervals following injury.

Pharmos, which has \$60 million in cash, is pinning its remaining hopes for dexanabinol on a second indication, memory loss that often results in the months following cardiac bypass surgery. The company recently publicized preliminary results from an early-stage clinical trial that hinted, with a small test group, that dexanabinol may improve memory in patients who have suffered reduced blood flow to the brain during their operation. However, the drug once had given similarly promising early-stage results with TBI.

If Pharmos is to continue to pursue the heart surgery application, it will need to find a new benchmark upon which it can quantitatively measure the drug's success. The company now faces the "added hurdle in coming up with a clinical measure that the FDA agrees to, that would show efficacy," said Elemer Piros, an analyst at Rodman and Renshaw. "It was an uphill battle before, and now it's even more difficult."

Pharmos has a second class of experimental drug targeting severe pain that is still in the laboratory. The drug is not chemically related to either **Merck's** (nyse: [MRK](#) - [news](#) - [people](#)) Vioxx or **Pfizer's** (nyse: [PFE](#) - [news](#) - [people](#)) Celebrex, both linked to an elevated risk of heart attack.

"[This drug] is their major asset, and up in my list of four to five top platforms" targeting pain, said Dr. **Harry Tracy**, publisher of *Neuroinvestment*, an investing newsletter. Following the Vioxx and Celebrex debacles, this could be a seller's market for Pharmos' drug, Tracy said. It will be another six months, however, before Pharmos has completed even initial safety experiments in the lab.

Because of the company's relatively strong cash position, enough to continue operations for three years, it will be able to weather the failure of dexanabinol for brain injury. However, the TBI indication was the most advanced in Pharmos' pipeline. According to Rodman and Renshaw's Piros, it would take another 18 to 24 months for the company to see noteworthy advances on the drugs it has in its pipeline--either dexanabinol for cardiac surgery or initial clinical trials on its pain drug.

It may make better business sense for Pharmos to buy a drug ready for clinical trials from another company, or partner with a company that has a promising drug but is short on cash. Pharmos has substantial clinical expertise,

an asset in shepherding a drug through the clinical trial process.

"This may be the fastest route to attract investor interest," says Piros.