

# Amulet raises \$850k; looking for \$1M more

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Doctors have long used nitroglycerin to treat chest pains. The chemical, best known as an explosive, releases nitric oxide into the body, expanding blood vessels and increasing the flow of blood to the heart.

But leaders of Amulet Pharmaceuticals Inc., an early stage biotechnology company based at the University of Maryland, Baltimore County's technology incubator, believe nitric oxide has much greater potential.

The three-person company has developed and has applied for patents on a technology designed to spread out the release of nitric oxide over time and to particular parts of the body.

"Nitric oxide is incredibly powerful, but you have to have the right way to deliver it," said Craig Liddell, the company's CEO.

Amulet in June closed on a \$850,000 round of funding from two groups of angel investors. It is looking to raise about \$1 million more by the end of September, said Liddell, an Australian and a veteran executive of biotech startups who started at Amulet last year. Amulet in April won a \$75,000 award from the Maryland Technology Development Corp.

Liddell and the company's chief scien-

tific officer, Robert Rauli, say the initial applications of their technology are likely to be in preventing blood clotting in the use of coronary stents and catheters. The company, they said, is working on licensing its technology to makers of stents and catheters, they said.

They also said the company also is exploring deals with makers of contact lenses, with the goal of using nitric oxide's anti-bacterial powers to create self-cleaning plastic contact lens cases. Other applications could include the treatment of paralyzed stomach muscles, a condition that affects diabetics.

Liddell said the company doesn't plan to make drugs itself. Instead, he would like to license the technology to bigger firms, or sell off the company entirely.

Dr. David Kass, a Johns Hopkins cardiologist who is not affiliated with Amulet, said nitric oxide has many potential medical uses. But it faces two problems — its effects don't last long in the body, and it lowers patients' blood pressure, making it difficult to provide high doses to patients.

If Amulet is successful in finding a method to target nitric oxide to specific points of the body, it could have medical benefits, Kass said.

Rauli, who has a doctoral degree in



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**Craig Liddell, CEO of Amulet.**

pharmacology and has long done research into applications of nitric oxide. He said he brought in Liddell because he had more experience in working with emerging companies. Liddell was an executive at North Carolina-based Paradigm Genetics Inc. and Gaithersburg-based Artesian Therapeutics Inc.