



EndoGastric Solutions
 Headquarters: Redwood City
 President and CEO: Thierry Thauré
 Employees: 110
 Phone: 650.226.2200
 Website: endogastricsolutions.com
 Products: EsophyX, StomaphyX

NEW TOOLS: CEO Thierry Thauré said EndoGastric treats upper gastrointestinal disease with surgical tools that enter the body through the mouth, like the EsophyX2, shown here.

VICKI THOMPSON

EndoGastric Solutions develops an easier acid-reflux fix

BY NATHAN DONATO-WEINSTEIN

REDWOOD CITY – For EndoGastric Solutions, the road to a billion-dollar market runs through an unlikely place: the patient's mouth.

The Redwood City-based medical-device company is at the forefront of a new technique called natural orifice surgery, in which doctors operate through natural openings in the body such as the oral cavity.

Its two disposable devices are increasingly being used to help treat acid-reflux disease and gastric bypass patients. The attraction? Faster recovery, fewer complications, and less time in the hospital compared to traditional surgeries.

"This has a big clinical benefit and a large untapped market," said President and CEO Thierry Thauré. "It's a giant change."

The 110-employee company is embarking on a major expansion as it aims to reach profitability within one to two years. Thauré is doubling the size of his sales force, from 30 to 60, thanks to \$30 million in recently secured venture financing.

Mike Carusi, general partner at Advanced Technology Ventures, which participated in the most recent round, said several factors make it appealing. For one thing, its products



Mike Carusi

are already approved by the Food and Drug Administration, which has taken a tougher approach toward device approval.

"That's a big risk off the table," Carusi said. "The fact that EGS is out there with a product, that they are building a skilled sales force, that's going to be high value down the road."

The 7-year-old firm grew out of Scout Medical Technologies, a Kirkland, Wash.-based life-sciences incubator. In 2007, EndoGastric Solutions moved its headquarters from Redmond, Wash., to Redwood City. The privately held firm doesn't release revenue figures but has raised just over \$100 million.

New approach has big market

EsophyX, its first product, allows surgeons to go through the mouth to rebuild a valve at the end of the esophagus, which is dysfunctional in acid-reflux patients. The procedure prevents stomach fluids from rising back up, a cause of heartburn and other problems.

Surgeons use a second through-the-mouth device, StomaphyX, to reduce the stomach volume of people who have undergone gastric bypass surgery. Their stomachs often expand after the initial weight-loss procedure, diminishing its effectiveness. Previously, surgeons had to open up the abdominal wall.

The potential market is huge. Acid-reflux disease, also known as gastroesophageal reflux disease or GERD, affects up to 10 percent of the U.S. population,

Thauré said, and drugs fail 30 percent of them. Up to half of gastric bypass patients will experience stomach expansion, Thauré said.

The company has tallied 5,000 surgeries using the disposable devices since 2005, more than half in the past year. Because both devices are disposable, single-use products, each surgery is a source of new revenue for the company. The procedures can cost about the same as traditional surgeries, but they're more profitable for hospitals because patients don't need to stay as long.

Sherrie Conroy, editor of Medical Device and Diagnostic Industry, a trade publication, said that advantage is hard to overstate.

Minimally invasive devices "are definitely one of the hottest areas right now," she said. "They reduce costs, so overall if they can get these procedures implemented, they have this benefit at the end that is very attractive."

EsophyX competes with established medication options, called proton pump inhibitors, or PPIs. But millions of people respond poorly to the drugs, and some question their long-term effects.

"The device companies have an opportunity to fill those particular gaps and voids," Conroy said.

Dr. John Morton, the director of bariatric surgery and surgical quality at Stanford Hospital, has performed about 35 operations using StomaphyX. Before the device, many doctors would shy away from reshaping patients' stomachs

because of the risk, he said.

"In the old days it would require another surgery, and re-operation in these patients can be very dangerous," he said. "The complication rate is perhaps 50 percent."

Because the StomaphyX procedure is all done through the mouth, EGS's devices cut that rate dramatically, Morton said.

Dr. Albert Wetter, a surgeon with Peninsula Surgical Specialists in Burlingame who has performed several dozen procedures using both devices, said EsophyX makes sense for many patients.

"It can be done as an outpatient procedure and they go back to work within a day or two, so the recovery is much quicker," he said. "It really is a revolution, the next step forward."

While the company is still waiting for long-term data on the procedures' effectiveness, the early signs are encouraging and a dozen clinical trials are under way, Thauré said. In the meantime, the company is also investigating other uses of the technology to tackle stomach cancer and primary gastric bypass procedures.

"This is my fourth startup and this is the most exciting," Thauré said. "We're building a billion-dollar company and we are just starting."

NATHAN DONATO-WEINSTEIN is a freelance writer.



John Morton