

Interview - Venture success for VytronUS as chief moves to Abbott



[Elizabeth Cairns](#)

If the ability to charm early-stage investment out of venture capitalists is a measure of a company's technology, the ablation catheter system developed by VytronUS must be pretty special. The heart ablation specialist raked in \$31.6m in a B round in October, including an investment by Abbott Ventures - and Abbott has even poached its chief executive, Mike Pederson, to run its soon-to-be-formed electrophysiology business.

"It made raising the money interesting, knowing that [joining Abbott] was a possibility," Mr Pederson tells *EP Vantage*. But, he says, "I wouldn't have left VytronUS if my leaving was going to hurt the company."

Kick the tyres

Mr Pederson is moving to Abbott this week, and so far VytronUS has not identified a replacement. While it is certainly unusual for a CEO to bid adieu to a company just as it has completed a major fundraising - and Mr Pederson concedes that VytronUS's board of directors has pointed this out to him - he says that the company is in a good position.

"A new CEO will come in and I would fully expect him or her to kick the tyres and question everything - it's only appropriate to do that, and it's good for the company." He says that while this could result in a change of strategic course, he does not expect this "given the continuity of the rest of the team, including the board, and the progress that's been made".

Progress has indeed been made, but the company's technology is still at an early stage. VytronUS is working on a new kind of ablation system employing ultrasound, rather than the more common radiofrequency energy or freezing.

Cardiac ablation is a treatment for atrial fibrillation involving creating a pattern of scars on the heart tissue to stop the fast, convulsive contractions that characterise the arrhythmia.

"Ablation is a difficult procedure, it's time-consuming, and the tools that are being used are a big reason for that," Mr Pederson says. Most current technologies incorporate a single electrode, meaning that the doctor must create hundreds of single-point scorch marks on the cardiac muscle to make a line that can block electrical impulses. Doctors find themselves "trying to construct lines with a dot-making tool".

Early stage

By contrast, VytronUS's system can project a beam of energy onto the muscle: "We just sweep the beam over the tissue without even touching it and we get better, more consistent lesions," Mr Pederson says.

The system reduces the amount of fine catheter manipulation too, so it ought to be easier to use. It should also result in faster procedures and a lower re-operation rate - with current ablation systems many patients have to have a second procedure because the first does not take. If it does attain these goals the technology will appeal to hospital administrators keen to avoid the costs of repeat operations.

However, as might be expected for a company still at the series B stage, much remains to be proven.

"We still have to demonstrate all this in clinical trials - that advantages show up once we've treated a significant number of patients." The company has completed early feasibility work in a small number of patients, and these results have been used to help finalise the system's design. A full clinical trial will start "in the next year or so".

But VytronUS's unusual technology is only part of the reason it was able to pull off an unusually successful funding round. Around 30 million patients worldwide have AF, and along with the current far-from-perfect ablation systems, antiarrhythmia drugs tend to have poor efficacy and bad side-effects.

The market is hugely underserved; Mr Pederson says that this year be roughly 300,000 patients will be treated with ablation - just 1% of the addressable population.

“Certainly the [funding] environment is tough right now,” Mr Pederson says, “and a big story is one key reason why we were successful.”

What now?

The question for VytronUS’s investors now is how the company will develop after Mr Pederson jumps ship. The new Abbott electrophysiology business that he will oversee is to be formed via the acquisition of one of VytronUS’s rivals, Topera Medical ([Abbott buys into fizzing electrophysiology sector, October 30, 2014](#)). Previously Abbott had invested in Topera, perhaps foreshadowing a similar situation with VytronUS.

It should be pointed out that Mr Pederson would neither confirm nor deny that Abbott had participated in VytronUS’s latest venture round, but [a blog post from one of the partners at New Enterprise Associates](#), another VytronUS investor, stated that the Illinois giant had indeed made a minority equity investment.

But in medtech, while an investment is good, a buyout is usually better. Surely VytronUS’s recent investors will be hoping that a trade sale happens soon.

Abbott seems to be the obvious potential buyer, but it opted for Topera rather than VytronUS. Perhaps this merely reflects the unproven nature of VytronUS’s system – but in making a minority investment and tapping the CEO rather than buying the firm outright it looks a little like damning with faint praise.

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