

Matters of the heart generating profits for Richmond company

Encouraged by large sales to the U.S. military, Pyng Medical is now eyeing the hospital and emergency services markets

CURT CHEREWAYKO

Intravenous injection remains one of the most efficient ways to get blood, drugs and other fluids quickly to the heart. But it fails in one crucial situation: when a patient's veins collapse, because of massive blood loss or during cardiac arrest, preventing blood flow.

Pyng Medical has an alternative way to administer fluids to the heart in that situation, and the Richmond-based company is receiving accolades and enjoying record sales growth as a result.

With five consecutive quarters of profit and 60% year-over-year growth in sales of its FAST_i device, Pyng was named B.C.'s medical device company of the year this month by **LifeSciencesBC**, the primary representative association for the province's biotech cluster.

Pyng's success is founded on FAST_i's ability to inject fluids directly into the bone marrow through a puncture made in the upper part of sternum in a process known as intraosseous infusion.

"Anybody – it can be a medic, a paramedic, a nurse, a physician's assistant or a doctor – can take this device and very reliably and very safely, inside of about 10 seconds, get it into the sternum," said **David Christie**, Pyng's president and CEO. "From there, it's only about a 17-second trip to the heart."

With customers like the United States army and NATO using FAST_i to replace blood in injured soldiers,

the military market accounts for most FAST_i sales.

Since FAST_i received clearance from the United States' Food and Drug Administration in 1997,

Pyng has sold 120,000 devices.

The bulk of its demand has occurred since 2003.

In that year, the United States army made FAST_i a required tool in

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- Judy Findlay,
co-founder,
Pyng Medical

medical kits used in field operations by combat medics, field hospitals and ambulances.

In 2004, further confirmation of FAST_i's effectiveness came from a report commissioned by the U.S. Special Operations Command. It recommended FAST_i as the intraosseous device "best suited for the rigors of pre-hospital trauma care in tactical settings."

The committee recommended it be issued to first responders providing care in such settings.

Because about 80% of its revenue is from the U.S. defence market, Pyng has cited the surges in the Iraq war as having a major impact on FAST_i sales growth.

In an analysis of Pyng this month, **Elvis Picardo**, an analyst

with **Northern Securities**, noted that a potential shift in U.S. foreign policy, such as a reduction in troop deployments in Iraq, could reduce the company's product shipments.

Picardo told *BIV* that the risk to Pyng associated with a U.S. foreign policy shift is small, but quantifiable.

"It's a risk that needs to be addressed this year, because the U.S. is going to have a new president by the end of the year," he said, adding rhetorically, "but what are the chances that the U.S. is going to get less interventionist?"

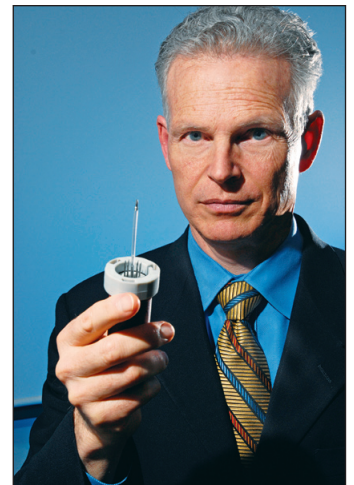
He gave Pyng a strong buy rating and forecast its sales in 2008 to grow by 20% to \$5.8 million.

A higher valuation of Pyng is warranted, he said in his analysis, because the company is profitable (net income for the year was \$860,000 or \$0.09 per share) with adequate cash reserves and a record of strong growth.

In 2005, the **International Liaison Committee on Resuscitation** recommended the use of intraosseous devices for heart resuscitation and emergency cardiac care when venous access cannot be quickly and reliably established.

Christie said the recommendations have created new opportunities to diversify into the hospital and emergency medical services arenas, which together represent a \$120 million market.

"We think that that market is much larger than the market we're already in, so we're continuing to



DOMINIC SCHAEFER

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invest in expanding into that market."

Judy Findlay, one of Pyng's founders and its lead engineer until leaving the company in 2003, noted that many of FAST_i's key design requirements related to the environment it's used in.

"It's a chaotic pre-hospital environment, and the user is not a doctor with 16 years of post-secondary schooling. It's basic level paramedics," she noted. "We wanted it to be very easy to learn to use and very easy to recall the steps." ■

cgq@biv.com