

CASE STUDY:

# Pyng Medical Drug Delivery

**UPDATING A CLASSIC MEDICAL DEVICE DESIGN  
FOR NEW MARKETS BRINGS INSIGHTS AND SAVINGS**

Pyng Medical Corp. commercializes award-winning trauma and resuscitation products for emergency medical responders and hospitals. Their FAST1® Intraosseous (IO) Infusion System is the first FDA-cleared IO system designed specifically for use in the sternum during adult and adolescent emergency intervention. With 10 years of military success, Pyng Medical Corp. wanted to re-energize the product line, and keep it ahead of marketplace competitors.

## THE PROCESS

Working together, StarFish Medical and Pyng Medical Corp. engaged with key military and civilian customers and end-users to identify the strengths and weaknesses of the FAST1® product. Preliminary research was followed up with focus groups of emergency medicine thought-leaders to corroborate the initial findings from the field. StarFish created a Product Definition using the insights gathered for a next generation IO device.

## RESULTS

Updating the military device for civilian appeal also makes the FASTResponder™ a more useful device on the battlefield. Less needles with a mechanical redesign that shields them in a transparent plastic shell creates an easier to handle device and improves civilian end-user perceptions. Reducing the size, weight, appearance and the force required for insertion allowed a more intuitive and ergonomic product appropriate for all civilian providers. Together, StarFish Medical and Pyng Medical Corp took the FASTResponder™ product through the requirements testing process.

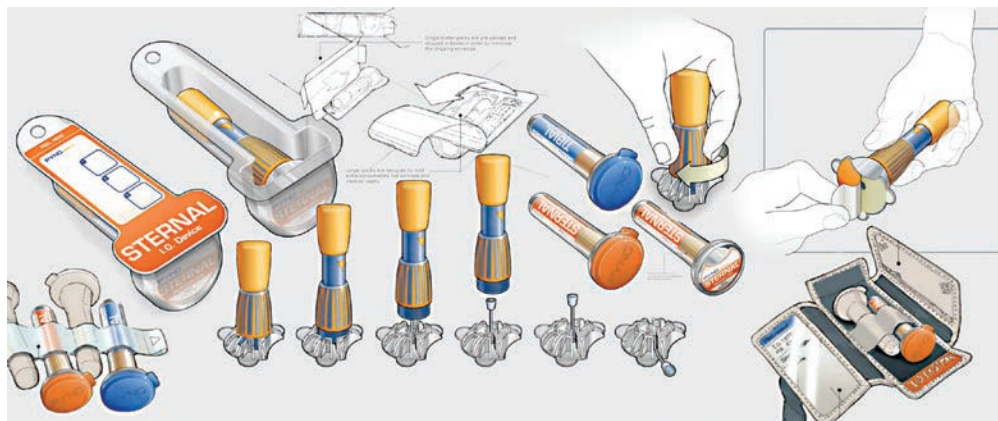
## BOTTOM LINE

FASTResponder™, Pyng Medical Corps. next generation IO Infusion device, received the CE Mark in Europe, is cleared by the United States Food and Drug Administration (FDA) for marketing in the United States and cleared by Health Canada. The FASTResponder™ product has received initial positive input from medical professionals for being easy to learn and easy to use.

### Quote:

*"I value most that StarFish Medical has a very strong skill set at the front-end of the R&D process. They can look at a problem and come up with a unique design and plan at an affordable price. Many find it easy to come up with a design that solves the problem. But not so easy to come up with a solution that meets the need, is affordable, able to be completed in an acceptable timeframe, and doable."*

> **Mark F. Hodge** Pyng  
Medical President & Chief  
Executive Officer



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StarFish Medical™ is an award winning, full service Medical Device Design company offering design, development, and NPI manufacturing services based in Toronto and Victoria BC. Our Pathfinder™ process reduces wasted effort and increases success for medical device product definition, technical engineering, and product development. Prototype and volume production are delivered within an ISO 13485 certified Quality Management System, manufacturing and clean room facilities.

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