

Transforming the Management of Critical Bleeding

Introductory Investor Deck



Clinical Need



Uncontrolled bleeding is a major cause of morbidity and mortality in surgery, trauma, intensive care, childbirth, etc.

Systemic bleeding is caused by **defects in the blood itself**.

Targeted transfusion applies **one of four treatments** to control systemic bleeding.

Targeted transfusion **requires understanding the specific blood defect** to determine the appropriate treatment.



Existing diagnostic tests are slow, incomplete, complicated, and expensive.

Our Solution

The **Quantra™** System helps to diagnose the cause of bleeding and thereby enables targeted transfusion.



Quick

Results in < 15 minutes
Near the patient

Clear

Outputs tied to therapy
Simple dial display

Complete

Measures all four causes of
bleeding

Easy

3 Steps
Plug and Play Operation
Automated Quality Control

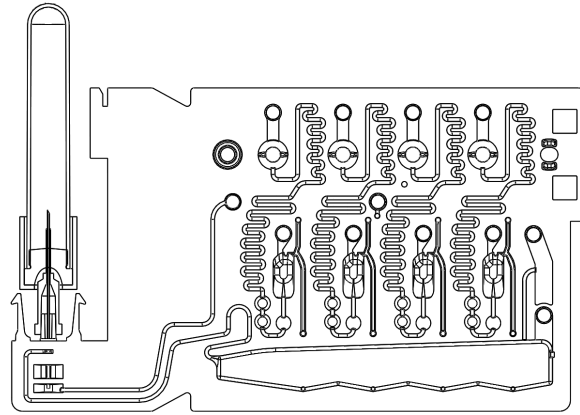
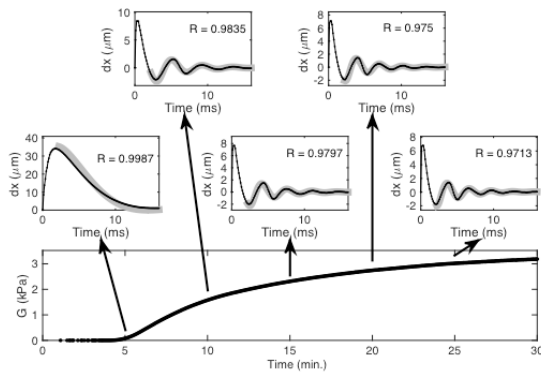
Economical

No dedicated personnel

Enabling Technologies

Ultrasonic Stiffness Measurement

Patented technology measures evolving clot stiffness by ringing the clot like a bell.



Differential Cartridge

Single use, four channel cartridge uses different reagents to measure four different clotting components.

Dial Display

Intuitive display provides comprehensive, actionable results at a single glance.



Targeted transfusion improves outcomes & lowers cost

Better Outcomes

Scientifically managed transfusion of blood products **reduces:**

- Mortality by **2.5x**
- Myocardial infarction by **3.0x**
- Renal failure by **13.0x**
- Stroke by **3.6x^{1,2}**

Lower Cost

- Targeted transfusion of blood products **saves** hospitals **\$50k to \$100k per month**, while improving patient care^{4,5}
- Hospital **stay reduced by 0.8 days** for every unit of unnecessary transfusion eliminated³

¹ Relationship of blood transfusion and clinical outcomes in patients with acute coronary syndromes. JAMA, 2004

² Effect of peri-operative red blood cell transfusion on ... mortality following CABG surgery. Eur. J. Cardiothorac. Surg., 2005

³ Blood Transfusion is Associated with Increased Resource Utilization. Annals of Cardiac Anesthesia 2008

⁴ Cost reduction of perioperative coag. management in cardiac surgery: value of bedside TEG. Eur J Cardiothorac Surg, 2007

⁵ The clinical and cost effectiveness of TEG/TEM. Health Technology Assessment Report 11, 2008

Quantra Addresses \$1.0B Global Market

Instrument Sales Model

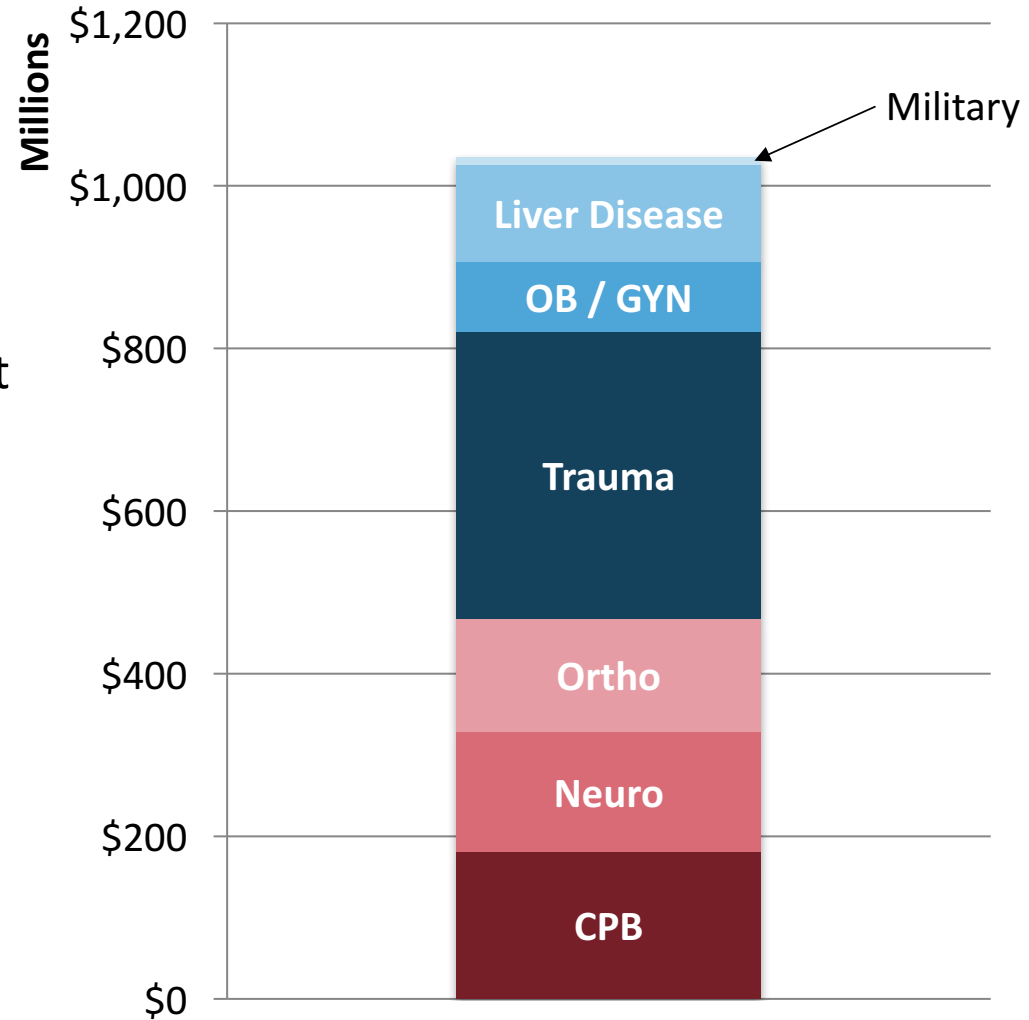
- \$20,000 for Quantra
- \$75 per cartridge

Reagent Rental Model

- Quantra loaned at no cost
- \$93 per cartridge

Key Points:

- US and EU are initial markets
- Targeting 85% gross margin on cartridges
- Reimbursed via existing DRGs (Diagnostic Related Groups)



Market Penetration Strategy

Initial Targets

- Large medical centers (over 300 beds)
- Centers performing complex cardiac, spine, and trauma surgeries

Approach

- Sales calls to both surgeons and anesthesiologists
- Sales specialists will expand usage to additional applications

United States:

- Direct sales force
- Targeted rollout
- Initial 12 person sales force, growing to 50 in five years
- Buyer chooses instrument purchase or reagent rental
- Cost reimbursed by existing DRG and offset by transfusion reduction

European Union:

- Distributor sales model
- Distributors purchase inventory at 30-40% discount
- Targeted rollout by country

Competition

	Existing Products	Next Gen Products	 HEMOSONICS Quick, Clear, Complete.
Results in 15 min.?	X	X	✓
Comprehensive?	X	X	✓
Efficient workflow?	X	X	✓
Intuitive display?	X	X	✓
Meets lab reqs.?	X	Unknown	✓
Publications?	✓	X	In Process
Available?	✓	EU Only	Launch 2017

TEG 5000



ROTEM δ



TEG 6s



ROTEM σ



Quantra



Limited Adoption

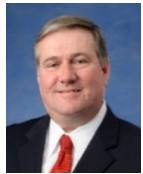
Still Miss the Mark

The Solution!

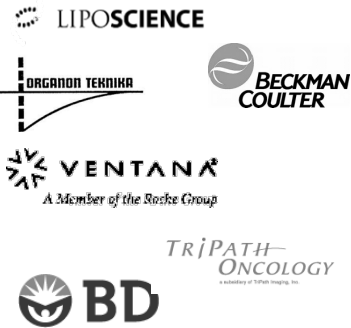


Competitive information is based on public information and may not be complete or accurate

Proven Leadership Team With Deep Domain Expertise



Tim Fischer*
President & CEO

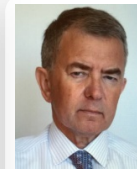


Bill Moffitt*
Chairman of the Board



Mark Wheeler, MD*
Director

WT Investment
Advisors LP



Josep Manent*
Director



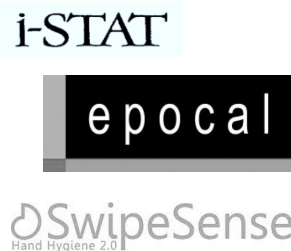
Bill Walker*
CTO & Founder



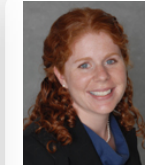
Francesco Viola*
CSO & Founder



Jeff Baker
Commercial



Thomas Givens
VP Engineering



Megan Shaw
VP Business Development



David Bryant
VP Quality Systems



*Board Member

Recent and Upcoming Milestones

Completed and published clinical studies

FDA agrees with direct de novo 510(k) pathway and clinical study design

Quantitative market research confirms \$1B market and customer need

Clinical Registration Study initiated in July, 2016

Commenced cGMP manufacturing of instrument and cartridge

Initiated pre-launch commercial activities with positive customer feedback

Targeting EU launch in early 2017

Targeting US launch in mid 2017 (contingent upon FDA clearance)

Raising \$15MM to support launch and commercialization

Investment Highlights

Quantra™: Next generation product to guide the management of critical bleeding



Clinically Proven Patented Technology

Advanced technology for surgery, trauma, OB, and critical care
Extensive patent portfolio covers core functionality

Low Regulatory Risk

Direct de novo 510(k) Pathway
CE Mark planned late 2016, FDA clearance planned in 2017

Saves Lives and Reduces Cost of Care

Existing products are slow, confusing, incomplete, complex & costly
Quantra is quick, clear, complete, easy, and economical
Saves cost by eliminating unnecessary transfusions

Rapidly Expanding Market

Reducing transfusions is a priority because of their cost and risk
Aging population and surgical advances drive market growth

Large, Profitable Market

>\$1 B market

High gross margin cartridge