

## COMPANY INFORMATION

December 2008

### The Company

Vivacta is a medical diagnostic business exploiting proprietary Piezofilm detection technology. Piezofilm detection allows rapid determination of highly sensitive binding assays including immunoassay and DNA / RNA. The company is focused on "Point of Care" systems comprising single use cartridges used in conjunction with a small format reader.

### Technology Differentiation

Immunoassays account for 42% of the tests in the lab today, whereas in point of care (excluding glucose self testing) immunoassays only account for 25%. The reason for immunoassay's shortfall today in PoC is due in part to a lack of platform technologies capable of many of the higher sensitivity tests where there is a need for quantitation with a wide dynamic range.

	<b>Current technology: Photo-spectrometer</b>	<b>Vivacta Piezofilm: Initial Target Performance</b>
<b>Dynamic range</b>	50-60X	1,000-10,000
<b>Detection limit (pg/mL)</b>	100	20
<b>Test time</b>	15 minutes	5 minutes

Another key technology differentiator relates to Piezofilms detection of analyte in whole blood without the need for wash steps or red-cell separation. This provides less complex cartridge design and minimises sample volume, it also avoids the complex IP area relating to lateral flow.

### Intellectual Property

Vivacta have a large number of patents and applications providing broad protection relating to chemical detection and specifically binding assays using Piezofilm. Also there are multiple layers of further protection relating to key technologies relating to homogeneous and separation free assays.

### Market Opportunities

The combination of wide dynamic range, ultra-high sensitivity and rapid test provide clear opportunities in the \$1.3 billion established "Heart Marker" sector as well as other acute markets for stroke, sepsis and renal. The compelling need for rapid diagnosis in these acute care settings make the technology an ideal candidate.

In chronic disease management the clinic benefits provided by PoC diagnostics relate to efficiency and effective patient interaction. Vivacta plan to demonstrate the system performance with the introduction of a test for the largest immunoassay application: the monitoring of thyroid function using TSH. This will be a first of its kind in ultrasensitive yet compact format. The test will allow patient screening for hypothyroidism, management during drug titration, and regular monitoring. An additional application is for pre-contrast agent treatment before imaging procedures. The existing lab testing market for Thyroid Function is globally in excess of \$1 billion.

### Exploitation

Vivacta plan to focus on product development, bringing new assays through pilot production stage in preparation for clinical trials. Relationships with partners are being sought, and it is anticipated the partner will market, manufacture and handle regulatory clearance and ongoing compliance. Licences will be by indicated use. The technology has opportunities across all PoC settings:

- Institutional acute care: ICU, ER
- Clinics: Endocrinology, Urology, Cardiology.
- Primary care, Physicians Office
- Self testing

### Management

A management team with strong IVD experience, and a Board that includes Directors that were Chairman and Presidents of IVD companies that include J&J, Roche and Bayer.

## LAB RESULTS WITHOUT THE LAB



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#### Investors

Viking Technologies SA  
Spark Ventures  
HBM BioVentures  
AGF Private Equity

#### Board of Directors

Rolf Classon Chairman  
Jonathan Gee  
Paddy Greenwood  
Gerry Moeller  
Gerard Vaillant  
Werner Schaefer  
Neil Butler CEO  
Tim Carter CSO

#### Management Team

Neil Butler CEO  
Tim Carter CSO  
Steve Ross R&D Dir.  
Sonja Johnston Quality Dir  
Stafford Moss Eng Mgr  
Nigel Newton Fin Dir

Lawyers: Taylor Wessing  
Auditors: Deloitte & Touche  
Bank: Nat West  
Patent Attorney: Elkington & Fife

**Company number:** 5397165

#### Investment

Series A, Feb 06 \$6m  
Series B, Nov 07 \$12m

#### Number of Employees

30 excluding the Board

#### Premises

12,000 sqft of purpose built laboratories, offices and cartridge pilot production.

## System Design for our TSH test

