
IntelliHeart Diagnostics

Cardiovascular disease diagnostic system

September 2004

Cardiovascular disease

- CVD is biggest killer in the western world
 - Approx 40% of western world dies from CVD
 - Incidence and risk increases with age
 - Prevalence has increased 18% in Australia over last decade and will continue to increase with aging population
 - More than 25% of Australian adults have some sort of CV condition and 90% have at least one major risk factor
 - 2000-01 spending on CVD in Australia = \$5.4b (11% of total allocated health spending)
 - Arterial plaques develop many years before symptoms of CVD appear and, in most cases, can be prevented, even reversed

Current Methods of CVD Diagnosis

Currently available tests	Efficacy	Cost / test	Other
Passive Electro-cardiogram (ECG)	Poor - Needs 70% blockage for clear diagnosis (only 10% of coronaries come from this group)	\$50	Used by GPs as indicator
Stress ECG	Poor - Needs 70% blockage	\$300	
Stress Echocardiogram	Poor - Needs 50% blockage (85% of coronaries come from undetected patients)	\$1,000	
Stress Nuclear	Poor - needs 50% blockage	\$1,500	High Irridation, 5 hour test
Angiography	Poor - needs 50% blockage	\$1,500	Invasive, High Irridation, requires hospitalisation
CT Scan of coronary arteries	Moderate - but doesn't measure cardiac function or blood flow	\$1,000	Moderate Irradiation
INTELLIHEART DIAGNOSTIC TESTING	Highly accurate - comprehensive measurement of all aspects of CVD risk - PREVENTATIVE TOOL	\$200	Non-invasive, no irradiation, done by GP on the spot

Shortcomings of Existing Approaches

- Most tests require over 50% blockage of arteries for the patient to be classified as “abnormal”
 - However, about 85% of future coronaries come from patients with under 50% blockage
- Many tests are expensive, lengthy, irradiate the patient and lack comprehensiveness
- Some tests are intrusive and have significant adverse event rates (e.g. Angiogram)

Overview of IntelliHeart Diagnostics

- Comprehensive system comprising a suite of non-invasive tests combined with a proprietary algorithm
- Provides a single index (percentage chance of developing CVD within 10 years)
- Stratifies risk causes (cholesterol, heart function, smoking, blood pressure etc.)
- Combination of 4 existing and approved technologies with IntelliHeart proprietary risk quantification software
 - ECG and blood pressure measure “traditional” parameters
 - Pulse wave velocity non-invasively measures arterial stiffness and central (“real”) blood pressure
 - Heart rate variability non-invasively measures balance between stress and relaxation of the heart and major blood vessels
- Components are FDA and TGA approved
- Directly measures **arterial stiffness**, which is the key cause of CVD
- Therapeutic actions can be prescribed and their efficacy monitored on an on-going basis

Overview of IntelliHeart Diagnostics (cont.)

- Tool for GPs, cardiologists and others to manage patients' risk of developing CVD **before** symptoms present
 - Diagnosis, treatment and on-going patient monitoring
 - Non-invasive, 30 minutes per test
 - Very early diagnosis (years prior to overt symptoms) of potential CVD
 - Paradigm shift in the treatment of CVD
 - Current practise: Treat problem after a CVD event
 - With IntelliHeart system: Treat risks before CVD symptoms appear
- Future developments:
 - Integration into a single portable unit
 - Software enhancements and add-ons
 - Therapeutic output (i.e. suggested drug and lifestyle therapies)

IntelliHeart Business Model

- 2 revenue streams
 - **Service:** Test revenue – from IntelliHeart “Heart Watch” clinics and other clinics where the system is installed
 - **Product:** Sales of the device to larger medical clinics, hospitals, research institutions, universities, ambulance services etc
- Commercial drivers for medical clinics are strong profit from tests coupled with increasing demand from patients for information about their health

IntelliHeart Business Model (cont.)

- Promotion via leading cardiologists, key opinion makers as well as the general community to create demand
- Other activities includes speaking at medical conferences, publishing research in medical journals, online information and supporting relevant clinical studies
- Message is **prevent CVD** before symptoms not get treatment after a heart attack or stroke
- Overseas sales through distributors, potentially subsidised from pharmaceutical companies

Achievements to Date

- Currently operating in two clinics in Melbourne
 - Historically generated c.\$200,000 (20 patients per week)
 - Over 2,000 patient tests completed
 - Current pricing \$200 per test
- Additional clinics to be rolled out in the coming months
 - Pre-launch interest from at least four clinic operators
 - Four clinics at MOU stage
 - Two corporate health providers are evaluating the IntelliHeart system
- Software for stand-alone application completed
 - System for remote, secure applications to be developed within months
- Marketed the concept at major medical conferences
- Begun discussions with potential distributors in Australia, New Zealand, Middle East, India and South East Asia

Board & Management

- Dr. Jack Minas will join the Board as Executive Director at the General Meeting (10th September 2004)
- Chief Operating Officer has been identified
- Richard Revelins – Executive Chairman
- Jeremy Cooper – Executive Director
- Hugh Warner – Non-Executive Director
- Theo Rigopoulos – Non-Executive Director

Capital Structure

	Shares	Options
Current shares on issue	233.4m	17m
IntelliHeart acquisition	79.5m	38.5m
Private Placement to raise \$2.5m (2c per share)	125m	62.5m
Total post acquisition and placement	437.9m	118m

- Market capitalisation pre acquisition \$5m
- Market capitalisation post acquisition and capital raising \$8.75m (at 2 cents per share)
- Current top twenty shareholders; 166 million shares

Competitive Profile

Company	Positioning	Revenue	NPAT	Market Cap
Medical Monitors	Telephonic medical information on BP and ECG monitors	0.3m	(3.1m)	\$18m
USCOM	Blood flow monitor - more like an echocardiogram	1.3m	(1.0m)	\$108m
AtCor	Non-invasive PVW, HRV Measuring Devices	approx \$800k	prob losses	Unlisted
CardioDynamics	Non-invasive measurement of heart's mechanical function	US\$40m	US\$3.5m	US\$244m
Hypertension Diags	Manufacturer of devices similar to AtCor	US\$1m	(US\$2.0m)	US\$3.4m

Summary

- IntelliHeart system has been in operation for over five years – novel way to detect CVD years before symptoms present
- Funds raised will kick start the full commercial roll out of the IntelliHeart system
- Strong pre-launch interest already being shown by clinic operators, corporate sector and various overseas parties
- Substantial value generation opportunity

www.intelliheart.com.au