

ISI - Intelesens Limited Sensor Technology & Devices (ST&D)

Intelesens is a leading innovator in targeted non-invasive vital signs monitoring in UK. It develops and manufactures own products and also designs products for OEMs. The company competitive advantages are due to its non-invasive wireless medical devices combined with medical sensors and electrodes, which involves in-depth expertise including wireless telemetry, low power consumption electronics, embedded software, cardiology, body sensors and low level signal processing, screen printing solid gel electrode manufacture, science of the skin including long-term non-irritant materials, defibrillation techniques and recovery as well as medical systems approval. The company's non-invasive wireless medical devices combined with medical sensors and electrodes are ultra miniature intelligent sensors which are worn on the chest and can monitor a range of vital signs including ECG, heart rate, respiration, temperature and motion – all with hugely reduced motion artefact. Super efficient, customized patch electrodes, on-board intelligence and efficient electronics and telemetry greatly extend battery life as only the clinically significant data needs to be transmitted. The company is shipping the world's first intelligent system that monitors ECG arrhythmia event, temperature and respiration rate continuously. It is shipping an in-home foetal monitoring patch that could help expectant mothers predict the onset of their own labour as well the OEM products for monitoring of other human vital signs such as blood pressure and the physiological measurement of muscular or vascular activity.

<http://intelesens.com/>

SWOT ANALYSIS

Strengths:

- Intelesens is an internationally recognized provider of high performance electrodes including a range of cost reducing defibrillation pads;
- Intelesens was incorporated in August 2000 (with Enterprise Equity leading an investment of £1.7m into the company in May 2005) by 3 of the province's leading scientists as a University of Ulster spin-out company, thereby ensuring the continued identification and design of world beating new products;
- Intelesens has established strong partnerships with a number of key – player companies in the field of medical technology such as Welch Allyn, EquipMed, Intel Digital Health and others;
- Firm's audited and accredited Quality Management System;
- Powerful research team;
- Firm's technology and design are to be found in the products of different world's leading medical devices manufactures;
- 20 years experience of the research team.

Weaknesses:

- Lack of comparison with similar products;
- Unknown prices of products;
- Unknown competitiveness of products;
- The project key concepts aren't defined. Instead the firm's activities are described;
- Instead sustainability a journal citation for firm's activities is given;
- CE marking is a mandatory European approval for medical devices to indicate conformity with the essential requirements set out in European Directives. This milestone opens up extensive new markets in Europe and South-East Asia;
- Medical systems approval – FDA and CE.

Opportunities:

- Development of general purpose wireless monitor for five vital signs in a single unit;
- Developing of more efficient monitored healthcare in hospitals and home settings;
- The potential users of such technologies are not forming a homogeneous group. They include young and healthy individuals, who are mainly interested in "lifestyle functionalities" in order to improve their individual quality of life;
- The three Founders of Intelesens are part of a knowledgeable R&D group with substantial expertise in the field of sensors and related technologies. They have an impressive record of publications, conference visits, guest speaking assignments and patents demonstrating world-class skills in Clinical Instrumentation, Thin Film Devices & Physiological Sensors.

Threats:

- Global market uncertainty;
- Possible lack of financial found for future product's development;
- In this field the Intelesens Company is vulnerable to a negative publicity.