



**NON-INVASIVE BIOSENSORS  
TO MONITORIZE YOUR  
BIOMARKERS IN SWEAT**

# Connecting with the problem



## Neonatal Intensive Care Units:

- 10 days of stay
- 4-6 x Blood Samples for analysis/ day
- 6 mL/ Blood / day
- Lactate, Glucose, pH, CO<sub>2</sub>

**Vascular Damage: Hematoma**

**Thrombosis: 3,9% related vascular thrombosis**

**Infection: 13% Catheter related Infections**

**Pain and Stress**

# *Unmet Need*

Reduction of morbidity and mortality by thrombosis and infections catheter related

*Objective: reduce 50% of cases (110,500 cases/year only in newborn)*

Monitor patients with chronic cardiac and respiratory diseases and diabetes

*Potential market 1,293.7 million people*

Facilitate hospitalization at home by removing the barrier of blood draws

Improving adherence to treatment by the improvement of home monitoring



# ***Onalabs Solution***

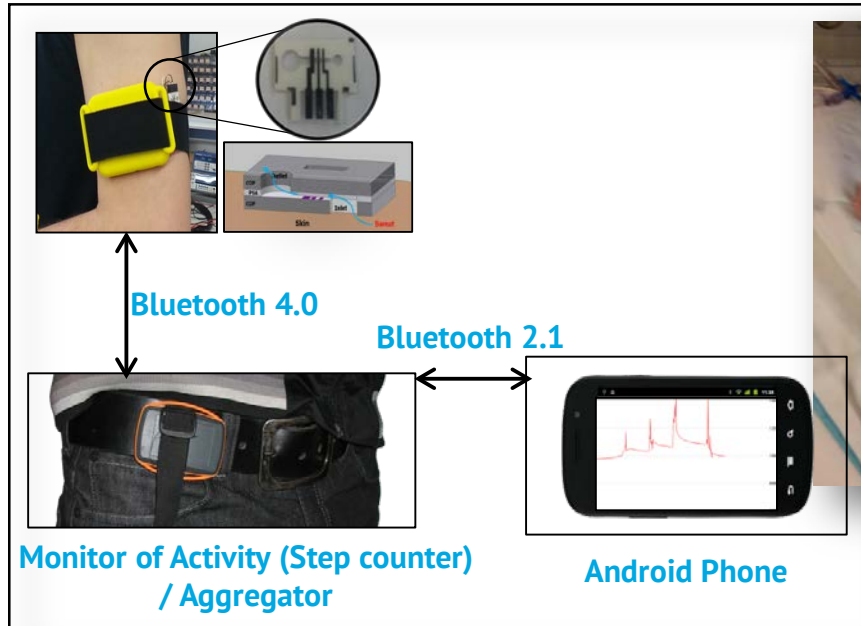
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**Non-invasive physiological status monitoring by a multi-bio-sensing wearable medical device connected digitally to the patient environment and the Hospital Information Systems, detecting continuously and real-time sweat levels of **Lactate, Glucose, pH and CO<sub>2</sub>****

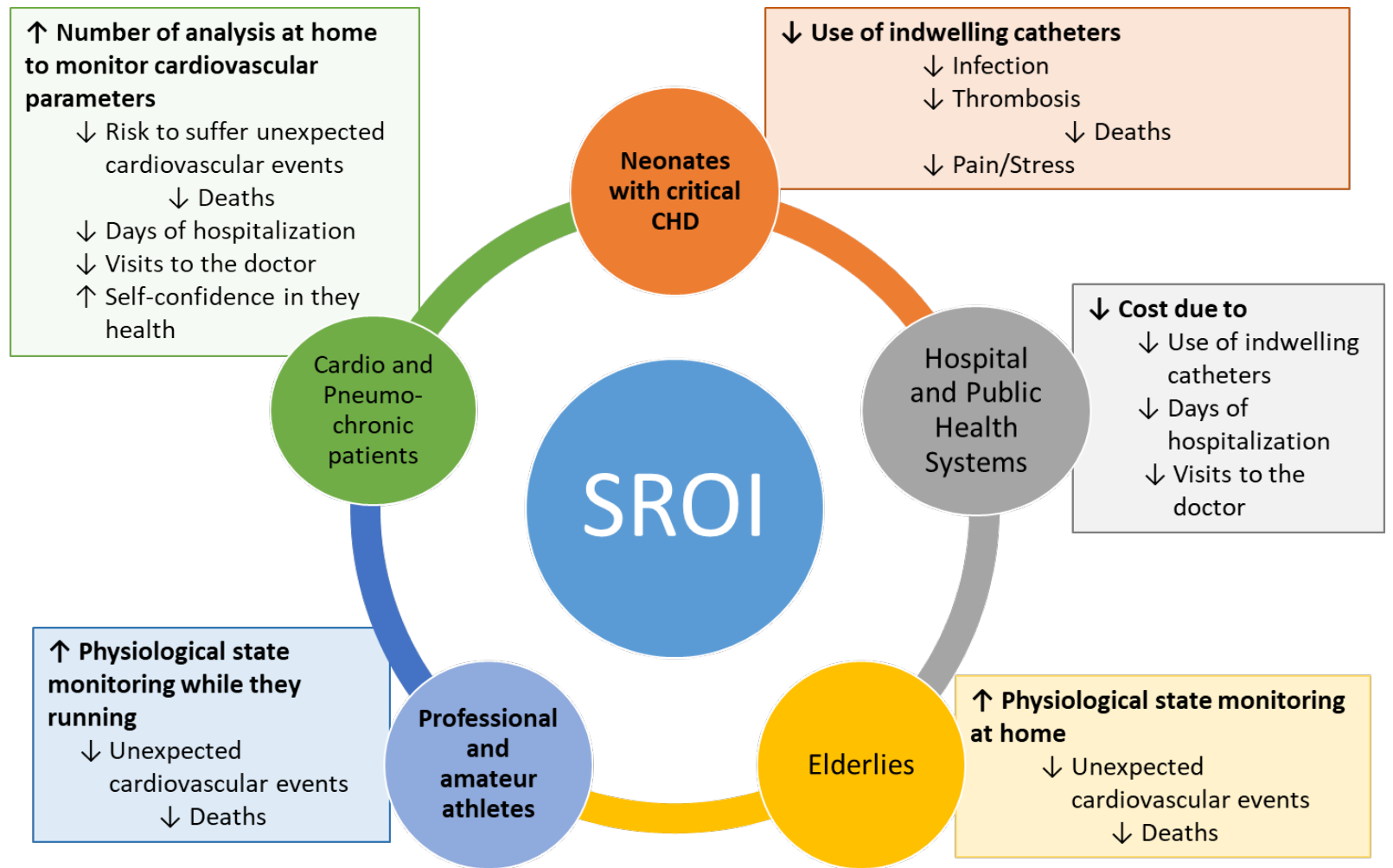


# Solution Status



















- Validation in effort tests – **DONE**
- Validation in laboratory- **DONE**
- Electronics development - **DONE**
- Clinical validation– **BEING DONE ACTUALLY**
- Industrial design and miniaturization– **IN STUDY**



# Clinical and Social Impact



## Onalabs Competitors

	Onalabs onalabs.com	Abbott freestylelibre.es	BSX Athletics bsxinsight.com	Eccrine eccrinesystems.com	Biolinq Biolinq.me	MC10 Mc10inc.com
						
Available?						
Non-Invasive?						
Product life	Long	14 days	Long	Unknown	Unknown	Unknown
Market	EU – US	US	US -Only for wellness	US	US	US
Measures	Glucose, Lactate, pH, CO <sub>2</sub>	Glucose	Lactate	Dehydration	Lactate	Glucose
Price	149 € reader + 6 € sensor	169,90 € reader + 119,80 €/month	From \$ 59,99 to \$ 419,99	No data yet	No data yet	No data yet
Comments		Invasive solution despite their marketing	The results are not reliable	US Air Force contractor	Intradermal system for continuous monitoring	ECG recording sensors

# *Business Model*

Initial– Objective: to position our biosensors as standard

*Model: “Machine + Disposables”*

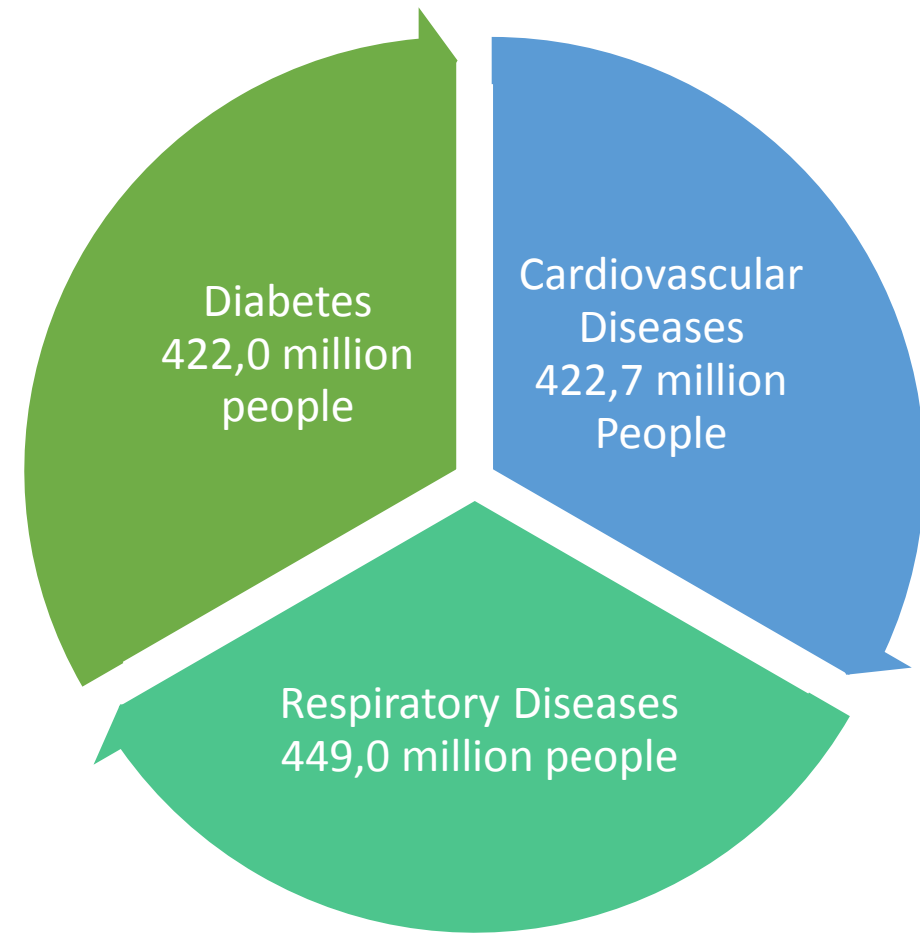
Final – Objective: technology leader in biosensors for non-invasive monitoring

*Model: “Onalabs Inside”*



# Onalabs Global Market

- Focus on non-communicable diseases (NCD)
- NCDs kill 40 million people/year, 70% global deaths
- Cardiovascular and respiratory diseases plus diabetes are 80% of premature NCDs annual deaths:
  - Cardiovascular 17,7 million people
  - Respiratory 3,9 million people
  - Diabetes 1,6 million people



# IP Protection

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- Signed License Agreement for [lactate biosensors](#) patents P201630518 and PCT/ES2017/070694, worldwide exploitation for any application. Licensed from Universidad de Burgos – Spain.
- Signed License Agreement for [glucose biosensors](#) patents P201531868 and PCT/ES2016/070832 , worldwide exploitation for any application. Licensed from Universidad Politècnica de Catalunya – Spain.
- Positive Patentability Report No. 902770 n37 from Hoffmann Eitle concerning the [whole device](#). Patent application under preparation.





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## **Onalabs Team**

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# Support Entities

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# *Onalabs Next Focus*

Product tests and validation in hospitals (public) and organizations (private)

Market studies. Different markets, different market structures

Introduction in US

Designing and prototyping

Contacting possible manufacturing partners

***Contacting Private Investors and VCs to Join the Team***

***Time to market 18 months, investment needed 2,0 million €***

# Onalabs Healthcare

- *is the first non-invasive monitoring solution measuring any chemical parameters present in sweat using miniaturized biosensors*
- *focuses on three of the four leading Non-Communicable Diseases (NCDs) identified by WHO that are killing 40 million people each year, which is equivalent to 70% of deaths occurring worldwide: heart diseases, lung diseases and diabetes*
- *improves the life conditions of chronic patients, reduces and minimizes hospitalization situations for chronic patients, measures relevant biomarkers anytime and anywhere, detects and controls the clinical impairment and reduces hospitalization time and prevents unnecessary treatments*





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