

Translation Potential

Home Monitoring



For Whom?

NYHA Classification Scheme



Heart failure patients with the most severe kind of heart failure (NYHA Class III and IV).

How It Works

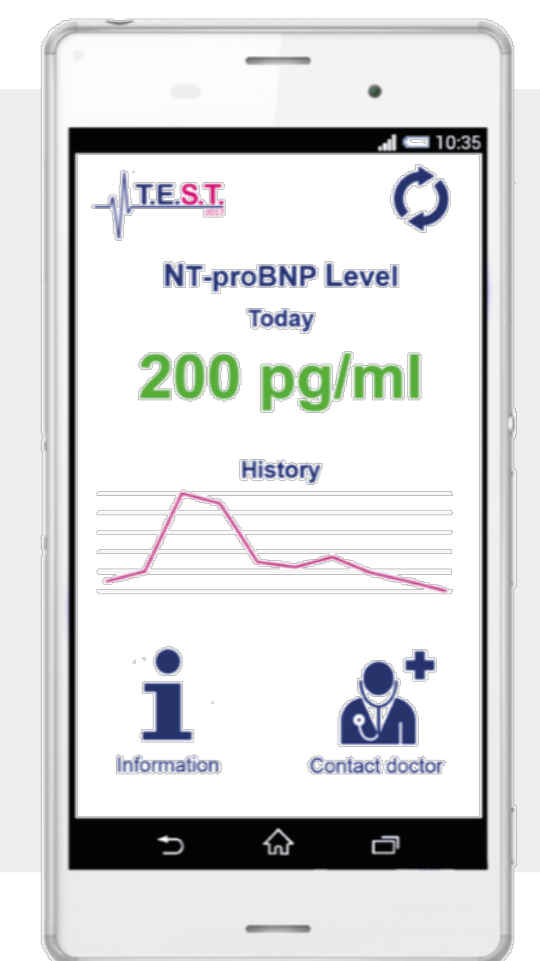
- 1) Finger prick
- 2) Insert droplet of blood in cartridge
- 3) Place cartridge in device
- 4) Within 10 minutes, the results are shown on the display

Current Treatment

- Patients are monitored by the cardiology department of hospitals, by being called every two weeks.
- If health status seems to be deteriorated, an ECG and blood withdrawal are performed.
- The drawn blood is processed in high throughput machines in hospital laboratories to measure the NT-proBNP concentration.

Envisioned Treatment

- At home, the patient measures the NT-proBNP concentration and other variables.
- Data can be tracked via an app and compared with earlier measurements.
- The cardiologist receives a notification when the health status deteriorates.



Benefits

- ✓ Insight in disease progression
- ✓ Confirmation of suspicions
- ✓ Less hospital and physician visits
- ✓ More self-control for patient
- ✓ Care on a distance



Results Survey

82 respondents

- 91,5% experiences a fingerstick as not bothersome
- 83% wants to receive information about their current health status
- 58,8% wants to share data with researchers

Benefit For Society



Saving Potential

In the Netherlands, every year:

- Current hospitalization costs **30.000 x € 15.000,- = €450 million euros**
- Costs monitoring of NYHA III and IV patients **100.000 x € 1.000,- = €100 million euros**
- Targeted prevention of hospitalizations **50 %**
- Investing 100 million euros will save 350 million euros

Big Data

By saving data in a cloud, research gets more insight in heart failure. With new solutions, healthcare can be approved.

Competitor Analysis

	Existing sensors	Our Sensor
User	Healthcare professional	Patient
Price Analyser	€ 1.500 - € 10.000	€ 500
Price Cartridge	€ 15 - € 40	€ 1

NT-proBNP test in clinical laboratory: €14,68

CONSULTED WITH

Patients • Cardiologists • General Practitioners • Clinical Chemists • Hartstichting