

Wearable Healthcare

WIRELESS ELECTROCARDIOGRAPHY WITH 3D MEMS
ACTIVITY MEASUREMENT HEALTH & WELLNESS



FIDES

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Healthcare



FIDES WIRELESS ECG WITH 3D MEMS BIOSENSOR



Wireless ECG and 3D MEMS Sensor

Wireless ECG patch with body activity monitoring is indispensable in our daily life.

Heart pulse diagnosis with AI, Big data, wireless networks are needed in order to predict heart stress and other diagnostic body malfunction.

Predict heart failure events Patient Status vital sign before they happen and deterioration management.

The very simple wireless ECG patch make virtual ground for each sensor with small coin battery operation.

Physical, psychological daily life activity stress management help to well living.

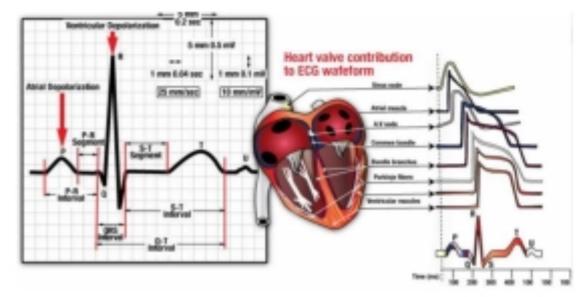
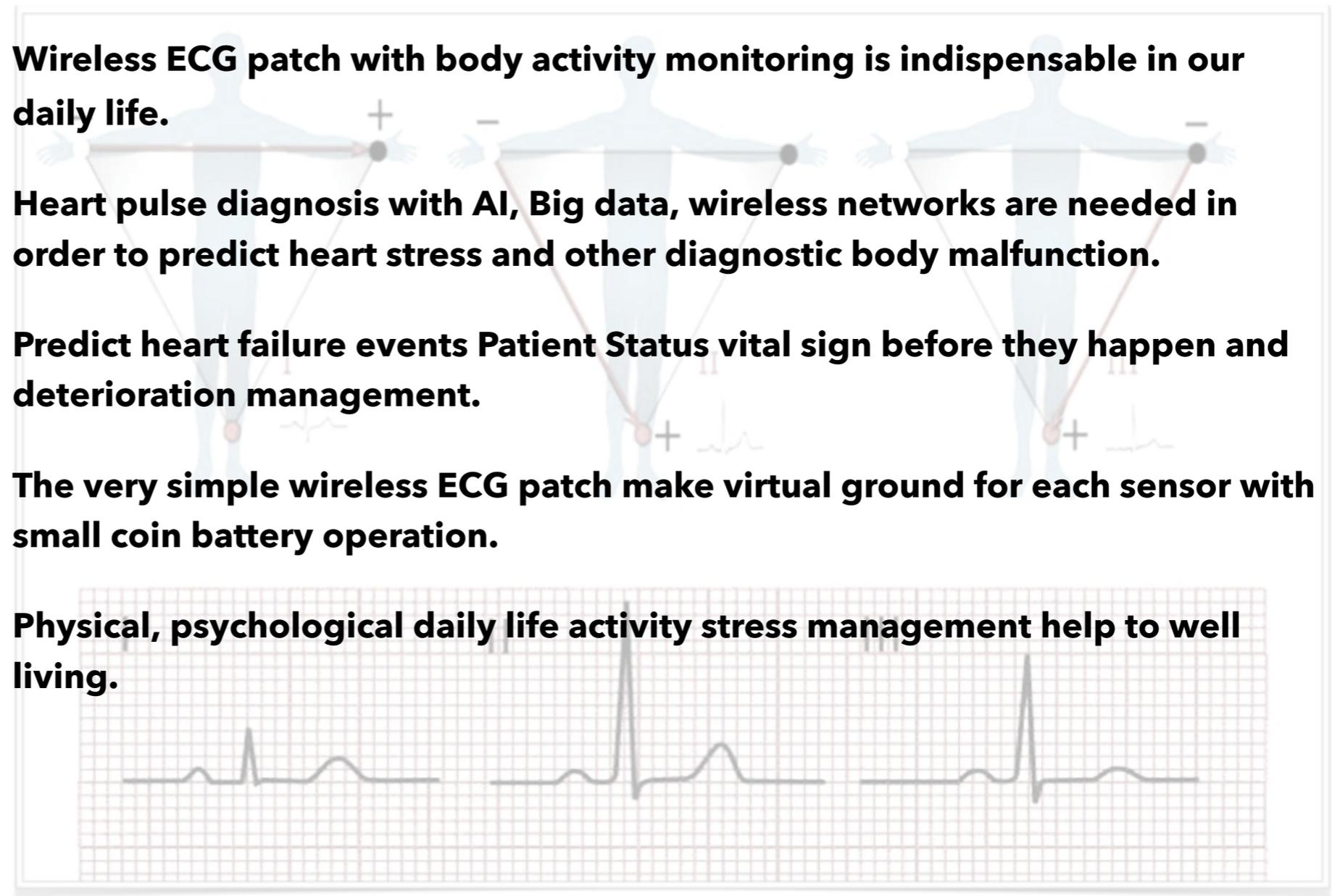


Fig 1. Heart pulse example



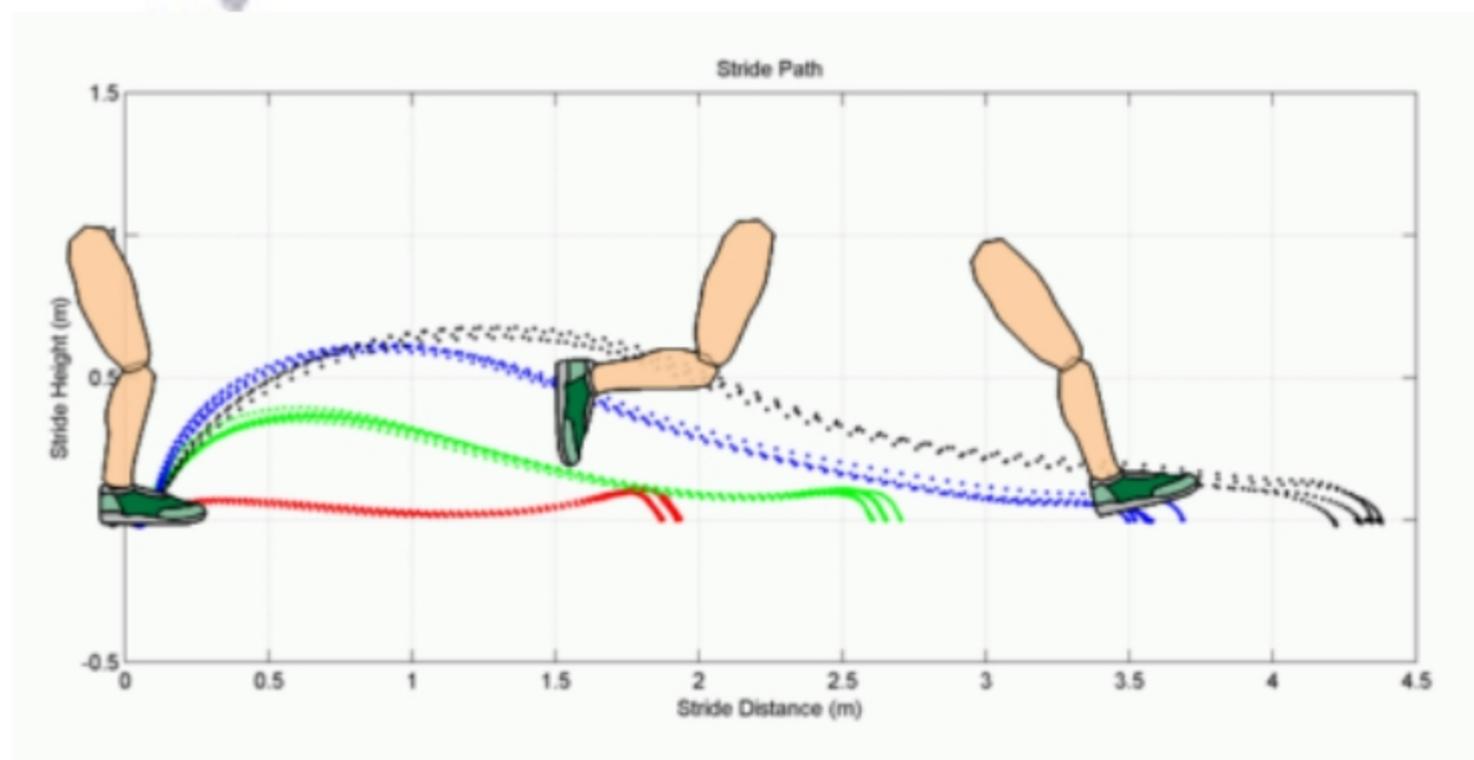


Exercise activity classification

The 3D MEMS sensor captures the activity data.

This graph show 4 different stride for walking, jogging, running and sprinting of this person was between a walk, jog, run and sprint.

Inactive class for lying or sitting and active class for up and going somewhere of locomotion class.





Wireless Technology for ECG

Electrocardiogram quick and easy to obtain 24h heart pulse early warning high accuracy measurement are prevented sudden cardiac arrest.

Enormous benefits to millions of patients and their care teams while addressing the spiraling costs of care.



Fig 2. **FIDES novel wireless ECG coin patch** for multi purpose limb leads



Fig 3. The limb leads record by right finger touch are not support daily monitoring.



Fig 4. The blood flow record by Ir technology for heart rate check are low accuracy not support heart pulse.



Fig 5. Wireless ECG sensor with separate transmitter and receiver. © Isansys Lifecare



Fig 6. Low cost compact wireless ECG sensor. © Isansys Lifecare

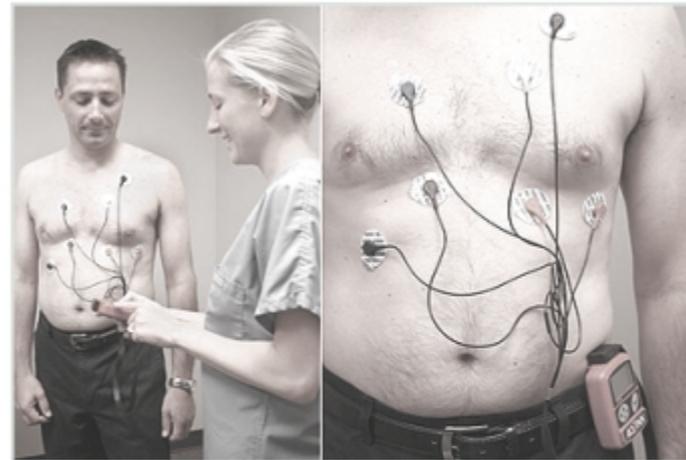


Target research technology

Easy to wearable wireless 12-Lead ECG Patch and bands for standard diagnostic and Lead I, II, III type with 3D MEMS activity measurement support all kinds of activity with animal.

Function of WECG with MEMS are

- Activity heart pulse and body stress monitor
- Health monitor and managements
- Foot angle and velocity 97% accuracy for speed, distance and calorimetry with heart pulse.
- Presuppose anginal, cardiology monitor for daily life activity.
- Monitoring and AI diagnostic ECG sinus rhythm research.



- Prepare

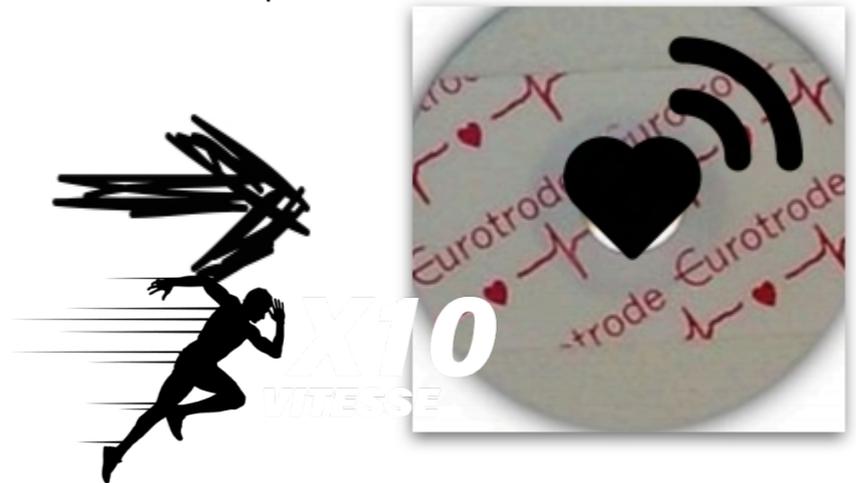


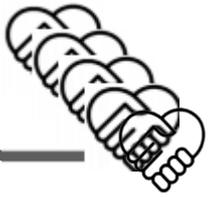
Fig 7. Wired portable ECG change to wireless ECG 3D MEMS sensor are 24h daily life body activity monitoring and diagnostic management

Technology collaboration

- Ready to clinical test hospital collaboration
- ASIC chip design, firmware
- AI Bio data analysis, diagnosis (Cardiac disease activity data)
- Various application software
- Application module production

Business with FIDES

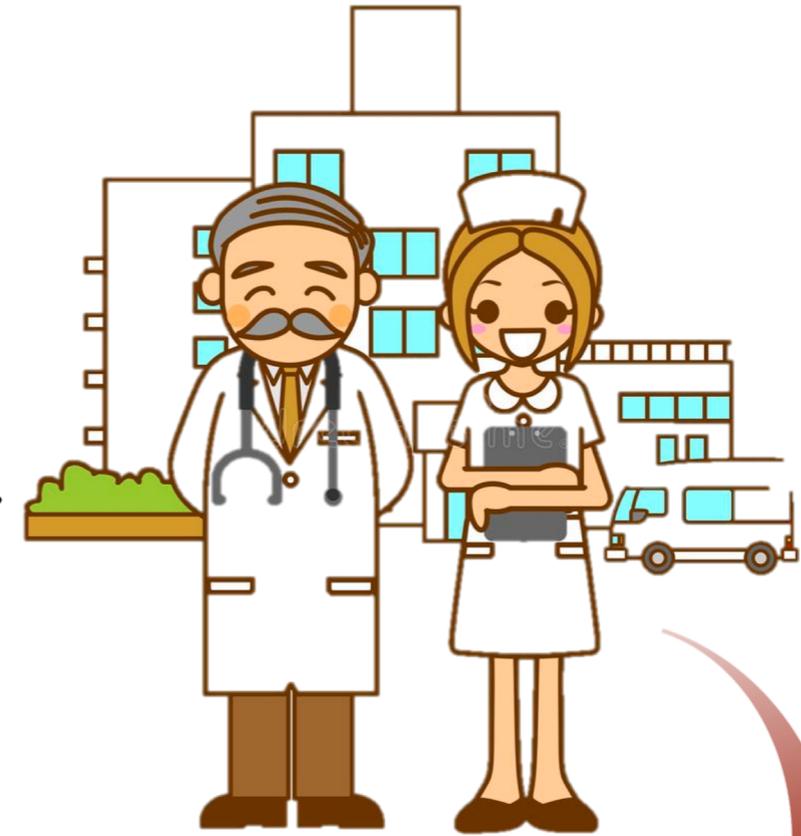
- FIDES can provide technology with participate in ASIC, application design
- Anticipate business provide or introducing for R&D fund including invest, etc.
- Otherwise equals provide for start this business ways.



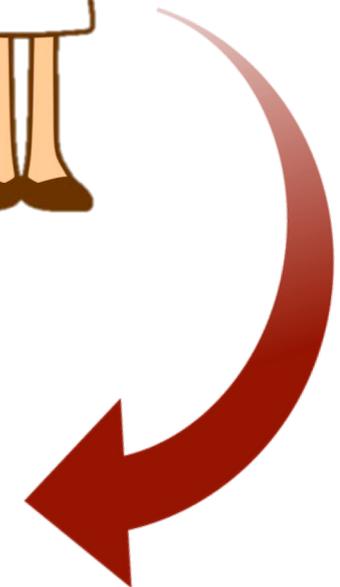
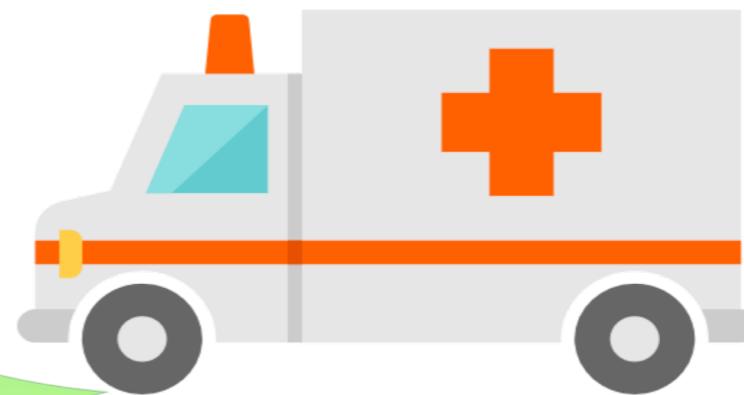
Exercise activity classification

WECG / 3D MEMS sensor captures the activity data.

AI program support prediction / health management.



Activity management



**WIRELESS ELECTROCARDIOGRAPHY WITH 3D MEMS
ACTIVITY MEASUREMENT PROJECT**

HEALTHCARE

