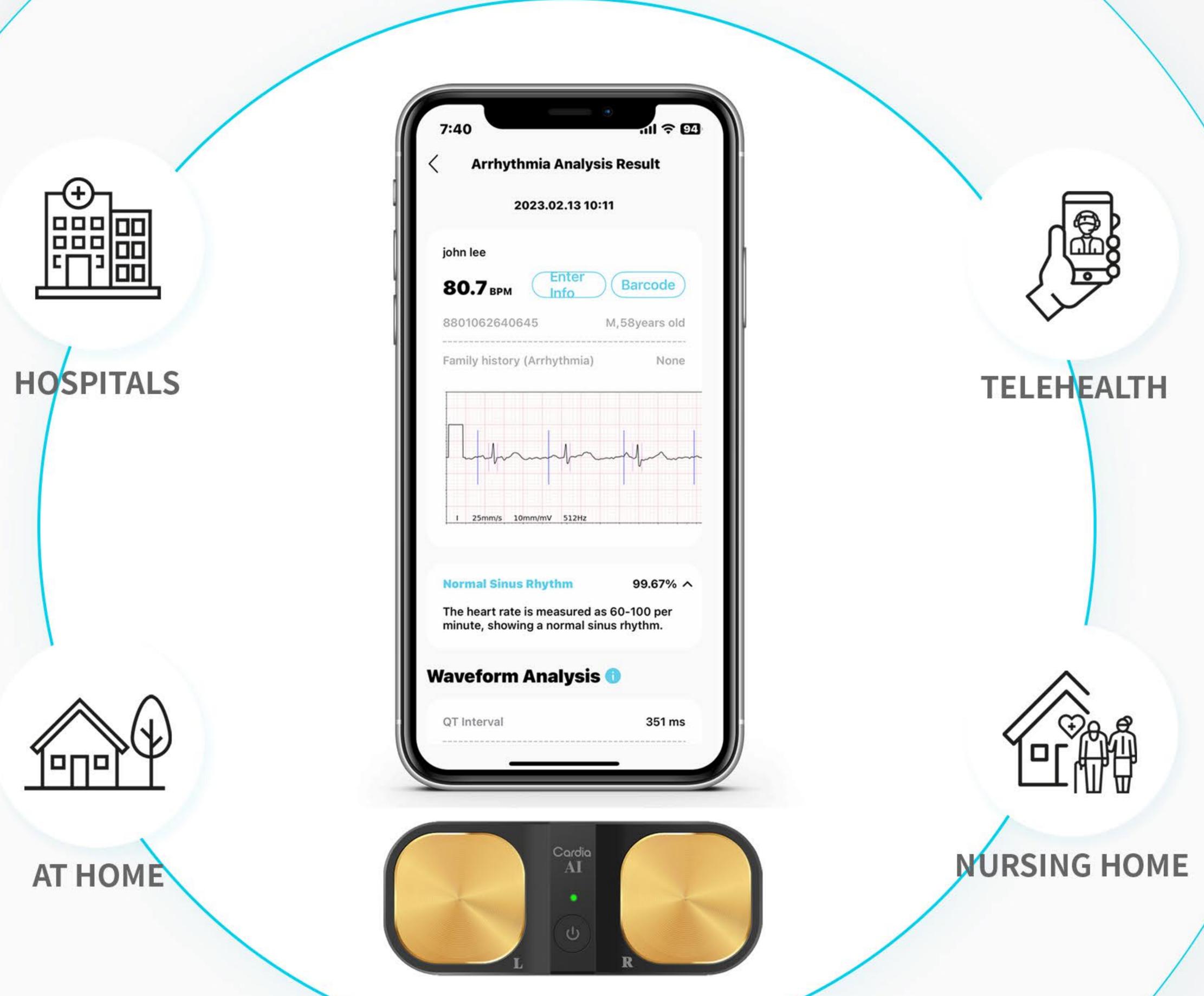


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AI - BASED ALGORITHM APPLIED

ECG TESTING ANYTIME ANYWHERE

OPTIMAL FOR TELEMEDICINE

01 ABOUT MediFarmSoft,

MediFarmSoft,

a company specializing in the development of Al-based diagnostic medical system, is a leading company in the digital healthcare market. Since its establishment in 2018, we have been focusing on studying Al-based algorithm and intelligent biometric information analysis, which are based on the convergence of medical devices and IT technology.

In 2021, we developed Cardial ECG, a portable ECG self-diagnosis device that utilizes Al interpretation algorithm to provide fast and accurate ECG analysis results.

The Cardial system is a suitable product for telemedicine, allowing both medical professionals and individuals to check easily for intermittent cardiac abnormalities anytime, anywhere.

In addition, we plan to provide opportunities for the early detection and treatment of arrhythmia in cardiac patients through the development of the 6-Lead Holter ECG (CAI-300) and Atrial Fibrillation Prediction System (PAPS) based on artificial intelligence analysis.

MediFarmSoft will continue to strive tirelessly for the development and advancement of biometric analysis medical devices and IT software. We are committed to becoming a leading company in the field of Al-based biometric information analysis platforms, contributing to the creation of a healthy society.

02 COMPANY HISTORY

2023

- Supplying Cardial, to 189 overseas diplomatic stations of MOFA for monitoring heart-diseases
- Cardial(CAI-100H), holter ECG device, approved by MFDS(KFDA), Class II
- Supply and Distribution Agreement in Indonesia

2022

- Supply and Distribution Agreement in Philippines
- Supply and Distribution Agreement in Kenya, Nigeria and Uganda

2021

- Clinical Study for Cardia SOFT, Al algorithm software by SNU Hospital
- Establishment of Al-based analysis service platform at Amazon Cloud Cardial (CAI-100) CE IIa Approval (MDD)
- Cardial (CAI-100), uHealthcare ECG device, MFDS Approval (Medical Grade III)
- ISO13485

2020

- Venture Enterprises Certification (no. 20200401662)
- Patent of Al-based ECG Diagnostic System
- Completion on IP-R&D Project of KISTA
- KGMP

- Corporate-affiliated R&D Institute (no. 2019113596)
- Successful Development of World First Al Analysis Algorithm for 18 types of Heart Diseases.
- IRB Approval for Providing Diseases Data by SNU Hosp.

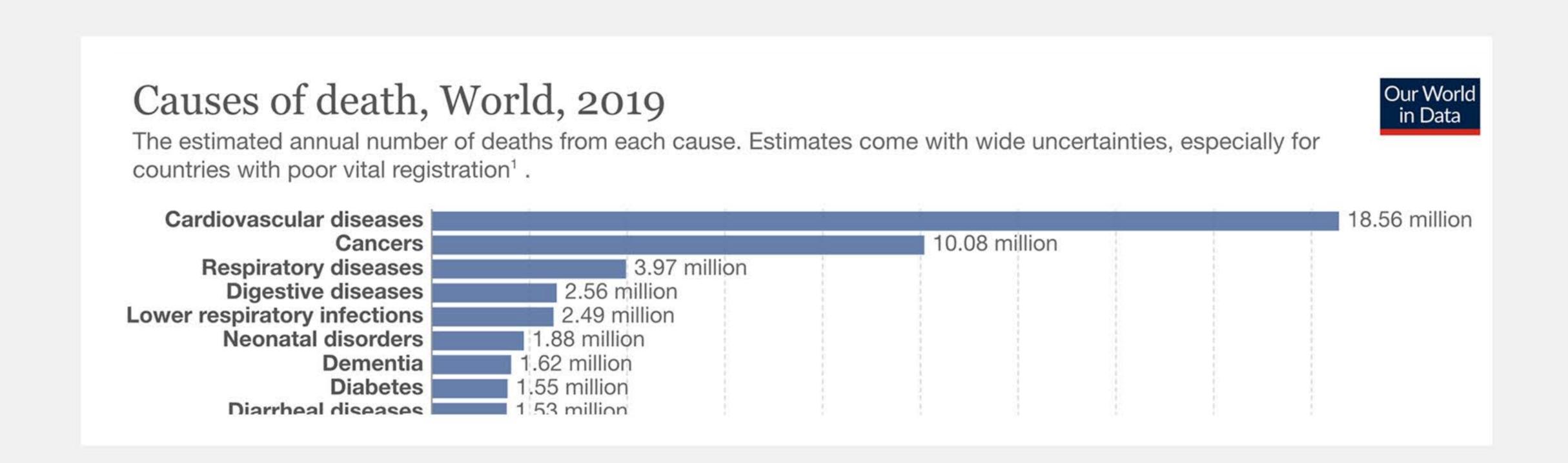
2018

Establishment of MediFarmSoft



03 PROBLEMS

Sudden cardiac death and arrythmia represent Major worldwide public health problems.



ECG devices are the common method to monitor heart problems (National Library of Medicine), but the intermittent heart rhythms cannot be detected at the time of having ECG.

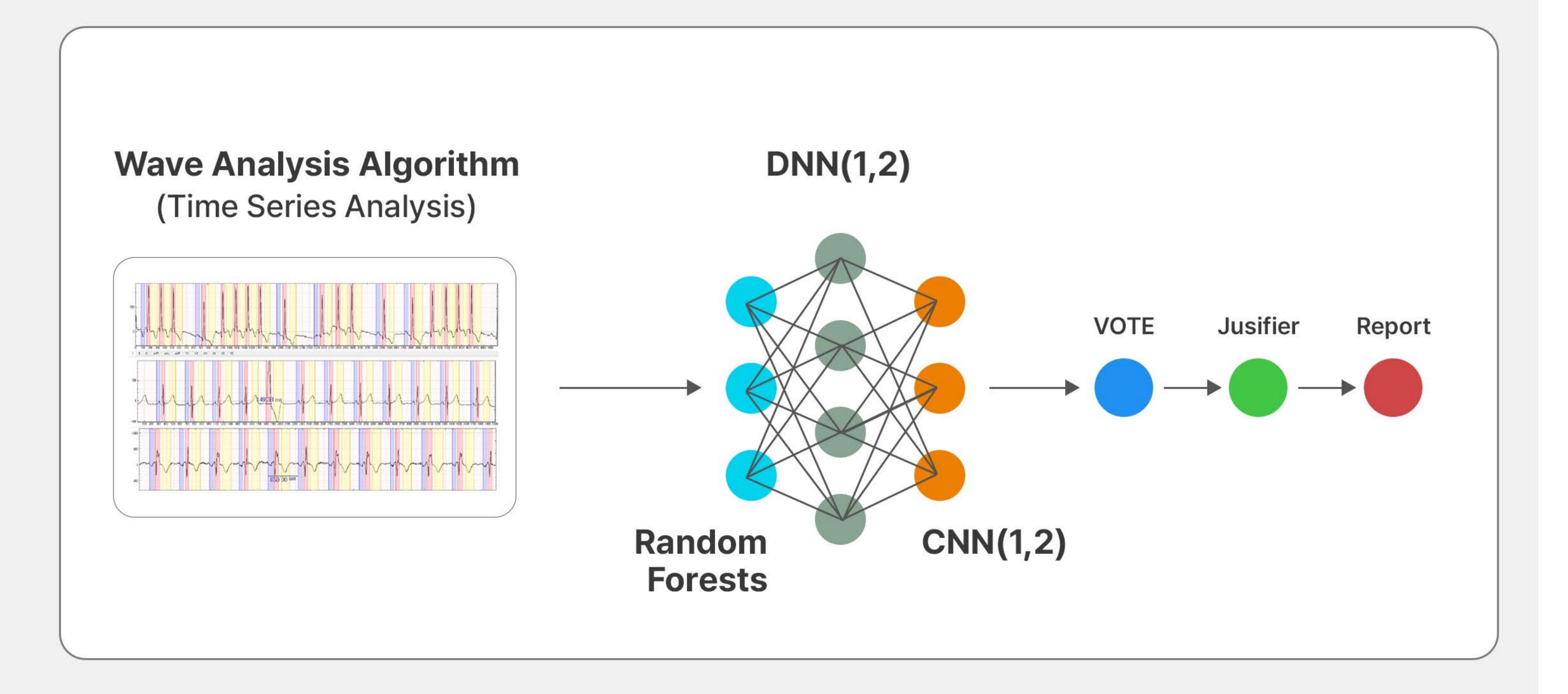


Physicians at all training levels may have deficiencies in ECG interpretation.

74.9% interpretation accuracy for cardiologists

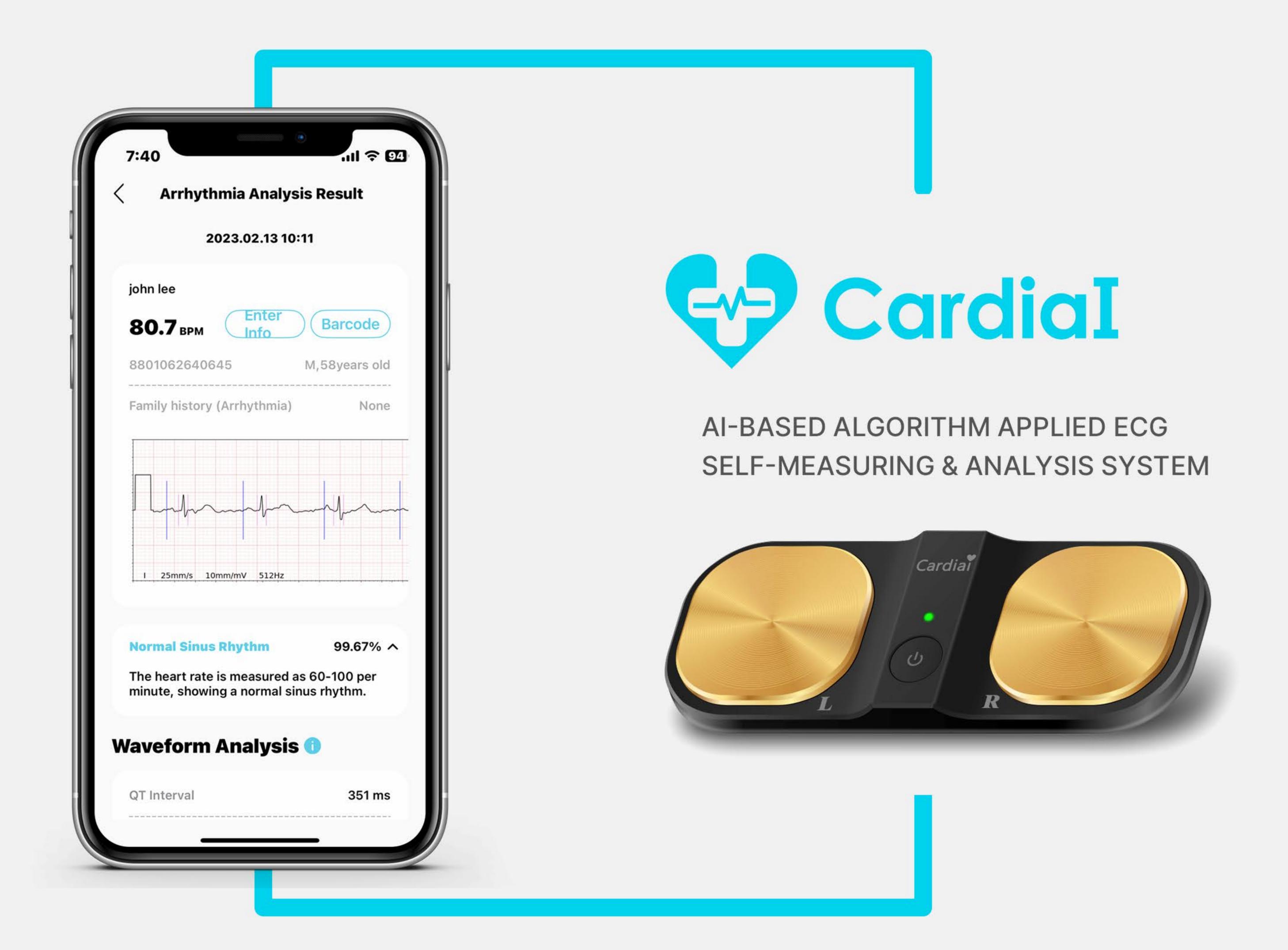
04 SOLUTIONS

Deep Learning



- Al-enhanced ECG in cardiovascular disease management. 1)
- The average F1 score for the DNN(0.837) exceeded that of average cardiologists(0.780).2)
- At present, ambulatory single-lead devices incorporated in smartphones can be used intermittently to monitor heart rhythm. 3)
- 01 https://www.nature.com/articles/s41569-020-00503-2 https://pubmed.ncbi.nlm.nih.gov/30617320/ https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9683599/

05 UHEALTHCARE CARDIAI ECG DEVICE



By quick & simple ECG test anytime, anywhere, patient can confirm the symptom of arrhythmia such as 'atrial fibrillation, tachycardia, bradycardia'

Cardial is the medical device that supports patients to diagnose & read arrhythmia accurately through ECG waveform analysis with Al analysis algorithm.



DEVICE FOR ECG CHECK-UP



SIMPLE, QUICK 30-SEC



PATENT & DESIGN
SKILL-APPLIED



ANALYSIS IN REAL TIME

Analyzable Heart Rhythms









🕜 Bradycardia 🧭 Normal Sinus Rhythm

06 WHY CARDIAI?

ARRHYTHMIA THAT CAUSES STROKE



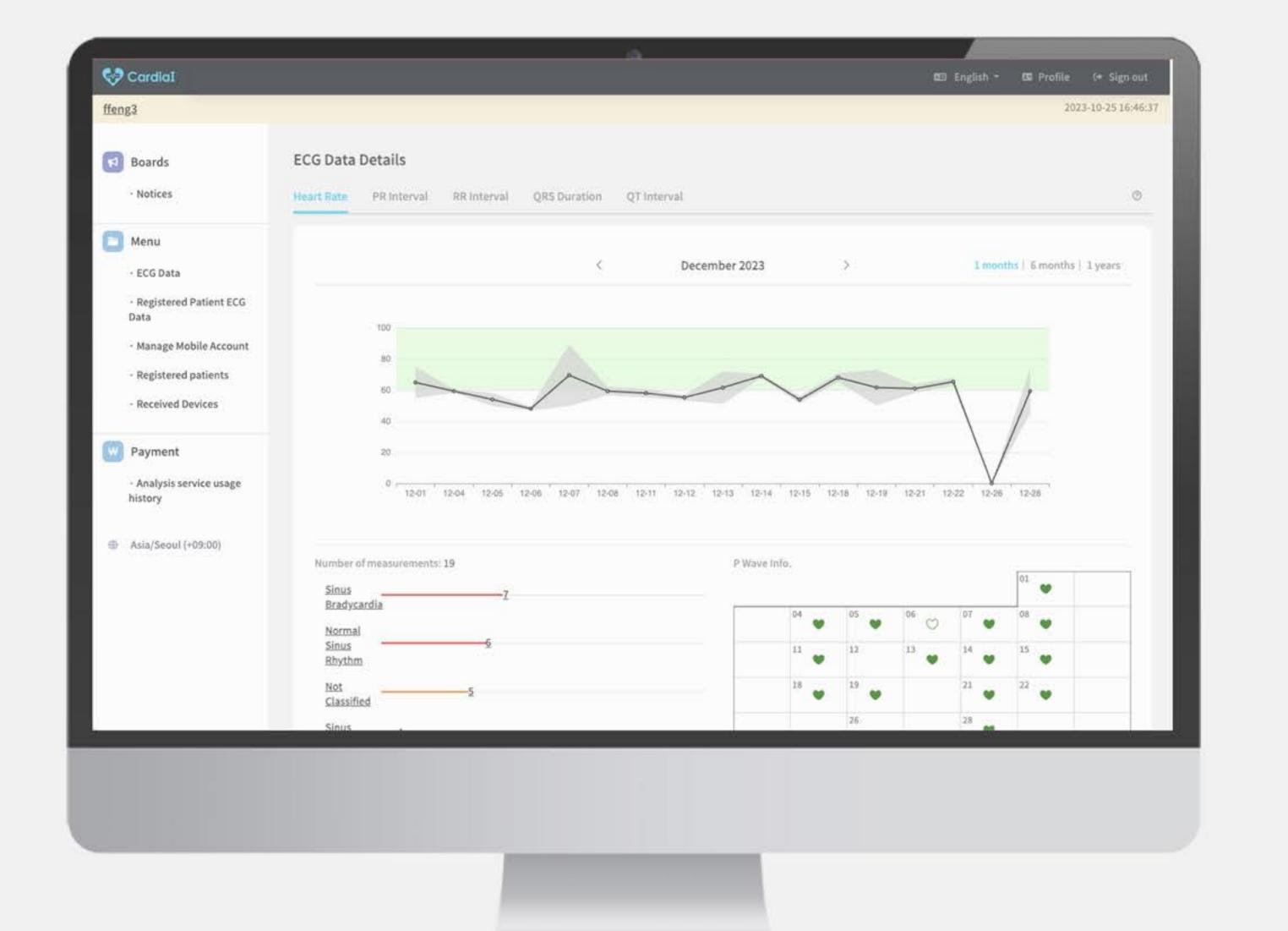
Arrhythmia patient has 5 increased times in stroke risk and increased 2 times in mortality. In the long run, heart failure with impaired heart function and various symptoms could occur.

Atrial Fibrillation is the main reason of stroke, acute, coronary syndrome, heart disease, cardiovascular death.

Cardial is suitable to measure Atrial Fibrillation simply accurately.

Periodic ECG test are a useful way to improve Atrial Fibrillation readings.

ANYTIME · ANYWHERE, SIMPLE & ACCURATE, ATRIAL FIBRILLATION READING.



PORTABLE

Immediate ECG diagnosis when abnormal symptom occurred

ACCURACY

Image/waveform analysis algorithm applied, high accuracy about arrhythmia analysis provided

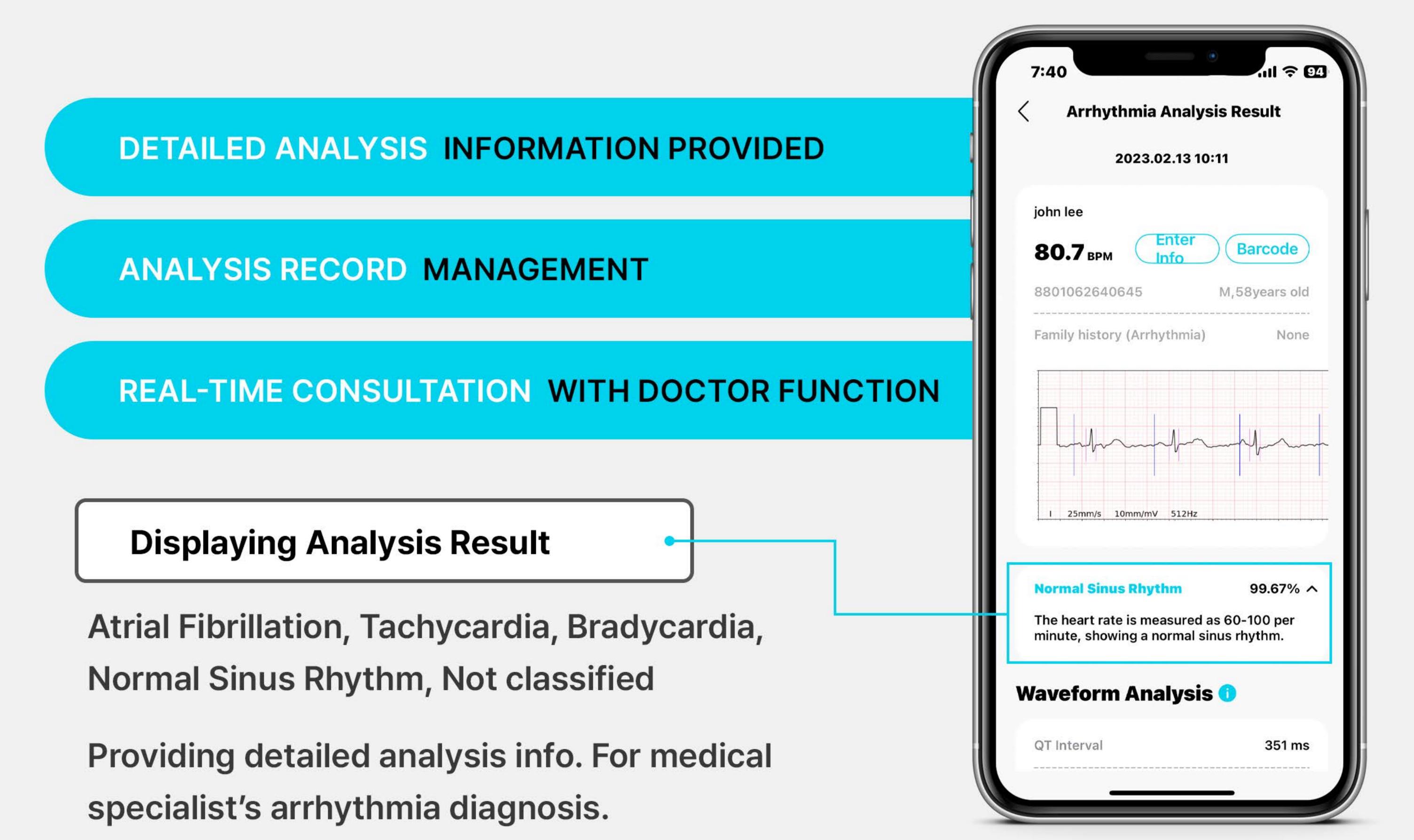
RELIABILITY

CE & Korea MFDS certificates, Patent & Design registrations

REAL-TIME ANALYSIS

Immediate check-up of ECG analysis result, Doctors can diagnose with the analysis result

07 CARDIAI MOBILE APPLICATION

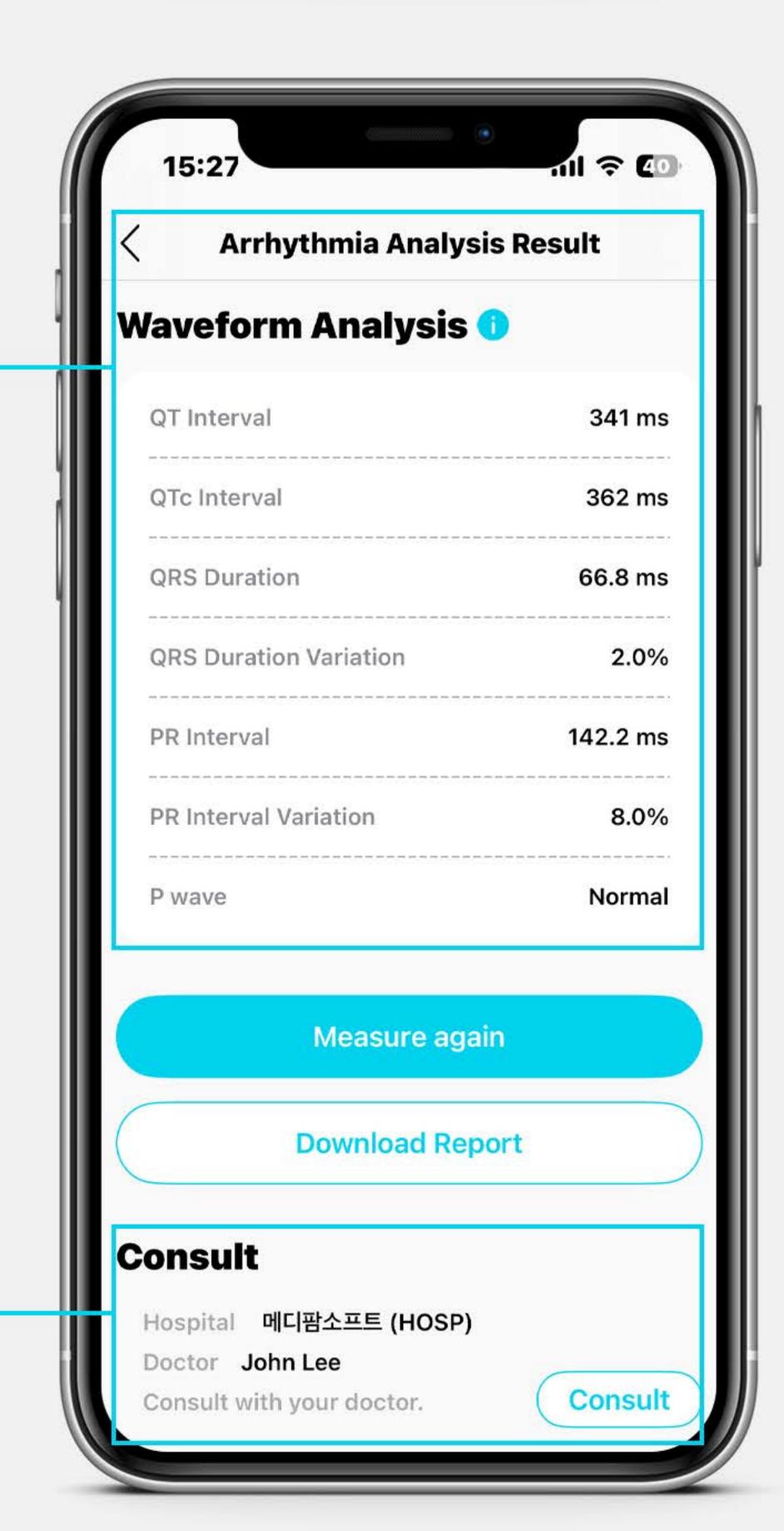


Major Determinations are Displayed by Waveform Analysis Algorithm

Faster and more accurate ECG analysis info. is available.

Doctors Consultation Through Messaging Functions

With ECG data & analysis result, patients can consult with their doctors remotely.



08 ECG ANALYSIS REPORT

CardiaI provides ECG analysis report in PNG/PDF format after measurement.

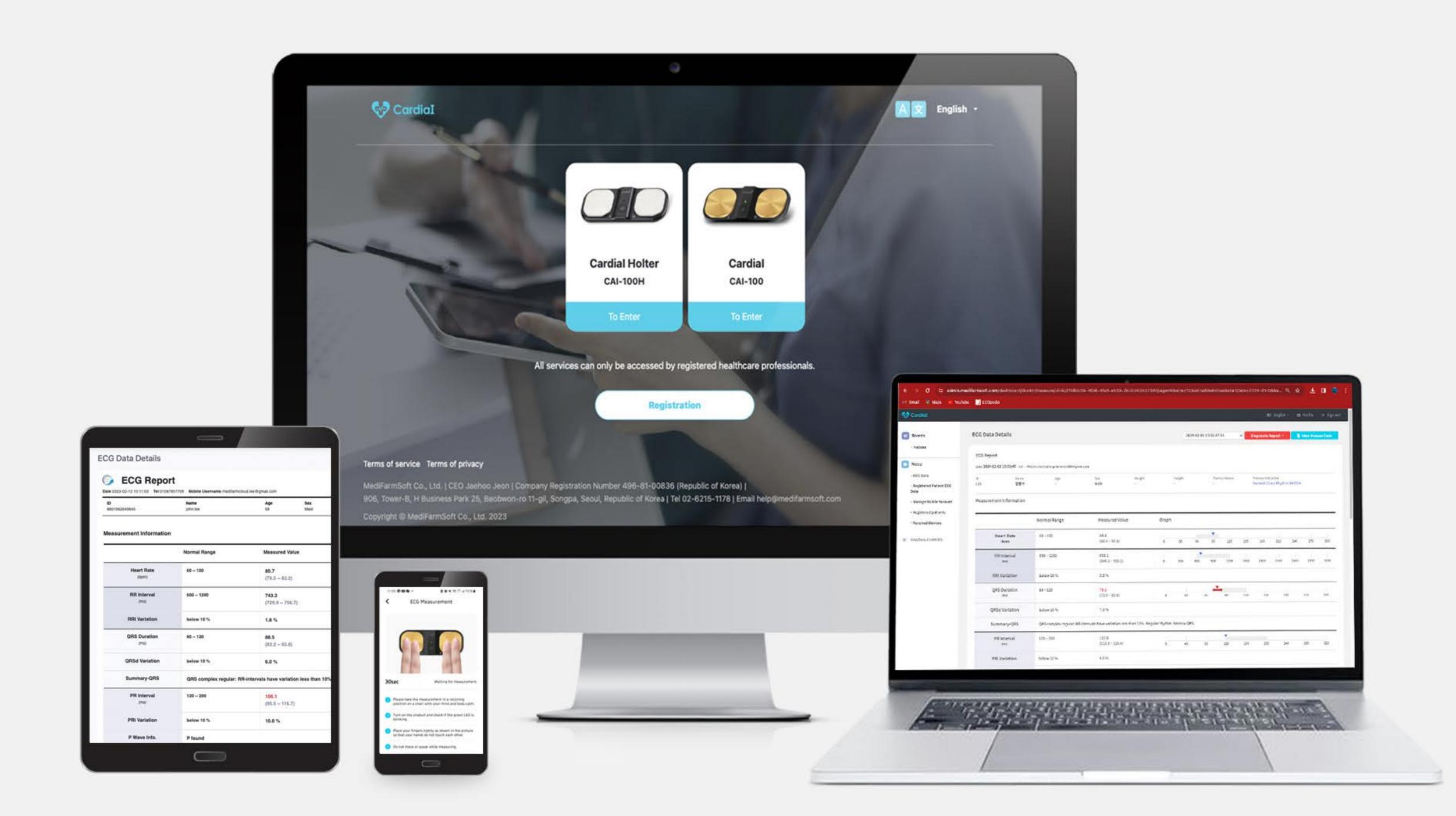
Doctors can check each patients' heart condition with web viewer, Users can check own report through Cardial app, also can share with family by using SNS & E-MAIL.



- Primary indication & conclusion
- Annotation information measured
- Various determinations
- O Doctor's comment

09 CARDIAI WEB VIEWER S/W

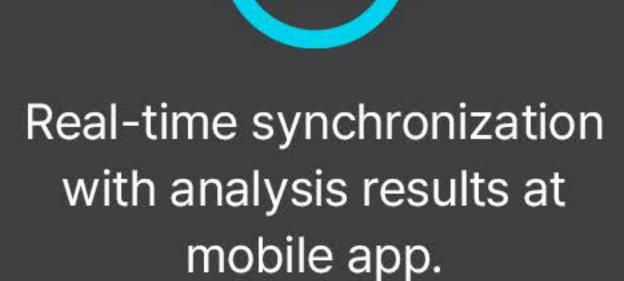
- The Web-Viewer S/W is Designed for telehealth services and for use by medical doctors at their hospitals/clinics
- Medical doctors can review patients' ECG test report and communicate with the patients without face-to-face meeting



KEY FUNCTIONS

- 1) Manage ECG reports taken by a Cardial ECG device
- 2) Generate statistics based on ECG reports
- 3) Communicate with patients using chat tool
- 4) Process payment for analysis S/W
- Cardial Web Viewer is a program that can confirm Patient's ECG test result at Cardial app. through web viewer software, and also could contact patient in real time.
- Also, it is a useful software that can diagnose patient's ECG test result and communicate in telemedicine way.







Available real-time conversation with patients

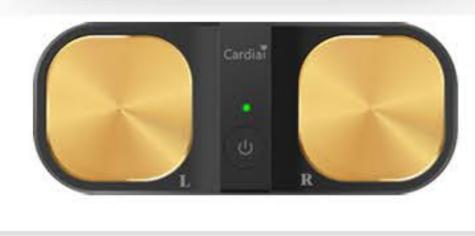


10 CARDIAI ECG SPECIFICATION

SIZE	84 x 34 x 7mm	WEIGHT	22g
POWER BUTTON	1 ea	LED	Red / Green / Blue
BETTERY	210mAh	RECHARGEABLE	Possible (USB C-type)
CONNECTION	BLE 5.0	CHANNEL	Lead-1
DISTANCE	Maximum 3m to connect mobile application		

How to use?



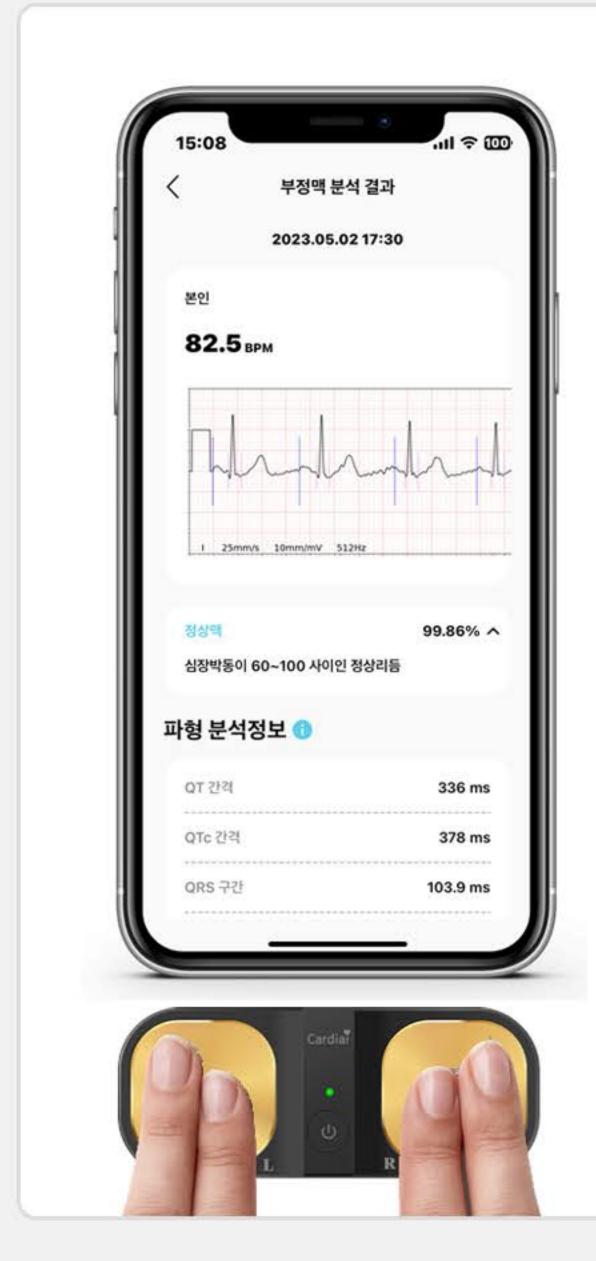


the device, then green LED will be on.
Tab 'Start' button on mobile app. to start recording.

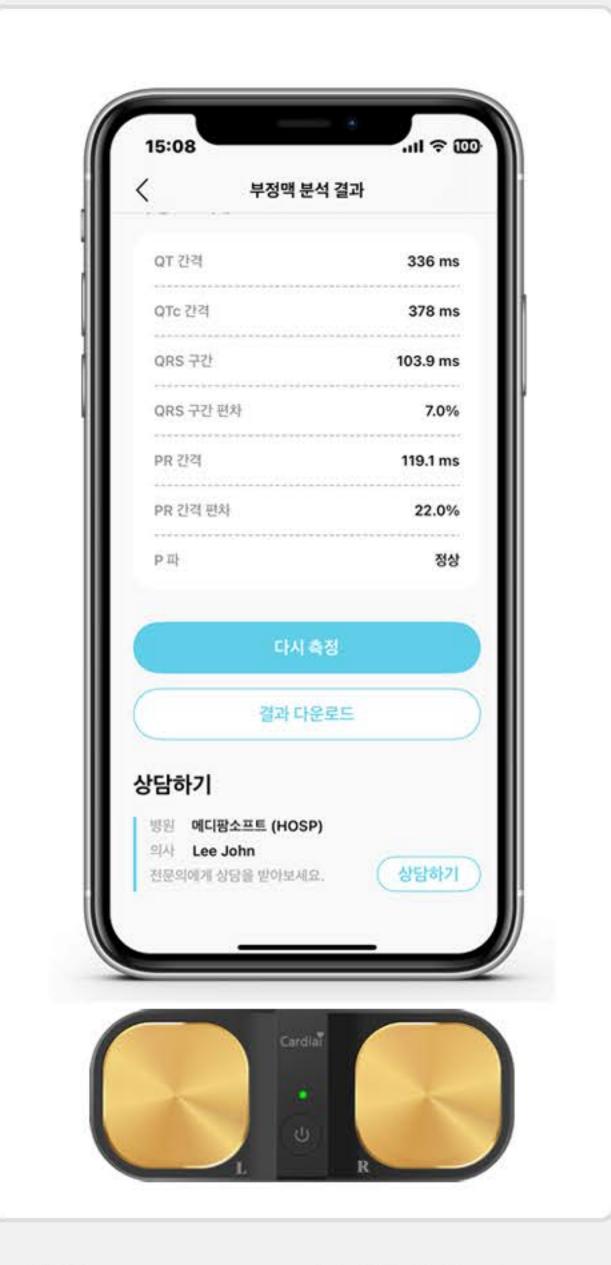
Press the power button of



Place index & middle fingers on electrodes.



When recording start, blue LED will be on.



When green LED blinks after 30-sec recording, measurement is completed.



UHEALTHCARE ECG CLASS II
ANALYSIS SOFTWARE CLASS III
GATEWAY SOFTWARE CLASS I



AMBULATORY ECG CLASS IIA



AMBULATORY ECG RECORDING SYSTEM

11 CARDIAI WINDOWS SYSTEM

ECG system with Built-in Analysis S/W

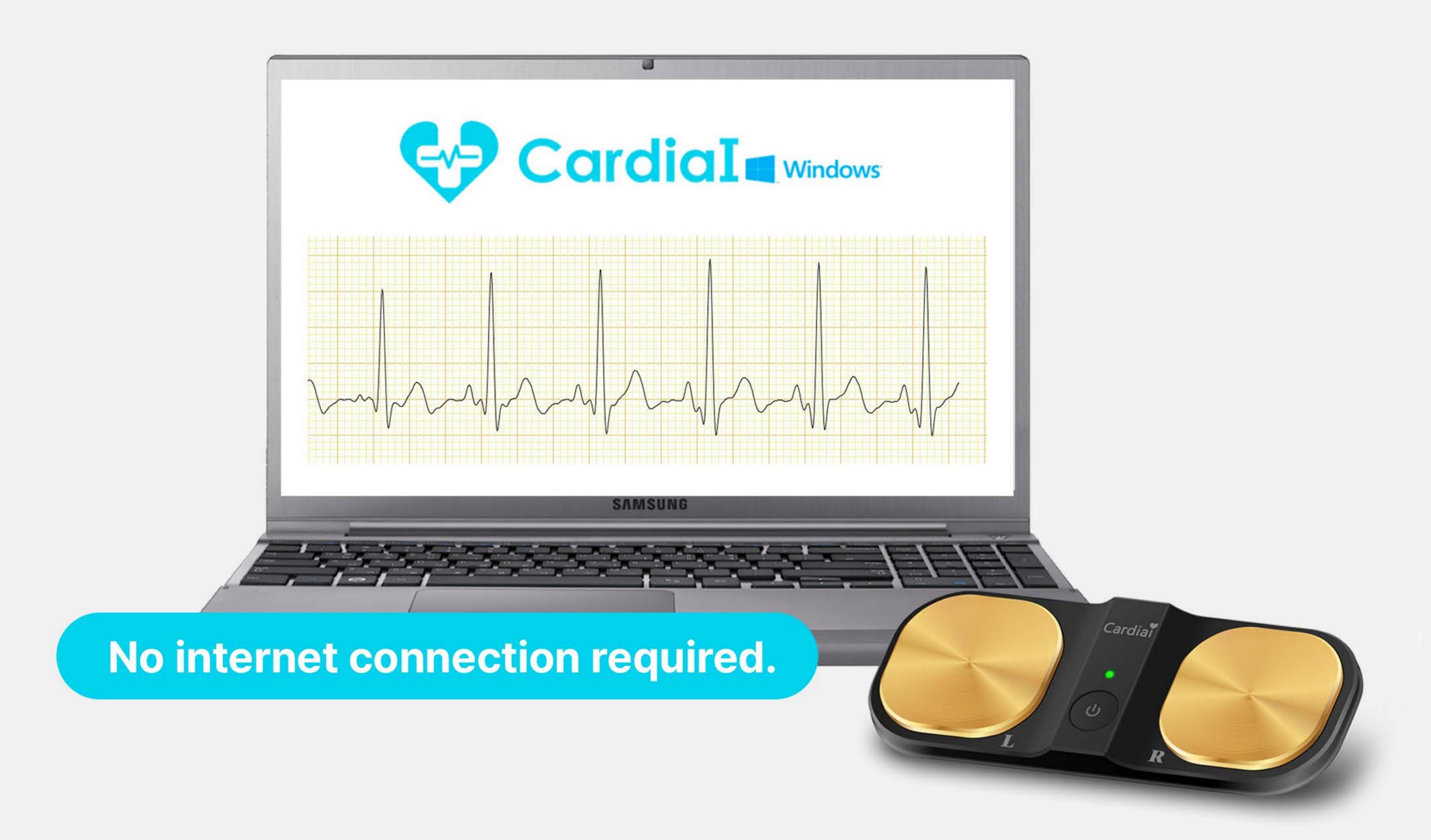
Cardial Windows is specifically designed for non-internet service areas, making it an essential ECG system for patients and medical doctors residing in rural or internet service-limited regions.

System Components

- A 10" laptop computer
- Cardial ECG device
- Security-key USB
- Cardial ECG annotation S/W
- Windows Application

Essential System for

- No internet service regions
- Personal health data protection



12 CARDIAI KIOSK SYSTEM



*KIOSK design will be changed

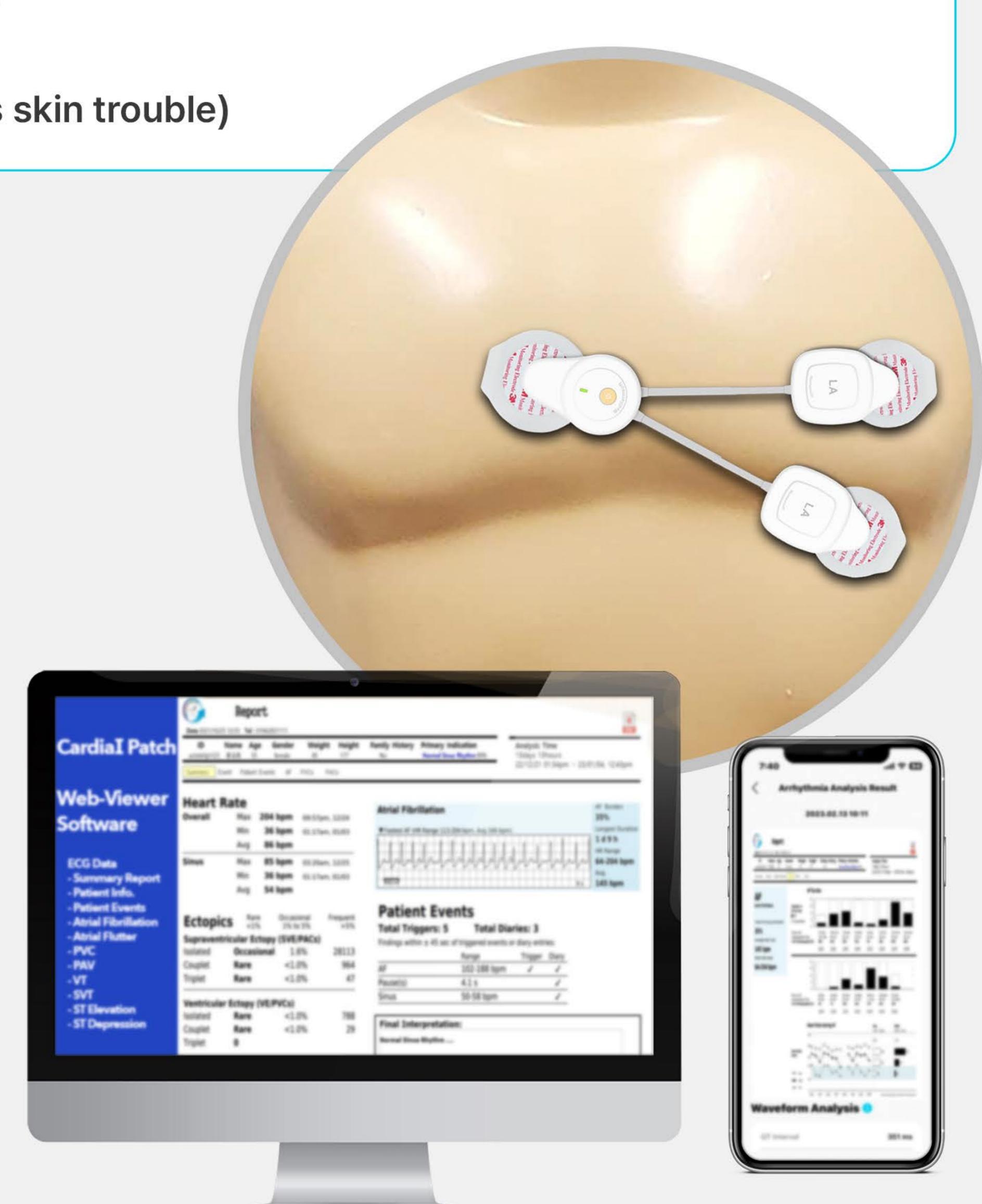
- Multi biometric diagnostic Kiosk system
- Interpretation of 6 biometrics such as BP, HR, TEMP, RESP., SpO2 and ECG
- For hospitals, health examination centers, shopping malls, public places and etc.

MEDIFARMSOFT ------ CARDIAI MEDIFARMSOFT ------

13 CARDIAI PATCH HOLTER ECG SYSTEM

More than 10days, Continuous monitoring your cardiac signals.

- 6-Lead Holter ECG System
- 48 hours real-time ECG wave tracking
- 8 key Arrhythmia Symptoms
- User friendly interface
- Bio-friendly patch(less skin trouble)



14 CARDIAI PATCH HOLTER ECG SYSTEM

PATCH-TYPED 6-LEAD HOLTER ECG

(LEAD I, II, III, AVR, AVL, AND AVF)

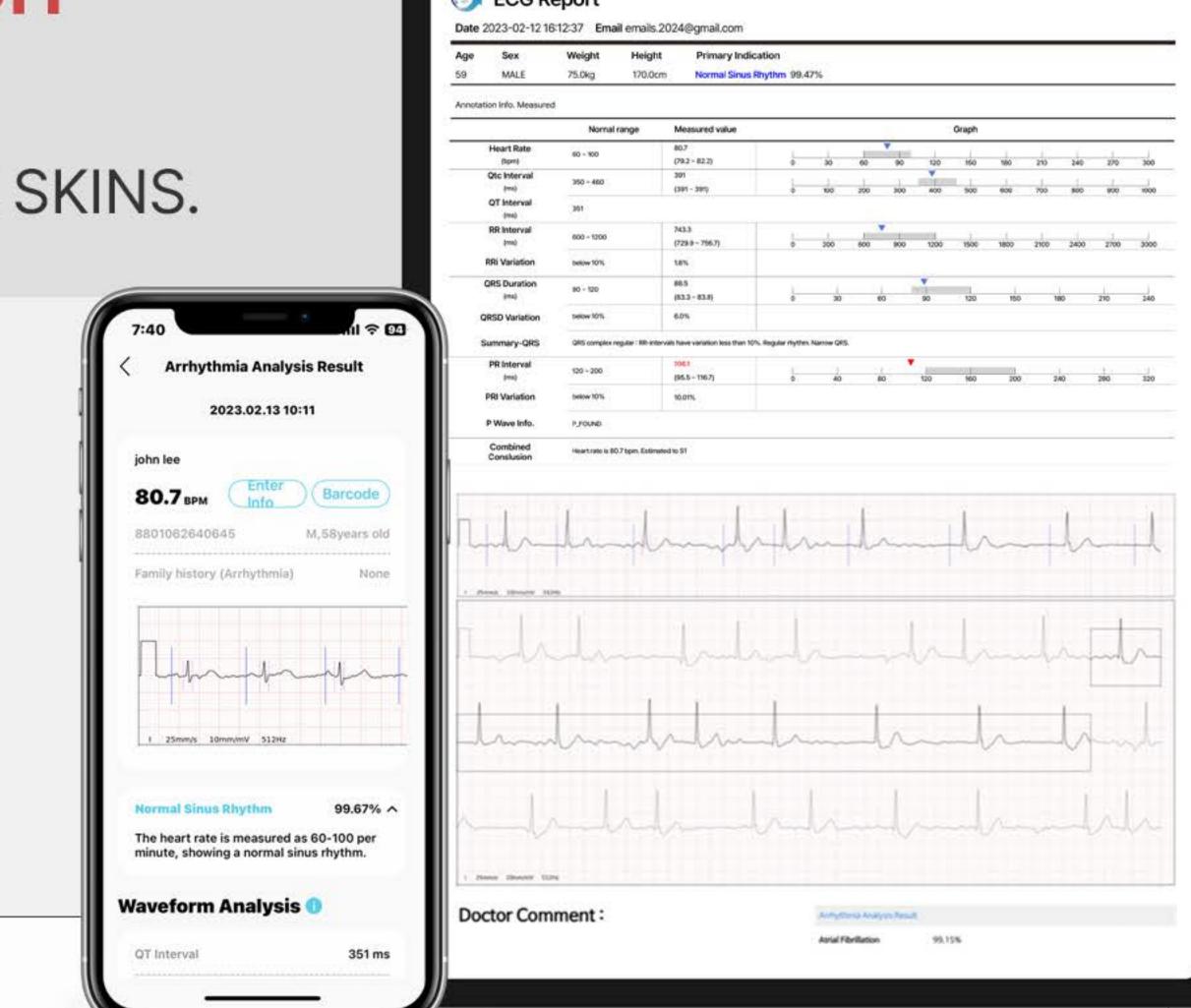
INTERPRETATION OF 8 ARRHYTHMIA-RELATED SYMPTOMS

- ATRIAL FIBRILLATION
- ATRIAL FLUTTER
- PREMATURE VENTRICULAR CONTRACTION(PVC)
- PREMATURE ATRIAL CONTRACTION(PAV)
- VENTRICULAR TACHYCARDIA(VT)
- SUPRAVENTRICULAR TACHYCARDIA(SVT)
- ST ELEVATION
- ST DEPRESSION

CONTINUOUS MONITORING OF HEART CONDITIONS FOR MORE THAN 10 DAYS

APPLICATION OF A BIO-FRIENDLY PATCH THAT IS SAFE FOR THE SKIN

AVAILABLE A LONG-TERM USE EVEN ON SENSITIVE SKINS.



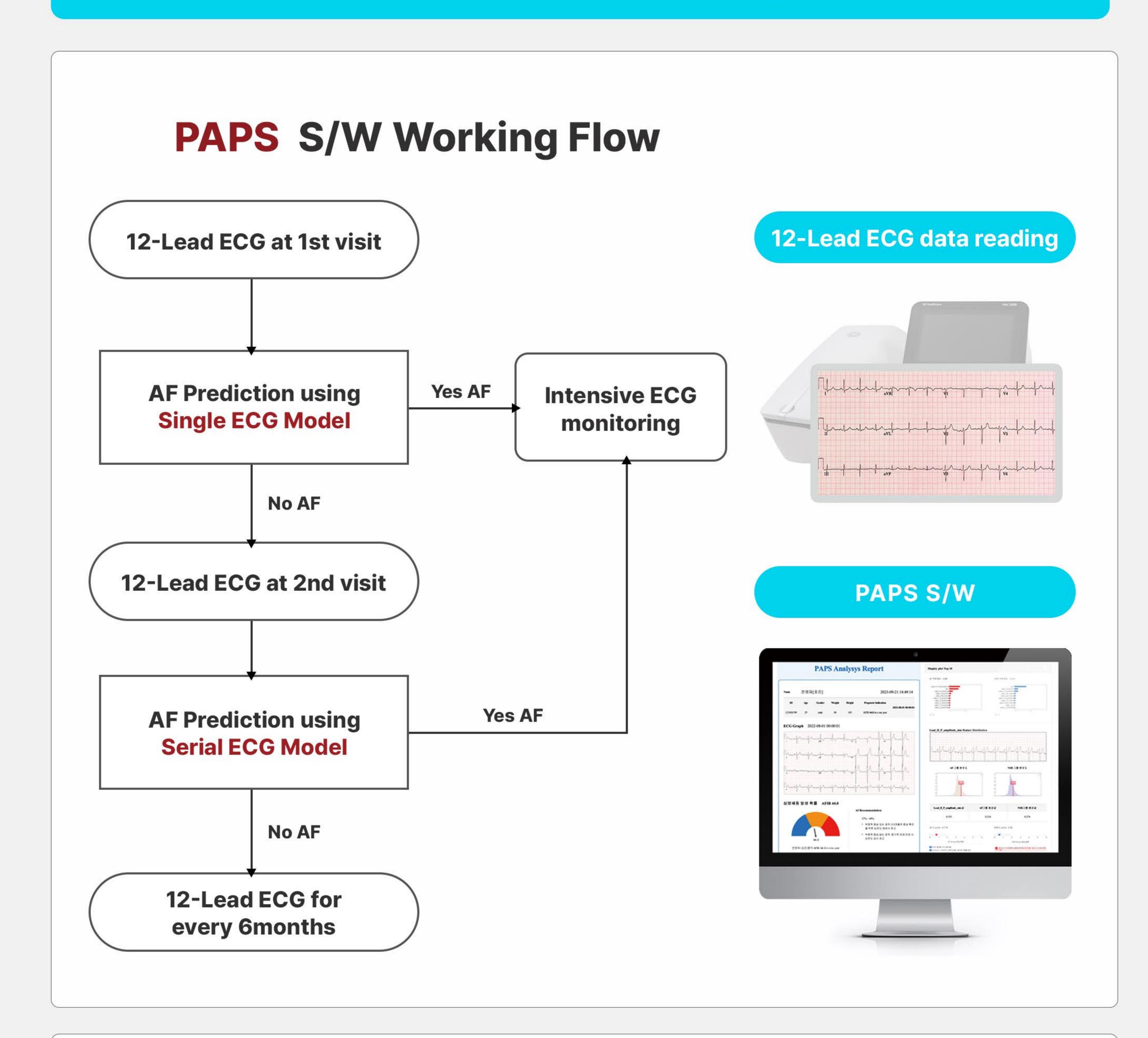
Specification

PRODUCT	CardiaI Patch (Holter ECG)	
MODEL NO.	CAI-300	
BATTERY	280mAh(USB charging) / USB-C type Charging	
COMMUNICATIONS	BLE 5.0	
WEIGHT	30g	

DIFARMSOFT ----- CARDIAI MEDIFARMSOFT ------ CARDIA

15 PAPS, PREDICT AFIB., PREVENT STROKE

Atrial Fibrillation Prediction S/W



- A ground-breaking system that provides early detecting opportunities for atrial fibrillation and protection of stroke.
- Ensuring high accuracy through the application of xAl
- · Clinical trial has been conducting with Samsung Seoul Medical Center.

16 PAPS, PREDICT AFIB., PREVENT STROKE

 Atrial fibrillation is a common cardiac arrhythmia that can increase the risk of stroke. People with AF have a 3-5 times higher risk of ischemic stroke.

[Stroke Asso. In the UK]

PAPS Strengths

 Predicting Atrial Fibrillation in advance
 PAPS compares and analyzes the patient's previous ECG with the latest ECG to predict the likelihood of future Atrial Fibrillation

- Over 2 Million ECG Data Labelling by Samsung Medical Center
- · Two Al Models Applied (high accuracy and sensitivity)
- Single ECG Model

occurrences.

- Serial ECG Model

Patent Status

AI-BASED ECG INTERPRETATION SYSTEM	1020190141008
AI-BASED ECG INTERPRETATION SYSTEM (DIVISIONAL)	1020200094742
AI-BASED BIOSIGNAL REMOTE MONITORING SYSTEM	1020210018514
WEARABLE MULTI-BIO SIGNAL MEASUREMENT DEVICE	1020210063275
BIO DATA MEASUREMENT & INTERPRETATION SYSTEM	1020210132816
WEARABLE DEVICE FOR MEASURING A AI-BASED REMOTE MONITORING SYSTEM UTILIZING MULTIPLE BIO SIGNALS	PCT/KR2021/018949
SYSTEM FOR MEASURING AND READING BIO SIGNAL DATA	PCT/KR2021/018948

Certifications

- GMP, ISO13485
- Free Sales by MFDS
- CE IIa MDD(2195-MED-2113201)
- FDA 510k Submission Number: K233168

18 COMMERCIALIZATION PLAN

Stage	Products	Diagnosis	R&D Pilot Registration Marketed
Commercialized	CardiaI mobile ECG	Atrial Fibrillation Tachycardia Bradycardia Normal Sinus	
	CardiaI Windows	Atrial Fibrillation Tachycardia Bradycardia Normal Sinus	
Under Development	CardiaI Patch	6-lead Holter ECG 8 symptoms	
	CardiaI PAPS	Predict Afib, Prevent Stroke	
	CardiaI KIOSK	Body Temp. Blood Pressure ECG Heart Rate Respiratory Rate SpO2	
R&D	CardiaI Diabetes Monitor System	Non-invasive diabetes level	
	CardiaI Psycho therapy System	Treating anxiety and depression	
			[as of Jan. 2024]