KNOW LABS

TRANSFORMING NON-INVASIVE MEDICAL DIAGNOSTICS AND BEYOND

Know Labs (NYSE MKT: KNW)

DISCLOSURE

CAUTION ABOUT FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements that are based on the Company management's beliefs and assumptions and on information currently available to the Company . All statements other than statements of historical facts are forward-looking statements. These statements relate to future events or to the Company's future financial performance and involve known and unknown risks, uncertainties and other factors that may cause actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about: goals and strategies; future business development, financial condition and results of operations expected product development outcomes, including obtaining regulatory clearance; expected changes in revenue, costs or expenditures; growth of and competition trends in industry; and expectations regarding demand for, and market acceptance of, our products. You can identify forward looking statements by terms such as "may," "could," "will," "should," "would," "expect," "plan," "intend," "anticipate," "believe," "estimate," "predict," "potential," "project" or "continue" or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond the Company's control and which could materially affect results. . In evaluating these forward-looking statements, you should consider various factors, including: Company management's ability to change the direction of the company; ability to keep pace with new technology and changing market needs; and the competitive environment of the business. These and other factors may cause the Company's actual results to differ materially from any forward-looking statement. Forward-looking statements are only predictions. The forward-looking events discussed in this document and other statements made from time to time by the Company or its representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties and assumptions about the Company. The Company is obligated to publicly update or revise any forward-looking statement, whether as a result of uncertainties and assumptions, the forward-looking events discussed in this document and other statements made from time to time by the Company or its representatives might not occur. See offering documents for further risks and disclosures. Past performance is not indicative of future results. There is now guarantee that any specific outcome will be achieved. Investments may be speculative, illiquid and there is a total risk of loss.

General securities market uncertainties resulting in economic considerations.

Recent unease regarding the aforementioned geo-political considerations and increasing inflation has caused the United States and worldwide national securities markets to have undergone unprecedented stress due to the uncertainties of regarding the economy and the resulting reactions and outcomes of governments, businesses, and the general population. These uncertainties have resulted in declines in all market sectors, increases in volumes due to flight to safety and governmental actions to support the markets. As a result, until economic outlook has stabilized, the markets may not be available to the Company for purposes of raising required capital. Should we not be able to obtain financing when required, in the amounts necessary to execute on our plans in full, or on terms which are economically feasible, we may be unable to sustain the necessary capital to pursue our strategic plan and may have to reduce the planned future growth and/or scope of our operations.

We need additional financing to support our technology development and ongoing operations, pay our debts and maintain ownership of our intellectual properties.

We are currently operating at a loss and using substantial cash to fund our operation. We believe that our cash on hand will be sufficient to fund our operations through September 30, 2024. We will need additional financing to implement our business plan and to service our ongoing operations, pay our current debts (described below) and maintain ownership of our intellectual property. There can be no assurance that we will be able to secure any needed funding, or that if such funding is available, the terms or conditions would be acceptable to us. If we are unable to obtain additional financing when it is needed, we will need to restructure our operations and/or divest all or a portion of our business. We may seek additional capital through a combination of private and public equity offerings, debt financings and strategic collaborations. Debt financing, if obtained, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, and could increase our expenses and require that our assets secure such debt. Equity financing, if obtained, could result in dilution to our then-existing stockholders and/or require such stockholders to waive certain rights and preferences. Strategic collaborations may include features which could limit the Company's ultimate potential. If such financings is not available on satisfactory terms, or is not available at all, we may be required to delay, scale back, eliminate the development of business opportunities and our operations and financial condition may be materially adversely affected.

We have a history of operating losses and there can be no assurance that we can achieve or maintain profitability.

We have experienced net losses since inception. As of September 30, 2023, we had an accumulated deficit of $121,841,000 and net losses in the amount of $15,289,000 and $20,071,000 for the years ended September 30, 2023 and 2022, respectively. There can be no assurance that we will achieve or maintain profitability. If we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Failure to become and remain profitable would impair our ability to sustain operations and adversely affect the price of our common stock and our ability to raise capital. Our operating expenses may increase as we spend resources on growing our business, and if our revenue does not correspondingly increase, our operating results and financial condition will suffer. Our businesses have produced minimal revenues and may not produce significant revenues in the near term, or at all, which would harm our ability to continue our operations or obtain additional financing and require us to reduce or discontinue our operations. You must consider our business and prospects in light of the risks and difficulties we will encounter as business with an early-stage technology in a new and rapidly evolving industry. We may not be able to successfully address these risks and difficulties, which could significantly harm our business, operating results and financial condition.

If we are unable to secure a sales and marketing partner or establish satisfactory sales and marketing capabilities at our company, we may not be able to successfully commercialize our technology.

If we are not successful entering into appropriate collaboration arrangements or recruiting sales and marketing personnel or in building a sales and marketing infrastructure, we will have difficulty successfully commercializing our technology, which would adversely affect our business, operating results and financial condition.

We may not be able to enter into collaboration agreements on terms acceptable to us or at all. In addition, even if we enter into such relationships, we may have limited or no control over the sales, marketing and distribution activities of these third parties. Our future revenues may depend heavily on the success of the efforts of these third parties. If we elect to establish a sales and marketing infrastructure, we may not realize a positive return on this investment. In addition, we must compete with established and well-funded pharmaceutical and biotechnology companies to recruit, hire, train and retain sales and marketing personnel. Factors that may inhibit our efforts to commercialize technology without strategic partners or licensees include:

- our inability to recruit and retain adequate numbers of effective sales and marketing personnel;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

Government regulatory approval may be necessary before some of our products can be sold and there is no assurance such approval will be granted.

Our technology will have a number of potential applications in fields of use which will require prior governmental regulatory approval before the technology can be introduced to the marketplace. For example, we are exploring the use of our technology for certain medical diagnostic applications, with an initial focus on the monitoring of blood glucose. There is no assurance that we will be successful in developing glucose monitoring medical applications for our technology. If we were to be successful in developing glucose monitoring medical applications of our technology, prior clearance by the FDA and other governmental regulatory bodies will be required before the technology could be introduced into the marketplace. Our devices leverage Machine Learning (ML) and Artificial Intelligence (AI) to process the massive data collected through the KnowU sensor. ML/AI also controls the sensor operation, enabling the device to emit and capture data, and, ultimately, to identify and measure blood glucose levels. Machine learning-enabled device software functions (ML-DSF) continue to be evaluated by the FDA, which recently released new guidance proposing a science-based approach for AI/ML-enabled medical devices to be modified and improved more quickly. There is no assurance that such regulatory approval would be obtained for a glucose monitoring medical diagnostic device or other applications requiring such approval. The FDA can refuse to grant, delay, and limit or deny approval of an application for clearance of marketing a glucose monitoring device for many reasons. We may not obtain the necessary regulatory approvals or clearances to market these glucose monitoring systems in the United States or outside of the United States. Any delay in, or failure to receive or maintain, approval or clearance for our products could prevent us from generating revenue from these products or achieving profitability.

Company Overview

- **Who Is Know Labs?** Emerging Leader in RF Dielectric Spectroscopy for Non-Invasive Medical Diagnostics
- **Non-Invasive Medical Diagnostics:** A Better Solution for Diabetes Management
- **Product Roadmap:** The Next-Generation Blood Glucose Monitor
- **Clinical Data:** Meeting the Requirements for Medical Grade Accuracy
- **Path to Commercialization:** Leverage Strategic Partnerships
- **Intellectual Property:** Global Leadership Across the Value Chain
- **Skunkworks:** Multiple Shots on Goal

Who Is Know Labs? Emerging Leader in RF Dielectric Spectroscopy for Non-Invasive Medical Diagnostics

Who is Know Labs?

- **Inventor of Foundational Platform Technology in Radio Frequency (RF) Dielectric Spectroscopy to Non-Invasively Measure and Monitor a Broad Array of Analytes Across Diverse Use Cases, "A New Branch of Science"**
- **Strong IP Leadership** with Over 300 Patent Assets
- **Numerous Peer-Reviewed Publications** Demonstrate Clinical Efficacy Paving the Way to Medical Grade Accuracy
- **Capital Efficient Business Model With Focus on Strategic Joint Venture** with Major Players to Accelerate Speed to Market and Leverage IP
- We are building the **Next Generation of Non-Invasive Medical Diagnostics**

Non-Invasive Medical Diagnostics: A Better Solution for Diabetes Management

Non-invasive RF Diagnostics: How It Works

First Principles: The Diagnostic Use of RF Energy is Agnostic to Tissue or Analyte in Ultrasound, MRI and KnowU

Noninvasive Diagnostic Product	Frequency	How it Works	Use Case
	2 MHz to 15 MHz	• Ultrasound imaging emits RF energy directed at the tissue being examined and reflected echoes created an image	• Measure physical attributes – healthy baby (10 fingers / toes), gender, stress, echocardiogram (healthy heart)
	400 MHz	• Magnetic resonance imaging (MRI) works by passing an electric current through coiled wires to create a temporary magnetic field in your body • An RF transmitter/receiver in the machine then sends and receives radio waves • The computer then uses these signals to make digital images of the scanned area of your body	• MRI is a type of diagnostic test that can create detailed images of nearly every structure and organ inside the body • Images can show organs, bones, joints, muscles and blood vessels
	300 MHz to 4400 MHz	• An RF transmitter/receiver sends and receives frequency sweeps into the body which then activate the dielectric properties of glucose (a polar molecule in the body) and its ability to store electrical energy in an electric field (known as permittivity) • Glucose has a distinctive conformational dipole rotation • Using time frequency sweeps, KnowU rapidly scans a large range of RF frequencies and records voltage values detected at each frequency to quantify real-time blood glucose	• Measure blood glucose in real-time • Monitor for glycemic levels and ranges
BlueTooth & Wi-fi	2400 MHz to 2485 MHz		
5G Phones	450 MHz to 6 GHz		

Product Roadmap: The Next-Generation Blood Glucose Monitor

Know Labs

We are building the

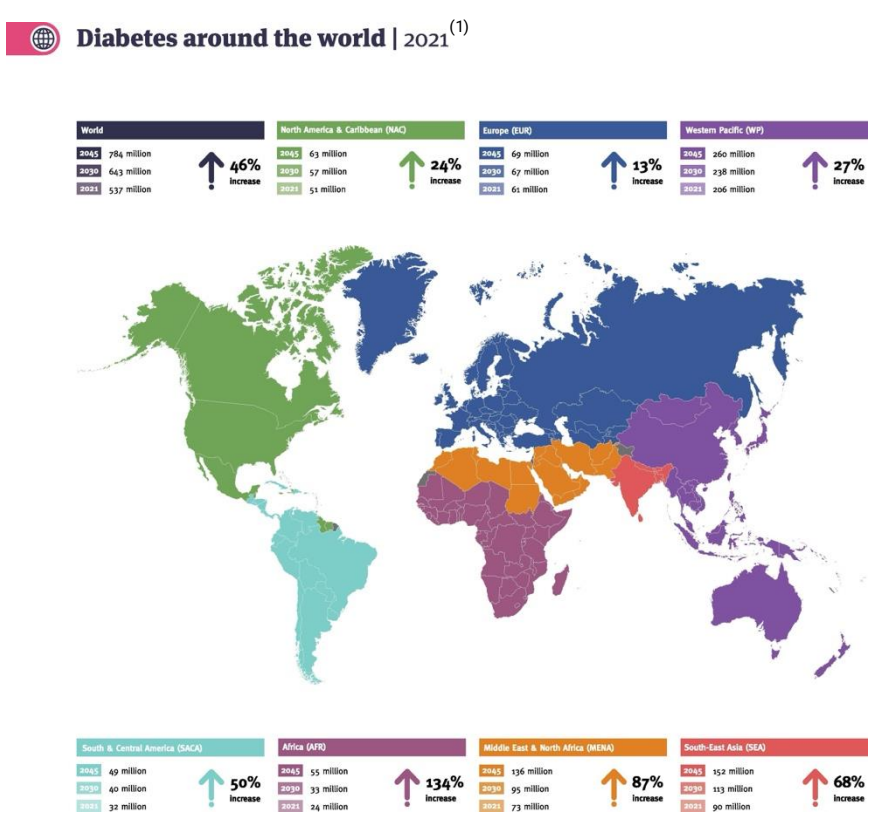
Next Generation of Non-Invasive Medical Diagnostics, leading with Blood Glucose Monitoring

Know Labs' Technology is in development, and there is no assurance that the development will have a successful outcome. Past performance is not indicative of future results. There is no guarantee that any specific objective will be achieved.

Why Blood Glucose?

Diabetes is a Real World Problem of Growing Proportions

- CDC 1994: "The diabetes epidemic"
  CDC 2022: "The diabetes pandemic"
- In the U.S., 1 in 9 adults have diabetes – in the rest of the world, that can reach 1 in 3
- Diabetes reduces life expectancy 8 to 10 years[2] with comorbidities including cancer, heart disease, stroke, hypertension, etc.
- **Worldwide – less than 1% CGM penetration; <u>for the other 99%,</u> daily finger sticks are the only other option or doing nothing at all**[3]
- **<u>Non-invasive blood glucose monitoring</u> is the next generation capable of reaching the world – accessible, affordable and convenient**
- **<u>Blood glucose correlates to other diseases</u>: heart disease, cancer, Alzheimer's Disease, etc.**



(1) https://idf.org/about-diabetes/diabetes-facts-figures/
(2) https://www.hcplive.com/view/average-life-years-lost-from-type-1-type-2-diabetes
(3) https://www.linkedin.com/pulse/cgm-oligopoly-dexcom-abbott-medtronic-implications-john-hanks-6yooc/ (4.9M out of 537M with diabetes use CGM penetration)

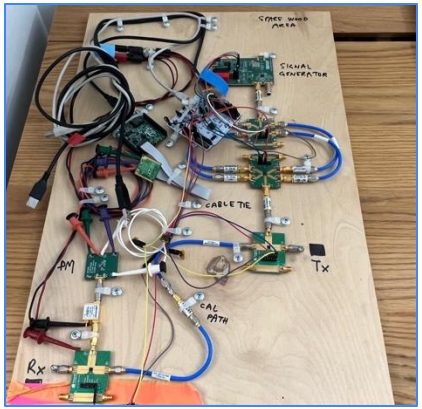
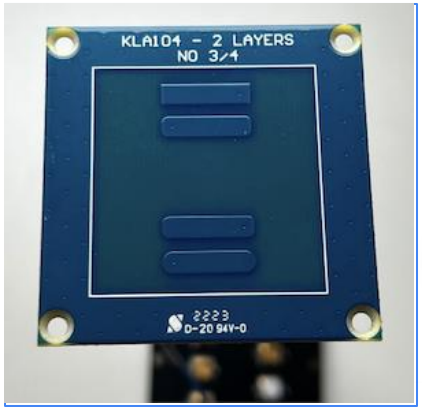
Current Invasive BGMs are Good, but could be Much Better

	1st Generation Finger Stick			2nd Generation CGM			
							
Examples	Roche – Accu-chek. Ascensia – Contour Lifescan – OneTouch. One Drop Meter			Dexcom – G7		Medtronic – Guardian Abbott – Freestyle Libre 3	
FDA Cleared	**Early 1980s**			**Mid 2000s**			
Technology	**Enzymatic Electrochemical:** the enzyme on the strip, glucose dehydrogenase, converts glucose to gluconolactone. **This creates an electrical current that serves as a proxy for glucose levels**			**Enzymatic Electrochemical:** 5 mm microneedle coated with glucose oxidase oxidizes the glucose in the interstitial fluid, **producing hydrogen peroxide and electrical current proportional to glucose levels**			
Use Interface	**Invasive fingerstick** **1-10 fingersticks/day**			**Invasive microneedle** **Continuous wear**			
MARD	5% to 8%			8% to 10%			
Consumables	**Single-use test strips and lancets**			**New sensor every 10 to 14 days**			
Retail Cost	**>$1,500**			**$2,500 to $5,000**			

Key Pain Points

- **Inconsistent accuracy across hypo, normal and hyperglycemic ranges**
- **High cost, limiting access to uninsured and emerging countries' populations**
- **Invasive and inconvenient**
- **High volume of plastic-based disposables (not environmentally friendly)**
- **Not scalable, enzyme limited to one analyte monitoring**
- **High failure rate and FDA MAUDE adverse event cases**

Know Labs R&D Roadmap: 2019 to Today

2019: Proof-of-Concept	2021: Generation 0	2023: Generation 1	2024: Generation 2
			
• **Exploratory** design • Multiple components wired to each other • Signal testing purpose • 2 x 3 ft board	• **Miniaturized** format • Wired connection to power source and data capture • Restricted to **laboratory-controlled environment**	• **On-the-go** form factor • Place your palm or arm for an on-demand, non-invasive blood glucose level • Computer mouse size	• **Wearable** form factor • Continuous monitoring • 85% smaller and 75% lighter than previous Generation

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Gen 1: Benchtop Form Factor

Using Gen 1 Prototype on Forearm

Using Gen 1 Prototype on Hand

Gen 1

- **Computer mouse size**
- Connected with USB cable to laptop
- Research Lab in your pocket to accelerate data collection

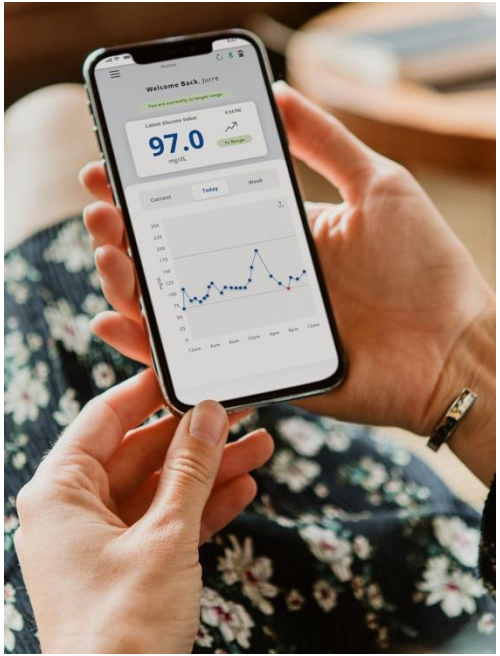
Gen 2: 24 Hour Wearable Form Factor

Gen 2

- **85% smaller than Gen 1**
- Completely wireless and connected to app

Worn with Adhesive or a Strap

Mobile App



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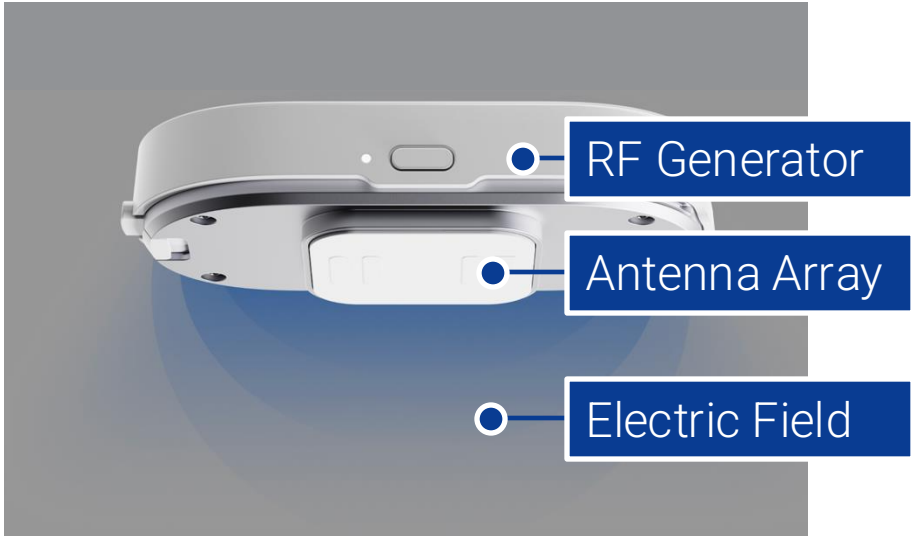
RF Dielectric Sensor

IP-PROTECTED | INCLUDED IN THE KNOWU



RF Generator enables frequency sweeps from 300 to 4,400 MHz, at various intervals, **1.5M data points collected per hour = >400 per second**

Antenna Array that emits and captures radio wave signals in the microwave spectrum and generates an **Electric Field**

5 Key Parameters, customizable with each sweep: power, frequency range, frequency step, dwell time, and antenna permutations

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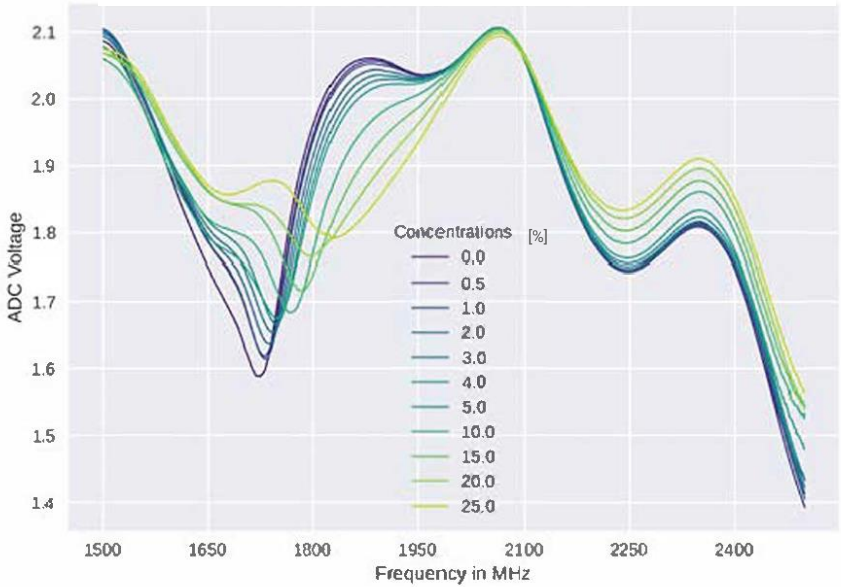
Clinical Data: Meeting the Requirements for Medical Grade Accuracy

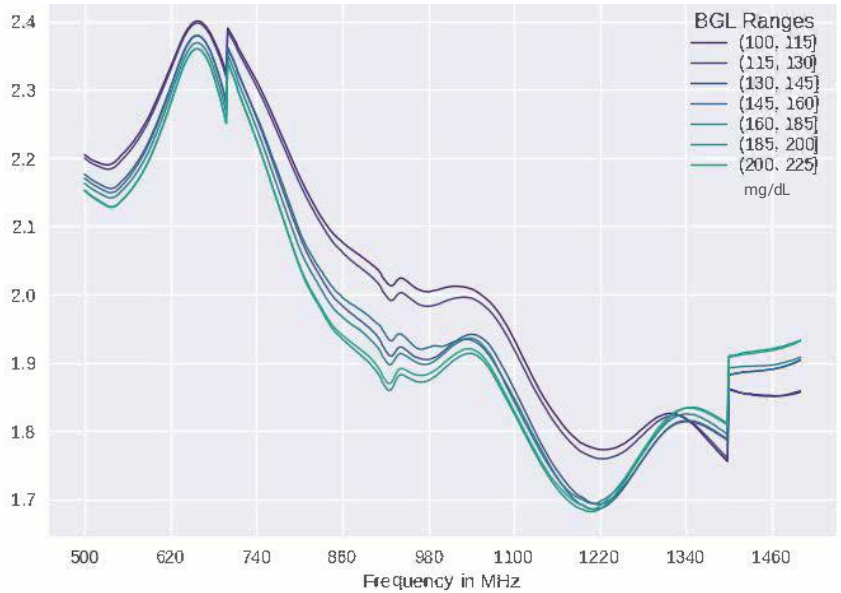
High-Resolution Data Collection and Processing

In Vitro Glucose Solutions Readings



IN VITRO: ADC Voltage (y-axis) measuring voltage based on glucose concentration and frequency sweeps

In Vivo Glucose Readings Over 3 Hour Test



IN VIVO: ADC Voltage (y-axis) measuring voltage based on dielectric permittivities of blood glucose and frequency sweeps

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Validation: Stability, Repeatability and Accuracy

Peer-Reviewed Publications in 2024

July 8, 2024

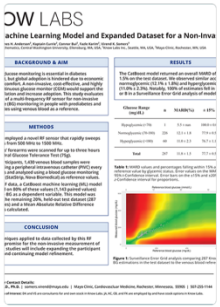
A Glycemic Status Classification Model Using a Radiofrequency Noninvasive Blood Glucose Monitor.

A study titled, "*A Glycemic Status Classification Model Using a Radiofrequency Noninvasive Blood Glucose Monitor*," demonstrates the accuracy of Know Labs' proprietary non-invasive radiofrequency (RF) dielectric sensor and trade-secret machine learning (ML) algorithms in classifying an individual's glycemic status as hyperglycemic, normoglycemic, or hypoglycemic with 93.37% accuracy compared to venous blood glucose values—serving as an early proof-of-concept for a novel, non-invasive diabetes screening device.

Peer-Reviewed By: *Diabetes Technology & Therapeutics Journal*

Karim F, Anderson JH, Currie K, Bui C, Klyve D, Sor
Status Classification Model Using a Radiofrequen
doi:10.1089/dia.2024.0170

DTT Journal
93.37% Accuracy


OW LABS
achine Learning Model and Expanded Dataset for a Non-Inva
BACKGROUND & AIM
METHODS
RESULTS
CONCLUSION

ADA/2024
11.8% MARD

June 21, 2024

Clinical Research Study Among PWD Using a Venous Blood Comparator Demonstrates a Stable MARD in an Expanded Dataset.

A study titled, "*A New Machine Learning Model and Expanded Dataset for a Non-Invasive BGM*," assesses the accuracy of the novel Know Labs radiofrequency (RF) dielectric sensor for non-invasive blood glucose measurement in participants with prediabetes and Type 2 diabetes using venous blood as comparative reference. Results were presented as a poster at the American Diabetes Association's 84th Scientific Sessions.

Reviewed By: Abstract Review Committee American Diabetes Association's 84th Scientific Sessions.

Klyve D, Anderson JH, Currie K, Bui C, Karim F, Somers VK. Published March 6, 2024. Non-Invasive Blood Glucose Monitoring in People with Diabetes Using an RF Sensor and Venous Blood Comparator. The American Diabetes Association's 84th Scientific Sessions, Orlando, FL.

IEEE Sensors

September 1, 2024

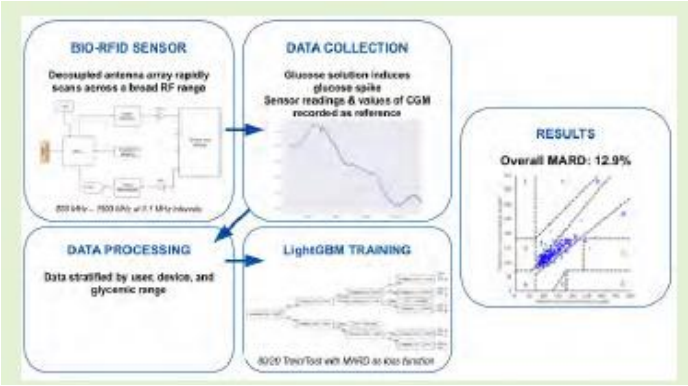
Noninvasive Blood Glucose Measurement Using RF Spectroscopy and a LightGBM AI Model

12.7% MARD - normoglycemic range
14.0% MARD - hyperglycemic range

IEEE Sensors Journal

September 1, 2024

12.7% MARD - normoglycemic range
14.0% MARD - hyperglycemic range
12.9% MARD - overall

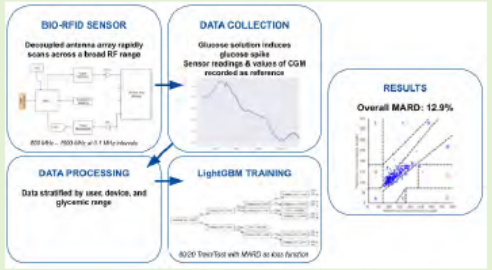


IEEE Sensors Council IEEE SENSORS JOURNAL, VOL. 24, NO. 17, 1 SEPTEMBER 2024 28049

Noninvasive Blood Glucose Measurement Using RF Spectroscopy and a LightGBM AI Model

Dominic Klyve, Steve Lowe, Kaptain Currie, James H. Anderson Jr., Carl Ward, and Barry Shelton

Abstract—We present a validation for a novel sensor and data processing pipeline designed to measure blood glucose (BG) noninvasively using the rapid collection of a broad range of radio frequency (RF) waves via a decoupled antenna array. Five healthy human subjects ingested 37.5 g of glucose solution to generate BG readings across two glycemic ranges: normoglycemic and hyperglycemic. Concurrent measurements from a continuous glucose monitor (CGM) and the RF sensor were collected for comparative analysis. A light gradient-boosting machine (LightGBM) model was trained to predict BG values using 1555 observations, where an observation is defined as data collected from 13 RF sensor sweeps paired with a single Dexcom G6 CGM value. Using this model, we predicted BG in the held-out test dataset with a mean absolute relative difference (MARD) of 12.7% in the normoglycemic range and 14.0% in the hyperglycemic range. While in early-stage validation, these results demonstrate the promise of this hardware and software technique for the noninvasive measurement of BG for practical application.



Index Terms— Diabetes, light gradient-boosting machine (LightGBM), noninvasive blood glucose (BG) monitoring, radio frequency (RF) sensor.

ATTD 2024 Poster: ~11% MARD in Normal & Hyperglycemic

Non-Invasive Blood Glucose Monitoring in People with Diabetes Using an RF Sensor and Venous Blood Comparator

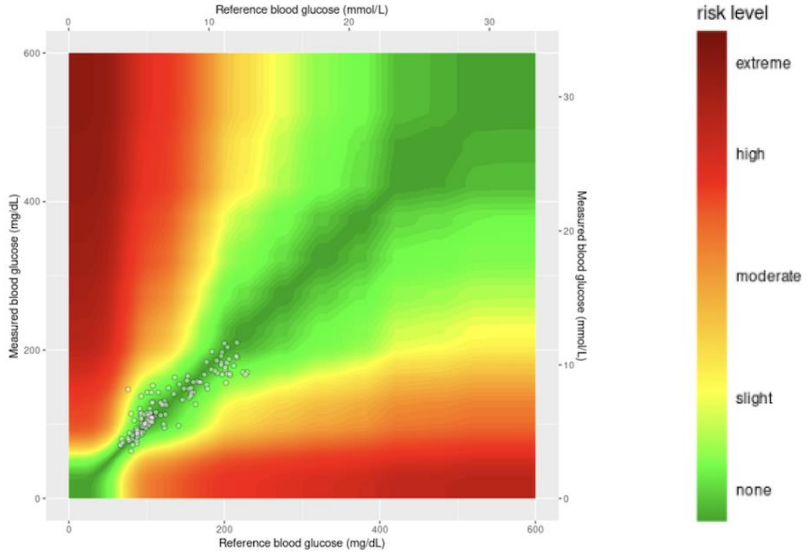
D. Klyve, J. Anderson, K. Currie, C. Ward, K. Pandya, V. Somers

17th Advanced Technology & Treatment for Diabetes (ATTD) Conference, Florence, Italy March 6 – 9, 2024
Presented by Dr. Virend Somers, M.D., PhD., Mayo Clinic

- 30 participants with **prediabetes and Type 2 diabetes**
- **Venous blood** as a comparative reference
- 3-hour **Glucose Tolerance Test** (GTT)

Glucose Range (mg/dL)	*n*	MARD (%)	±15%	±20%
Hypoglycemic (<70)	4	9.5 ± 8.3	75.0 ± 4.2	100.0 ± 0.0
Normoglycemic (70-180)	99	11.0 ± 2.7	75.8 ± 0.8	83.8 ± 0.7
Hyperglycemic (>180)	27	11.5 ± 3.1	66.7 ± 1.8	85.2 ± 1.3
Total	130	11.1 ± 2.1	73.8 ± 0.8	84.6 ± 0.6

LightGBM Machine Learning Model: 80% training (520 paired RF and reference blood glucose values)/20% test (130 paired values)



100% of estimations in Risk Grades A and B (82.3% in A, 17.7% in B)

Path to Commercialization: Leverage Strategic Partnerships

Know Labs has Built a Strong Foundation in RF Spectroscopy for Strategic Partnerships and Joint Ventures

- Robust research platform (Gen 0, 1 and 2)
- Form-factor agnostic
- Medical grade accuracy validated by multiple peer-reviewed publications
- Multi-analyte application (O2, glucose, alcohol, metabolized drugs, ketones, etc.)
- Impervious to skin tone
- Interoperability with other systems & devices and Integration with other technologies
- RF expertise (on/off Bluetooth/Wi-Fi)
- IP Leader → 300+ patent assets

Strategic Collaborations Accelerate Time-to-Market

- Acceleration of clinical data collection – Know Labs' sensors and partners' sensors
- Continued work to mitigate interferences – environmental and in the body
- Further miniaturization – current format vs. ASIC
- Strategic JDAs: Integration with other devices and platforms
- Strategic JDAs: Collaboration on other analytes/biomarkers

Know Labs' RF Domain Expertise and Intellectual Property (IP) Assets Make for an Ideal Partner for Strategic Collaboration

Multiple Paths to Revenue

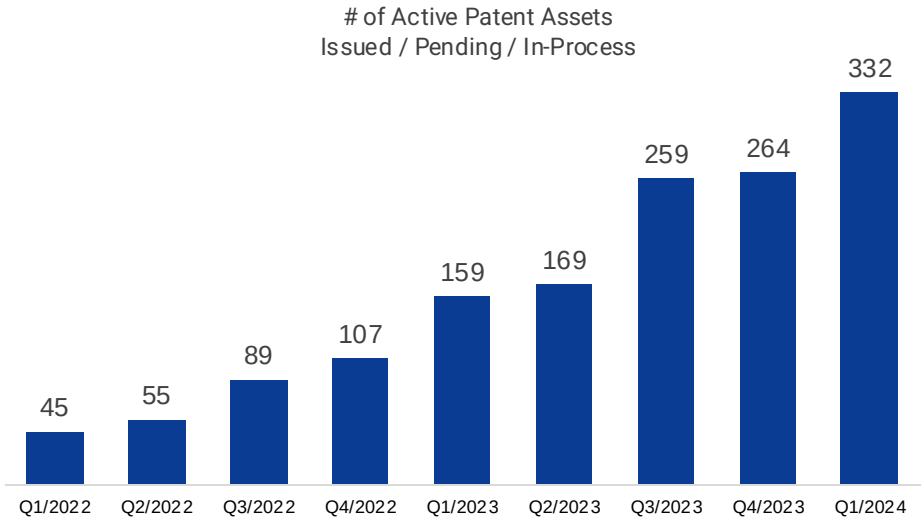
- Strategic JVs / JDA in core and non-core applications
- FDA cleared product sales in non-invasive glucose monitoring
- Rest Of World (ROW) product sales as glycemic screening device
- Software as Medical Device (SaMD) app royalties
- Skunkworks JDA leveraging platform technology and IP
- Patent licensing revenue: core fields-of-use
- Patent licensing revenue: non-core platform technology

Noninvasive Blood Glucose Monitoring success is the gateway to hundreds of other analytes in the bloodstream

Intellectual Property: Global Leadership Across the Value Chain

IP-Protected: Global IP Leadership

Know Labs Patent Portfolio



March 2022 to March 2024: IP portfolio grew 7.4x

Strategic IP development program

- 332 patents = 75 granted, 204 pending and 53 in-process
- 109% YoY growth, 3.1x IP market growth of ~35%
- **Global coverage with patent assets in the US, PCT and 16 other jurisdictions worldwide**

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IP Coverage: Devices (>100 Patents)

Key
Green = granted patent
Red = pending application
= same family/similar technology

Antenna Array/Sensor

- US 10,548,503; Europe, China, Indonesia, South Korea
- US 17/889102
- US 18/150985
- US 18/160235

- US 11,063,373; Europe, China, South Korea, Taiwan
- US 11,234,619
- US 11,031,970
- US 11,223,383
- US 11,058,317
- US 17/123992
- US 18/062869

- US 17/243938; Europe, China, Japan, South Korea, Taiwan

- US 17/930137
- PCT/IB2023/058828

- US 29/874568; Europe, China, UK, Japan

- US 29/877412; Europe, China, UK, Japan

Antenna Switching

- US 11,058,331; Europe, China, Japan, Hong Kong
- US 11,193,923
- US 11,330,997; Europe, China, Japan, Hong Kong
- US 17/699,803

Frequency Sweeps

- US 11,033,208; Europe, China, Japan, India, Singapore
- US 17/314715

NI High Performance Sensor

- US 11,529,077 MARD (5.0% to 9.9%)

Predictive Health & Database

- US 11,234,618; Europe, China, Brazil, Japan, South Korea
- US 11,284,819
- US 11,284,820
- US 17/685141
- US 17/685157

Control Insulin Pump/Other Device

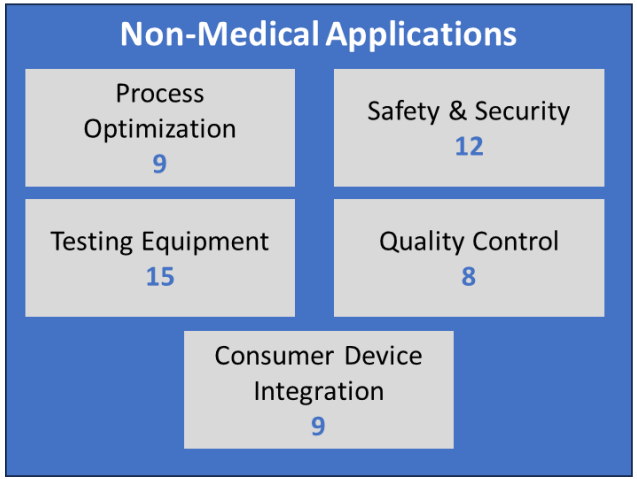
- US 11,510,597; Europe, China, Australia, Canada, Japan, HK
- US 18/055084
- US 11,389,091

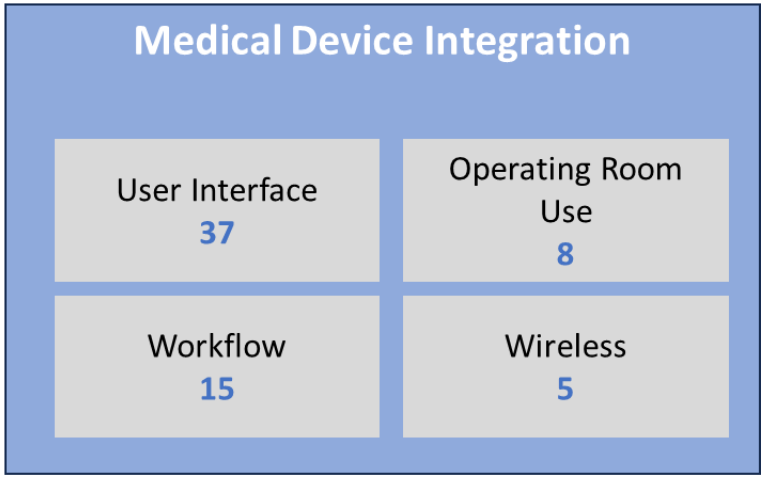
IP Coverage: Platform (>100 Patents)

Key
Green = granted patent
Red = pending application
= same family/similar technology

• US 17/171279 • US 17/171281 • US 17/171284	Notification based on sensor results
• US D942430 • EU 008267561-001 • EU 008267561-002 • EU 008267561-003 • UK 90082675610001 • UK 90082675610002 • UK 90082675610003	Non-Gen 1 antenna array designs
• US 17/198760	In Vitro/Table Top Sensor
• US 11,689,274 • US 18/330974 • US 11,764488 • US 18/330976	Detecting Variability In A Medium
• US 17/465110 • US 17/465112	Sensor Useable In Wearable and Non-Wearable Device
• US 17/468298 Europe, China, Japan • US 17/468300	In Vitro Flowing Fluids
• US 17/455309	Smartwatch With Sensor
• US 17/584822	Shape Changing Antenna
• US 17/478084 - PCT/IB2022/058421	Noise Reduction
• US 17/454383 • US 17/805338 - PCT/IB2022/060799	Temperature Compensation
• US 29/790073 - EU 008863054-0001 - EU 008863054-0002 - UK 6192169 - UK 6192170 • US 29/790074 • US D991063 - EU 008860639-0001 - UK 6192168	Non-Gen 1 Sensor Designs
• US 17/584845 - PCT/IB2022/060651	Non-Invasive and Invasive Sensing
• US 17/584870 - PCT/IB2023/050643	Multiple Sensor Assemblies
• US 17/858437 • US 18/148491 - PCT/IB2023/056867	Sensing At Varying Body Positions
• US 11,802,843 - PCT/IB2023/053640	Reducing Signal Inaccuracy
• US 17/859787 - PCT/IB2023/057008	Sensing Multiple Analytes
• US 17/662102 • US 11,529,077 - PCT/IB2023/054567	MARD
• US 17/865806 - PCT/IB2023/057201 - Taiwan	Harmonic Signals
• US 17/887923 - PCT/IB2023/058072 • US 17/887954	Analyte-Based Access Controls
• US 18/049838 - PCT/IB2023/060771	Identity-Based Analyte Detection
• US 17/937540 - PCT/IB2023/059307 • US 11,696,698 - PCT/IB2023/059361	Adjustable Sensor Components

IP Coverage: Applications (>100 Patents)





EXAMPLES

- SYSTEM AND METHOD FOR MONITORING HEALTH PARAMETERS
- A RECONFIGURABLE WEARABLE HEALTH MONITORING DEVICE
- A WEARABLE HEALTH MONITORING DEVICE
- SYSTEM AND METHOD FOR TRAINING A MODEL TO MONITOR HEALTH PARAMETERS
- SYSTEM AND METHOD FOR PERFORMING SURGERY WITH REAL-TIME HEALTH PARAMETER MONITORING
- METHOD FOR IMPROVED SURGICAL CARE
- SYSTEM AND METHOD FOR RF ANALYTE MEASUREMENT GUIDED INSULIN ADMINISTRATION
- NON INVASIVE RF DEVICE FUSED WITH MRI DATA

Skunkworks: Multiple Shots on Goal

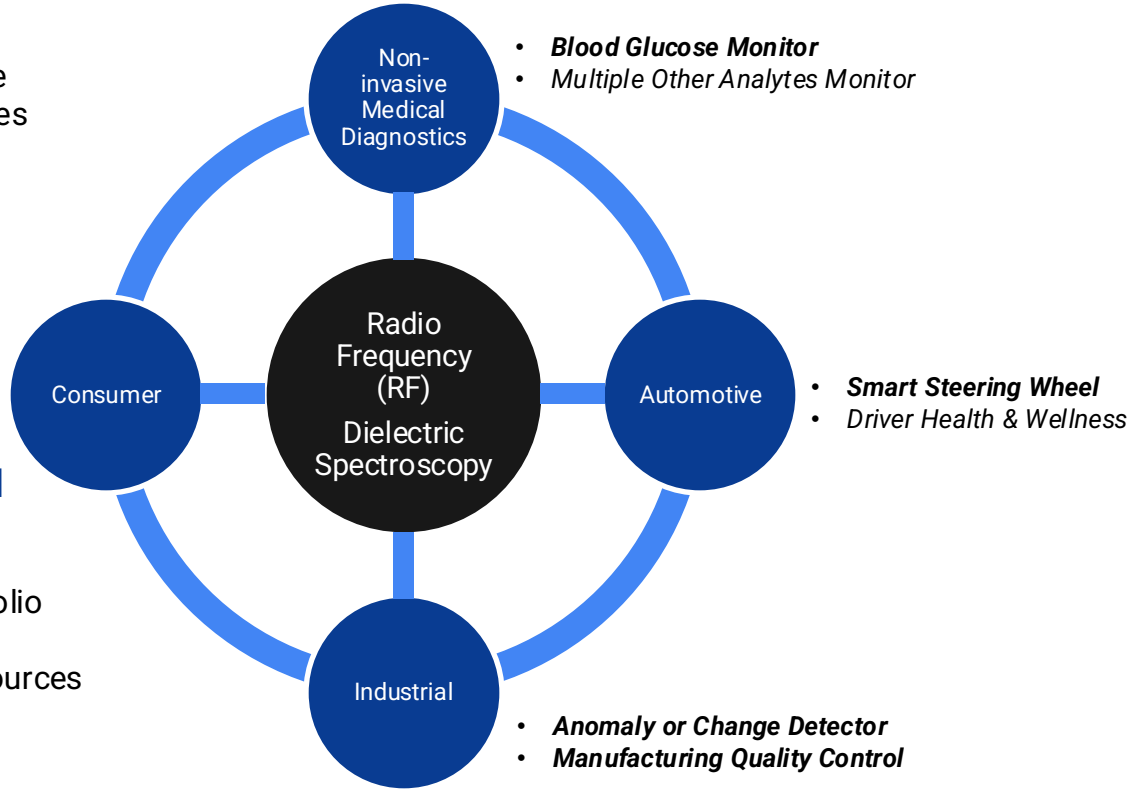
Know Labs' Skunkworks Announced May 2024

Platform Technology

- First Principle Physics Enable Diverse Use Cases & Industries
- Highly Accurate
- Form Factor Agnostic
- Hundreds of Analytes
- Organic & Inorganic

Partnership Business Model

- Multiple Shots on Goal
- High Capital Efficiency
- Monetize Large Patent Portfolio
- Increased Speed to Market
- Leverage Partners' R&D Resources
- Accelerates Market Access
- Potential for Spin-outs



- ***Blood Glucose Monitor***
- *Multiple Other Analytes Monitor*

- *Health & Wellness*
- *Human Performance*

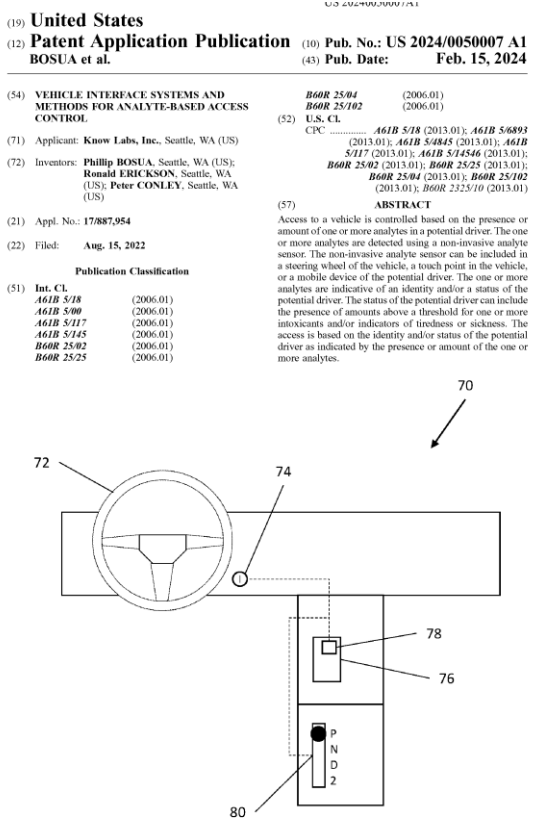
- ***Smart Steering Wheel***
- *Driver Health & Wellness*

- ***Anomaly or Change Detector***
- ***Manufacturing Quality Control***

Know Labs' Technology is in development, and there is no assurance that the development will have a successful outcome. Past performance is not indicative of future results. There is no guarantee that any specific objective will be achieved.

Next-Generation Automotive Health & Wellness Platform

- **Know Labs has developed a patented, highly novel non-invasive platform technology that brings a new class of medical-grade IoT sensors to vehicle-based health & wellness monitoring**
- Utilizes RF dielectric spectroscopy to accurately measure and monitor over 100 analytes in the human body.
- Know Labs sensors communicate and interact with other systems within the automobile and with external networks
- **Interoperable with other safety and health & wellness systems**



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(12) **Patent Application Publication** (10) **Pub. No.: US 2024/0050007 A1**
BOSUA et al. (43) **Pub. Date: Feb. 15, 2024**

(54) **VEHICLE INTERFACE SYSTEMS AND METHODS FOR ANALYTE-BASED ACCESS CONTROL**

(71) Applicant: **Know Labs, Inc.**, Seattle, WA (US)

(72) Inventors: **Phillip BOSUA**, Seattle, WA (US); **Ronald ERICKSON**, Seattle, WA (US); **Peter CONLEY**, Seattle, WA (US)

(21) Appl. No.: **17/887,954**

(22) Filed: **Aug. 15, 2022**

Publication Classification

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B60R 25/25	(2006.01)
B60R 25/04	(2006.01)
B60R 25/102	(2006.01)

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CPC ***A61B 5/18*** (2013.01); ***A61B 5/6893*** (2013.01); ***A61B 5/4845*** (2013.01); ***A61B 5/117*** (2013.01); ***A61B 5/14546*** (2013.01); ***B60R 25/02*** (2013.01); ***B60R 25/25*** (2013.01); ***B60R 25/04*** (2013.01); ***B60R 25/102*** (2013.01); *B60R 2325/10* (2013.01)

(57) **ABSTRACT**

Access to a vehicle is controlled based on the presence or amount of one or more analytes in a potential driver. The one or more analytes are detected using a non-invasive analyte sensor. The non-invasive analyte sensor can be included in a steering wheel of the vehicle, a touch point in the vehicle, or a mobile device of the potential driver. The one or more analytes are indicative of an identity and/or a status of the potential driver. The status of the potential driver can include the presence of amounts above a threshold for one or more intoxicants and/or indicators of tiredness or sickness. The access is based on the identity and/or status of the potential driver as indicated by the presence or amount of the one or more analytes.

Know Labs' Technology is in development, and there is no assurance that the development will have a successful outcome. Past performance is not indicative of future results. There is no guarantee that any specific objective will be achieved.

The Next-Generation Automotive Cockpit

Methods and Systems for Vehicle-Based Wellness Monitoring

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

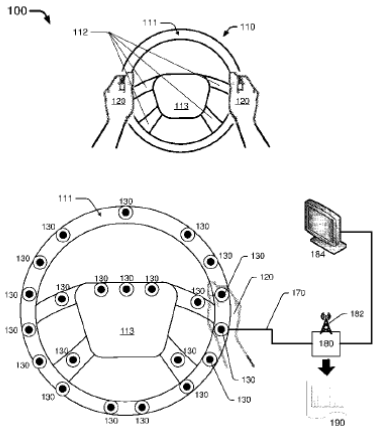
(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
11 January 2018 (11.01.2018)

WIPO | PCT

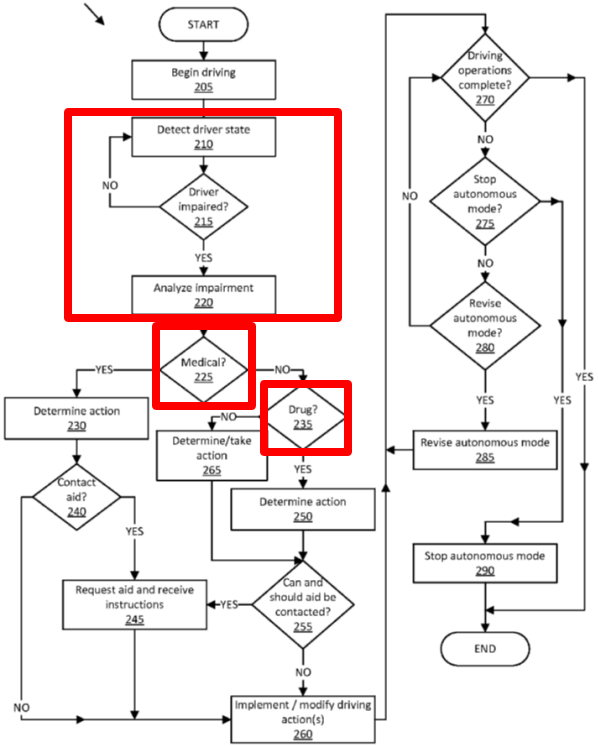
(10) International Publication Number
WO 2018/009219 A1

(54) **Title:** METHODS AND SYSTEMS FOR VEHICLES-BASED WELLNESS MONITORING



(57) **Abstract:** Methods and systems for monitoring wellness of a vehicle occupant are described. A method and a system may involve monitoring biophysical data of the occupant and determining the wellness information thereof. The method and the system may also involve determining whether the occupant is in a potential impairment state. The method and the system may also involve performing precautionary actions in response to the determining that the occupant is in the potential impairment state. The method and the system may also involve providing lifestyle recommendations to the occupant. The method and the system may further involve transmitting the wellness information to a second processor located within the vehicle or remotely from the vehicle.

- **Know Labs sensor technology enables autonomous vehicle workflow**
- **Enables wellness monitoring**
- **Enables human analyte monitoring seamlessly and non-invasively**



Summary: Why Know Labs?

Emerging Leader

- NYSE IPO (Ticker: KNW) 9/15/2022
- Below the radar - current Form 13F Institutional Ownership <9%(1) (35 institutions)
- ~$25.7M Market Cap(2) versus >$27B Market Cap(2) for CGM incumbents, a factor of >1000x

Global Innovator

- Highly differentiated approach to glucose monitoring with peer-reviewed validation
- Combination of radio and microwave dielectric spectroscopy measures analyte data in real-time
- Glucose correlated to other important biomarkers

IP Leadership

- More than 300 patents issued, pending and in-process filings worldwide create deep IP moat
- Foundational patents cover more than 100 analytes
- System-level interoperability to enable new hybrid architectures with leading players

Medical Device

- Highly accurate medical device under development to serve the needs of hundreds of millions
- Hundreds of tests have proven that KnowU can measure blood glucose levels non-invasively
- Broad applications across other medical diagnostic platforms

Platform Technology

- Real-world commercialization opportunities across multiple industries
- 100+ potential applications and use cases in medical diagnostics and beyond
- F500-class development partners to bring to products to market

(1) Form 13Fs as of 9/30/2024
(2) As of November 11, 2024

Appendix

The Non-Invasive Race Is On

Bloomberg

Samsung explores development of non-invasive blood sugar monitoring

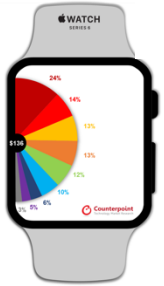
January 24, 2024

"If we can do continuous glucose, we're in a whole different ball game," Dr Pak, Samsung's mobile digital health chief, said during an interview. "I think that's where everyone is trying to get to. We're putting significant investment towards that."

He would not comment on a timeline for either feature, but said he hopes non-invasive glucose monitoring could come to the market in some form within five years (2029).

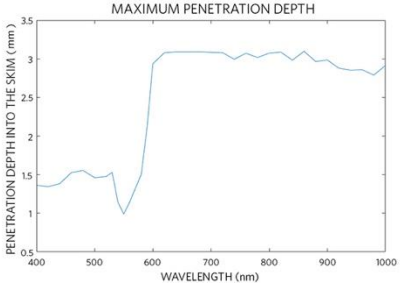
- Dr. Hon Pak, M.D.
  Head of Digital Health,
  Samsung Electronics

Why Optical Blood Glucose Sensors Don't Work And Know Labs Does



$150 BOM BUDGET %

- Processing + Memory
- Other Components
- Casing
- Display Subsystem
- Sensors
- Contents in Box
- Battery and Charging
- Assembly and testing
- Power Management + Audio
- IPR & Software (Less than 1%)



LIMITATIONS OF A $18 BOM FOR 9 SENSORS

Samsung / Apple
785 nm

Optical Sensors (400nm – 1000nm)

Green LED | Red LED | Infrared

525nm | 660nm | 940nm

-- All Health Wearable Devices --

Radio Frequency (300MHz – 4400MHz)

Microwave | Radio

6.8cm - 1m

LOW ---------- Signal Transmission Depth ----------> HIGH

1mm to 3mm | 10mm to 13mm

First Principles:

RF Energy Overcomes the Limitations of Physics

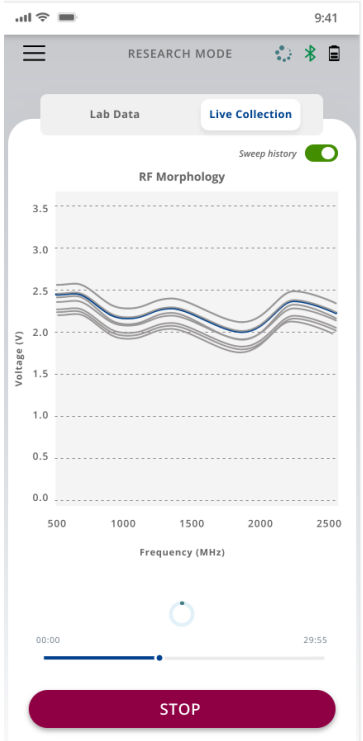
Tunable RF wavelength 68 million to 1 billion nm versus fixed IR wavelength 1000 nm

RF Dielectric Spectroscopy sweeps entire tissue stack to a depth of 13 mm to collect high resolution voltage change data that fixed wavelength optical sensors are incapable of achieving.

The dielectric constant (relative permittivity) of glucose is 74.3 and decreases as the concentration of glucose increases.

KnowU App: Gateway to Future Analytes, Corporate JVs and App Store Model

Expandable App Architecture
Combined With Our
Platform Technology Offers
More Functionality
And Opportunity
For Recurring Revenue
From Other Analytes
In the Future
(Ketones, Cortisol, Troponin,
Hormones,
Metabolized Drugs, etc.)



Our App Developer

SYNCRO MEDICAL

SaMD
Software-
As-
Medical
Device

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