



# KNOW LABS

**3<sup>rd</sup> Bernstein  
CGM Disruptors Conference**  
November 2, 2023

Pete Conley  
CFO & SVP IP  
Know Labs (NYSE American: 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 June 30, 2023, we had an accumulated deficit of \$118,715,000 and net losses in the amount of \$12,353,000, \$20,071,000 and \$25,360,000 during the nine months ended June 30, 2023 and the years ended September 30, 2022 and 2021, respectively. There can be no assurance that we will achieve or maintain 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 Bio-RFID 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.

# WHAT'S HAPPENED SINCE LAST YEAR'S BERNSTEIN 2022 CONFERENCE?

## FY Sept 2023 In Review:

- 1. PRODUCT:** Successful introduction of Gen 1 Product Prototype on June 7, 2023.
- 2. SCIENTIFIC VALIDATION:** Peer-Reviewed Publication in Sensors Journal of Proof-of-Principle Study in Collaboration with Mayo Clinic. Poster presentations at APS and AACE.
- 3. CLINICAL ACCURACY:** Demonstrated 11.27% MARD from data collected in normoglycemic and hyperglycemic ranges across 366 datasets, 3,300 reference points and >1.7B datapoints.
- 4. INTELLECTUAL PROPERTY:** Patents issued, pending and in-process increased from 89 to 246 YoY (+176% vs. market +35%, 5x market CAGR) reflecting our high rate of innovation. Ranked by IPCG #1 in the world for non-invasive blood glucose monitoring IP.
- 5. STRATEGIC COLLABORATIONS:** JDA discussions currently underway with potential biopharma, med device and consumer electronics partners.

# INTRODUCED JUNE 7, 2023

## KnowU

2023: NI BGM & 2024: NI CGM

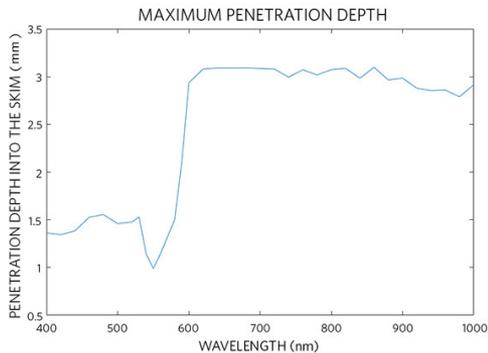
**Gen 1:** Place your palm or arm on the portable device for on-demand NI BGM data. “Computer mouse” form factor.

**Gen 2:** 50% smaller wearable NI CGM currently under development for early 2024 release. “AirPods case” form factor.



**Generation 1 Prototype Device:**  
A sophisticated research lab in your pocket.

# WHY IT WORKS (and why others don't)

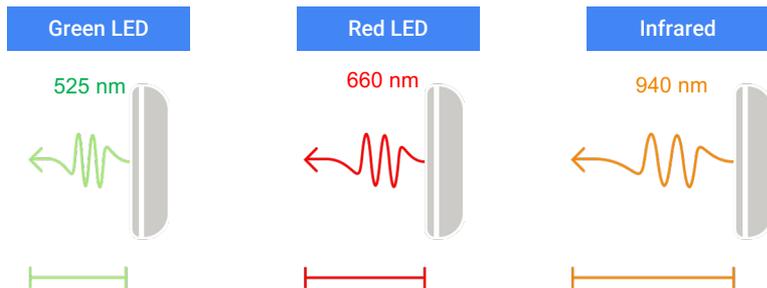


Optical Sensors (400 nm – 1000 nm)

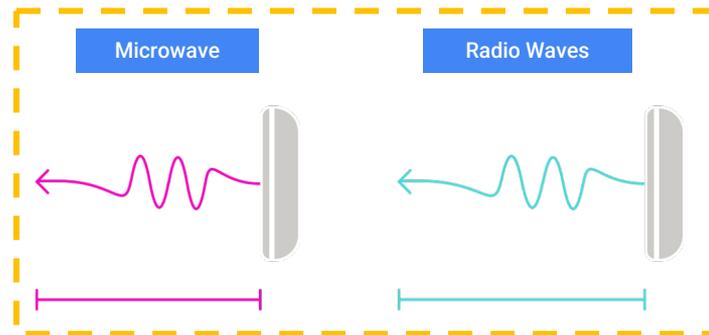
## First Principles: Overcoming the Limitations of Physics

RF Dielectric Spectroscopy sweeps entire tissue stack to collect high resolution voltage data at high speed that fixed wavelength optical sensors are incapable of achieving.

Radio Frequency (500 MHz – 4000 MHz)



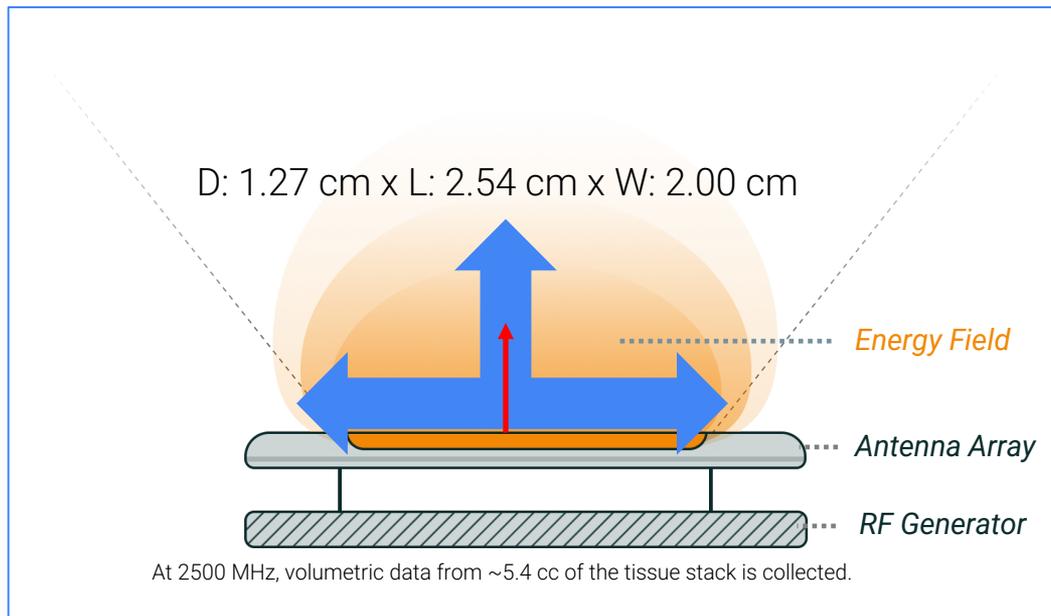
--- All Health Wearable Devices ---



LOW 1 mm to 3 mm SIGNAL TRANSMISSION DEPTH 12 mm to 13 mm HIGH

# HOW IT WORKS: More is More ... 3D Data Improves Clinical Accuracy

## Three Orders of Magnitude Increase of Volumetric 3D Voltage Data Collected in Real Time versus Current 2D CGMs



- IP-protected Antenna Array, Microwave spectrum that emits and captures radio wave signals, generates the “Energy Field” into 3D “Tissue Stack”
- IP-protected RF Generator enables frequency sweeps in the microwave spectrum, from 300 MHz to 4,400 MHz, at various intervals, 1.5M data points collected per hour = 445 per second
- 6 Key Parameters Customizable with Each Sweep: power, frequency range, frequency step, dwell time, antenna permutations = >30,000 combinations.

# HOW IT WORKS: Dexcom G7 versus KnowU - FDA Test Principles

## THE VOLTS HAVE IT: Two Different Models of “Glucose Voltmeters”: *Real-time Direct Reading* of Blood Glucose *Without the Proxy Latency* of Current CGMs

- The Dexcom G7 system detects glucose levels from the fluid just beneath the skin (interstitial fluid) using a microneedle to a depth of 5 mm & .001 cc.
- The microneedle continuously measures glucose concentrations in the interstitial fluid via an enzymatic electrochemical reaction using glucose oxidase. Glucose oxidase catalyzes the oxidation of glucose and produces hydrogen peroxide, as a proxy for blood glucose.
- The production of proxy hydrogen peroxide **generates an electrical current that is proportional to the interstitial glucose concentration** which, using an algorithm, is converted to a glucose value.

- The KnowU system detects glucose levels in real-time across the “tissue stack” (interstitial fluid, capillary blood, venous blood, cellular glucose) using non-invasive **RF dielectric (impedance measurement) spectroscopy** to a depth of 12.7 mm & 5.4 cc.
- KnowU harnesses 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).
- 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 continuously.**
- For each RF sweep, the KnowU returns a vector of voltage values representing the antenna’s transmission coefficient (**using S21**, not S11) over its frequency of operation.

# CLINICAL TESTING PROTOCOL

## Data Collection Over 3 Hour Test

- The array of antennas sits approximately 1 mm away from the users' skin inside the plastic wall of the device with which the user is in contact. The patient's arm, hand, or other body part appropriate for the sensor must be against the device for the 22 second length of the frequency sweep.
- The sensor currently operates within a frequency range of roughly 500 to 1500 MHz, though it has the ability to operate between 300 and 4400 MHz so a larger range scan could be used in the future.
- To take a measurement, the sensor scans through the frequency range, currently using 0.1 MHz intervals so that 10,001 data points are collected per sweep, equals 445 data points per second (versus 30 data points per second for a pulse oximeter).



Using KnowU on Hand

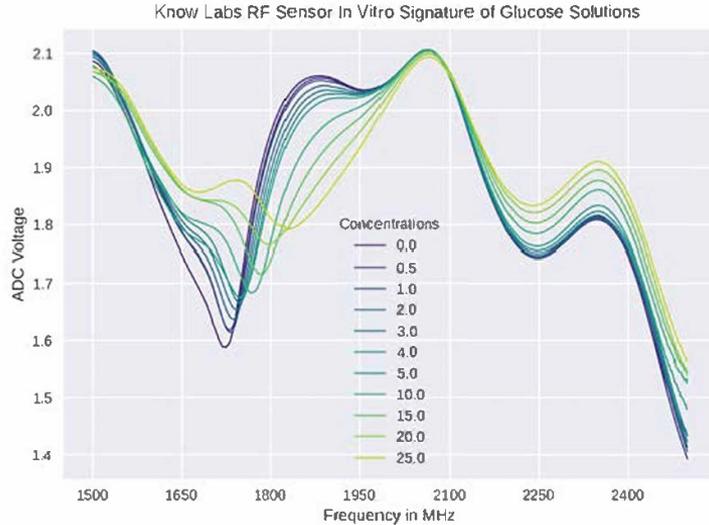


Using KnowU on Forearm

# FROM IN VITRO TO IN VIVO GLUCOSE TESTING

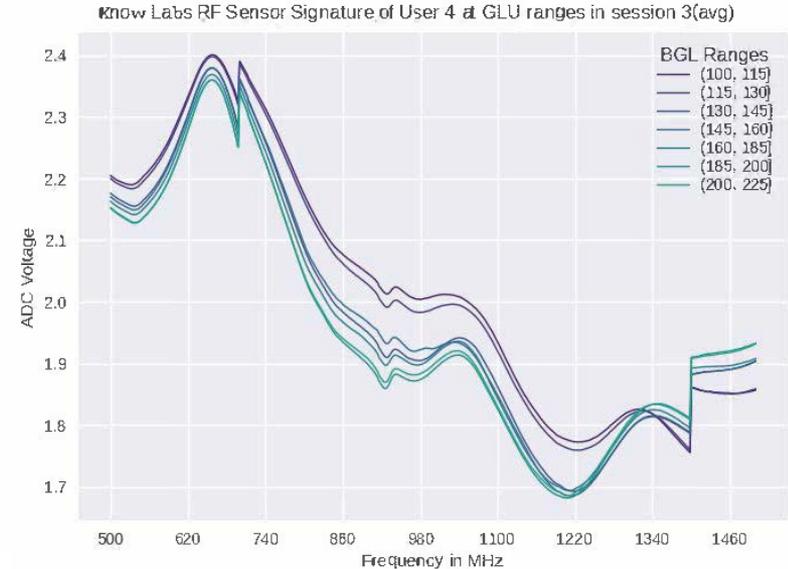
- **IN VITRO:** RF dielectric spectroscopy sensor can measure different concentrations of glucose in solution, where optical sensors cannot.
- **IN VIVO:** NI RF sensors based on dielectric permittivity can measure variance in blood glucose in BGL ranges.

## In Vitro Glucose Solutions Readings



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

## In Vivo Glucose Readings Over 3 Hour Test



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

# TIMELINE OF VALIDATION STUDIES FROM IN VITRO TO IN VIVO

	2021		2022		2023		TODAY
Manuscript	Proof of Principle with Mayo Clinic	Exploratory Clinical Study	Proof of Concept Clinical Study	Technical Feasibility Study	New Algorithm Refinement Study	Data Preprocessing Techniques Study	
Description	Demonstrated the accuracy of Bio-RFID sensor in quantifying different analytes <i>in vitro</i> (liquid solution).	First indication that Bio-RFID could be an accurate alternative to FDA-cleared glucose devices.	Proof of concept ability to quantify blood glucose non-invasively using RF.	Demonstrates Bio-RFID can deliver stable, repeatable results in measuring blood glucose levels.	Algorithm refinement in the non-invasive detection of blood glucose using Bio-RFID technology.	Improvement in machine learning model accuracy on an expanded mixed cohort dataset.	
Accuracy	Almost 100% <i>in vitro</i> accuracy	MARD <u>5.3%-6.7%</u>	MARD 19.3%	MARD 20.6%	MARD 12.9%	MARD <u>11.3%</u>	
# Participants	na	2	1	5	5	13	
# Datasets	na	3	22	106	106	366	
# Bio-RFID datapoints	na	<u>1.5M</u>	~183M	~430M	~430M	<u>~1.7B</u> (3 order of magnitude)	
# Reference Observations	na	75	~383	~1,555	~1,555	~3,311	

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.

# SCIENTIFIC VALIDATION:

## FY2023 Review: Sensors Journal, APS, AACE



Article

### Detecting Unique Analyte-Specific Radio Frequency Spectral Responses in Liquid Solutions—Implications for Non-Invasive Physiologic Monitoring

Dominic Klyve<sup>1,\*</sup>, James H. Anderson, Jr.<sup>2</sup>, George Lorentz<sup>3</sup> and Virend K. Somers<sup>2</sup>

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- 2 Know Labs Inc, Seattle, WA 98101, USA; andy@knowlabs.com
- 3 Mayo Clinic, Rochester, MN 55902, USA; lorentz.george@mayo.edu (G.L.); \* Correspondence: klyved@cwu.edu

**Abstract:** With rising healthcare costs and the rapid increase in remote care delivery, there is an increasing need for economical, accurate, and easy measures of blood analytes. Based on radio frequency identification (RFID) technology (the Bio-RFID sensor) was developed to non-invasively capture data from individual radio frequencies, and convert those data into physiologically meaningful information and insights. Here, we describe groundbreaking Bio-RFID to accurately measure various concentrations of analytes in water we tested the hypothesis that the Bio-RFID sensor is able to precisely identify a variety of analytes in vitro. For this assessment, varying propyl alcohol; (2) salt in water, and (3) commercial bleach in water we double-blind trial design, as proxies for biochemical solutions in gene was able to detect concentrations of 2000 parts per million (ppm), with the ability to detect considerably smaller concentration differences.



#### Technical Feasibility of a Novel Sensor for Non-Invasive Blood Glucose Monitoring Compared to Dexcom G6®

Dominic Klyve<sup>1</sup>, Ph.D., Barry Shotton<sup>1</sup>, Ph.D., Carl Ward, Ph.D.<sup>1</sup>, David Schwarz<sup>2</sup>, James H. Anderson Jr., M.D.<sup>1</sup>, Steve Kent<sup>1</sup>  
<sup>1</sup>Department of Mathematics, Central Washington University Ellensburg 98924, USA, klyved@cwu.edu \*Know Labs, Inc., Edge Impulse, Inc.

#### BACKGROUND & AIM

For the over 537M people living with diabetes, current methods of testing blood glucose concentration (BGC) come with drawbacks, whether they use traditional blood draws and test strips or more modern continuous glucose monitors (CGMs): the pain of finger-sticks or CGM probe insertion; the recurring cost of test strips or one-time use probes; and the environmental impact of both.

Know Labs has developed a novel electromagnetic platform technology - the Bio-RFID® platform - to non-invasively capture data from individual radio frequencies and convert those data into physiologically meaningful information and insights.

We investigated the technical feasibility of this new method to quantify blood glucose in vivo non-invasively using RF by means of training a neural network (NN) model to predict readings of the Dexcom G6® as a proxy for BGC.

#### RESULTS

In aggregate, across the five individual participants and 92 samples, we observed a mean absolute relative difference (MARD) of 20.6%. In accordance to FDA limits for accuracy for new blood glucose monitors a prediction is "within threshold" of the observed reference value if either: A) the prediction is within 15% of the reference value for blood sugars over 70 mg/dL; or B) the prediction is within 15 mg/dL for blood sugars below 70 mg/dL. 46% of the Bio-RFID predictions were within threshold.

FIG. 1 Select results predicted by the NN model, plotted with the Dexcom G6® readings across time.

#### CONCLUSIONS

Though a clinically useful non-invasive BGC monitor should make 95% of predictions within threshold, we find these results encouraging given the relatively small size of the dataset. This validated Bio-RFID as stable to deliver repeatable results, and as infrastructure for future data collection. Because a truly non-invasive CGM would be a powerful tool in diagnosing, managing, and treating diabetes and pre-diabetes, more research is underway to continue refining and developing these algorithms.

#### METHOD

- In a series of 46 tests (92 samples), five participants placed forearms on the Bio-RFID sensor and consumed 37.5 grams of liquid D-Glucose.
- We monitored their BGC for three hours using the Dexcom G6® as reference device, while logging the readings of the sensor.
- Data were collected on a continuous basis, using sweeps across the 500 MHz - 1500 MHz range at 0.1 MHz intervals, collecting values at 10,001 frequencies per sweep.
- Using the data captured with the Bio-RFID sensor, we trained a NN model to predict BGC readings of the Dexcom G6® reference device.

### Detecting Unique Analyte-Specific Radio Frequency Spectral Responses in Liquid Solutions

Implications for Non-Invasive Physiologic Monitoring

Dominic Klyve, Ph.D.<sup>1</sup>, James H. Anderson, Jr., M.D.<sup>2</sup>, George S. Lorentz, M.A.<sup>3</sup>, Virend K. Somers, M.D., Ph.D.<sup>2</sup>

#### BACKGROUND & AIMS

Know Labs has developed a novel electromagnetic platform technology - the Bio-RFID® platform - to non-invasively penetrate surfaces, capture data from individual radio frequencies, and convert those data into physiologically meaningful information and insights. Ongoing studies demonstrate Bio-RFID accuracy for non-invasive methods of medical diagnostics, with an ultimate aim of non-invasive blood glucose monitoring.

#### METHODS

**DATE:** March 3, 2021 **LOCATION:** St. Mary's Campus of Mayo Clinic, Rochester, MN

**STUDY DESIGN:**

- A series of five experiments designed to demonstrate the ability of the RF sensor to non-invasively quantify concentrations of a solute in liquid by scanning solutions near, and then performing blinded scans of the same solutions.
- Solutions of 1% water in Isopropyl alcohol, 2) sodium chloride in water, and 3) commercial bleach in water were tested as proxies for biochemical solutions.
- Data were collected using the Bio-RFID sensor that generates RF signals and measures received power through an antenna array.
- For each experiment, data were collected continuously, while sweeping across the 1500

EXPERIMENT 1, TABLE 1: Distance between 1% initial and 2% diluted solutions.

TRAINING DATA	DISTANCE	TEST DATA (blinded by researcher)	DISTANCE
1% Water	872,013	Blind 2	33,157
2% Water	1,571,048	Blind 5	804,863
3% Water	3,114,386	Blind 6	1,910,622
4% Water	4,260,250	Blind 3	3,086,471
5% Water	5,988,519	Blind 1	4,250,653
		Blind 4	5,556,104

#### RESULTS

For each of the five experiments, 100% of solutions in the test data were correctly identified. The Bio-RFID technology was able to detect concentrations as low as 2000 parts per million (ppm), with evidence suggesting the ability to detect considerably smaller concentration differences.

FIGURE 1 displays the Bio-RFID signatures of Isopropyl alcohol, together with the 1%, 2%, 3%, 4%, and 5% water solutions. It is noteworthy that the image contains the graphs of 12 lines, yet only six are distinguishable. This is due to the fact that the two scans of each of the six solutions led to visually indistinguishable signatures. After every blinded scan, the team was able to visually identify which of the analytes had been scanned from the Bio-RFID signature alone.

#### CONCLUSION

The Bio-RFID technology accurately detects, measures, and quantifies specific molecules in liquid. While these findings have in vitro commercial applications, these proof-of-principle studies provide strong support for the application of Bio-RFID for non-invasive bio-monitoring of physiologically and medically relevant analytes, such as glucose and alcohol, in the human body.

#### Know Labs Generation One Device®

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**CONTACT | ask@knowlabs.com**

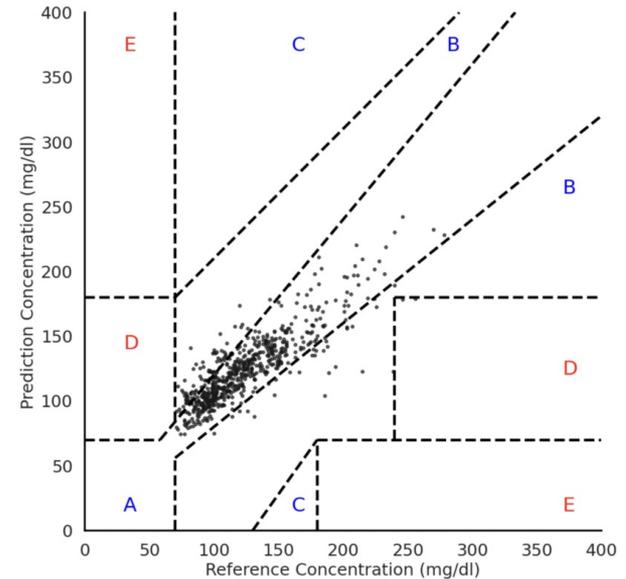
# CLINICAL ACCURACY IN MIXED COHORT: July 2023

Novel data preprocessing techniques in an expanded dataset improve ML model accuracy

Reviewed By Members of Know Labs' Scientific Advisory Board

	Observations	MARD (%)	MAE (mg/dl)	±15%	±20%
<b>Hypoglycemic (&lt;70 mg/dl)</b>	2 (<.3%)	n/a	n/a	n/a	n/a
<b>Normoglycemic (70 – 180 mg/dl)</b>	608 (91.4%)	10.76 ± 0.79	12.00 ± 0.82	75.5 ± 3.4	83.6 ± 2.9
<b>Hyperglycemic (&gt;180 mg/dl)</b>	53 (8.3%)	15.92 ± 2.98	33.43 ± 6.51	58.5 ± 13.3	67.9 ± 12.6

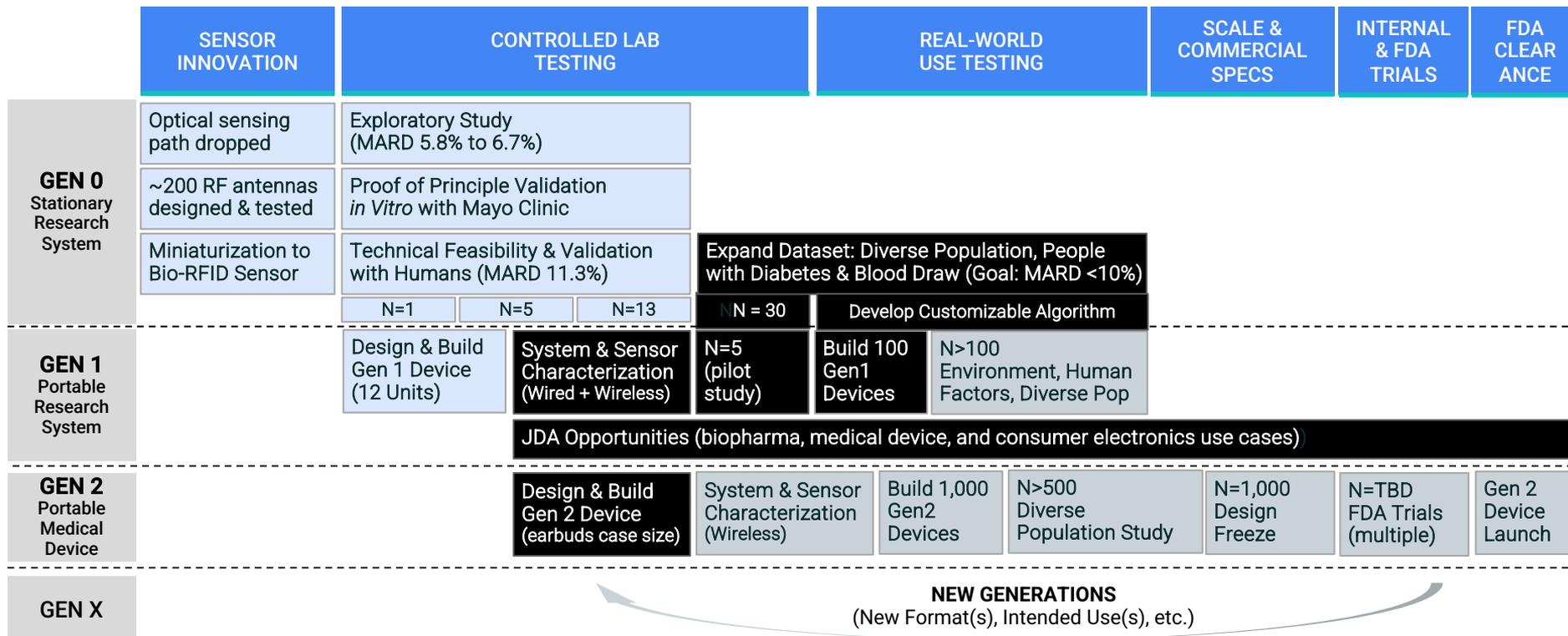
- Demonstrates a test in which the patented RF dielectric (impedance) spectroscopy sensor was able to predict reference values of Dexcom G6® CGM continuously and non-invasively with a **MARD of 11.27%**
- Caveat: one limitation of this study is the requirement for **a larger and more diverse participant population**. All participants were healthy and did not have diabetes; indeed, 91.4% of the reference values were in the normoglycemic range



# EXPECTED PATH TO MARKET

## Key

- Completed FY 9/2018 - 2023
- Current FY 9/2023 - 2024
- Planned FY 9/2024 - 2026



# KNOW LABS IP STORY: IP Market is Growing Rapidly in NI BGM

Yet, IP market is still *early days* with limited prior art challenges for Know Labs; enables *headroom* to build a dominant IP portfolio

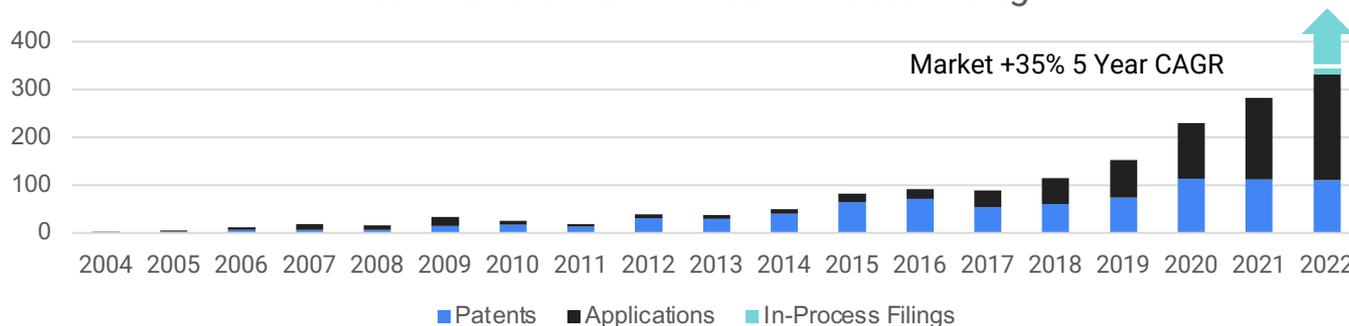
- Overall space has only 1,632 relevant global patents and applications
- Significantly higher IP activity in past 3-4 years
- Non-granted applications as a large percentage of filings shows it's difficult to obtain patents in this space

Know Labs is well positioned as an IP leader in a rapidly growing IP space

## Intellectual Property

45 Granted Patents  
157 Patent Applications  
44 In-Process Filings  
**Total 246 Active IP Assets**

### Global Patent Filing Rate Over Time Non-Invasive Blood Glucose Monitoring



# KNOW LABS IP STORY: Extending Our IP Leadership Beyond Just Market Growth

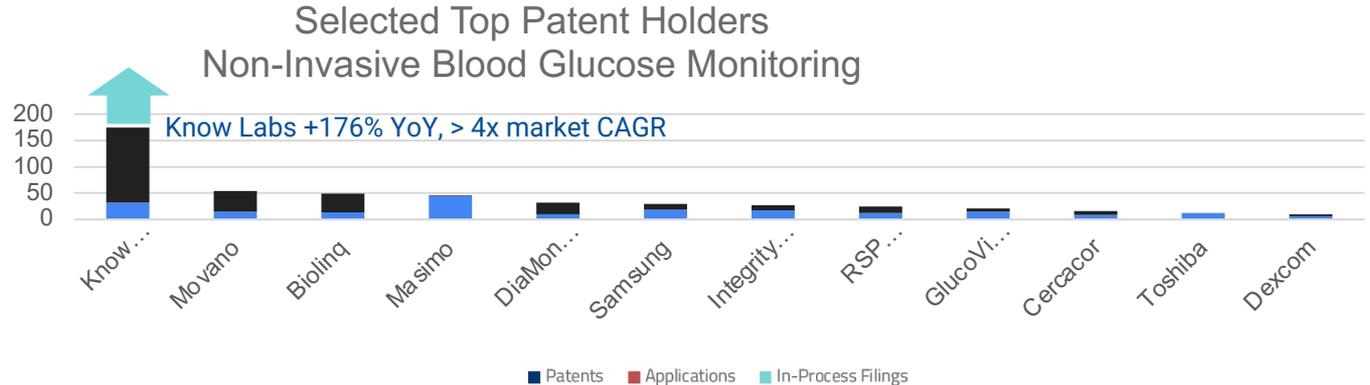
Know Labs' accelerating IP growth reflects high rate of innovation,  
with significant and focused investment in strategic IP development

- Know Labs holds 45 granted patents related to non-invasive blood glucose monitoring
  - Know Labs also has 157 patent applications pending
    - An additional 44 filings are in-process

## Intellectual Property

45 Granted Patents  
157 Patent Applications  
44 In-Process Filings  
**Total 246 Active IP Assets**

According to ipCG, Know Labs is the top worldwide IP holder in non-invasive blood glucose monitoring



# STRATEGIC IP VALUE CREATION: Leadership & Interoperability

## This Is Our Chessboard

### Intellectual Property

45 Granted Patents  
157 Patent Applications  
44 In-Process Filings  
**Total 246 Active IP Assets**



## RF SENSOR ipLANDSCAPE

LEGEND  
XX : XX : XX  
PATENTS : APPLICATIONS : KNOW LABS NEW APPLICATIONS

MEDICAL DEVICES	NON-OPTICAL	OPTICAL
WEARABLE	27 : 106 : 11	47 : 127 : 3
NON-WEARABLE	397 : 833 : 0	542 : 1067 : 1
NON-INVASIVE	214 : 463 : 79	290 : 574 : 1
MINIMALLY INVASIVE	71 : 116 : 1	81 : 177 : 0
SPO2 SPECIFIC	19 : 50 : 3	74 : 179 : 0
BLOOD GLUCOSE	70 : 171 : 33	138 : 264 : 0
OTHER ANALYTE	71 : 138 : 10	163 : 396 : 0
MULTI-ANALYTE	244 : 521 : 36	404 : 832 : 4

**DATA & ANALYSIS**

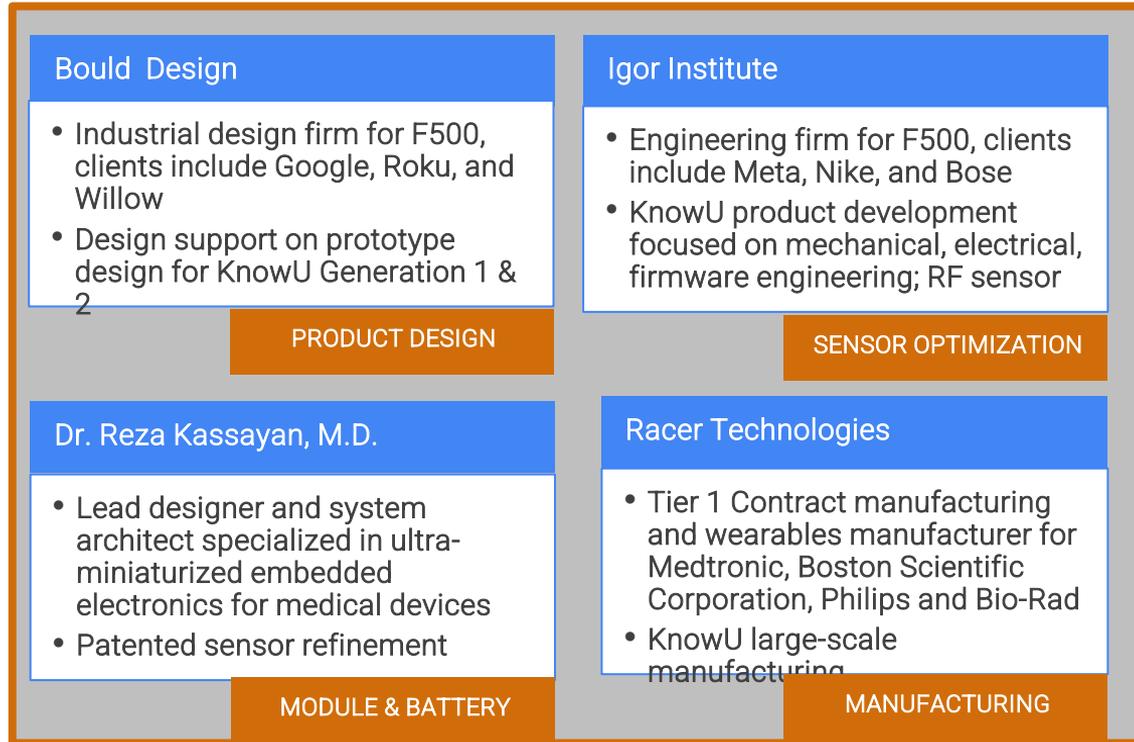
TRANSFORMS 63 : 161 : 2	SIGNAL PROCESSING 438 : 920 : 5	DATA TRANSMISSION & SECURITY 323 : 635 : 9	AI / ML 251 : 659 : 37
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**MEDICAL DEVICE INTEGRATION**

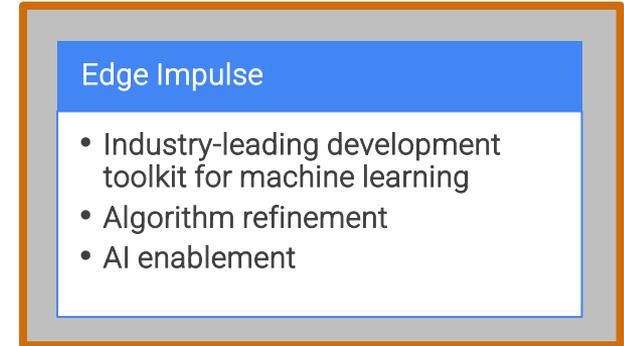
USER INTERFACE 468 : 950 : 37
WORKFLOW 25 : 75 : 15
STANDARDS 2 : 4 : 5
MANUFACTURING 44 : 126 : 1
CABLING 80 : 190 : 1
WIRELESS 248 : 516 : 5
OR USE 50 : 145 : 8

# F500-Class Strategic Development Partners Accelerate Our Speed to Market

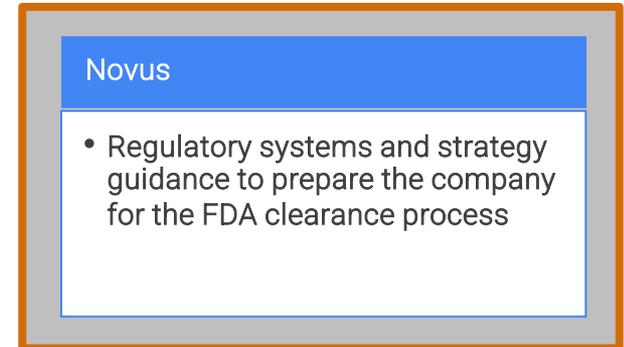
## HARDWARE – GENERATION 1 & 2 PROTOTYPES



## ALGORITHM (DATA SCIENCE)



## REGULATORY AND eQMS



# FY 9/2024\* Goals

## Introduce Gen 2 CGM device

- Wearable CGM at least 50% smaller than Gen 1 (“earbuds case size”)
- Potential format for FDA submission

## Further accelerate data collection and continue algorithm refinement

- Tens of billions of data points and reference points (IV, CGMs and finger sticks) – internal and external research institutions
- Achieve MARD under 10% in large mixed cohorts
- Increase the generalizability of the RF sensor
- Submit validation manuscripts to key global diabetes conference and peer-reviewed journals

## Refine regulatory strategy

- Apply for FDA Breakthrough Designation (FY 9/2024)
- FDA De Novo Classification Preparation (FY 9/2025 / FY 9/2026)

## Build upon current global IP leadership and interoperability in non-invasive blood glucose monitoring

## Prepare organization for accelerated growth and go-to-market plan (FY 9/2025 / FY 9/2026)

## Execute upon multiple JDA opportunities (core and non-core)

\* October 2023 to September 2024

# Why Know Labs?

Emerging Leader	Global Innovator	IP Leadership	Medical Device	Platform Technology
<ul style="list-style-type: none"><li>• NYSE American IPO September 15, 2022</li><li>• Below the radar - current Form 13F Institutional Ownership &lt;6%*. (25 institutions with 46 funds)</li><li>• ~\$20M Market Cap versus &gt;\$30B Market Cap for CGM Incumbents, a factor of 1500x</li></ul>	<ul style="list-style-type: none"><li>• Highly differentiated approach to glucose monitoring with high specificity &amp; sensitivity</li><li>• Combination of radio and microwave spectroscopy monitors high resolution analyte data in real-time</li><li>• 3D data collection</li></ul>	<ul style="list-style-type: none"><li>• 246 patents issued, pending and in-process filings worldwide</li><li>• Foundational patents cover more than 100 analytes</li><li>• System-level interoperability to enable new hybrid architectures with CGM incumbents</li></ul>	<ul style="list-style-type: none"><li>• Highly accurate medical device to serve the needs of hundreds of millions</li><li>• Hundreds of tests proved that KnowU can measure blood glucose levels non-invasively</li><li>• High level of accuracy</li></ul>	<ul style="list-style-type: none"><li>• Real-world commercialization opportunities across multiple industries</li><li>• 100+ potential applications and use cases in medical diagnostics and beyond</li><li>• F500-class development partners to bring to products to market</li></ul>

\* Form 13Fs as of 6/30/2023

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.







