

May 2021

CardieX
Corporate Update





CardieX is a health-technology company that focuses on vascular and arterial health.

Our two operating divisions develop and market medical and consumer devices & digital solutions for the world's largest health disorders - all based on our patented, FDA-cleared **SphygmoCor®** central blood pressure technology.

Key Company Highlights

Devices and digital solutions for the world's largest vascular health disorders - including hypertension, cardiovascular disease, cognitive health, diabetic retinopathy, renal disease.

Our **SphygmoCor® technology** non-invasively measures the vascular health of key organs (heart, brain, kidneys) and health of the full “arterial tree”.

Two operating divisions: ATCOR (medical) - specialist clinical markets, research, pharma; and **CONNEQT** (consumer) - home & primary care vital signs monitoring devices, wearables, digital solutions and apps.

Only FDA-cleared devices for non-invasive measurement of arterial waveforms in adults.

Substantial global patent and IP portfolio in wearable and cuff based arterial health monitors - “world-first” sensor patent lodged May, 2020.

Substantial “Addressable Markets”

Strong current and forecast revenue growth driven by clinical market sales and new consumer and wearable product releases.

Experienced, seasoned team (Masimo, Johnson & Johnson, Baxter, Welch Allyn).

Our Core Technology

Our patented **SphygmoCor®** technology measures “**central blood pressure**” and “**arterial waveforms**” providing advanced medical and consumer health parameters not available from traditional blood pressure devices.



All “**Top 20 Hospitals**” use SphygmoCor technology to measure central blood pressure (cBP)*



4000+ papers have been published in leading peer-reviewed journals like *Hypertension*, *Journal of Clinical Hypertension*, and the *Journal of the American College of Cardiology*



8 out of Top 10 Pharma companies have used SphygmoCor technology in their clinical trials*



Over **11,000 patients** have been tested with SphygmoCor technology in pharmaceutical trials

*CardieX Estimates.

Benefits of Central Blood Pressure Measurement (cBP)

1

More precise and accurate determination of hypertension and risk of vascular related diseases such as Alzheimer's, stroke, kidney, renal, and other inflammatory disorders.

2

cBP more closely reflects cardiovascular risk than brachial BP - predictive superiority of cBP over brachial BP primarily due to the proximity of the ascending aorta to the main organs (1400+ studies).

3

Identifies patients that are being over or undertreated for hypertensive related disorders (1.3B global hypertensives).

4

More precise targeting of prescription drugs - CardieX analysis estimates approx \$USD1.65B in annual cost savings to payers and insurers (~16% annual savings in costs of overtreatment).

5

Due to variability between individuals, **central blood pressure cannot be estimated** from brachial blood pressure, so must be measured separately.

“You can’t practice medicine anymore without central blood pressure.”

Dr. Mark Houston, Director - Hypertension Institute

Total Addressable Population Size

Our technology solutions have significant medical and consumer applications across the worlds largest health disorders.

Hypertension & Cardiovascular Disease - Central systolic blood pressure (cBP) and arterial stiffness considered better indicators of cardiovascular risk than brachial blood pressure alone.

1.3 billion hypertensives (Source: AMA)

Cardiovascular (CV) disease is the

#1 Killer
of humans globally¹



Incidence rate continues to rise

Current blood pressure (BP) monitoring solutions **do not** accurately identify or prevent CV risk.

100
YEAR OLD TECHNOLOGY

Global regulatory and policy support calls for **more accurate diagnosis** of heart diseases based on arterial stiffness.

THE LANCET



Diabetes - Management of central systolic blood pressure (CSBP) essential for identifying risk of diabetic retinopathy.

578m global diabetics by 2030 (Source: WHO)

Cognitive Health - Alzheimer’s and dementia risk impacted by central pulse pressure at the brain.

Approx 44m living with Alzheimer’s and dementia (Source: Alzheimer’s Assoc.)

Renal Disease - Chronic kidney disease (CKD) strongly associated with an increase in central blood pressure.

Currently, approx 700m CKD cases globally (Source: Lancet)

2.5 Billion

Total addressable health population

Total Addressable Market Size

\$550B

Annual Addressable
Market Opportunity

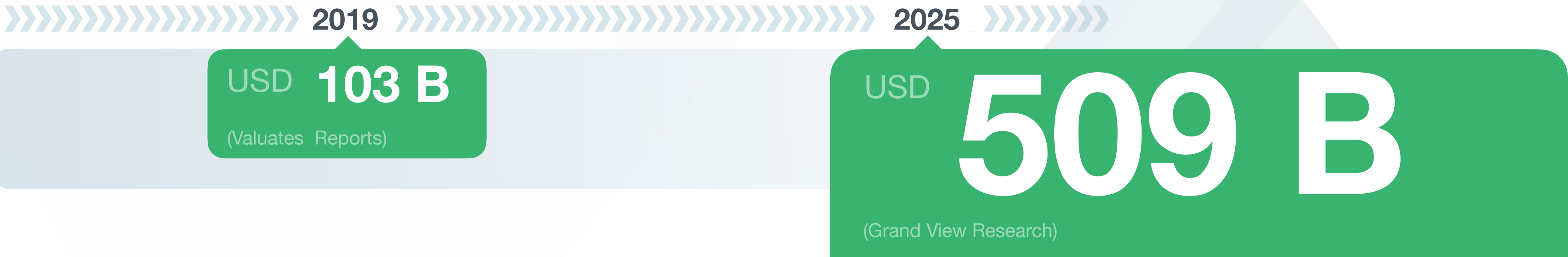
Global Blood Pressure Monitoring - Market Value



Health Wearables Market - Market Value



Digital Health - Market Value



Our Operating Companies

Our two operating companies leverage our FDA-cleared and patented **SphygmoCor®** technology for specialized health market solutions - with separate go-to-market, brand, and sales strategies.

ATCOR 

Specialist Medical Devices and Data Solutions (B2B)

 CONNECT

Home, consumer, and primary care devices and digital solutions.

ATCOR

Specialist Medical Devices and Data Solutions (B2B)

Medical Devices

SaaS Solutions

IP Licensing

The only devices cleared by the FDA to measure central arterial waveform pressure in adults.

Portfolio of company owned & jointly developed products:

- **XCEL SphygmoCor®**- “gold standard” for central blood pressure measurement.
- **Oscar 2** ABPM - technology sales and co-marketing with SunTech Medical.
- **Mobvoi JV**- licensing of ATCOR health algorithms to Google backed smartwatch “unicorn” (Q4/FY21 launch).

CPT reimbursement code **93050**.

Significant IP and trademark portfolio.

14

Patents covering significant applications in cardiovascular health and consumer wearables.

16

New Trademarks

ATCOR 



 mobvoi



Oscar 2™



FDA

CFDA

Approved

CE

USA CPT
Reimbursement Code

ATCOR Partners & Customers



We sell, lease, license, and provide data management software services to*:

Research and pharmaceutical companies for clinical trial services related to hypertension, cardiovascular disease, diabetes, and renal disease.



AstraZeneca

NOVARTIS



Specialist physician practices - Cardiology, Nephrology, and Endocrinology.



IDN/health care service providers in the USA for sale to their affiliate hospital and caregiver networks.



Medical and consumer device companies - licensing of algorithms and sale of technology.



SunTech Medical®



Exclusively selected by the Artery Society to measure CBP and arterial stiffness in the CARTESIAN Study - largest study to date on COVID and hypertension.

6

Continents

34

Countries

4000+

Installations

*Sample customers and clients.

ATCOR FY/2022

Growth Plan and Path to Profitability

- **New leadership** under Chris Dax (ex-Masimo VP of Sales).
- Major operating and **sales team expansion** in clinical trial services (Michael Schulz - (Welch Allyn/Mortara) + Bob Hayes).
- **Expanded sales and marketing focus** targeting VA's, IDN's, CRO's (USA sales team).
- **Expansion of sales markets** to target renal disease, cognitive health, gestational hypertension, and diabetes management.
- **Expansion of payer reimbursement** with Medicare/Medicaid in process (Dr. Steven Kesten (CMO) + Rhonda Welch (ex-Johnson & Johnson)).
- Insurance coverage + advocacy programs in process (CMO).
- **New** partnerships and licensing agreements.
- **New** product launches.
- **Key new** executive hires.

Current initiatives are already contributing to sales growth with **~40% increase** in forecast revenues for FY2021.

2022

On track for profitability
by year end 2022.



CONNECT

CONNEQT



Home, consumer, and primary care devices and digital solutions.

Home health

Wearables

Companion apps

(ArtyGo and ArtyNet)

- Targeting mass market consumer health products and primary care (GP) devices.
- Direct to consumer (D2C) and direct to business (B2B) online sales focus.
- Five (5) new products in development and on track to launch in 2021 and 2022.
 - **PULSE** (Q2/FY22).
 - **CONNEQT Band** (Q4/FY22).
 - **ArtyGo** app (Q2/FY22 - companion app for **PULSE** and **CONNEQT Band**).
 - **PULSE “MD”** (Q1/FY23).
 - **ArtyNet** SaaS (Q1/FY23 - companion clinician portal for **PULSE MD**).
- All products targeting “FDA-cleared status”.
- Proposed validation trials and studies in partnership with Macquarie University.
- Multiple consumer launch partnerships in process.



New brand reflects the consumer focus of the company on aspirational health and **connecting with a better life.**

CONNEQT PULSE (Q2/FY22)



World's first consumer dual blood pressure monitor (BPM).

- Customizable UI/device screens based on personal user health requirements - world first BPM UI/UX.
- Multiple trademarked and patented health parameters previously only available to specialist physicians, research, and Pharma.
- Direct to consumer sales model.
- FDA-cleared.
- First “CPT code” reimbursable BPM for primary care physicians.
- Price point at top end of professional BPM's.
- Pairs with ArtyGo app for “Freemium” and “Premium” subscription service.



See Appendices for:

CONNEQT PULSE

Competitive & Market Positioning

CONNEQT PULSE

Development & Launch Schedule



CONNEQT BAND (Q4/FY22)



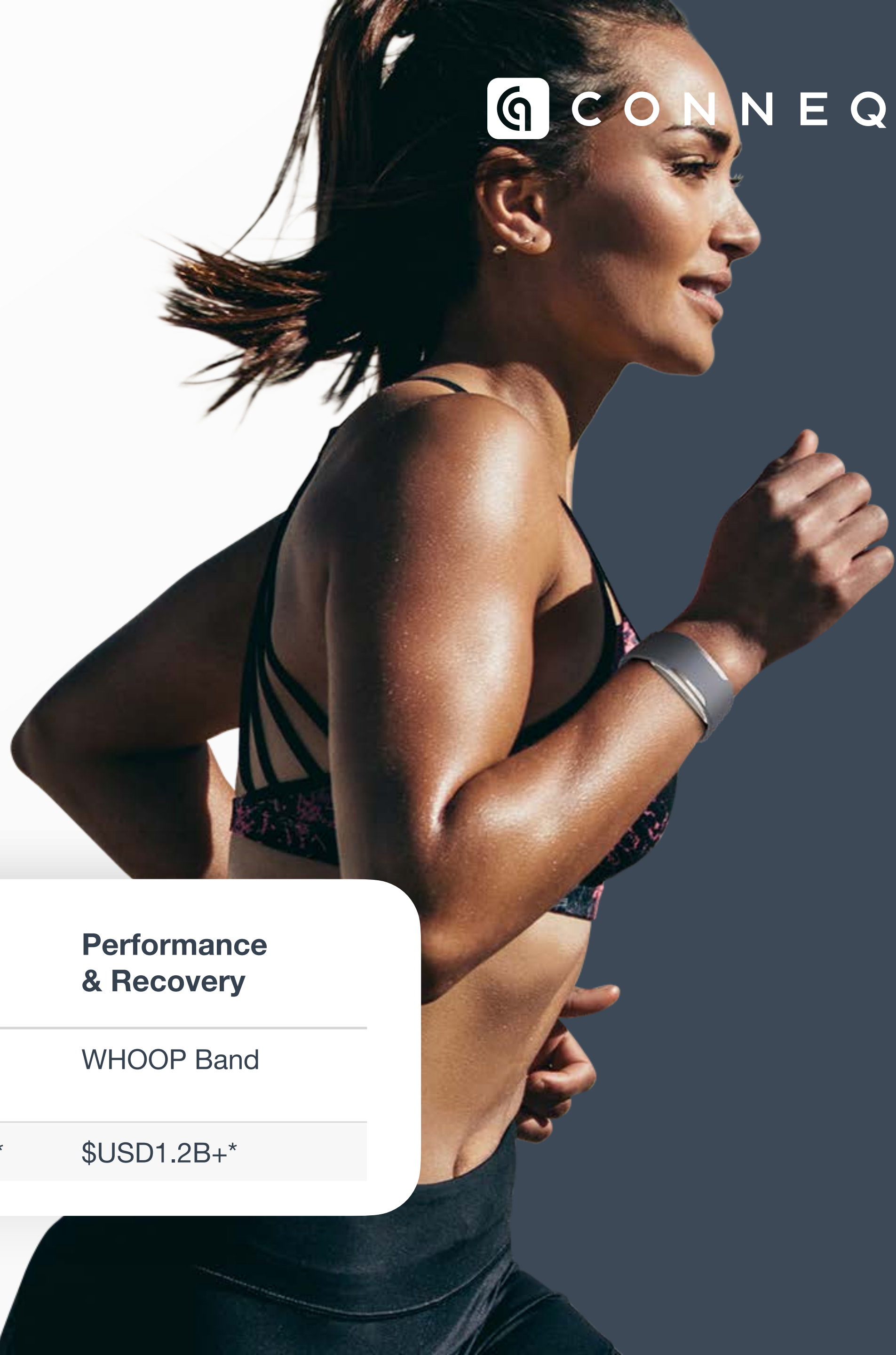
Significant global market opportunity in wearable health devices driven by:

- **1.3B** global hyertensives + multiple other vascular health sectors.
- Growth in global wearable devices to \$USD**104.4B** by 2027.
- Medicare “**remote monitoring codes**” (average \$440 per physician over 6-months per patient).
- Expanded Medicare coverage for hypertension and CVD.
- Growth in consumer connected fitness devices and move towards medically reliable wearable health parameters.

Significant opportunity to claim wearable market leadership in the world's largest health sector

Vascular Health	Sleep Health	Performance & Recovery
CONNEQT	Oura Ring	WHOOP Band
?	\$USD800M+*	\$USD1.2B+*

*Venture and private pre-money valuations.
Representative image only - final product details to be released Q2/FY22
- more details available under NDA



CONNEQT BAND

- **Targeted at health conscious consumers** with underlying vascular health conditions (heart, brain, renal, arterial).
- Incorporates **CardieX's patent pending PPG sensor algorithms** for advanced arterial health monitoring (May/2020).
- **First dual PPG sensor** wearable incorporating both a radial and side sensor. Haptic alerts for BP readings.
- Both **medical and consumer** health parameters.
- Only health wearable with **CPT code compliance** - allows physician reimbursement for central blood pressure measurements communicated remotely.
- Pairs with ArtyGo app for **advanced analytics** of personal health data.
- **Feature rich** and clinically validated.
- Prototypes completed - hardware testing in process.

*At launch

See Appendices for:

CONNEQT Band
Competitive & Market Positioning

CONNEQT Band
Development & Launch Schedule



Cleared*



CONNEQT



CONNEQT BAND

Wearable Market Positioning

Health Tech

OMRON

WITHINGS

 CONNEQT

 fitbit®

ŌURA

WHOOP®

GARMIN®

 WATCH

LifeStyle

CONNQ T

Sample Marketing Campaigns*



*Illustrative purposes only

ArtyGo COMPANION APP

for PULSE & CONNEQT BAND

Health Parameters and Analytics

ArtyGo Basic Features

- Health parameter dashboard with historical view and trends.
- Arty heart health AI coaching and recommendations.
- Heart health personal and group challenges.
- Data sharing with friends, family, and care provider.
- Apple HealthKit & Google Fit integration.

ArtyGo Premium Subscription Features (~\$30 per month)

- Lifestyle disease coaching programs.
- Monthly heart health physician reporting.
- Lifestyle tele-coaching care team.



ArtyGo COMPANION APP

for PULSE & CONNEQT BAND (cont.)



Personalized Health Cards



Health Coaching,
Recommendations & Insights

CardieX Capital Structure - Overview

Market Cap (@ \$0.07): \$66m

Cash (31/03/2021): \$4.8m

Shares, Options, & Fully Diluted Capital (MM)

ASX Listed Shares	925
ASX Listed Options (5c strike, expiry 11/21, raising \$6.37m)	127
Total ASX Listed Capital	1,052
Director Convertible Notes (CN's), Director Performance Shares (DPS), & ESOP	293
Total Fully Diluted Shares (on achievement of all share performance hurdles, Note conversion, & exercise of all options)	1,345

Director/Executive Shareholdings:

- Current - **21%**.
- Including Performance Shares & ESOP - **33.3%**.
- C2 Ventures Pty Ltd (Cooper & Cairns) - **20% going to 30%** w/ CN's & DPS.

CardieX Share Price: April 2020 to April 23, 2021

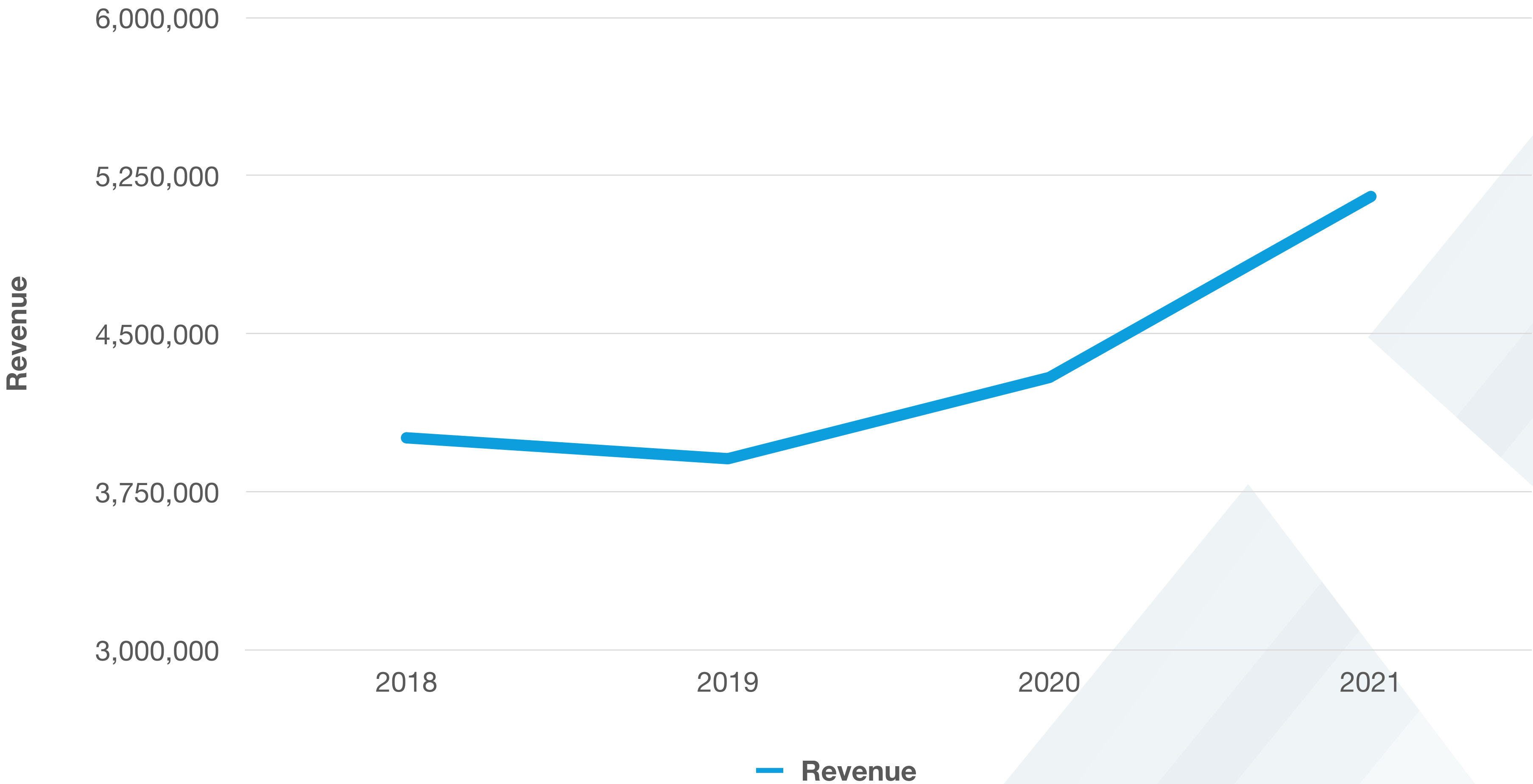


ESOP & Directors Performance Shares:

- ESOP - currently **33.25m** shares.
- DPS – **196.5m** shares, with share price triggers of 12, 15, 20, 25 & 50 cents.
- 8m DPS have vested, but have not issued due to the Corporations Act 2001 “creep” provisions.

Historical & Current (2021) Revenue Run Rate.

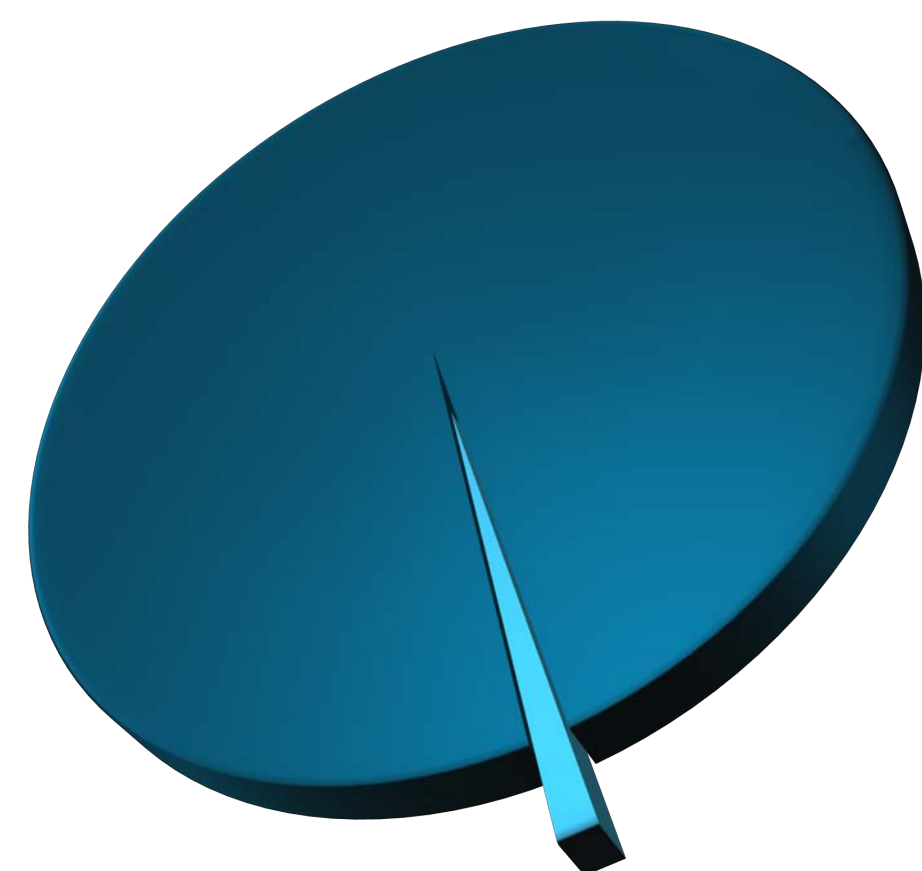
Revenue (2018 - 2021)



- Notes:**
- Actual Revenue for FY's: 2018, 2019, & 2020.
 - Annualised Revenue based on Year to 31 March 2021.
 - YTD growth – 34% (constant currency), >20% (actual currency).

Revenue Contributions 2021-2024

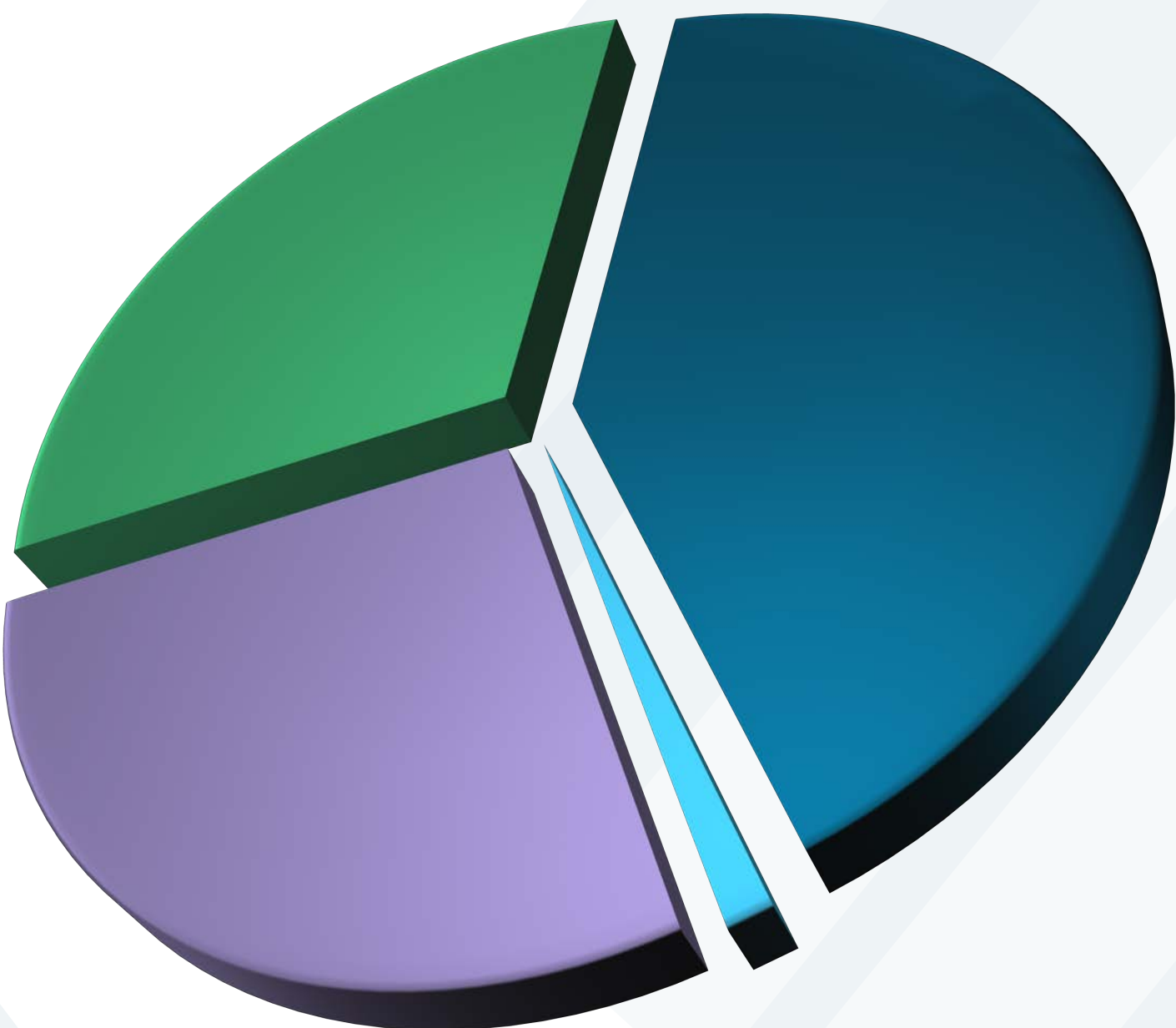
FY21 Business Unit
Revenue Contribution



- ATCOR Medical
- Technology Licensing



FY24 Revenue Contribution



- ATCOR Medical
- Technology Licensing
- New Device
- SaaS and Subscription

Appendices

Board of Directors

Key Management

Global Presence

CONNEQT PULSE - Competitive & Market Positioning

CONNEQT PULSE - Development & Launch Schedule

CONNEQT BAND - Competitive & Market Positioning

CONNEQT BAND - Development & Launch Schedule

CardieX Strategic Investments

References - Total Addressable Market and Population Size

Board of Directors



CEO & Co-Founder

Craig R. Cooper

BEC, LLB (Hons)

Founding Partner - Softbank Capital
Co-Founder - Boost Mobile
Host - CNBC's "Adventure Capitalists"
Co-Founder - NRG Asia-Pacific
Head of Venture Capital and Digital Media - Saban Capital
Venture Partner - VantagePoint Capital Partners
Blake Dawson Waldron
Freehills



Executive Chairman
and Co-Founder

Niall Cairns

BEC, ACA, FAICD

Managing Partner - Kestrel Capital Pty Limited
Chairman - Tambla Limited
Director - Consolidated Financial Holdings Limited (ASX:CWL)
DTS Limited, Harri LLC, Listing Logic Limited
Managing Partner - Kestrel Growth Funds
Managing Partner - Carnethy Evergreen Fund



Non-Executive
Director

R. King Nelson

BA, MBA

CEO - Q'Apel Medical, Inc
Director - Regenesys Biomedical
President, CEO & Director - Uptake Medical
Director - Digirad (NASDAQ:DRAD)
President, CEO & Director - Kerberos Proximal Solutions
President, CEO & Director - VenPro Medical (Medtronic)
Division President - Baxter Healthcare (various businesses)



Executive Director,
Chief Financial Officer

Jarrod White

CA, CTA, BCom(Law) UTS

Founding Partner - Traverse Accountants Pty Limited
CEO - Epsilon Healthcare Limited
Company Secretary - Multiple listed entities

Key Management



Chris Dax
President of ATCOR

Masimo
ISTA Pharmaceuticals
Elan Pharmaceuticals
Valeant



Mark Gorelick
Chief Product Officer

Traction Health
PAI Health
Performance Lab
Step Health



Steven Keston
Chief Medical Officer

SKC Life Sciences
Uptake Medical
Pneuma Respiratory
Boehringer Ingelheim



Rhonda Welch
VP of Health Economics

Welch Healthcare Consulting
Biosense Webster, J&J
Baxter Healthcare



Michael Schulz
Executive Director of Pharmaceutical Markets

Hillrom
Mortara Instruments
Quinton Instruments
BJC Heath System



Ric Ruffhead
Director of Sales

EP MedSystems (St. Jude)
AtriCure
Cardiac Pathways (Boston Scientific)
CardioGenesis



Lawrence Chan
Director of Product Development

Cochlear
Silverbrook Research



Ahmad Qasem
Director of Research & Applications

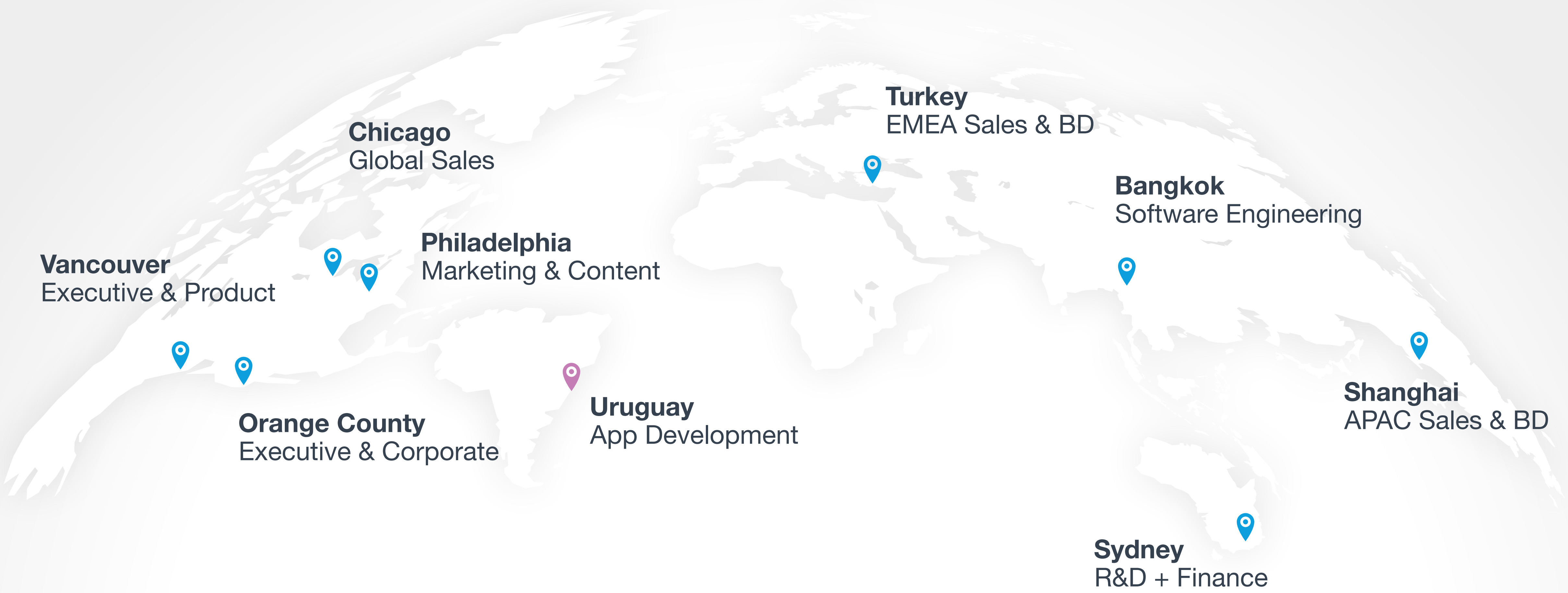
PhD in Biomedical Engineering
Macquarie University



ZiHan Lin
VP of Corporate Development

Masimo
Uptake Medical
Harvard / Stanford

Global Presence



Total Staff 41

CONNEQT PULSE

Competitive & Market Positioning



CLINICAL HEALTH PARAMETERS

CONNEQT Pulse

Withings

Omron

A&D

iHealth

Beurer

Brachial Blood Pressure



Central Blood Pressure



Standard Heart Rate



"Medical Grade" Heart Rate (TruHR)



Arterial Stiffness Index (ASF)



Arterial Age (ArtyAge)



eCap - Exercise Capacity (SEVR Index)



Heart Stress/Augmentation Index (HSX)



Vitals Risk (Central Pulse Pressure)



Arty Score (Overall Heart Health Index)



CPT Code for Reimbursement



CONNEQT PULSE

Launch Schedule



Milestone	Timeline
Device Development/Testing	
Clinical Validation Study Complete	Q4/FY21
Hardware Testing	Q4/FY21
App/Device Testing	Q4/FY21
Regulatory Submissions/Approvals	
FDA regulatory submission (US)	Q1/FY22
CE regulatory submission (EU)	Q1/FY22
NMPA regulatory submission (China)	Q1/FY22
CE anticipated approval (EU)	Q2/FY22
FDA anticipated approval (US)	Q2/FY22
NMPA anticipated approval (China)	Q2/FY22
Manufacturing & Product Launch	
Trial production of ATCOR Pulse units complete (200 units)	Q1/FY22
Pre Launch Marketing	Q2/FY22
Mass production of Atcor Pulse units (50k units)	Q2/FY22
Product Launch	Q2/FY22

CONNEQT BAND

Competitive & Market Positioning



Clinical Grade Health Parameters	CONNEQT BAND	Samsung/Galaxy Watch	Omron HeartGuide Watch	Aktiia Band	Apple Watch
Brachial Blood Pressure w/ calibration	●	●	No calibration required•	●	●
Central Blood Pressure w/ calibration	●	●	●	●	●
Standard Heart Rate	●	●	●	●	●
"Medical Grade" Heart Rate (TruHR)	●	●	●	●	●
Arterial Stiffness Index (ASF)	●	●	●	●	●
Arterial Age (ArtyAge)	●	●	●	●	●
eCap - Exercise Capacity (SEVR Index)	●	●	●	●	●
Heart Stress/Augmentation Index (HSX)	●	●	●	●	●
Vitals Risk (Central Pulse Pressure)	●	●	●	●	●
Arty Score (Overall Heart Health Index)	●	●	●	●	●
ECG	●	●	●	●	●
FDA CLEARED	●	●	●	●	●
CPT Code for Reimbursement	●	●	●	●	●

* Uses traditional pressure inflation method

CONNEQT BAND

Competitive & Market Positioning (cont.)



CONNEQT BAND Consumer Health Parameters

CONNEQT BAND	CONNEQT BAND	Samsung/Galaxy Watch	Omron HeartGuide Watch	Aktiia Band	Apple Watch
"Medical Grade" Heart Rate (TruHR)	●	●	●	●	●
Continous Heart Rate	●	●	●	●	●
Resting Heart Rate	●	●	●	●	●
Heart Rate Variability	●	●	●	●	●
Pulse Oximeter	●	●	●	●	●
Energy Expenditure	●	●	●	●	●
VO2max Estimation	●	●	●	●	●
VO2 Continous Measurement	●	●	●	●	●
Lactate Treshold	●	●	●	●	●
EPOC Analysis	●	●	●	●	●
Sleep Phases (Light, Deep, Wake)	●	●	●	●	●
Sleep Duration	●	●	●	●	●
Steps	●	●	●	●	●
Activity Intensity Classification (Low, Mod, High)	●	●	●	●	●
Activity Effort Summary	●	●	●	●	●

CONNEQT BAND

Competitive & Market Positioning (cont.)



CONNEQT BAND 2021/2022 Pipeline	CONNEQT BAND	Samsung/Galaxy Watch	Omron HeartGuide Watch	Aktiia Band	Apple Watch
Fitness Impact	●	●	●	●	●
Body Readiness	●	●	●	●	●
Daily Stress and Recovery Tracking	●	●	●	●	●
Fitness Level Index	●	●	●	●	●
Daily Activity Level Recommendations	●	●	●	●	●
A.Fib Risk Screening	●	●	●	●	●
Sleep Respiration	●	●	●	●	●
Sleep Apnea Risk Screening	●	●	●	●	●

CONNEQT BAND

Launch Schedule



Milestone	Timeline
Device Development/Testing	
Hardware Development/Testing	Q2/FY22
Clinical Validation Study Complete	Q2/FY22
Regulatory Submissions/Approvals	
FDA regulatory submission (US)	Q2/FY22
FDA anticipated approval (US)	Q4/FY22
Manufacturing & Product Launch	
Trial production of ArtyBand units	Q2/FY22
Pre Launch Marketing and Pre Orders	Q2/FY22
Mass production of ArtyBand units	Q3/FY22
Product Launch	Q4/FY22

CardieX Strategic Investments



Blumio, Inc (www.blumio.com)

Blumio creates radar based sensor units for application in acute ICU settings. CardieX and Blumio have a Collaboration Agreement in respect of the incorporation of ATCOR's algorithms and central pressure parameters into the Blumio radar sensor. Blumio recently signed a Co-Development Agreement with global semiconductor company Infineon to further develop the radar sensor utilizing the Infineon chip.

CardieX holds a Convertible Note of \$USD600K convertible into 7.5% of Blumio, and upwards of 10% based on certain performance milestones.



inHealth Lifestyle Therapeutics (www.inhealthonline.com)

inHealth provides virtual telehealth coaching and lifestyle therapeutics for diabetes, weight loss, hypertension, and other disorders.

CardieX owns 7.7% of inHealth and holds an outstanding Convertible Note in the company in the amount of \$USD2.5M. On full conversion of the Note CardieX will own between 20-30% of inHealth.

inHealth and CardieX are looking to incorporate inHealth coaches and other parameters into the ArtyGo app virtual coaching feature.

References

Total Addressable Market and Population Size

1. World Health Organization. https://www.who.int/health-topics/cardiovascular-diseases/#tab=tab_1
2. Fortune Business Insights. <https://www.fortunebusinessinsights.com/industry-reports/blood-pressure-monitors-market-100059>
3. Industry Status Report. <https://industrystatsreport.com/Lifesciences-and-Healthcare/Medical-Wearables-Market-Size-and-Growth/Summary>
4. Valuates Reports. <https://reports.valuates.com/market-reports/QYRE-Othe-0A163/digital-health-market>
5. Grand View Research. <https://www.grandviewresearch.com/press-release/global-digital-health-market>
6. Journal of American Society of Hypertension. <https://www.sciencedirect.com/science/article/abs/pii/S1933171116304892?via%3Dihub>
7. The Hospitalist. <https://www.the-hospitalist.org/hospitalist/article/220457/coronavirus-updates/comorbidities-rule-new-yorks-covid-19-deaths>

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Authorised by the Board of Directors of Cardiex

CardieX