





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).

#### **Health Parameters**

# 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.



**Arterial Age** (ArtyAge™)



**Arterial Stiffness Factor™** 



**Heart Stress Score** (HSX<sup>™</sup>)



**Exercise Capacity** (eCap™)



TruHR™ (Heart Rate)



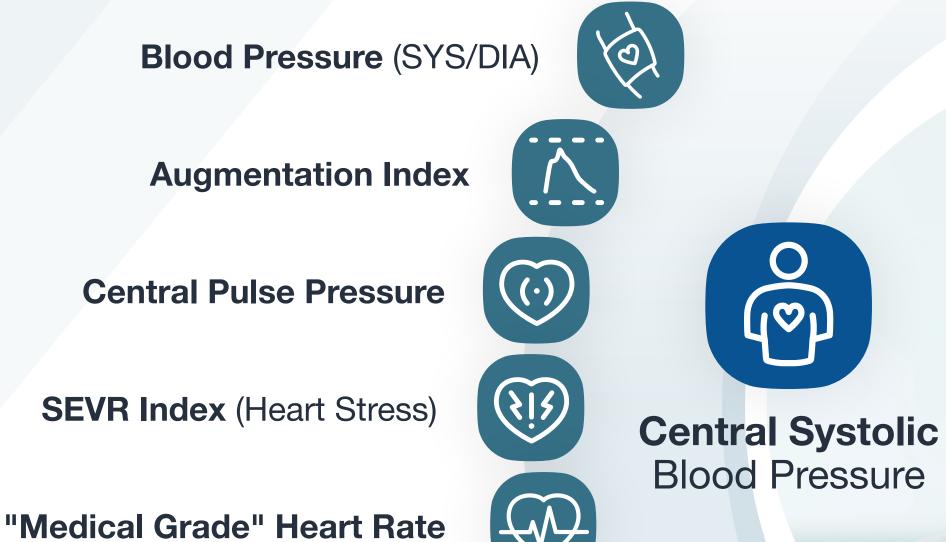
**Blood Pressure Variability** (BPV™)



Cardiac Efficiency (HPX™)



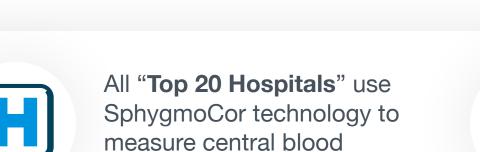
**Heart Rate Variability** (HRV+™)







**ATCOR** 



pressure (cBP)\*

**Cardiac Output** 

**Heart Stroke Volume** 



**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\*

**Central Diastolic** 

**Blood Pressure** 



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

# Benefits of Central Blood Pressure Measurement (cBP)

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

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).

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).

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

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

"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 globally<sup>1</sup>



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

1000
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**

Global Blood Pressure Monitoring - Market Value

USD 1.04 B

(Fortune Business Insights)

2025

USD 2.5 B

(Fortune Business Insights)

Health Wearables Market - Market Value

USD 37.1 B (Grand View Research)

USD 404.4 B

(Grand View Research)

**Digital Health** - Market Value

USD 103 B
(Valuates Reports)

USD 500 B

(Grand View Research)

\$550B

Annual Addressable Market Opportunity

# 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)

**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.

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**New Trademarks** 



### 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.











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.











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

Continents

Countries

**4000**+ Installations

### 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.



## CONNEQT

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

Home health

Wearables

**Companion apps** 

- 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).
  - CONNEQT app (Q2/FY22 companion app for PULSE and CONNEQT Band).
  - **PULSE "MD"** (Q1/FY23).
  - Physician SaaS Platform (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.

GCONNEQT

# 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 CONNEQT 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 hypertensives + multiple other vascular health sectors.
- Growth in global wearable devices to \$USD104.4B 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.

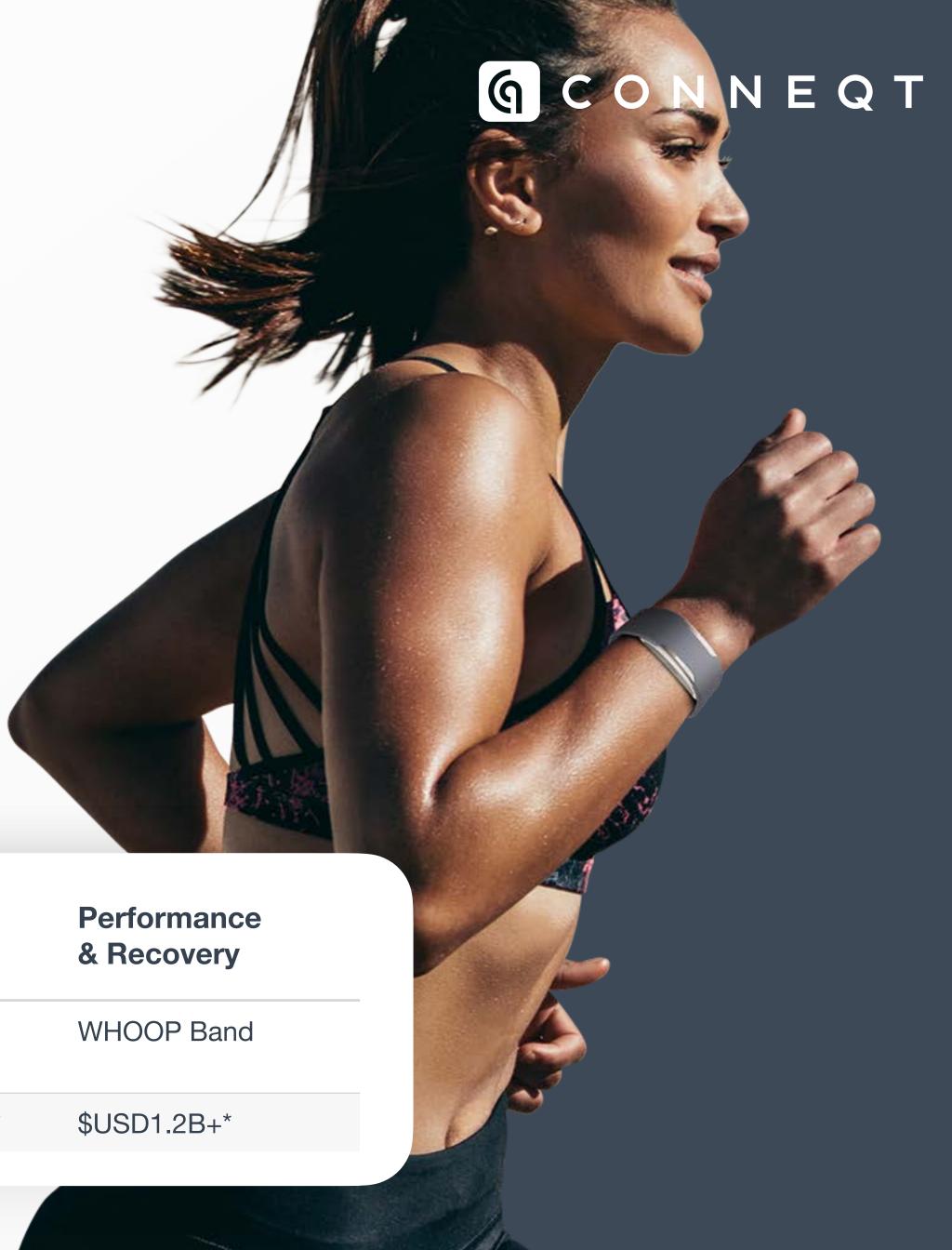
Significant opportunity to claim wearable market leadership in the world's largest health sector

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



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- 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 CONNEQT 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



Wearable Market Positioning

OMRON

WITHINGS





ŌURA

**VVI-IOOIP®** 

**GARMIN**®

**WATCH** 

Health Tech

## CONNEQT

Sample Go-To-Market & Launch Partnerships\*





weight watchers

CONNEQT

Eat Smart Month

#EATSMART

# CONNEQT



### CONNEQT COMPANION APP

#### for PULSE & CONNEQT BAND

#### **Health Parameters and Analytics**

#### **CONNEQT Basic Features**

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

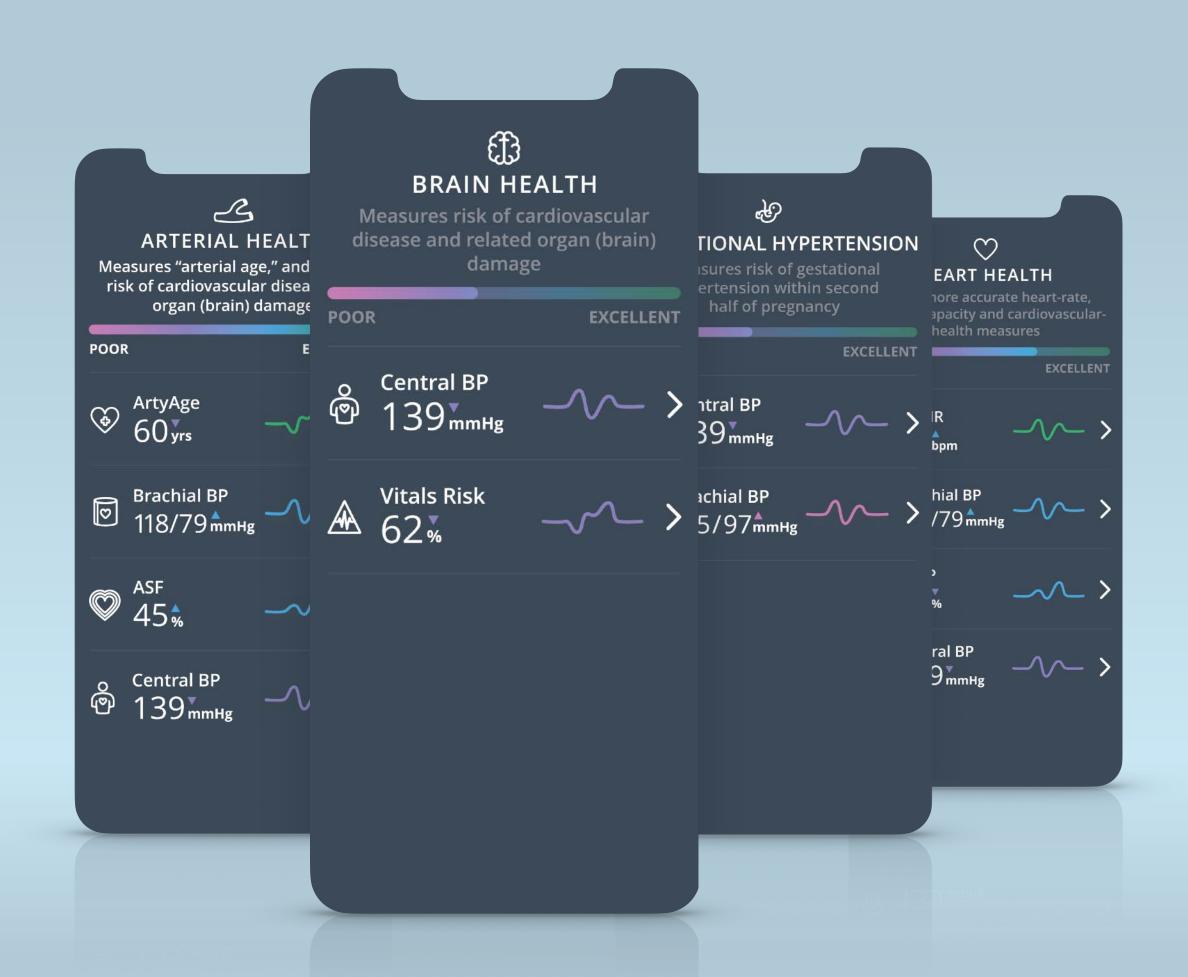
# CONNEQT Premium Subscription Features (~\$30 per month)

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



### CONNEQT COMPANION APP

for PULSE & CONNEQT BAND (cont.)





# 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
<b>ASX Listed Options</b> (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

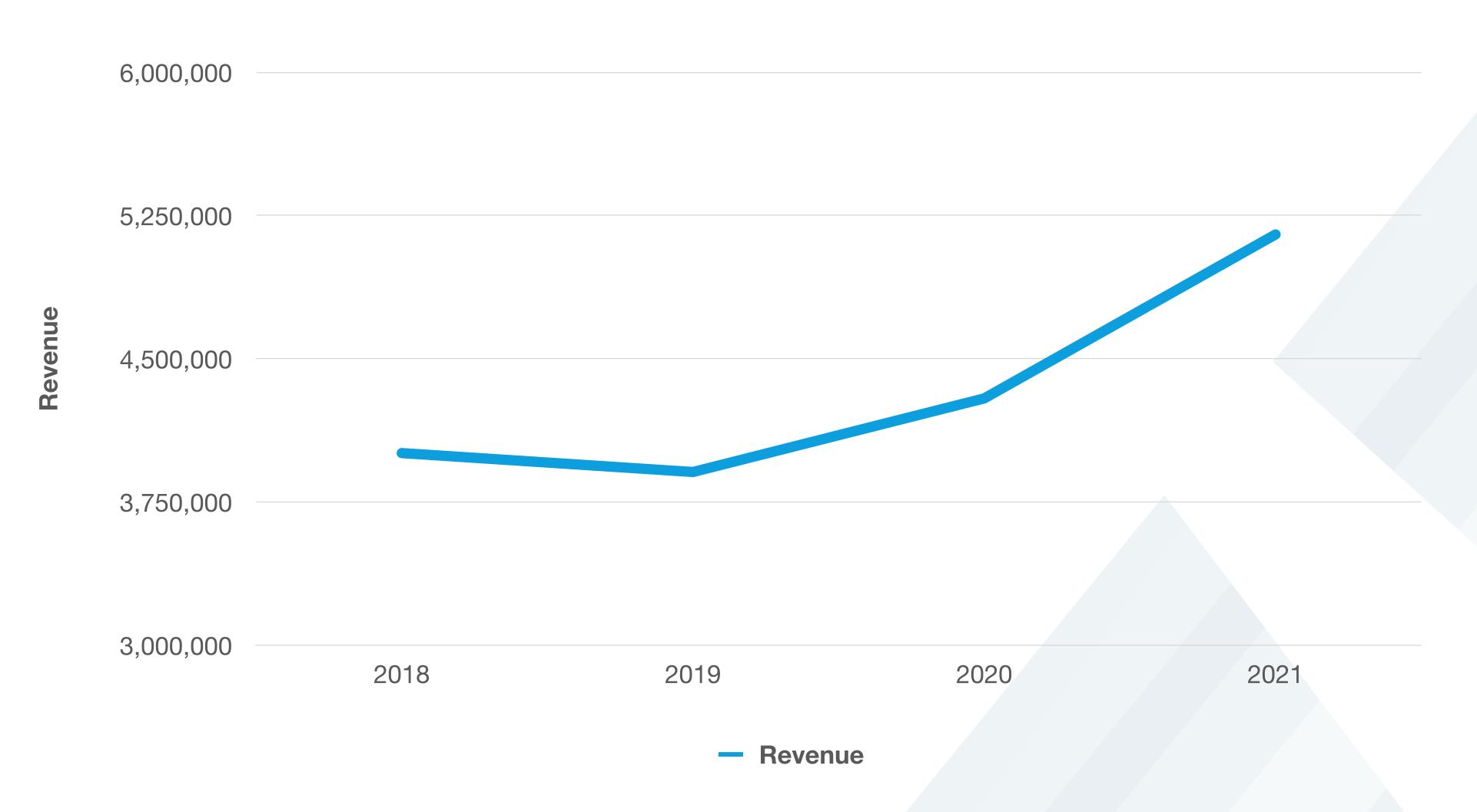


#### **ESOP & Directors Performance Shares:**

- 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)

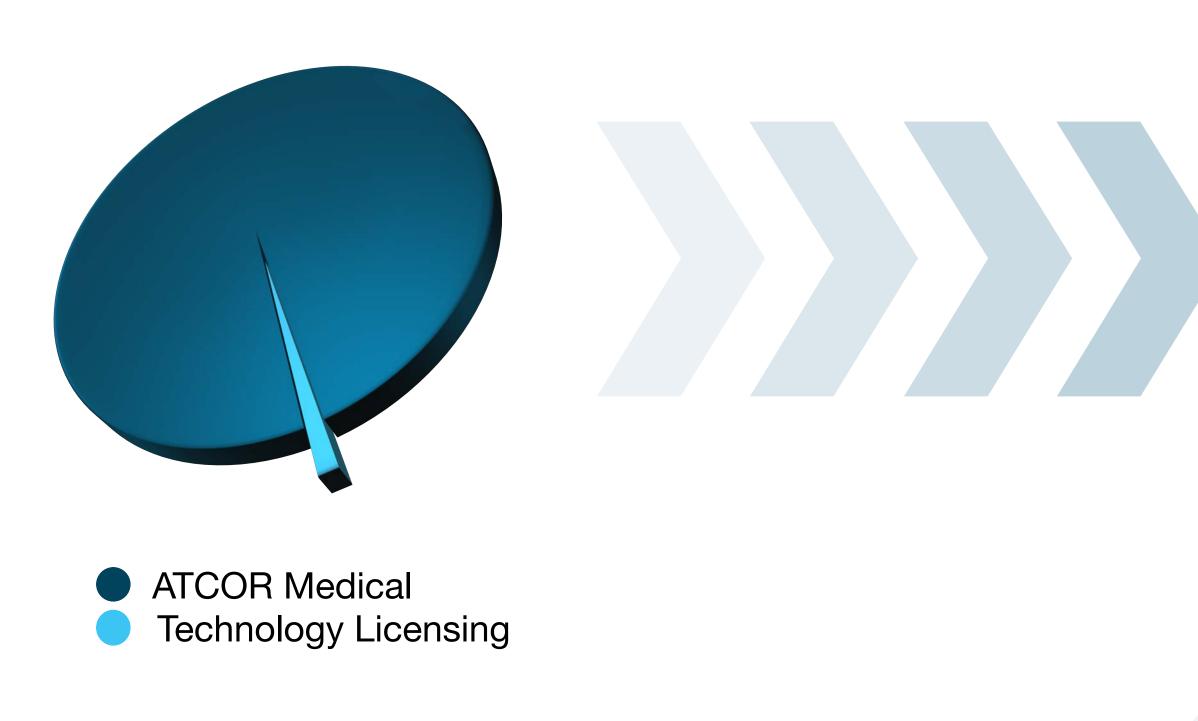


#### **Notes:**

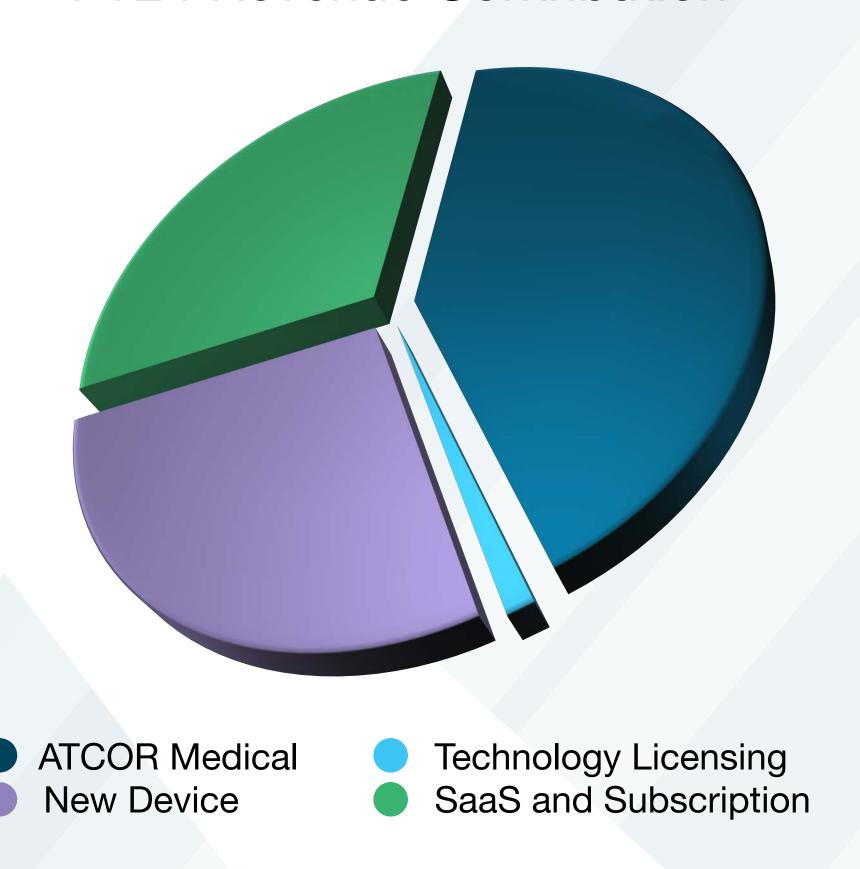
- Actual Revenue for FY's: 2018, 2019, & 2020.
- Annualised Revenue based on Year to 31 March 2021.
- YTD growth 34% (constant currency),
   >20% (actual currency).

### Revenue Contributions 2021-2024

FY21 Business Unit Revenue Contribution



**FY24 Revenue Contribution** 



# 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 - Regenesis 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

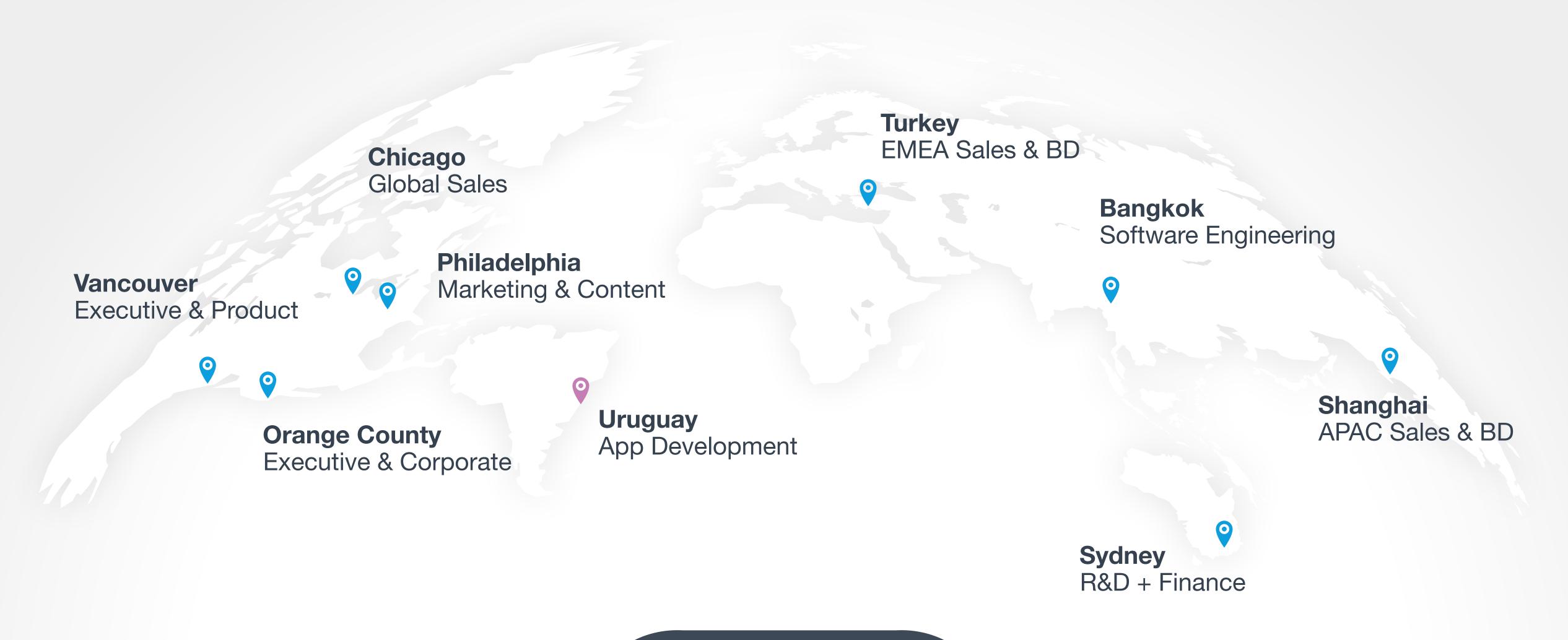


ZiHan Lin

**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			

#### Competitive & Market Positioning



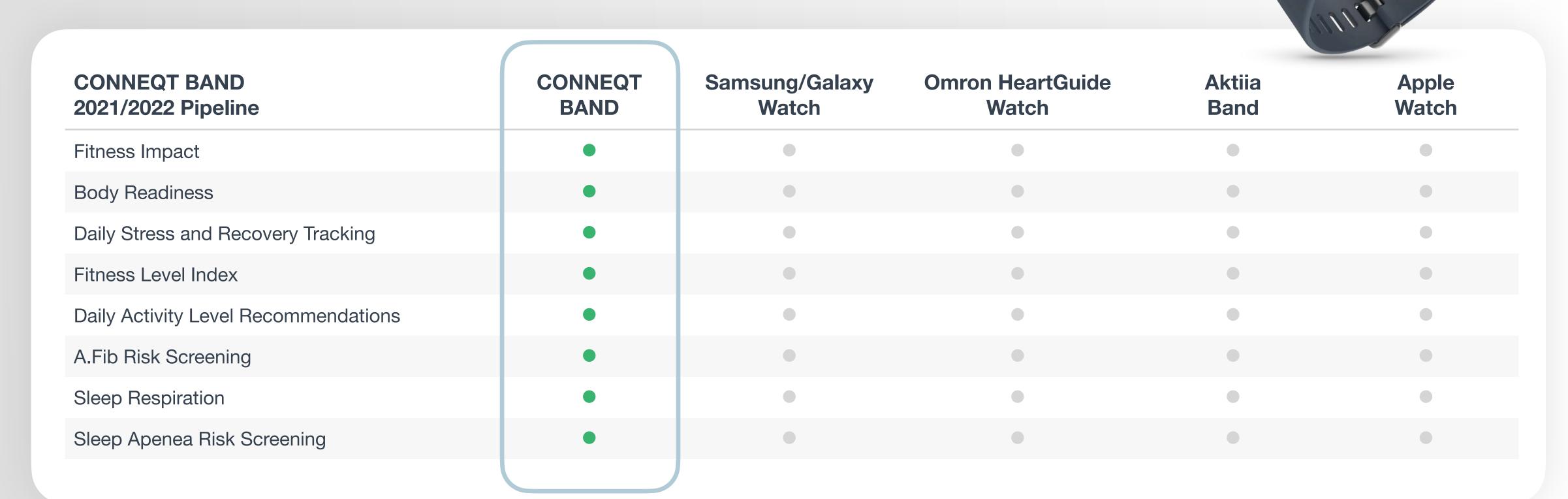
Clinical Grade Health Parameters	CONNEQT BAND	Samsung/Galaxy Watch	Omron HeartGuide Watch	Aktiia Band	Apple Watch
Brachial Blood Pressure w/ calibration	•		No calibration required•		
Central Blood Pressure w/ calibration	•				
Standard Heart Rate	•	•			
"Medical Grade" Heart Rate (TruHR)	•				
Arterial 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					

#### Competitive & Market Positioning (cont.)



CONNEQT BAND Consumer Health Parameters	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		•			

Competitive & Market Positioning (cont.)



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 CONNEQT Band units	Q2/FY22
Pre Launch Marketing and Pre Orders	Q2/FY22
Mass production of CONNEQT Band 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 CONNEQT 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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#### Niall Cairns

Executive Chairman and Co-Founder <a href="mailto:nccairns@cardiex.com">nccairns@cardiex.com</a>

Authorised by the Board of Directors of CardieX



