

# **CARDIEX LTD**

Digital Dawn on the Horizon

**Quick Update** 

2 October 2020



## **Digital Transformation Remains on Track**

On 24 September 2020, CardieX announced a new commercial partnership agreement with Mobvoi, Google's wearable platform partner in China, to launch a next generation smartwatch, incorporating proprietary algorithms developed specifically for Mobvoi - and made possible through the use of CardieX's subsidiary ATCOR's new PPG (photoplethysmography), based sensor technology. This follows an earlier joint development agreement between both parties that commenced in September 2019. Separately in September, Cardiex also entered into an agreement with China-based medical device company Andon to develop a cloud-connected blood pressure monitor for the home market. Both these announcements significantly accelerate CardieX's strategy of leveraging its novel FDA-cleared central blood pressure (cBP) technology into new market verticals globally.

#### First Wearable Consumer Product for CardieX

The new Mobvoi smartwatch will represent the first integration of ATCOR's wearable health analytics platform known as Arty™ (an anagram of "Heart" and "Artery"), and will feature branded measures of heart stress, heart age, exercise capacity (eCap™), and an overall heart health score which the company is branding as an "Arty™ Score". CardieX is also developing active community and AI-powered health coaching services for the new device. The initial six-month market release of the new Mobvoi smartwatch in Q1CY2021 in the US will herald the first wearable device for the company and the first of multiple new devices planned by CardieX over the next 15 months.

Under the two-year agreement, Mobvoi will drive commercialisation in North America, while Cardiex will hold distribution rights in Australia, New Zealand and non-competitive channels in North America. The smartwatch will be marketed with a CardieX trademarked Health360™ premium subscription service, which includes a three-month free trial. Following the free trial, consumers will be required to pay a per-month subscription fee, which will be split 60:40 between CardieX and Mobvoi. Following the initial six-month release period, both companies will determine a full worldwide market release strategy.

# **Cardie**X

CardieX is a global health technology company that focuses on hypertension, cardiovascular disease, and other vascular health disorders. The company's ATCOR division is the world leader in medical devices for measuring arterial stiffness and central blood pressure waveforms based on its unique FDA-cleared and patented SphygmoCor® technology. Under the ATCOR·X brand, the company also develops and licenses its Arty™ platform consisting of physiological and health analytics for wearable devices.

Stock	ASX: CDX
Price	A\$0.049
Market cap	A\$41m

Company data	
Cash on hand	A\$4.3m
Shares on issue	837.7m
Code ASX	CDX
Primary exchange	ASX

Next steps	
1QCY2021	Launch of Mobvoi smartwatch



## Andon Partnership Targets Home BP Market

On 7 September 2020, Cardiex also announced a joint development agreement with Andon to co-develop and manufacture a home blood pressure monitoring device incorporating ATCOR's patented SphygmoCor® technology and a world-first series of multiple new patented-pending health analytics. Andon (002432.SZ) is one of China's largest manufacturers of home-use medical electronic devices with a market capitalisation of ~ RMD 5.3B (A\$1B). The new consumer device will be marketed as the ATCOR "Pulse" and will integrate with ATCOR's companion app, cloud infrastructure, and multi-platform physician portal to support remote patient monitoring and telehealth communications. In addition to conventional blood pressure parameters, the ATCOR "Pulse" will measure central blood pressure, heart rate, arterial stiffness, arterial age, heart stress, and will also render a "Vital Risk Score™", a users exercise capacity (eCAP™), and an Arty™ Score which measures overall cardiovascular health. On launch, the



"Pulse" will be the first vital signs monitor that brings specialist level diagnostics and health data into the home and into the hands of consumers. Under the three-year agreement, Andon will be responsible for obtaining regulatory approval in all target markets. These include the USA, Australia, Europe and China with commercial launch slated for 4QCY2021. Importantly, US regulatory approval will provide access to reimbursement for physicians for remote patient monitoring through Medicare and Medicaid. ATCOR revenues will be generated through the sale of its SphygmoCor® chip to Andon, the retail & online sale of ATCOR "Pulse" devices, together with subscription revenue from the Arty™ app and SaaS revenues from physicians.

# Strategy Remains Intact - Scope for Multiple Partnerships and Markets

Under the Andon agreement, all intellectual property pertaining to ATCOR technology is retained by ATCOR exclusively. ATCOR also has the sole exclusive right to distribute the ATCOR "Pulse" device in certain defined global markets. Importantly, the company remains free to continue developing its product offering with other partners in the consumer home health and professional primary care markets consistent with its stated corporate strategy.

Similarly, on the wearable front, under the Mobvoi agreement, CardieX remains free to licence its proprietary technology platform to third party device manufacturers to other major device companies. CardieX is also continuing to fast-track its own in-house wearable for the medical market targeted at the 100m+ Americans that suffer from hypertension. Details of that new device at this stage are being closely guarded by the company.

#### Valuation

Our base-case valuation has risen to 10.3 cents per share using DCF methodology with key assumptions listed in Exhibit 1. This compares with 8.2 cents per share previously and incorporates time value of money and the increase in shares on issue following the company's recent A\$2.37m capital raise after costs.

Exhibit 1 - Base Case DCF valuation and Key Metrics

	2020	2021	2022	2023	2024	2025
A\$						
EBIT	-2,990,947	-1,800,645	923,584	2,690,134	5,552,833	8,726,840
Tax at standard rate	0	0	0	0	0	0
Post-tax EBIT	-2,990,947	-1,800,645	923,584	2,690,134	5,552,833	8,726,840
Depreciation	220,152	453,679	354,944	236,256	163,763	119,485
Amortisation	0	0	0	0	0	0
Post-tax cash flow	-2,770,795	-1,346,966	1,278,528	2,926,390	5,716,597	8,846,326
Less capex	-175,203	-600,000	-200,000	-50,000	-50,000	-50,000
Less change in working capital	0	0	0	0	0	0
Provisions/other	-23,573	0	0	0	0	0
Acquisitions/disposals	0	0	0	0	0	0
Free cash flow	-2,969,571	-1,946,966	1,078,528	2,876,390	5,666,597	8,796,326
Sum of discount streams	33,186,248					
Terminal growth	33,180,248					
Future value into perpetuity	163,041,983					
NPV of terminal value	49,976,007					
PV of cash flows	83,162,255					
PV OI Casii iiows	03,102,233					
PLUS: Value of investments	0					
PLUS: Value of tax losses	0					
LESS: Minority interests	0					
PLUS: Net cash	2,755,011					
Equity value	85,917,266					
Ordinary shares	837,701,426					
Value per share (A\$)	0.103					
Discount Rate	16.5%					

Source: MST Access



Exhibit 2 – Summary Financial Statements

Financial Summary (AUD)	FY18a	FY19a	FY20a	FY21e	FY22e	FY23e
PROFIT & LOSS						
Total Revenue	4,424,459	5,046,606	5,290,390	7,781,301	11,080,788	13,625,829
Operating Costs	-6,520,377	-7,221,483	-7,747,901	-8,293,868	-8,195,133	-8,439,166
		, ,				
EBITDA	-2,917,629	-2,763,316	-2,770,795	-1,346,966	1,278,528	2,926,390
EBIT	-2,978,803	-2,879,831	-2,990,947	-1,800,645	923,584	2,690,134
Tax	0	0	0	0	0	0
NPAT (Reported)	-2,537,285	-3,015,195	-3,222,541	-2,303,634	420,595	2,187,145
NPAT (Underlying)	-2,961,225	-2,979,278	-3,320,427	-2,303,634	420,595	2,187,145
Minority Interest	0	0	0	0	0	0
Average Number of Shares Outstanding	294.4	595.9	726.8	726.8	726.8	726.8
EPS (Underlying)	-0.01	0.37	1.21	0.82	0.80	3.21
Dividend per share (cps)	0	0	0	0	0	0
BALANCE SHEET						
Current Assets	6,114,250	6,956,474	4,693,348	4,613,392	5,188,931	7,562,332
Cash	2,736,517	4,980,826	2,061,642	1,981,686	2,557,225	4,930,626
Receivables	1,113,219	1,014,967	819,523	819,523	819,523	819,523
Inventory	490,362	218,930	259,679	259,679	259,679	259,679
Other Assets	1,774,152	741,751	1,552,504	1,552,504	1,552,504	1,552,504
Non-Current Assets	299,657	6,255,500	5,981,928	6,128,249	5,973,305	5,787,049
PP&E	97,079	657,534	565,636	711,957	557,013	370,757
Goodwill	0	0	0	0	0	0
Other Non-current Assets	299,657	6,255,500	5,981,928	6,128,249	5,973,305	5,787,049
Current Liabilities	1,769,430	5,057,371	3,644,551	3,644,551	3,644,551	3,644,551
Payables	1,469,402	1,360,332	711,530	711,530	711,530	711,530
Short Term Debt	185,000	0	718,464	718,464	718,464	718,464
Provisions & Tax	115,028	346,119	322,547	322,547	322,547	322,547
Other financial liabilities	0	3,350,920	249,447	249,447	249,447	249,447
Non-Current Liabilities	48,264	1,203,668	1,150,724	1,150,724	1,150,724	1,150,724
Long Term Debt	0	0	958,167	958,167	958,167	958,167
Provisions Other forms sink line billities	0	1,181,927	0	0	0	0
Other financial liabilities	0	3,350,920	249,447	249,447	249,447	249,447
Net Assets	4,596,213	6,950,935 51,500,876	5,880,001	5,946,367	6,366,961 55,497,941	8,554,106 55,497,941
Share Capital Reserves	46,832,833 1,571,498	1,613,332	53,127,941 1,969,548	55,497,941 1,969,548	1,969,548	1,969,548
Retained Earnings	-43,808,118	-46,163,273	-49,217,488	-51,521,122	-51,100,528	-48,913,383
Minority Interests	-43,000,110	-40,103,273	-49,217,400	-51,521,122	-51,100,520	-40,913,303
Total Equity	4,596,213	6,950,935	5.880.001	5,946,367	6,366,961	8,554,106
CASH FLOW	,,,,,,,				-,,	-,,
Operating Cash Flow	-2,038,320	-2,290,773	-1,698,851	-1,849,956	775,539	2,423,401
Working Capital Change	0	0	0	0	0	0
Maintenance Capex	-4,916	-203,849	-175,203	-600,000	-200,000	-50,000
Expansion Capex	0	0	0	0	0	0
Acquisitions	0	0	0	0	0	0
Investing Cash Flow	-207,494	-2,165,650	-3,699,113	-600,000	-200,000	-50,000
Equity Issued	4,834,825	4,502,199	1,000,000	2,370,000	0	0
Debt Issued	0	0	1,673,770	0	0	0
Dividends	0	0	0	0	0	0
Financing Cash Flow	4,304,029	6,700,732	2,473,419	2,370,000	0	0
Change in Cash Balance	2,058,215	2,244,309	-2,924,545	-79,956	575,539	2,373,401

Source: MST Access

#### **Disclaimers**

MST Access is a registered business name of MST Financial Services Pty Ltd (ACN 617 475 180 "MST Financial") which is a limited liability company incorporated in Australia on 10 April 2017 and holds an Australian Financial Services Licence (Number: 500 557). This research is issued in Australia through MST Access which is the research division of MST Financial. The research and any access to it, is intended only for "wholesale clients" within the meaning of the Corporations Act 2001 of Australia. Any advice given by MST Access is general advice only and does not take into account your personal circumstances, needs or objectives. You should, before acting on this advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Product Disclosure Statement or like instrument.

This report has been commissioned by CardieX Limited and prepared and issued by Chris Kallos of MST Access in consideration of a fee payable by CardieX Limited. MST Access receives fees from the company referred to in this document, for research services and other financial services or advice we may provide to that company. The analyst has received assistance from the company in preparing this document. The company has provided the analyst with communication with senior management and information on the company and industry. As part of due diligence, the analyst has independently and critically.

reviewed the assistance and information provided by the company to form the opinions expressed in the report. Diligent care has been taken by the analyst to maintain an honest and fair objectivity in writing this report and making the recommendation. Where MST Access has been commissioned to prepare Content and receives fees for its preparation, please note that NO part of the fee, compensation or employee remuneration paid will either directly or indirectly impact the Content provided

Accuracy of content: All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report and have not sought for this information to be independently verified. Opinions contained in this report represent those of MST Access at the time of publication. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current opportunions.

Exclusion of Liability: To the fullest extent allowed by law, MST Access shall not be liable for any direct, indirect or consequential losses, loss of profits, damages, costs or expenses incurred or suffered by you arising out or in connection with the access to, use of or reliance on any information contained on this note. No guarantees or warranties regarding accuracy, completeness or fitness for purpose are provided by MST Access, and under no circumstances will any of MST Financial's officers, representatives, associates or agents be liable for any loss or damage, whether direct, incidental or consequential, caused by reliance on or use of the content

# **General Advice Warning**

MST Access Research may not it be construed as personal advice or recommendation. MST encourages investors to seek independent financial advice regarding the suitability of investments for their individual circumstances and recommends that investments be independently evaluated. Investments involve risks and the value of any investment or income may go down as well as up. Investors may not get back the full amount invested. Past performance is not indicative of future performance. Estimates of future performance are based on assumptions that may not be realised. If provided, and unless otherwise stated, the closing price provided is that of the primary exchange for the issuer's securities or investments. The information contained within MST Access Research is published solely for information purposes and is not a solicitation or offer to buy or sell any financial instrument or participate in any trading or investment strategy. Analysis contained within MST Access Research publications is based upon publicly available information and may include numerous assumptions. Investors should be aware that different assumptions can and do result in materially different results.

MST Access Research is distributed only as may be permitted by law. It is not intended for distribution or use by any person or entity located in a jurisdiction where distribution, publication, availability or use would be prohibited. MST makes no claim that MST Access Research content may be lawfully viewed or accessed outside of Australia. Access to MST Access Research content may not be legal for certain persons and in certain jurisdictions. If you access this service or content from outside of Australia, you are responsible for compliance with the laws of your jurisdiction and/or the jurisdiction of the third party receiving such content. MST Access Research is provided to our clients through our proprietary research portal and distributed electronically by MST to its MST Access clients. Some MST Access Research products may also be made available to its clients via third party vendors or distributed through alternative electronic means as a convenience. Such alternative distribution methods are at MST's discretion.

#### **Access and Use**

Any access to or use of MST Access Research is subject to the Terms and Conditions of MST Access Research. By accessing or using MST Access Research you hereby agree to be bound by our Terms and Conditions and hereby consent to MST collecting and using your personal data (including cookies) in accordance with our Privacy Policy (https://mstfinancial.com.au/privacy-policy/), including for the purpose of a) setting your preferences and b) collecting readership data so we may deliver an improved and personalised service to you. If you do not agree to our Terms and Conditions and/or if you do not wish to consent to MST's use of your personal data, please do not access this service.

Copyright of the information contained within MST Access Research (including trademarks and service marks) are the property of their respective owners. MST Access Research, or any portion thereof, may not be reprinted, sold or redistributed without the prior and written consent of MST

