

## New products and cost efficiencies set to flow

CardieX's quarterly update highlighted significant progress across multiple fronts spanning the traditional ATCOR medical business and growing portfolio of new consumer product initiatives. The company reported sales of A\$3.2m for the 9 months ending 31 March 2021, up over 30% year on year (excluding royalties) and guided to a 40% increase for FY21 both on a constant currency basis; and provided a detailed roadmap of new product launches for the coming 12-18 months. Management also provided some initial details of its new health wearable device – code named: "the Arty Band" - which the company will be formally announcing in the next 2-4 weeks, as well as the "PULSE" - the world's first "dual" blood pressure monitor.

#### Introducing Arty Band.

CardieX gave some early details of what they are currently calling the "Arty Band", a new consumer health wearable incorporating proprietary (patent-pending) PPG sensor technology and a suite of consumer and clinically relevant health parameters. Subject to FDA clearance, the wearable will target the clinician/physician market looking to recommend a clinical grade remote wearable monitor to their patients as well as being a fully featured health wearable device for the everyday consumer. On release, it should also boost ATCOR's core research business by offering clinical trial managers a wearable solution to support their trials for heart failure and other vascular health disorders. CardieX cited exercise capacity, heart stress, and arterial stiffness as examples of future health parameters for the device under consideration. We also believe they are working on a cuffless blood pressure solution based on their FDA-cleared SphygmoCor® technology. Unlike Apple and other wearable companies that are focused on general consumer health, ATCOR is targeting FDA clearance for its key health parameters which will give the company a significantly broader market in both consumer and clinical health applications. Official announcement of the new wearable is expected in the coming weeks along with details of initial partnerships.

### Manufacturing restructure adds significant efficiencies.

During 3QFY21, CardieX completed the outsourcing of its manufacturing to a new Sydney based manufacturing group and closed its West Ryde facility. Management expects the move to deliver significant efficiencies in both expenses and logistics for the company's ATCOR division.

#### Cash balance secure.

CardieX's cash balance at end of March 2021 was A\$4.8m, which included A\$3.15m raised in the SPP after costs. Further, CardieX's



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\$0.066
Market cap	A\$61m
Valuation	A\$0.11

Next steps					
Q1FY22	Limited market release of Mobvoi smartwatch				
Q2FY22	Launch of "Pulse" platform for US home BP monitor market.				



Chris Kallos, CFA Chris.kallos@mstaccess.com.au

listed options (5 cents exercise price and November 2021 expiry) could raise a further A\$6.35m if fully exercised. This should provide sufficient funding for the launches of both Pulse and "Arty Band", which are expected to cost A\$1.5m each as well as the company's contribution to co-marketing of the Mobvoi smartwatch on release.



### Shanty to lead re-branding of consumer wellness division.

The move into consumer wearables is a key aspect of the transformation currently underway. As such, CardieX has engaged leading US based marketing and brand agency – Shanty, to guide re-branding of the consumer wellness business. Shanty's other clients include Netflix, Sonos, Twitter, Adidas and Nike.

## Valuation: Fair value of A\$0.11 per share

Our base-case valuation remains steady at 11.1 cps (cents per share), using DCF methodology, representing a  $\sim 60\%$  premium to the closing price of A\$0.07 as at 28 April 2021. Our fair value incorporates the increase in shares on issue following the company's capital raise in the SPP. Key risks to our valuation include delays in new product launches and lower than expected adoption by end-users.

# Multiple new product launches - Key dates

CardieX remains on track to launch both the Mobvoi smartwatch and telehealth-connected "Pulse" home device by Q1FY22 and Q2FY22, respectively. CardieX's new Arty Band incorporating proprietary PPG sensor technology with Arty™ health parameters, is expected to launch by Q3FY22, subject to FDA clearance.

Date	Mobvoi (MVP) Project Key Events		
Q4 FY21	MVP development work completion.		
Q4 FY21	Pre-launch marketing including key opinion leader (KOL) reviews begin.		
Q4 FY21	Factory shipment of the first batch of products.		
Q1 FY22	Limited market release in the US and Australia/NZ– targeting Amazon Prime Day shoppers.		
Q3 FY22	Full market release in the US, Australia/New Zealand, as well as global markets. (EU andChina)		

Source: CardieX

Date	Pulse Project Key Events			
Q4 FY21	Clinical validation study of patented CBP parameters in the Pulse device target completion date.			
Q4 FY21	Additional testing of the Pulse device in combination with the ArtyGo App to be completed.			
Q1 FY22	Trial Production will begin.			
Q1 FY22	FDA, CE Mark, & NMPA (China) regulatory submission anticipated to be filed.			
Q2 FY22	Mass production (up to 50,000 units) will take place.			
Q2 FY22	CE Mark approval anticipated.			
Q2 FY22	FDA and NMPA approval anticipated.			
Q2 FY22	Initiation of the ATCOR Pulse & ArtyGo app pre-launch marketing campaign.			
Q2 FY22	Product launch of the ATCOR Pulse anticipated.			

Source: CardieX

Date	Arty Band Project Key Events		
Complete	Design mock-ups of Arty Band sensor module and straps sent to US Office.		
Underway	Brand strategy and product name due for completion end of April.		
Q4 FY21	PPG sensor partner/provider being contracted.		
Q4 FY21	Technology partnerships in contract negotiation for other general health algorithms.		
Q4 FY21	Contract manufacturer being finalized.		



Q2 FY22	FDA regulatory submission anticipated to be filed		
Q2 FY22	Commencement of pre-marketing and pre-orders		
Q3 FY22	Beginning of mass production.		
Q3 FY22	Product launch anticipated.		

Source: CardieX

# New applications and portals to support Pulse and SaaS solution for physicians.

In parallel with the new product development pipeline, CardieX is also developing two key companion software products – ArtyGo and the ArtyNet.

### ArtyGo

ArtyGo, will be a full featured consumer app paired to Pulse and the "Arty Band" that will provide a digital dashboard for all related health parameters, as well as health tips, notifications, live health coaching, and the ability to remotely share health readings with the patient's physician. The ArtyGo app will have both a free and subscription component.

Date	ArtyGo App Project Key Events			
Q1 FY22	Development/testing of the ArtyGo App FDA submission			
Q1 FY22	FDA, CE Mark, NMPA (China) regulatory submission to be filed			
Q2 FY22	Launch of MPV version with enhanced features on both iOS and Android			
Q2 FY22	CE Mark, FDA and NMPA approval anticipated			
Q2 FY22	ArtyGo app pre-launch marketing to commence.			
Q2 FY22	Launch of ArtyGo application (along with ATCOR Pulse device)			

Source: CardieX

#### ArtyNet

ArtyNet is the physician software platform that will allow integration of all of the patient's health readings obtained by the CardieX devices into the physicians billing systems and EMR management platform - the software that the physician uses to manage all patient records.

Date	ArtyNet Project Key Events			
Q2 FY22	Development/testing of the ArtyNet Portal for FDA submission will be completed			
Q2 FY22	FDA regulatory submission anticipated to be filed			
Q3 FY22	Launch of ArtyNet Portal pre-launch marketing campaign			
Q4 FY22	FDA approval anticipated			
Q4 FY22	Product launch anticipated			

Source: CardieX



Exhibit 1 – Summary Financial Statements

Financial Summary (AUD)	FY18a	FY19a	FY20a	FY21e	FY22e	FY23e
PROFIT & LOSS						
	4 404 450	5.040.000	F 000 000	0.755.044	40.474.400	44.750.004
Total Revenue	4,424,459	5,046,606	5,290,390	6,755,941	12,174,430	14,750,931
Operating Costs	-6,520,377	-7,221,483	-7,747,901	-8,114,191	-8,100,043	-8,381,086
EBITDA	-2,917,629	-2,763,316	-2,770,795	-2,170,658	2,036,061	3,683,011
EBIT	-2,978,803	-2,879,831	-2,990,947	-2,468,652	1,776,207	3,504,835
Tax	0	0	0	0	0	0
NPAT (Reported)	-2,537,285	-3,015,195	-3,222,541	-2,971,642	1,273,218	3,001,846
NPAT (Underlying)	-2,961,225	-2,979,278	-3,320,427	-2,971,642	1,273,218	3,001,846
Minority Interest	0	0	0	0	0	0
Average Number of Shares Outstanding	294.4	595.9	726.8	857.5	857.5	857.5
EPS (Underlying)	-0.01	0.00	0.00	0.00	0.00	0.00
Dividend per share (cps)	0	0.00	0.00	0	0.00	0.00
BALANCE SHEET						
Current Assets	6,114,250	6,956,474	4,693,348	4,189,701	5,522,772	8,652,794
Cash	2,736,517	4,980,826	2,061,642	1,557,995	2,891,066	6,021,088
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	5,883,934	5,824,080	5,695,904
PP&E	97,079	657,534	565,636	467,642	407,788	279,612
Goodwill	0	0	0	0	0	0
Other Non-current Assets	299,657	6,255,500	5,981,928	5,883,934	5,824,080	5,695,904
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 Other financial liabilities	115,028 0	346,119 3,350,920	322,547 249,447	322,547 249,447	322,547 249,447	322,547 249,447
	48,264		1,150,724			
Non-Current Liabilities	40,204	1,203,668	958,167	1,150,724 958,167	1,150,724 958,167	1,150,724 958,167
Long Term Debt Provisions	0	1,181,927	956, 167	956, 167	950,107	956, 167
Other financial liabilities	0	3,350,920	249,447	249,447	249,447	249,447
Net Assets	4,596,213	6,950,935	5,880,001	5,278,359	6,551,577	9,553,423
Share Capital	46,832,833	51,500,876	53,127,941	55,497,941	55,497,941	55,497,941
Reserves	1,571,498	1,613,332	1,969,548	1,969,548	1,969,548	1,969,548
Retained Earnings	-43,808,118	-46,163,273	-49,217,488	-52,189,130	-50,915,912	-47,914,066
Minority Interests	0	0	0	0	0	0
Total Equity	4,596,213	6,950,935	5,880,001	5,278,359	6,551,577	9,553,423
CASH FLOW						
Operating Cash Flow	-2,038,320	-2,290,773	-1,698,851	-2,673,647	1,533,072	3,180,022
Working Capital Change	0	0	0	0	0	0
Maintenance Capex	-4,916	-203,849	-175,203	-200,000	-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	-200,000	-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	-503,647	1,333,072	3,130,022

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 expectations.

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

