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Cortical Dynamics Limited  
ACN 107 557 620

Financial Report 30 June 2022

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Cortical Dynamics Limited

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## **Directors**

David Breeze  
Charles Chang  
Ashley Zimpel

## **Registered Office**

Unit 12, Level 1  
114 Cedric Street  
STIRLING WA 6021

## **Principal Business Address**

Unit 12, Level 1  
114 Cedric Street  
STIRLING WA 6021  
Telephone: (08) 9328 8711  
Facsimile: (08) 9328 8733  
Website: [www.corticaldynamics.com](http://www.corticaldynamics.com)  
Email: [contact@corticaldynamics.com](mailto:contact@corticaldynamics.com)

## **Auditor**

HLB Mann Judd (WA Partnership)  
Level 4  
130 Stirling Street  
PERTH WA 6000

## **Australian Business Number**

88 107 557 620

## **Share Registry**

Advanced Share Registry Limited  
110 Stirling Highway  
NEDLANDS WA 6009

# Directors' Report

Cortical Dynamics Limited

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The directors of Cortical Dynamics Limited ("Cortical Dynamics" or the "Company") present their report on the company for the financial year ended 30 June 2022.

## Directors

The names of directors in office at any time during or since the end of the year are:

Name	Date Appointed	Date Resigned
David Breeze	9 November 2004	Current
Charles Chang	4 March 2020	Current
Ashley Zimpel	4 March 2020	Current

## Company Secretary

Mr David Breeze was appointed Company Secretary on 23 November 2016 until his resignation on 17 December 2019. He was re-appointed Company Secretary on 26 February 2020. He has many years experience in the management of listed and unlisted entities.

## Principal Activities

The principal activity of the Company during the financial year was the development of the Brain Anaesthesia Response Monitor (BARM) which is based on an algorithm able to measure patient brain activity during surgery to assist in maintaining optimal drug dosage.

## Operating Results

The operating loss for the Company after tax for the year was \$706,061 (2021: loss of \$1,115,543).

## Dividends

The directors recommend that no dividend be paid in respect of the current period and no dividends have been paid or declared since the commencement of the period.

## Indemnifying Officers or Auditors

During or since the end of the financial year the Company has given an indemnity or entered an agreement to indemnify or paid or agreed to pay insurance premiums as follows. The Company has paid premiums to insure directors and officers against liabilities for costs and expenses incurred by them in defending any legal proceedings arising out of their conduct while acting in the capacity of director or officer of the Company, other than conduct involving a wilful breach of duty in relation to the Company. The Company has not indemnified the current or former auditors of the Company.

## Financial Position

The Company has a working capital surplus of \$87,931 as at 30 June 2022 (2021: surplus of \$11,080) and net assets of \$90,607 as at 30 June 2022 (2021: net assets of \$14,971).

## Significant Changes in State Of Affairs

The Company raised \$783,647 during the year by the issue of 6,269,177 shares at an average price of 12.5 cents per share. Other than this there was no other significant changes in the state of affairs of the Company other than that referred to in the Review of Operations, financial statements or notes thereto.

# Directors' Report

Cortical Dynamics Limited

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## Review of Operations

Cortical is an Australian based medical device neurotechnology company that is developing BARM™, an industry leading EEG (electrical activity) brain function monitor. BARM™ is being developed to better detect the effect of anaesthetic agents on brain activity under a general operation, aiding anaesthetists in keeping patients optimally anaesthetised. The Australian manufactured and designed, electroencephalographically based (EEG-based), BARM™ system is configured to efficiently image and display complex information related to the clinically relevant state of the brain. When commercialized the BARM™ system will be offered on a stand-alone basis or integrated into leading brand operating room monitors as “plug and play” option.

BARM™ has already received TGA approval, Korean MFDS approval, the CE mark and the company has now made application for its FDA approval in the USA.

The BARM™ system is protected by five patent families in multiple jurisdictions worldwide consisting of 36 granted patents. Cortical will continue to drive the development of BARM™ and maintain its intellectual property.

### *About BARM™*

The BARM™ technical approach is different from other medical brain monitoring devices currently available in the market in that its underlying algorithm produces EEG indexes which are directly related to the physiological state of the patient's brain. Such monitoring is gaining significant use during surgery, however even with the use of EEG monitors, it is not uncommon for there to be a critical imbalance between the patient's anaesthetic requirements and the anaesthetic drugs given.

To date, existing EEG based depth of anaesthesia (“D o A”) monitors operate in the context of a number of well documented limitations: (i) inability to monitor the analgesic effects; and (ii) reliably measure certain hypnotic agents.

The above limitations highlight the inadequacies in current EEG based depth of anaesthesia monitors, particularly given surgical anaesthesia requires both hypnotic and analgesic agents (and muscle relaxants).

### *BARM™ Technology and Addressable Market*

BARM™ is focussed not only on monitoring the inhalation methodology of anaesthesia delivery, but importantly has a very strong focus on Total Intravenous Anaesthesia (TIVA) monitoring. TIVA is a method of inducing and maintaining general anaesthesia without the use of any inhalation agents and is growing in popularity not least because its use eliminates greenhouse gases that are a direct consequence of gaseous anaesthesia. TIVA is also a cheaper option. TIVA is becoming more widely accepted, particularly in Europe and approximately 29 million major general surgeries are conducted in the European Union each year, of which 55% (circa 16 million) are balanced anaesthesia (using a combination of intravenous agents such as propofol and volatile gases) and 20% are total intravenous anaesthesia using propofol. This creates a growing market opportunity for BARM™ of between US\$83m to \$229m in the European Union alone.

Additionally, there is growing recognition amongst health governing bodies to recommend the use of brain monitors during operations involving general anaesthesia such as in the UK; “The use of EEG-based depth of anaesthesia monitors has been recommended in patients receiving total intravenous anaesthesia because it is cost effective and because it is not possible to measure end-tidal anaesthetic concentration in this group” (source: nice.org.uk).

# Directors' Report

Cortical Dynamics Limited

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*Additional Potential applications for BARM™ in helping mitigate or reduce Cognitive decline in the elderly after surgery and anaesthesia as a result of brain monitoring.*

A recent editorial in *International Psychogeriatrics* concluded that 'anaesthesia and surgery induce cognitive dysfunction in susceptible individuals. Susceptible people are thought to include the elderly. This is a serious problem. It was recently estimated that there are annually over 230 million procedures with general anaesthesia worldwide. There are over 880 million people > 60 years old in the world today. The latter figure is predicted to grow rapidly as life expectancy increases, particularly in developing countries.

The consensus statement of the First International Workshop on Anaesthetics and Alzheimer's Disease concluded that 'there is sufficient evidence at multiple levels to warrant further and more definitive investigations of the onset and progression of Alzheimer's disease and neurodegeneration after anaesthesia and surgery'.

## *Statistics- Summary USA*

1. There are 17.8 million annual cases of anaesthesia in the over 65 age group in the USA alone
2. 14% of these experience POCD- 2.5million (post-operative cognitive decline)
3. 10% of these patients experience acceleration of cognitive decline and are admitted to aged care facilities 2 years earlier than would otherwise be the case.
4. This equates to 250,000 people at a cost/year of USD \$40,000 per individual and an overall increased cost of USD\$ 20 billion to society

## *The Neurotechnology Market*

The global brain monitoring market is on a high growth trajectory as a recent KPMG (July 2022) report outlines with Neurotechnology being recognised as a top 20 emerging "giant" growth industry in the Asia Pacific Region alone. Around 312 million major surgical procedures requiring anaesthesia are undertaken every year worldwide (*WHO 2012*.) The pain monitoring market is valued at over US\$8.6 billion per annum by 2022. ([www.grandviewresearch.com/industry-analysis/pain-management-devices-market](http://www.grandviewresearch.com/industry-analysis/pain-management-devices-market)- April 2016).

## *Potential Future applications of the technology*

Cortical's technology has a versatility that may go beyond depth of anaesthesia and may be applied to other EEG based markets, such as neuro-diagnostic, drug discovery, drug evaluation and the emerging Brain Computer Interface (BCI) market.

There are also considerable opportunities that may be offered by subsequent expansion of the company's core technology through developing the product to carry out additional functions including neuro-diagnostics of changes in brain and memory functions to provide early warning of degenerative diseases, pain response and tranquiliser monitoring for trauma patients in intensive care units.

While the current array of bedside monitoring and imaging systems in the critical care environment has led to dramatic reductions in mortality, they do not as yet involve the continuous monitoring of brain function. This is widely acknowledged to be a major problem, as the care and management of the critically ill patient is ultimately all about the brain.

The continuous monitoring of a patients' brain state is not only necessary to diagnose and manage acute deteriorations in brain function that may have long lasting effects, but also to aid in the optimal administration of sedation and analgesia. Sedation and analgesia in the critically ill patient play a pivotal role in their care and is necessary to minimize patient distress and agitation, being essential to

# Directors' Report

Cortical Dynamics Limited

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facilitate the utility of a wide variety of life support equipment and procedures, the most important of which is mechanical ventilation.

Study after study has shown that too deep sedation increases the time on mechanical ventilation, which leads to increases in mortality, the incidence of complications and treatment costs. Given these acknowledged advantages to brain function monitoring in the ICU why then is continuous monitoring of brain function not currently available?

There are two main reasons for this:

1. Firstly, the size and the complexity of configuration of most approaches to monitoring brain function are simply not capable of being adapted for use in the busy and crowded ICU environment.
2. Secondly, in those monitoring approaches that could be potentially deployed at the bedside, they depend on physiologically uncertain principles of operation that are not relevant, or meaningfully interpretable, in the context of the critically ill patient.

Cortical aims to investigate these limitations by the further development and trialling of BARM™ in this setting with a view to extending the functionality of bedside EEG monitoring to the objective monitoring of analgesia, a measure also vital to the management of the sedated mechanically ventilated critically ill patient. In Australia between 2015 and 2016 there were approximately 149,000 admissions to ICU of which 48,000 required continuous ventilatory support (CVS) and thus required sedation, pain relief and who would have potentially benefited from such monitoring as BARM™ could provide.

## *Recent Developments*

### *Partnership with ENCEVIS*

Cortical Dynamics entered into a partnership with Austrian EEG experts ENCEVIS /AIT with a view to further enhance the BARM™ technology. The AIT Austrian Institute of Technology is Austria's largest research and technology organisation employing over 1,300 people. The Republic of Austria (through the Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology) owns 50.46% of AIT, while the Federation of Austrian Industries owns the other 49.54. ENCEVIS is a division of AIT that specialises in EEG

### *Cortical Dynamics wins AI prestigious grant and appoints Head of Data Analytics*

In June 2022 Cortical Dynamics won a prestigious grant from the MTPConnect BMT program. The matched funding that will help Cortical develop an AI and machine learning capacity for BARM™.

Conjunctionally Cortical has appointed a world class Head of Data Analytics who will focus on developing for the company a deep understanding of sedation level monitoring systems using Artificial Intelligence including neurophysiology (EEG), machine learning, statistical analysis, anaesthesiology. Application areas will include optimal management of anaesthesia and sedatives in the operating room and the ICU.

### *Cortical Dynamics announces New USA Patent*

Throughout the year Cortical continued to expand its IP portfolio in the USA. Cortical has developed an extensive patent portfolio encapsulating the BARM, providing critical patent protection across several key brain monitoring markets. Cortical's competitive advantage is underpinned by a strong patent position covered by five patent families and 36 granted patents.

# Directors' Report

Cortical Dynamics Limited

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## *FDA 510(K) Submission*

Cortical has begun the FDA 510K filing process for BARM™ in the USA assisted by Washington based technical advisors MCRA. The Food and Drug Administration ("FDA") is the federal agency of the United States Department of Health and Human Services which regulates the sale of medical device products (including diagnostic tests) in the U.S. and monitors the safety of all regulated medical products. FDA approval is a necessary precursor for sales of BARM™ to commence in the USA.

## **Subsequent Events**

In August 2022 the Company was granted a key patent relating to its Brain Anaesthesia Response Monitor (BARM™) technology in the United States. The new Patent is titled "Apparatus and process for measuring brain activity" was made under United States Patent Application No. 17/614701.

In July 2022 Cortical appointed a full-time project manager.

The Company has issued 6,714,000 fully paid ordinary shares at 12.5 cents each for \$839,250 cash.

Other than the above, there have not been any matters or circumstance that have arisen since the end of the financial year that have significantly affected, or may significantly affect, the operations of the Company, the results of those operations, or the state of affairs of the Company in future financial years.

## **Meetings of Directors**

During the financial year no meetings of directors were held. The Board meets regularly by telephone to make day-to-day decisions with respect to the business of the Company.

## **Options**

At the date of this report, the unissued ordinary shares of the Company under option are as follows:

<i>Grant Date</i>	<i>Date of Expiry</i>	<i>Exercise Price</i>	<i>Number Under Option</i>
4/10/2019	24/8/2024	\$0.20	7,000,000
14/5/2020	15/5/2023	\$0.15	10,750,000
21/6/2020	21/6/2025	\$0.20	250,000
18/11/2020	18/11/2025	\$0.25	7,600,000
19/1/2021	22/11/2025	\$0.25	250,000

During the year ended 30 June 2022 no ordinary shares of the Company were issued on the exercise of options (2021: Nil). No person entitled to exercise an option had or has any right by virtue of the option to participate in any share issue of any other body corporate. No shares have been issued during or since the end of the financial year as a result of exercise of an option. No options lapsed unexercised during the year.

# Directors' Report

Cortical Dynamics Limited

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## Information on Directors

### **David Breeze (appointed 9 November 2004)**

*Executive Director and Company Secretary – Age 69*

Shares held – 9,998,702

Options held- 3,500,000

David is a Corporate Finance Specialist with extensive experience in the stock broking industry and capital markets. He has been a corporate consultant to Daiwa Securities; and held executive and director positions in the stock broking industry. David has a Bachelor of Economics and a Masters of Business Administration, and is a Fellow of the Financial Services Institute of Australasia, and a Fellow of the Institute of Company Directors of Australia. He has published in the Journal of Securities Institute of Australia and has also acted as an Independent Expert under the Corporations Act. He has worked on the structuring, capital raising and public listing of over 70 companies involving in excess of \$250M. These capital raisings covered a diverse range of areas including oil and gas, gold, food, manufacturing and technology.

David Breeze is Chairman of unlisted Grandbridge Limited, an investment and advisory company, and a director ASX listed BPH Energy Limited and MEC Resources Limited. He is also a director of unlisted Molecular Discovery Systems Limited, Diagnostic Array Systems Limited, and Advent Energy Limited and its subsidiaries.

### **Charles Chang (appointed 4 March 2020)**

*Non - Executive Director – Age 65*

Shares held – 7,713,803

Options held – 3,500,000

Founder of strategy advisory firm Accolade, Inc. in 2000 and Gentium Partners, an accelerator/VC investment firm. Previously Managing Director at Deutsche Bank and Bankers Trust investment banking. US citizen. Received M.Sc. from Dartmouth Guarani School of Graduate and Advanced Studies and B.A. in Economics from UC Berkeley. Served on several boards including as representative of AXA Asset Management in their JV in Korea with the third largest domestic life insurance company. Co-chairs subcommittee on PE/VC for the AmCham in Korea and actively involved in ESG, climate change activism, and supporting a NGO for disadvantaged children.

### **Ashley Zimpel (appointed 4 March 2020)**

*Executive Director – Age 63*

Shares held – 9,084,038

Options held – 11,000,000

Mr. Zimpel is Perth based business developer, corporate financier and senior banker/investment banker with broad financial markets experience and a strong focus on innovation, client interaction, financing and business strategy. He has a 35 year track record of founding, investing in and establishing businesses in financial capital markets, Agri- business and fintech in WA and Australia wide. Adviser and mentor to Start-ups, SMEs and state government. He has a long history of interaction with Western Australian Government Sector, WA Universities, business incubators and innovation community. He has an exemplary record of capital raising in both equity, debt and structured financial products for start-ups, SMEs, ASX listed public companies and government agencies both in Australia and internationally. He has held positions of executive chairman, executive director, director, partner and financial advisor in financial institutions and ASX listed companies including Aurora Labs (ASX:A3D). His prior roles include:- Enable Funding-Co-Founder and Founding Chairman, Charter Pacific Corporation-Chairman Advisory Committee, Marine Produce Limited-Chairman, Macquarie Bank-Director, Bankers Trust Australia- Senior Vice President, Rand Merchant Bank Australia-Co Founder and Executive Director, Hattersley Maxwell Noall.



# Directors' Report

Cortical Dynamics Limited

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## Non-audit Services

No fees were paid for non-audit services to the external auditors during the year ended 30 June 2022 (2021: \$Nil).

## Proceedings on Behalf of Company

No person has applied for leave of Court to bring proceedings on behalf of the company or intervene in any proceedings to which the company is a party for the purpose of taking responsibility on behalf of the company for all or any part of those proceedings. The company was not a party to any such proceedings during the year.

## Environmental Issues

The Company's operations are not regulated by any significant environmental regulation under a law of the Commonwealth or of a state or territory.

## Likely Developments

Likely developments other than those disclosed in this financial report which may prejudice the company by disclosure have not been disclosed.

## Auditor's Independence Declaration

The lead auditor's independence declaration for the year ended 30 June 2022 has been received and can be found on page 8.

Signed in accordance with a resolution of the board of directors.



David Breeze

Director

Dated this 31st October 2022

## AUDITOR'S INDEPENDENCE DECLARATION

As lead auditor for the audit of the financial report of Cortical Dynamics Limited for the year ended 30 June 2022, I declare that to the best of my knowledge and belief, there have been no contraventions of:

- a) the auditor independence requirements of the *Corporations Act 2001* in relation to the audit; and
- b) any applicable code of professional conduct in relation to the audit.

Perth, Western Australia  
31 October 2022



**L Di Giallonardo**  
**Partner**

**hlb.com.au**

**HLB Mann Judd (WA Partnership) ABN 22 193 232 714**

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**T:** +61 (0)8 9227 7500 **E:** mailbox@hlbwa.com.au

Liability limited by a scheme approved under Professional Standards Legislation.

HLB Mann Judd (WA Partnership) is a member of HLB International, the global advisory and accounting network.

# Statement of Profit or Loss and Other Comprehensive Income

## for the year ended 30 June 2022

Cortical Dynamics Limited

	Note	2022 \$	2021 \$
Revenue	2	24	31,529
Other income	2	240,685	155,047
Cost of goods sold		-	(43,960)
Administration expenses		(458,788)	(430,499)
Interest expense		(3,155)	(2,863)
Foreign exchange (loss) / gain		(892)	524
Provision for inventory writedown	9	(10,054)	(37,689)
Consulting, legal and patent expenses		(144,024)	(91,310)
Depreciation expense	10	(1,215)	(1,215)
Occupancy expense		(15,337)	(8,804)
Share based payments		-	(313,892)
Research and development expenses	3	(300,225)	(349,512)
Other expenses from ordinary activities		(13,080)	(22,899)
Operating loss before income tax		(706,061)	(1,115,543)
Income tax expense	7	-	-
<b>Operating loss from continuing operations</b>		(706,061)	(1,115,543)
Other comprehensive Income			
Items that will never be reclassified to profit or loss		-	-
Items that are or may be reclassified to profit or loss		-	-
<b>Total comprehensive loss</b>		(706,061)	(1,115,543)

The accompanying notes form part of, and should be read in conjunction with, these financial statements.

# Statement of Financial Position

as at 30 June 2022

Cortical Dynamics Limited

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	Note	2022 \$	2021 \$
<b>Current Assets</b>			
Cash and cash equivalents	5	222,533	93,040
Trade and other receivables	8	278,158	160,773
Prepayments		22,475	32,847
<b>Total Current Assets</b>		<b>523,166</b>	<b>286,660</b>
<b>Non-Current Assets</b>			
Property, plant and equipment	10	2,676	3,891
<b>Total Non-Current Assets</b>		<b>2,676</b>	<b>3,891</b>
<b>Total Assets</b>		<b>525,842</b>	<b>290,551</b>
<b>Current Liabilities</b>			
Trade and other payables	11	435,235	275,580
<b>Total Current Liabilities</b>		<b>435,235</b>	<b>275,580</b>
<b>Total Liabilities</b>		<b>435,235</b>	<b>275,580</b>
<b>Net Assets</b>		<b>90,607</b>	<b>14,971</b>
<b>Equity</b>			
Issued capital	12	7,699,140	6,917,443
Reserves	13	570,746	570,746
Accumulated losses		(8,179,279)	(7,473,218)
<b>Total Equity</b>		<b>90,607</b>	<b>14,971</b>

The accompanying notes form part of, and should be read in conjunction with, these financial statements.

# Statement of Changes in Equity

for the year ended 30 June 2022

Cortical Dynamics Limited

	Issued Capital \$	Accumulated losses \$	Reserves \$	Total \$
<b>Balance at 1 July 2020</b>	6,224,799	(6,357,675)	256,854	123,978
Loss attributable to members of the Company	-	(1,115,543)	-	(1,115,543)
Total comprehensive loss	-	(1,115,543)	-	(1,115,543)
Shares issued for cash	692,644	-	-	692,644
Share based payments	-	-	313,892	313,892
<b>Balance at 30 June 2021</b>	6,917,443	(7,473,218)	570,746	14,971
Loss attributable to members of the Company	-	(706,061)	-	(706,061)
Total comprehensive loss	-	(706,061)	-	(706,061)
Shares issued for cash	783,647	-	-	783,647
Share issue costs	(1,950)	-	-	(1,950)
<b>Balance at 30 June 2022</b>	7,699,140	(8,179,279)	570,746	90,607

The accompanying notes form part of and should be read in conjunction with these financial statements

# Statement of Cash Flows

for the year ended 30 June 2022

Cortical Dynamics Limited

	Note	2022 \$	2021 \$
<b>Cash flows from operating activities</b>			
Receipts from customers		-	32,966
Payments to suppliers and employees		(771,788)	(872,284)
Research and development tax offset received		-	129,547
Interest received		24	42
Grant income received		120,560	-
<b>Net cash used in operating activities</b>	14(b)	(651,204)	(709,729)
<b>Cash flows used in investing activities</b>			
Acquisition of property, plant and equipment		-	(1,226)
<b>Net cash used in financing activities</b>		-	(1,226)
<b>Cash flows from financing activities</b>			
(Repayment of) borrowings	14(c)	-	(15,000)
Receipts from issue of shares		782,647	692,144
Share issue costs		(1,950)	-
<b>Net cash provided by financing activities</b>		780,697	677,144
Net increase / (decrease) in cash held		129,493	(33,811)
Cash at the beginning of the financial year		93,040	126,851
<b>Cash at the end of the financial year</b>	14(a)	222,533	93,040

The accompanying notes form part of and should be read in conjunction with these financial statements

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

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## 1. Statement of Significant Accounting Policies

### *Corporate Information*

Cortical Dynamics Ltd ("Cortical" or the "Company") is a public unlisted company, which is incorporated and domiciled in Australia. This financial report was authorised for issue on 31st October 2022 by the board of directors.

### *Basis of Preparation*

The financial report is a general purpose financial report that has been prepared in accordance with Australian Accounting Standards, and the Corporations Act 2001. Cortical Dynamics Limited is a for-profit entity for the purpose of preparing the financial statements.

Australian Accounting Standards set out accounting policies that the AASB has concluded would result in a financial report containing relevant and reliable information about transactions, events and conditions to which they apply. Compliance with Australian Accounting Standards ensures that the financial statements and notes also comply with International Financial Reporting Standards. Material accounting policies adopted in the preparation of this financial report are presented below. They have been consistently applied unless otherwise stated.

The financial report has been prepared on an accruals basis and is based on historical costs, modified, where applicable, by the measurement at fair value of for profit selected non-current assets, financial assets and financial liabilities.

### *Compliance with IFRS*

The financial statements of Cortical Dynamics Limited comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

### *Going Concern*

The operating loss for the Company after tax for the year was \$706,061 (2021: loss of \$1,115,543). The Company has a working capital surplus of \$87,931 as at 30 June 2022 (2021: surplus of \$11,080) and net assets of \$90,607 as at 30 June 2022 (2021: net assets of \$14,971).

Included in trade creditors and payables are balances totalling \$374,833 (2021: \$192,833) payable to current directors. The directors as a part of their cash monitoring, have voluntarily suspended cash payments for their directors' fees to conserve cash resources until such time that the Company has sufficient cash resources.

Based on the cash flow forecasts and expense reductions implemented, the directors are satisfied that the going concern basis of preparation is appropriate. The financial report has therefore been prepared on a going concern basis, which assumes continuity of normal business activities and the realisation of assets and the settlement of liabilities in the ordinary course of business. Should the Company not be successful in raising additional funds through the issue of new equity or borrowings, should the need arise, there exists a material uncertainty that may cast significant doubt as to whether or not the Company will be able to continue as a going concern and therefore whether it will realise its assets and discharge its liabilities as and when they fall due and in the normal course of business and at the amounts stated in the financial report.

The financial statements do not include any adjustments relative to the recoverability and classification of recorded asset amounts or, to the amounts and classification of liabilities that might be necessary should the Company not continue as a going concern.

## Accounting Policies

### (a) Financial Instruments

#### *Recognition and derecognition*

Financial assets and financial liabilities are recognised when the Company becomes a party to the contractual provisions of the financial instrument. Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire, or when the financial asset and substantially all the risks and rewards are transferred. A financial liability is derecognised when it is extinguished, discharged, cancelled or expires.

#### *Classification and initial measurement of financial assets*

Except for those trade receivables that do not contain a significant financing component and are measured at the transaction price in accordance with AASB 15, all financial assets are initially measured at fair value adjusted for transaction costs (where applicable). For the purpose of subsequent measurement, financial assets, other than those designated and effective as hedging instruments, are classified into the following categories:

- amortised cost
- fair value through profit or loss (FVTPL)
- equity instruments at fair value through other comprehensive income (FVOCI)
- debt instruments at fair value through other comprehensive income (FVOCI).

All income and expenses relating to financial assets that are recognised in profit or loss are presented within finance costs, finance income or other financial items, except for impairment of trade receivables which is presented within other expenses.

The classification is determined by both:

- the entity's business model for managing the financial asset, and
- the contractual cash flow characteristics of the financial asset.

#### *Subsequent measurement of financial assets*

##### (i) Financial assets at amortised cost

Financial assets are measured at amortised cost if the assets meet the following conditions (and are not designated as FVTPL):

- they are held within a business model whose objective is to hold the financial assets to collect its contractual cash flows
- the contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

After initial recognition, these are measured at amortised cost using the effective interest method. Discounting is omitted where the effect of discounting is immaterial. The Company's cash and cash equivalents, trade and most other receivables fall into this category of financial instruments.

##### (ii) Financial assets at fair value through profit or loss (FVTPL)

Financial assets that are held within a different business model other than 'hold to collect' or 'hold to collect and sell' are categorised at fair value through profit and loss. Further, irrespective of business model financial assets whose contractual cash flows are not solely payments of principal and interest are accounted for at FVTPL.



## (a) Financial Instruments (continued)

All derivative financial instruments fall into this category, except for those designated and effective as hedging instruments, for which the hedge accounting requirements apply. The category also contains an equity investment. The Company accounts for the investment at FVTPL and did not make the irrevocable election to account for the investment in unlisted and listed equity securities at fair value through other comprehensive income (FVOCI). The fair value was determined in line with the requirements of AASB 9, which does not allow for measurement at cost. Assets in this category are measured at fair value with gains or losses recognised in profit or loss. The fair values of financial assets in this category are determined by reference to active market transactions or using a valuation technique where no active market exists.

### (iii) Equity instruments at fair value through other comprehensive income (Equity FVOCI)

Investments in equity instruments that are not held for trading are eligible for an irrevocable election at inception to be measured at FVOCI. Under Equity FVOCI, subsequent movements in fair value are recognised in other comprehensive income and are never reclassified to profit or loss. Dividend from these investments continue to be recorded as other income within the profit or loss unless the dividend clearly represents return of capital. This category includes unlisted equity securities that were previously classified as 'available-for-sale' under AASB 139. Any gains or losses recognised in other comprehensive income (OCI) are not recycled upon derecognition of the asset.

### (iv) value through other comprehensive income (Debt FVOCI)

Financial assets with contractual cash flows representing solely payments of principal and interest and held within a business model of collecting the contractual cash flows and selling the assets are accounted for at debt FVOCI. The Company accounts for financial assets at FVOCI if the assets meet the following conditions:

- they are held under a business model whose objective it is to "hold to collect" the associated cash flows and sell financial assets; and
- the contractual terms of the financial assets give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Any gains or losses recognised in other comprehensive income (OCI) will be recycled upon derecognition of the asset.

### *Impairment of financial assets*

AASB 9's impairment requirements use forward-looking information to recognise expected credit losses – the 'expected credit loss (ECL) model'. Instruments within the scope of the requirements include loans and other debt-type financial assets measured at amortised cost and FVOCI, trade receivables, contract assets recognised and measured under AASB 15 and loan commitments and some financial guarantee contracts (for the issuer) that are not measured at fair value through profit or loss. Recognition of credit losses is no longer dependent on the Company first identifying a credit loss event. Instead the Company considers a broader range of information when assessing credit risk and measuring expected credit losses, including past events, current conditions, reasonable and supportable forecasts that affect the expected collectability of the future cash flows of the instrument.

In applying this forward-looking approach, a distinction is made between:

- financial instruments that have not deteriorated significantly in credit quality since initial recognition or that have low credit risk ('Level 1') and
- financial instruments that have deteriorated significantly in credit quality since initial recognition and whose credit risk is not low ('Level 2').
- 'Level 3' would cover financial assets that have objective evidence of impairment at the reporting date.

'12-month expected credit losses' are recognised for the first category while 'lifetime expected credit losses' are recognised for the second category. Measurement of the expected credit losses is determined by a probability-weighted estimate of credit losses over the expected life of the financial instrument.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

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## **(a) Financial Instruments (continued)**

### *Trade and other receivables and contract assets*

The Company makes use of a simplified approach in accounting for trade and other receivables as well as contract assets and records the loss allowance as lifetime expected credit losses. These are the expected shortfalls in contractual cash flows, considering the potential for default at any point during the life of the financial instrument. In calculating, the Company uses its historical experience, external indicators and forward-looking information to calculate the expected credit losses using a provision matrix. The Company assesses impairment of trade receivables on a collective basis as they possess shared credit risk characteristics they have been grouped based on the days past due.

### *Classification and measurement of financial liabilities*

The Company's financial liabilities include borrowings, trade and other payables and derivative financial instruments. Financial liabilities are initially measured at fair value, and, where applicable, adjusted for transaction costs unless the Company designated a financial liability at fair value through profit or loss. Subsequently, financial liabilities are measured at amortised cost using the effective interest method except for derivatives and financial liabilities designated at FVTPL, which are carried subsequently at fair value with gains or losses recognised in profit or loss (other than derivative financial instruments that are designated and effective as hedging instruments).

## **(b) Impairment of Assets**

At each reporting date, the Company reviews the carrying values of its tangible and intangible assets to determine whether there is any indication that those assets have been impaired. If such an indication exists, the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, is compared to the asset's carrying value. Any excess of the asset's carrying value over its recoverable amount is expensed to the statement of comprehensive income.

Impairment testing is performed annually for goodwill and intangible assets with indefinite lives.

Where it is not possible to estimate the recoverable amount of an individual asset, the company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

## **(c) Cash and Cash Equivalents**

Cash and cash equivalents include cash on hand, deposits held at call with banks, other short-term highly liquid investments, and bank overdrafts. Bank overdrafts are shown within short-term borrowings in current liabilities on the statement of financial position.

## **(d) Revenue and Other Income**

Interest revenue is recognised when it is probable that the economic benefits will flow to the Company and the amount of revenue can be measured reliably. Interest revenue is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable.

Dividend revenue is recognised when the right to receive a dividend has been established. Dividends received from associates and joint venture entities are accounted for in accordance with the equity method of accounting.

All revenue is stated net of the amount of goods and services tax (GST).

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

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## **(e) Income Tax**

The charge / (benefit) for current income tax expense is based on the profit / (loss) for the year adjusted for any non-assessable or disallowed items. It is calculated using the tax rates that have been enacted or are substantively enacted by the balance date. Deferred tax is accounted for using the balance sheet liability method in respect of temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the financial statements. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax is calculated at the tax rates that are expected to apply to the period when the asset is realised or liability is settled. Deferred tax is recognised in the statement of comprehensive income except where it relates to items that may be recognised directly to equity, in which case the deferred tax is adjusted directly against equity.

Deferred income tax assets are recognised to the extent that it is probable that future tax profits will be available against which deductible temporary differences or unused tax losses or tax credits can be utilised.

The amount of benefits brought to account or which may be realised in the future is based on the assumption that no adverse change will occur in income taxation legislation and the anticipation that the economic entity will derive sufficient future assessable income to enable the benefit to be realised and comply with the conditions of deductibility imposed by the law.

### *Tax incentives*

The Company may be entitled to claim special tax deductions in relation to qualifying expenditure. As the Company is not in a position to recognise current income tax payable or current tax expense, the refundable tax offset is in cash and recognised as R&D rebate revenue in the period incurred.

## **(f) Goods and Services Tax (GST)**

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense.

Receivables and payables in the statement of financial position are shown inclusive of GST.

Cash flows are presented in the statement of cash flows on a gross basis, except for the GST component of investing and financing activities, which are disclosed as operating cash flows.

## **(g) Intangibles**

### *Patents and Trademarks*

Patents and trademarks are recognised at cost of acquisition. Patents and trademarks have a finite life and are carried at cost less any accumulated amortisation and any impairment losses. Capitalised patents and trademarks are amortised over their useful life.

## **(h) Trade and other payables**

Liabilities are recognised for amounts to be paid in the future for goods or services received, whether or not billed to the Company. The amounts are unsecured and are usually paid within 30 days.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

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## **(i) Share based payments**

Share based compensation benefits are provided to employees via the employee option plan.

The fair value of options granted under the Company's employee option plan is recognised as an employee benefit expense with a corresponding increase in equity. The fair value is measured at grant date and recognised over the period during which the employees become unconditionally entitled to the options. The fair value at grant date is independently determined using an option pricing model that takes into account the exercise price, the term of the option, the vesting and performance criteria, the impact of dilution, the non-tradable nature of the option, the share price at grant date and expected volatility of the underlying share, the expected dividend yield and risk free interest rate for the term of the option.

The fair value of the options granted excludes the impact of any non-market vesting conditions (for example, profitability and sales growth targets). Non-market vesting conditions are included in assumptions about the number of options that are expected to vest. At each balance date, the Company revises its estimate of the number of options that are expected to vest. The employee benefit expense recognised each period takes into account the most recent estimate. Upon the exercise of options, the balance of the share-based payments reserve relating to those options is transferred to share capital.

## **(j) Comparative Figures**

When required by Accounting Standards, comparative figures have been adjusted to conform to changes in presentation for the current financial year.

## **(k) Critical accounting estimates and judgments**

The directors evaluate estimates and judgments incorporated into the financial report based on historical knowledge and best available current information. Estimates assume a reasonable expectation of future events and are based on current trends and economic data, obtained both externally and within the Company.

*Key estimates — Research and development tax incentives*

From 1 July 2021 the Company has determined that it will only recognise research and development tax incentive rebates in the period in which they are received.

## **(l) Trade and Other Receivables**

Trade receivables and other receivables are carried at amortised cost less an allowance for any uncollectible amounts. An estimate for doubtful debts is made when the collection of the full amount of the debt is no longer probable. Bad debts are written off when identified.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

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## **(m) Property, plant and equipment**

Each class of property, plant and equipment is carried at cost less, where applicable, any accumulated depreciation and impairment losses.

### *Plant and equipment*

Plant and equipment are measured on the cost basis. The carrying amount of plant and equipment is reviewed annually by directors to ensure it is not in excess of the recoverable amount from these assets. The recoverable amount is assessed on the basis of the expected net cash flows that will be received from the asset's employment and subsequent disposal. The expected net cash flows have been discounted to their present values in determining recoverable amounts.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. All other repairs and maintenance are charged to the statement of profit or loss and other comprehensive income during the financial period in which they are incurred.

### *Depreciation*

The depreciable amount of all fixed assets including building and capitalised lease assets, but excluding freehold land, is depreciated on a straight-line basis over their useful lives to the company commencing from the time the asset is held ready for use. Leasehold improvements are depreciated over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements.

<i>Class of Fixed Asset</i>	<i>Depreciation Rate</i>
Plant and equipment	20%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance date. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount. Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of comprehensive income. When revalued assets are sold, amounts included in the revaluation reserve relating to that asset are transferred to retained earnings / accumulated losses.

## **(n) Inventories**

Inventories are valued at the lower of cost and net realisable value (refer Note 9).

Costs incurred in bringing each product to its present location and condition is accounted for as follows:

- (i) Raw materials – purchase cost on a first-in, first-out basis; and
- (ii) Finished goods and work-in-progress – cost of direct materials and labour and a proportion of manufacturing overheads based on normal operating capacity but excluding borrowing costs.

Net realisable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

## (o) Application of New and Revised Accounting Standards

*Standards and Interpretations applicable to 30 June 2022*

In the year ended 30 June 2022, the Directors have reviewed all of the new and revised Standards and Interpretations issued by the AASB that are relevant to the Company and effective for the current reporting period beginning on or after 1 July 2021. The Directors have determined that there is no material impact of the other new and revised Standards and Interpretations on the Company and therefore, no material change is necessary to Company accounting policies.

*Standards and Interpretations in issue not yet adopted*

The Directors have also reviewed all of the new and revised Standards and Interpretations in issue not yet adopted for the year ended 30 June 2022. As a result of this review the Directors have determined that there is no material impact, of the new and revised Standards and Interpretations on the Company and, therefore, no change is necessary to the Company's accounting policies.

## (p) Employee Benefits

Provision is made for the company's liability for employee benefits arising from services rendered by employees to balance date. Employee benefits that are expected to be settled within one year have been measured at the amounts expected to be paid when the liability is settled, plus related on-costs. Employee benefits payable later than one year have been measured at the present value of the estimated future cash outflows to be made for those benefits.

		<b>2022</b>	<b>2021</b>
		<b>\$</b>	<b>\$</b>
<b>2. Revenue</b>			
<i>Revenue</i>	<b>Note</b>		
Sale of finished goods		-	31,481
Interest revenue		24	48
		<u>24</u>	<u>31,529</u>
<i>Other Income</i>			
Cashflow boost government subsidy		-	7,500
Grant Income		109,600	-
R&D tax incentive rebate - current year accrued	1(k)	-	143,000
R&D tax incentive rebate - prior year under accrued		131,085	4,547
		<u>240,685</u>	<u>155,047</u>

## 3. Expenses Included in the Loss for the Year

*Research and development expenses:*

Consultant expense	213,156	304,768
Clinical trials	80,246	-
Other	6,823	44,744
	<u>300,225</u>	<u>349,512</u>

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

	2022 \$	2021 \$
<b>4. Auditors' Remuneration</b>		
Remuneration of the auditor of the Company:		
HLB Mann Judd(WA Partnership)	8,072	9,718
	<u>8,072</u>	<u>9,718</u>

## 5. Cash and Cash Equivalents

Cash at bank and in hand	<u>222,533</u>	<u>93,040</u>
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The average effective interest rate on short-term bank deposits was 0.017%: (2021 0.03%).

## 6. Key Management Personnel Compensation

Names and positions held of Company key management personnel in office at any time during the financial year are:

### **Key Management Personnel**

David Breeze – Executive Director and Company Secretary  
Charles Chang - Non-Executive Director  
Ashley Zimpel - Executive Director

### **Remuneration of Key Management Personnel (KMP)**

KMP remuneration was as follows.

	2022 \$	2021 \$
Salary, fees, and allowances	350,000	320,833
Share based payments	-	300,100
	<u>350,000</u>	<u>620,933</u>

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

	2022 \$	2021 \$
<b>7. Income Tax Expense</b>		
a) The prima facie tax (benefit) on loss from ordinary activities before income tax is reconciled to the income tax as follows:		
Accounting loss before tax	(706,061)	(1,115,543)
Prima facie tax (benefit) on loss from ordinary activities before income tax at 25% (2021: 26%)	(176,515)	(290,041)
Effect of concessions: research and development grant	75,336	88,189
Tax benefit of revenue losses and temporary differences not recognised	101,179	201,852
Income tax	-	-
b) The following deferred tax balances at 25% (2021: 25%) have not been recognised		
Deferred Tax Assets:		
Carry forward revenue losses	1,228,306	1,227,048
Temporary differences	40,225	35,895
Deferred Tax Liabilities:		
Research and development grant accrual	(68,771)	(35,750)
Net unrecognised deferred tax assets:	1,199,760	1,227,193

(c) The tax benefits of the unrecognised tax losses will only be obtained if:

- (i) the Company derives future assessable income in a nature and of an amount sufficient to enable the benefits to be utilised;
- (ii) the Company continues to comply with the conditions for deductibility imposed by law; and
- (iii) no changes in income tax legislation adversely affect the Company in utilising the benefits.



# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

	2022 \$	2021 \$
<b>8. Trade and Other Receivables</b>		
<i>Current</i>		
Trade receivables	-	310
Research and development rebate receivable	274,085	143,000
GST receivable	3,073	17,463
Other receivables	1,000	-
Total trade and other receivables	<u>278,158</u>	<u>160,773</u>

The June 2022 year Research and development rebate of \$274,085 was received on 25th July 2022

## 9. Inventories

### *Current*

Raw materials at cost	100,949	90,895
Less: writedown	<u>(100,949)</u>	<u>(90,895)</u>
Raw materials at net realisable value	<u>-</u>	<u>-</u>
Finished goods at cost	41,401	41,401
Less: writedown	<u>(41,401)</u>	<u>(41,401)</u>
Finished goods at net realisable value	<u>-</u>	<u>-</u>

Inventories have been written down on the basis that the Company does not have a historical record of sufficient revenue generation from the BARM and the product is still in the development stage. This writedown may be re-assessed and may be reversed in future periods.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

	2022 \$	2021 \$
<b>10. Property, Plant and Equipment</b>		
Cost	22,220	22,220
Accumulated depreciation	(19,544)	(18,329)
Closing balance	2,676	3,891
Reconciliation of carrying value		
Office equipment:		
Opening balance	3,891	3,880
Additions	-	1,226
Less depreciation	(1,215)	(1,215)
Closing balance	2,676	3,891
<b>11. Trade and other payables</b>		
<i>Current unsecured:</i>		
Trade payables	20,672	45,175
Director fee accruals	374,833	192,833
Sundry payables and accrued expenses	39,730	37,572
	435,235	275,580

Trade payables are normally settled within 60 days.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

	2022 \$	2021 \$
<b>12. Issued Capital</b>		
182,981,760 (2021: 176,712,583) fully paid ordinary shares of no par value	<u>7,699,140</u>	<u>6,917,433</u>

## a) Fully Paid Ordinary Share Capital

Fully paid ordinary shares carry one vote per share and carry the right to dividends.

Ordinary Shares	2022 \$	2021 \$	2022 Number	2021 Number
At the beginning of reporting period	6,917,433	6,224,799	176,712,583	171,170,433
Shares issued for cash	783,647	692,644	6,269,177	5,542,150
Share issue costs	(1,950)	-	-	-
At reporting date	<u>7,699,140</u>	<u>6,917,433</u>	<u>182,981,760</u>	<u>176,712,583</u>

## b) Capital risk management

The Company's objectives when managing capital are to safeguard their ability to continue as a going concern, so that they may continue to provide returns for shareholders and benefits for other stakeholders. The focus of the Company's capital risk management is:

- the current working capital position against the requirements of the Company to meet corporate overheads; and
- to ensure appropriate liquidity is maintained to meet anticipated operating requirements, with a view to initiating appropriate capital raisings as required.

The working capital position of the Company at 30 June 2022 and 30 June 2021 is as follows:

	2022 \$	2021 \$
Cash and cash equivalents	222,533	93,040
Trade and other receivables	278,158	160,773
Prepayments	22,475	32,847
Trade and other payables	(435,235)	(275,580)
Working capital position	<u>87,931</u>	<u>11,080</u>

Refer to Note 1 for further details of the Company's financial position and plans to manage the working capital.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

## 13. Reserves

	2022	2021
	\$	\$
Share based payments reserve	570,746	570,746
	<u>570,746</u>	<u>570,746</u>

### Reconciliation of movement

Opening balance	570,746	256,854
Share based payments during the year	-	313,892
Closing balance	<u>570,746</u>	<u>570,746</u>

The option reserve records items recognised as expenses in respect of share options. Refer to Note 20 for further details on share based payments.

## 14. Cash Flow Information

### a) Reconciliation of Cash

For the purposes of the statement of cash flows, cash includes cash on hand and in banks and investments in money market instruments, net of outstanding bank overdrafts. Cash at the end of the financial year as shown in the statement of cash flows is reconciled to the related items in the statement of financial position as follows:

	2022	2021
	\$	\$
Cash and cash equivalents	<u>222,533</u>	<u>93,040</u>

### b) Reconciliation of cash flow from operations with profit after income tax

Operating loss after income tax	(706,061)	(1,115,543)
<i>Non-cash flows:</i>		
Depreciation and amortisation	1,215	1,215
Share based payments	-	313,892
<i>Changes in working capital:</i>		
(Increase) in trade and other receivables	(117,385)	(12,909)
Decrease / (increase) in other assets	10,372	(1,767)
Increase in trade payables and accruals	160,655	105,383
(Decrease) in provisions	-	-
Net cash (outflows) from operating activities	<u>(651,204)</u>	<u>(709,729)</u>

### (c) Changes in liabilities arising from financing activities:

Balance at 1 July	-	15,000
Net cash from financing activities	-	(15,000)
Balance at 30 June	<u>-</u>	<u>-</u>

## 15. Financial Instruments

### a) Financial Risk Management

The Company's financial instruments consist mainly of deposits with banks, and accounts receivable and payable. The main purpose of non-derivative financial instruments is to raise finance for Company operations.

#### i. Financial Risks

The main risks that the Company is exposed to through its financial instruments are interest rate risk, liquidity risk, credit risk and foreign exchange risk.

##### *Interest rate risk*

Interest rate risk is managed with fixed and variable rate debt as required.

##### *Liquidity risk*

The Company manages liquidity risk by monitoring forecast cash flows.

##### *Credit risk*

The maximum exposure to credit risk, excluding the value of any collateral or other security, at balance date to recognised financial assets, is the carrying amount, net of any provisions for impairment of those assets, as disclosed in the statement of financial position and notes to the financial statements.

Credit risk for derivative financial instruments arises from the potential failure by counter-parties to the contract to meet their obligations.

##### *Foreign exchange risk*

The Company is exposed to foreign exchange risk on product sales proceeds and costs which are quoted in a currency (US\$) other than the functional currency of the Company, being the A\$, and cash balances held in US\$. The Company does not hedge this risk, however it continues to monitor these exchange rates so that this currency exposure is maintained at an acceptable level. There is a natural hedge in place to the extent US\$ costs are covered by US\$ revenues.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

## 15. Financial Instruments (continued)

### b) Financial Instruments

#### i. Interest rate risk

The Company's exposure to interest rate risk, which is the risk that a financial instrument's value will fluctuate as a result of changes in market interest rates and the effective weighted average interest rates on classes of financial assets and financial liabilities, is as follows. The effective average interest rate is calculated on interest bearing assets and liabilities.

2022	Effective Average Interest Rate Receivable/ Payable %	Floating Interest Rate \$	Fixed Interest Rate 0 – 1 Years \$	Fixed Interest Rate 1 – 5 Years \$	Non-Interest Bearing \$	Total \$
<b>Financial Assets</b>						
Cash and cash equivalents	0.017%	222,533	-	-	-	222,533
Trade and other receivables		-	-	-	278,158	278,158
		222,533	-	-	278,158	500,691
<b>Financial Liabilities</b>						
Trade and sundry payables		-	-	-	435,235	435,235
		-	-	-	435,235	435,235

2021	Effective Average Interest Rate Receivable/ Payable %	Floating Interest Rate \$	Fixed Interest Rate 0 – 1 Years \$	Fixed Interest Rate 1 – 5 Years \$	Non-Interest Bearing \$	Total \$
<b>Financial Assets</b>						
Cash and cash equivalents	0.03%	93,040	-	-	-	93,040
Trade and other receivables		-	-	-	160,773	160,773
		93,040	-	-	160,773	253,813
<b>Financial Liabilities</b>						
Trade and sundry payables		-	-	-	275,580	275,580
		-	-	-	275,580	275,580

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

## 15. Financial Instruments (continued)

### (b) Financial Instruments (continued)

#### ii. Fair Values

The fair values of:

- Term receivables are determined by discounting the cash flows, at the market interest rates of similar securities, to their present value.
- Other loans and amounts due are determined by discounting the cash flows, at market interest rates of similar borrowings to their present value.
- Other assets and liabilities approximate their carrying value.

No financial assets and financial liabilities are readily traded on organised markets in standardised form other than listed investments.

Aggregate fair values and carrying amounts of financial assets and financial liabilities at balance date:

	2022 (\$)		2021 (\$)	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
<b>Financial Assets</b>				
Trade and other receivables	278,158	278,158	160,773	160,773
	<u>278,158</u>	<u>278,158</u>	<u>160,773</u>	<u>160,773</u>
<b>Financial Liabilities</b>				
Trade and other payables	435,235	435,235	275,580	275,580
	<u>435,235</u>	<u>435,235</u>	<u>275,580</u>	<u>275,580</u>

#### iii. Foreign Exchange Risk

The A\$ / US\$ exchange rate was 0.69 at 30 June 2022 and 0.73 for the year ending 30 June 2022. The Company's exposure to foreign exchange risk at balance date was as follows, based on carrying amounts in A\$:

	A\$	US\$	Total \$
<b>2022</b>			
Cash and cash equivalents	222,082	451	222,533
Trade and other receivables	278,158	-	278,158
Trade and other payables	(427,964)	(7,271)	(435,235)
Balance at 30 June	<u>72,276</u>	<u>(6,820)</u>	<u>65,456</u>
<b>2021</b>			
Cash and cash equivalents	88,022	5,018	93,040
Trade and other receivables	160,773	-	160,773
Trade and other payables	(272,180)	(3,400)	(275,580)
Balance at 30 June	<u>(23,385)</u>	<u>1,618</u>	<u>(21,767)</u>

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

## 15. Financial Instruments (continued)

### (b) Financial Instruments (continued)

#### iv. Sensitivity Analysis

##### *Interest Rate Risk*

The Company has performed sensitivity analysis relating to its exposure to interest rate risk at balance date. This sensitivity analysis demonstrates the effect on the current year results and equity which could result from a change in these risks

##### *Interest Rate Sensitivity Analysis*

	Company	
	2022	2021
<b>Change in loss</b>		
— Increase in interest rate by 1%	1,999	656
— Decrease in interest rate by 0.5%	(76)	(119)

#### v. Liquidity risk

Liquidity is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The following are the contractual maturities at the end of the reporting period of financial liabilities.

##### **Contractual cash flows (\$)**

<b>30 June 2022</b>	<b>Carrying amount</b>	<b>Total</b>	<b>2 mths or less</b>	<b>3 mths to 1 year</b>
Trade and other payables	435,235	435,235	49,103	386,132
	<u>435,235</u>	<u>435,235</u>	<u>49,103</u>	<u>386,132</u>
<b>30 June 2021</b>	<b>Carrying amount</b>	<b>Total</b>	<b>2 mths or less</b>	<b>3 mths to 1 year</b>
Trade and other payables	275,580	275,580	82,747	192,833
	<u>275,580</u>	<u>275,580</u>	<u>82,747</u>	<u>192,833</u>



# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

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## 16. Subsequent Events

In August 2022 the Company was granted a key patent relating to its Brain Anaesthesia Response Monitor (BARM) technology in the United States. The new Patent is titled "Apparatus and process for measuring brain activity" was made under United States Patent Application No. 17/614701.

In July 2022 Cortical appointed a full-time project manager.

The Company has issued 6,714,000 fully paid ordinary shares at 12.5 cents each for \$839,250 cash.

Other than the above, there have not been any matters or circumstance that have arisen since the end of the financial year that have significantly affected, or may significantly affect, the operations of the Company, the results of those operations, or the state of affairs of the Company in future financial years.

## 17. Related Party Transactions

### (a) Key Management Personnel Remuneration

Details of key management personnel remuneration and retirement benefits are disclosed in Note 6 to the financial statements.

Trade and other payables at 30 June 2022 include \$Nil (2021: \$7,302) payable to Mr David Breeze for Company expenses incurred by him and a total of 374,833 in accrued directors' fees (2021: \$192,833).

### (b) Related entities

During the year the Company incurred \$36,000 (2021: \$36,000) in management and service fees to Grandbridge Limited, and repaid \$Nil (2021: \$15,000) to BPH Energy Limited, companies of which Mr Breeze is Managing Director.

## 18. Capital Commitments

There were no capital commitments at 30 June 2022 or 30 June 2021.

## 19. Contingent Liabilities

There were no contingent liabilities at 30 June 2022 or 30 June 2021.

# Notes to the Financial Statements for the year ended 30 June 2022

Cortical Dynamics Limited

## 20. Share-Based Payments

The following share-based payment arrangements existed at 30 June 2022:

Total number	Grant Date	Exercise price	Fair value per option at grant date	Expiry date
7,000,000	4/10/2019	\$0.20	\$0.331	24/8/2024
10,750,000	14/5/2020	\$0.15	\$0.0012	15/5/2023
250,000	21/6/2020	\$0.20	\$0.0467	21/6/2025
7,600,000	18/11/2020	\$0.25	\$0.0400	18/11/2025
250,000	19/01/2021	\$0.25	\$0.0392	22/11/2025
<u>25,850,000</u>				

All options granted are to purchase ordinary shares in Cortical Dynamics Limited, which confer a right of one ordinary share for every option held. The fair value of the options granted is estimated as at the date of grant using a Black-Scholes model taking into account the terms and conditions upon which the options were granted.

The following table lists the inputs to the model used for valuing options granted during the prior year:

Grant date	18/11/2020	19/1/2021
Share price at grant date	\$0.125	\$0.125
Exercise price	\$0.25	\$0.25
Expected volatility	75%	75%
Expected life	5 years	4.8 years
Expected dividends	Nil	Nil
Risk-free interest rate	0.3%	0.3%
Fair value at grant date	\$0.04	\$0.0392

The movement in share options on issue during the year is as follows:

	Number of options	Weighted average exercise price per share
Outstanding at the beginning of the year	25,850,000	0.19
Outstanding at year-end	<u>25,850,000</u>	<u>0.19</u>
Exercisable at year-end	<u>25,850,000</u>	<u>0.19</u>

# Directors' Declaration

Cortical Dynamics Limited

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The directors of the company declare that:

1. the financial statements and notes, as set out on pages 9 to 32, are in accordance with the Corporations Act 2001 and:
  - (a) comply with Accounting Standards and the Corporations Regulations 2001; and
  - (b) give a true and fair view of the financial position as at 30 June 2022 and of the performance for the year ended on that date of the Company;
2. the Financial Statements and Notes comply with International Financial Reporting Standards as disclosed in Note 1;
3. in the directors' opinion there are reasonable grounds to believe that the Company will be able to pay its debts as and when they become due and payable.

Signed in accordance with a resolution of the directors made pursuant to S295(5) of the Corporations Act 2001.

Director



.....  
David Breeze  
Director

Dated this 31st October 2022

## **INDEPENDENT AUDITOR'S REPORT**

To the Members of Cortical Dynamics Limited

### **Report on the Audit of the Financial Report**

#### *Opinion*

We have audited the financial report of Cortical Dynamics Limited ("the Company") which comprises the statement of financial position as at 30 June 2022, the statement of profit or loss and other comprehensive income, the statement of changes in equity and the statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, and the directors' declaration.

In our opinion, the accompanying financial report of the Company is in accordance with the *Corporations Act 2001*, including:

- (a) giving a true and fair view of the Company's financial position as at 30 June 2022 and of its financial performance for the year then ended; and
- (b) complying with Australian Accounting Standards and the *Corporations Regulations 2001*.

#### *Basis for Opinion*

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Company in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* ("the Code") that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### *Material Uncertainty Regarding Going Concern*

We draw attention to Note 1 in the financial report, which indicates that a material uncertainty exists that may cast significant doubt on the Company's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

#### *Information Other than the Financial Report and Auditor's Report Thereon*

The directors are responsible for the other information. The other information comprises the information included in the Company's annual report for the year ended 30 June 2022, but does not include the financial report and our auditor's report thereon.

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Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report, or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

#### *Responsibilities of the Directors for the Financial Report*

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error

In preparing the financial report, the directors are responsible for assessing the ability of the Company to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

#### *Auditor's Responsibilities for the Audit of the Financial Report*

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our

auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

*HLB Mann Judd*

**HLB Mann Judd**  
**Chartered Accountants**

**Perth, Western Australia**  
**31 October 2022**



**L Di Giallonardo**  
**Partner**