

## June 2024 Quarterly Activities Report and Appendix 4C

### Highlights

- **Initiated regulatory strategy assessment to prepare for registrational study in US and device registration in EU.**
- **Initiated an autism clinical study in partnership with US based Turning Pointe Autism Foundation.**
- **Partnered with Erasmus University Medical Centre in Europe to evaluate BlinkLab's AI-powered test for early accurate diagnosis of frontotemporal dementia (FTD) and Alzheimer's (AD).**
- **Commenced clinical study with Bates College in the US to validate the smartphone-based platform for the assessment of Functional Neurological Disorder.**
- **Initiated a new study in children between 5-16 years to validate the platform's diagnostic accuracy for ADHD.**
- **Rolled-out major software updates for BlinkLab diagnostic application ahead of US clinical studies**
- **As at 30 June 2024, the Company had a cash balance of \$6.017 million.**

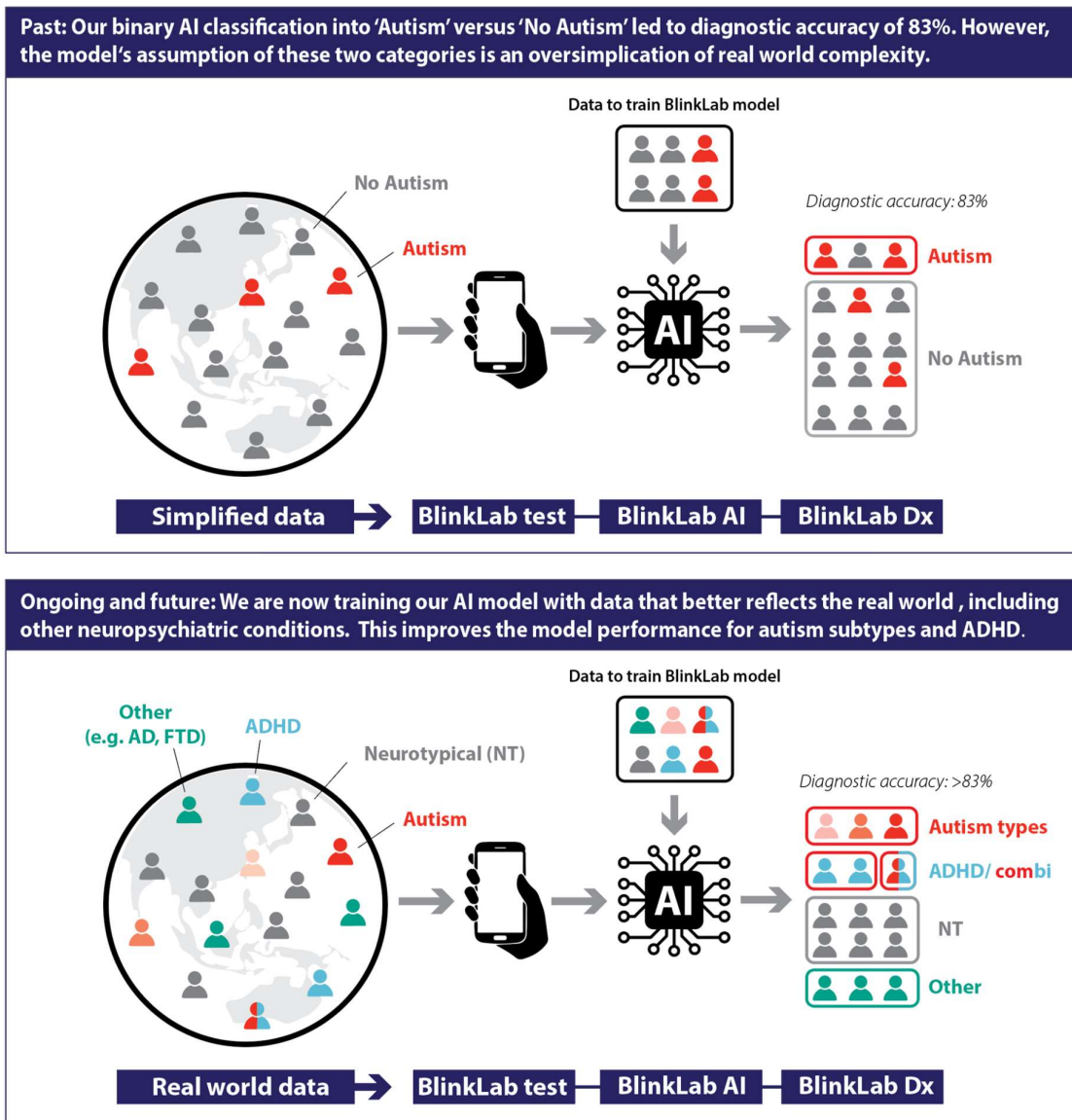
**BlinkLab Limited (ASX:BB1)** ("**BlinkLab**", "the **Company**") an innovative digital healthcare company leveraging smartphones, computer vision, AI and machine learning to diagnose neurodevelopmental conditions is pleased to release its first Appendix 4C and quarterly activity report for the period ended 30 June 2024. The Company remains committed to its mission of revolutionising autism and ADHD diagnosis using its cutting-edge technology.

### **Regulatory Strategy Assessment Ahead of FDA Registrational Study**

During the quarter the company initiated the regulatory assessment ahead of its US registrational study and subsequent 510k FDA submission. The assessment is based on relevant legislation and FDA guidance and includes reviews of device risk classification, system and software architecture design specifications, cybersecurity as it pertains to patient safety and information privacy, usability/human factors testing.

BlinkLab is also working toward implementing a post-approval predetermined change control plan (PCCP). PCCP is a documented process, required to be pre-approved by FDA, that will allow BlinkLab machine learning algorithms to be intermittently “unlocked” under certain circumstances and with specific guardrails in place, in order to leverage new data to enhance performance of the tests once its available to end users.

## Assessing Digital Sensory Phenotyping in Multiple Indications to Improve Our Predictive Machine Learning Models





During the first half of 2024, BlinkLab successfully completed a 280 patient study in autism and results are now submitted for publication in a high impact scientific journal. The study was conducted as a multi-center program involving 280 children aged between 3-12 years, comprising 97 neurotypical children and 183 children with ASD. The evaluation encompassed general spontaneous and stimulus-evoked postural, head, facial, and vocal responses along with more specific neurometric tests, including the modulation of acoustically evoked eyelid startle responses. Ensemble learning principles from machine learning were applied to assess predictive performance and demonstrated sensitivity of 85% and specificity of 84%, with a sensitivity of 84% and specificity of 83% on the holdout set (unseen data).

However, in the real world distinguishing autism from other psychiatric disorders is difficult due to their multidimensional phenotypes and poor sensitivity of conventional diagnostic methods. BlinkLab is trying to fundamentally change the approach by collecting digital phenotype data from various neurodevelopmental and neurodegenerative conditions and using these robust variable data sets as input for our predictive machine learning models. By training the model on large data sets from various diseases, we significantly improve future predictive performance of the BlinkLab application in real world scenarios (Fig. 1).

This quarter BlinkLab have initiated additional clinical studies in ADHD, autism, frontotemporal dementia, Alzheimer's disease and functional neurological disorder. Together, these studies will generate digital phenotypes from almost 1000 subjects significantly improving the predictive accuracy of the BlinkLab test as well as allowing our ML models to recognize multiple neurodevelopmental diseases in large population data sets.

### **New study in children with attention-deficit hyperactivity disorder (ADHD) initiated**

Attention-deficit hyperactivity disorder is defined as a heritable, chronic, neurobehavioral condition, predominantly affecting children and adolescents between the ages of 6 and 17. Characterised by symptoms of hyperactivity, inattention, and impulsivity, ADHD poses significant challenges during key formative years. Children and adolescents with ADHD often struggle with impulsive behaviour and slower processing of information, leading to lower performance on standardised tests, reduced grades, and a higher likelihood of dropping out of school. The global prevalence of ADHD in this age group is estimated to be around 5%.

Diagnosing ADHD is a complex process, and currently there is no definitive marker for ADHD. Clinicians rely on the DSM-5 guidelines. Diagnosis involves identifying specific symptoms that persist for at least six (6) months and is further complicated by comorbid conditions such as Oppositional Defiant Disorder (ODD), Major Depressive Disorder (MDD), and anxiety disorders. The DSM-5's lack of comprehensive coverage of sex differences in ADHD also contributes to the complexity and potential for misdiagnosis. To aid in diagnosis and treatment monitoring, various rating scales are used, including the Conners Rating Scales and the Vanderbilt ADHD Rating Scale, though they have limitations in terms of specificity and sensitivity.



The treatment of ADHD, particularly in paediatric settings, demands an integrative, multifaceted approach that combines pharmacological treatments with psychoeducation, psychotherapeutic, and psychosocial interventions. A key challenge in this treatment is determining the most effective dosage and type of stimulant medication for each individual, a process that often involves trial and error, adding stress for both the child and their caregivers. Finding the right medication balance is crucial for effective symptom management and the overall well-being and development of the child. There is a great unmet need for early diagnosis of ADHD and new rapid, accurate methods to optimise medication and dosage in ADHD care.

During the quarter BlinkLab initiated a large study for the diagnosis and treatment monitoring in children with ADHD. All children will go through a comprehensive ADHD diagnostic evaluation and results will be compared with BlinkLab's rapid smartphone based test. All data will be collected in a prospective study design. Data collected from the current clinical trial will be used as part of a large global ADHD study conducted by BlinkLab in multiple countries and subsequent regulatory approvals in EU and US.

### **Major Software Updates Ahead of US Registrational Study**

During the quarter the company released version 1.3 of its BlinkLab application on the Apple App store. The new version brings significant advancements to the BlinkLab application, designed to enhance its usability, data quality, and overall capabilities for conducting neurobehavioral evaluations. The enhancements encompass improvements in data processing, ability to perform eye gaze tracking, support for additional devices, and refinements in our backend systems and AI/ML algorithms.

### Enhanced Data Quality

Several updates have been implemented to optimise data collection. Users now receive real-time feedback if their faces are misaligned during the experimental setup, ensuring correct positioning and high-quality data acquisition. Additionally, the app now measures background noise during inter-trial intervals, uploading this data for analysis to mitigate external factors that could influence results. Continuous checks on headphone and bluetooth connectivity have been integrated, automatically pausing experiments if disconnections occur, thus preserving data integrity. Volume control enhancements have also been introduced to maintain consistent audio stimulus levels, preventing participants from lowering the volume excessively. A seamless data upload feature has been added, ensuring that data upload resumes if the app is closed and reopened, with a progress bar indicating the upload status. Real-time error notifications now alert experimenters to issues like incorrect device output or low volume via visual and tactile feedback, allowing for immediate corrections.



### Eye Gaze Tracking Support

Recent studies highlight the strong correlation between eye gaze movements and conditions such as ASD and ADHD. Eye tracking for instance can help quantify the level of social visual engagement, i.e. how a child engages with social and non-social cues occurring continuously within naturalistic environmental contexts. To bolster the app's gaze tracking capabilities, we have optimised the horizontal orientation mode, standardising it across all experiments for accurate tracking. Additionally, timestamp tracking for video content has been introduced, enabling precise linkage between eye movements and specific video segments.

### iPad Support

The BlinkLab app now extends its support to iPads, ensuring they meet the required frame rate (60 fps) and resolution (1280x720) for optimal performance. This expansion increases the app's accessibility, allowing a broader range of users to participate in experiments without compromising data quality.

### Backend and AI/ML Algorithm Enhancements

Our backend system has undergone significant improvements, with standardised data point extraction used by our AI/ML models, thereby eliminating manual steps in data processing and streamlining the system's efficiency. The AI/ML algorithms have been refined to enhance their ability to distinguish between ASD and ADHD, thereby improving the accuracy of diagnostic assessments and providing more reliable results.

### Future App Development

Our future tech stack development will focus on completing the AI/ML pipeline by removing all remaining manual processes and validating our approach's generalisation on unseen data. These steps are pivotal in ensuring the platform's reliability and effectiveness across diverse conditions and user groups.

### **Financial update**

*This is the first reporting quarter for BlinkLab as the Company was admitted to ASX on 2 April 2024. Accordingly, in the 4C, both columns are identical i.e. 'Current quarter' and 'Year to date'. Importantly, the Company's first quarter represents 4 months and 9 days, being from the Prospectus date (21 February 2024) until 30 June 2024.*

Net cash used for operations for the extended quarter ended 30 June 2024, was \$0.966 million. Operating cash outflows in the quarter included expenditure on research and development activities of \$0.137 million, staff costs (including research and development employees) of \$0.277 million and corporate administration of \$0.506 million (which includes \$0.24 million paid for annual D&O insurance premium). Payments to related parties totalled \$0.131 million for the extended quarter and were attributable to the provision of services (salaries and wages/labour). The Company's cash balance was \$6.017 million as at 30 June 2024.



The Company expects cash outflows to reduce significantly for the quarter ended 30 September 2024, as a large amount of IPO related costs and one of fees, incurred during the Company's first operating quarter ended 30 June 2024, will not be incurred in the future.

Use of Funds	Full subscription - \$7,000,000		
	Funds allocated pursuant to Prospectus. (8 Quarters) \$	Actual cash expenditure for the extended period, ended 30 June 2024 (Q1) * \$	Balance Remaining \$
Expenses of the Public Offer	\$695,945	\$696,504	(\$559)
Software Improvement and Tech Support	\$1,656,568	\$75,880	\$1,580,688
IP Protection	\$150,000	\$5,450	\$144,550
Research and Business Development	\$1,031,500	\$374,490	\$657,010
Clinical Studies and Regulatory (United States)	\$1,869,609	-	\$1,869,609
Completion of Clinical Study and Regulatory Submission (Europe)	\$480,000	-	\$480,000
General, Admin & Working Capital	\$1,691,114	\$724,111	\$967,003
Ongoing Listing Costs	\$340,000	\$20,920	\$319,080
<b>Total</b>	<b>\$7,914,736</b>	<b>\$1,897,355</b>	<b>\$6,017,381</b>

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The Board of Directors has approved this announcement.

**For further information please contact:**

Dr. Henk-Jan Boele  
Chief Executive Officer  
henkjan@blinklab.org  
M: +31 71 799 6194

Brian Leedman  
Non-Executive Chairman  
brian@blinklab.org  
M +61 (0) 412 281 780



### **About BlinkLab Limited**

BlinkLab, a company founded by neuroscientists at Princeton University, over the past several years has fully developed a smartphone based diagnostic platform for autism, ADHD, schizophrenia, and other neurodevelopmental conditions. Our most advanced product is an autism diagnostic test that leverages the power of smartphones, AI and machine learning to deliver screening tests specifically designed for children as young as 18 months old. This marks a significant advancement, considering traditional diagnoses typically occur around five years of age, often missing the crucial early window for effective intervention. BlinkLab is led by an experienced management team and directors with a proven track record in building companies and vast knowledge in digital healthcare, computer vision, AI and machine learning. Our Scientific Advisory Board consists of leading experts in the field of autism and brain development allowing us to bridge most advanced technological innovations with groundbreaking scientific research.

## Appendix 4C

### Quarterly cash flow report for entities subject to Listing Rule 4.7B

**Name of entity**

BlinkLab Limited

**ABN**

53 652 901 703

**Quarter ended ("current quarter")**

30 June 2024

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (4 months &amp; 9 days*) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) research and development	(137)	(137)
(b) product manufacturing and operating costs	-	-
(c) advertising and marketing	(75)	(75)
(d) leased assets	-	-
(e) staff costs	(277)	(277)
(f) administration and corporate costs	(506)	(506)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	29	29
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(966)</b>	<b>(966)</b>
<p>* This is the first reporting quarter for BlinkLab as the Company was admitted to ASX on 2 April 2024. Both 'Current quarter' and 'Year to date' columns are the same on this basis, and represent 4 months and 9 days, which is from the Prospectus date (21 February 2024) until 30 June 2024.</p>		

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-



Consolidated statement of cash flows	Current quarter \$A'000	Year to date (4 months & 9 days*) \$A'000
(c) property, plant and equipment	(26)	(26)
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	(25)	(25)
<b>2.2</b> Proceeds from disposal of:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-
<b>2.3</b> Cash flows from loans to other entities	-	-
<b>2.4</b> Dividends received (see note 3)	-	-
<b>2.5</b> Other (provide details if material)	-	-
<b>2.6</b> <b>Net cash from / (used in) investing activities</b>	<b>(51)</b>	<b>(51)</b>

<b>3.</b> <b>Cash flows from financing activities</b>		
<b>3.1</b> Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
<b>3.2</b> Proceeds from issue of convertible debt securities	-	-
<b>3.3</b> Proceeds from exercise of options	-	-
<b>3.4</b> Transaction costs related to issues of equity securities or convertible debt securities	(435)	(435)
<b>3.5</b> Proceeds from borrowings	-	-
<b>3.6</b> Repayment of borrowings	-	-
<b>3.7</b> Transaction costs related to loans and borrowings	-	-
<b>3.8</b> Dividends paid	-	-
<b>3.9</b> Payment of lease liability	(15)	(15)
<b>3.10</b> <b>Net cash from / (used in) financing activities</b>	<b>(450)</b>	<b>(450)</b>

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (4 months &amp; 9 days*) \$A'000</b>
<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	7,484	7,484
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(966)	(966)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(51)	(51)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(450)	(450)
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>6,017</b>	<b>6,017</b>

<b>5. Reconciliation of cash and cash equivalents</b>	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts		
5.1 Bank balances	1,017	7,484
5.2 Call deposits	5,000	-
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>6,017</b>	<b>7,484</b>

<b>6. Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to related parties and their associates included in item 1	(131)
6.2 Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>	

7. <b>Financing facilities</b> <i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 <b>Total financing facilities</b>	-	-
7.5 <b>Unused financing facilities available at quarter end</b>		-
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8. <b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1 Net cash from / (used in) operating activities (item 1.9)	(966)
8.2 Cash and cash equivalents at quarter end (item 4.6)	6,017
8.3 Unused finance facilities available at quarter end (item 7.5)	-
8.4 Total available funding (item 8.2 + item 8.3)	6,017
8.5 <b>Estimated quarters of funding available (item 8.4 divided by item 8.1)</b>	<b>6.23</b>
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: N/A	
8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: N/A	
8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer: N/A	
<i>Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.</i>	

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 July 2024

Authorised by: The Board of BlinkLab Limited  
(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.