



Early diagnosis of autism

Using a breakthrough AI-powered smartphone platform



**PRINCETON
UNIVERSITY**



Disclaimer

This presentation has been prepared by BlinkLab Limited (ACN 652 901 703) (**BlinkLab** or **Company**) and contains background information about BlinkLab's current operations at the date of this presentation. The presentation is in summary form and does not purport to be all inclusive or complete.

Recipients should conduct their own investigations and perform their own analysis in order to satisfy themselves as to the accuracy and completeness of the information, statements and opinions contained in this presentation. This presentation is for information purposes only. Neither this presentation nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sales of shares or other securities in any jurisdiction. This presentation is not a prospectus, product disclosure statement or other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law.

This presentation does not constitute investment or financial product advice (nor tax, accounting or legal advice) and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. Recipients should seek professional advice when deciding if an investment is appropriate. All securities involve risks which include (among others) the risk of adverse or unanticipated market, financial or political developments.

This presentation may include forward-looking statements. Forward-looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of BlinkLab. Actual results or events may be materially different to those expressed or implied in this presentation. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements.

Current Autism Market is \$700B in the US alone

"The economic burden is significant and alarming" ¹

- Autism prevalence has grown to 2-4% among children²

- Autism healthcare expenses world-wide are soaring³

Costs for an autism diagnostic evaluation: \$1,000 to \$5,000.

Costs of care are around **\$60K** annually during childhood³.

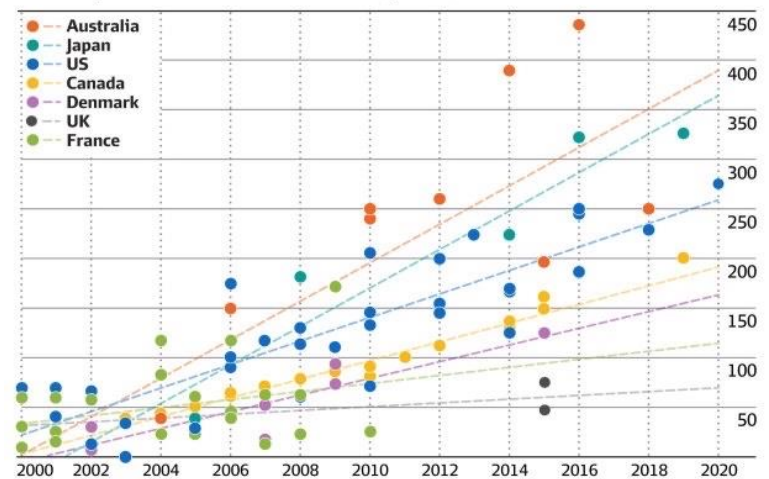
- Lifetime cost for individual with ASD: **\$3.6M³**

35% of NDIS participants have autism accounting for **\$6.7B⁴**.

- No medical autism check available

Autism diagnostic evaluation is **subjective**.

Autism prevalence studies of children, per 10,000



SOURCE: MAATHU RANJAN

¹ Leigh and Du (2015), Forecasting the economic burden of autism in 2015 and 2025 in the US, Journal of Autism and Developmental Disorder

² Center for Disease and Control, World Health Organization

³ Cakir et al. (2020) The lifetime social cost of autism: 1990-2029, Research in Autism Spectrum Disorder

⁴ National Disability Insurance Scheme (NDIS)



Insights

As at 30 June 2023:



35%
(214,880)

of the **610,502** active NDIS participants have a **primary disability of autism**, making it the **most common disability** for NDIS participants.

Source: [ndis.gov.au](https://www.ndis.gov.au)

Total payments

In the year ending 30 June 2023:

the NDIS provided

\$6.73 billion

of paid supports to participants with autism.

In the previous year:

the NDIS provided

\$5.27 billion

of paid supports to participants with autism.



↑ **28%**

Autism diagnosis is expensive, inaccurate, and too late

Leading to poor developmental and clinical outcomes and high financial costs.

Parental observations

Concerns arise about child's behavior and development.



Autism screening

By primary care physician, who refers to specialist.



12-24 months waitlist

Autism diagnostic evaluation

Formal diagnosis requires input from **multiple disciplines**, including psychiatry, psychology, audiology, occupational and physical therapists. Process is complex, expensive and frequently delayed. Current diagnostic tools are **subjective**.



Diagnosis at age 5-6

Family frustrated by evaluation that took longer than **12 months**.



Late intervention

Yielding **poor clinical results** and leading to **high expenses** later in life.



BlinkLab's digital solution accelerates path to diagnosis

By bringing to market a smartphone platform for **early** and **accurate** autism diagnosis.

Parental observations

Concerns arise about child's behavior and development.



Digital screening

Using our **accessible** smartphone-based platform.



blinklab

Diagnostic evaluation

Using biomarkers. Only necessary specialists are consulted.



Diagnosis at age 2-3

Initial diagnosis **instantaneously**, confirmed in 1-2 months.



Early and personalized intervention and accurate monitoring

Intervention starts early during brain development, yielding **optimal clinical results** and leading to significant **reduction in costs** (40-60%) later in life.



BlinkLab facilitates early diagnosis, reduces costs, and improves accuracy.

Our patented technology: neuroscience on a smartphone

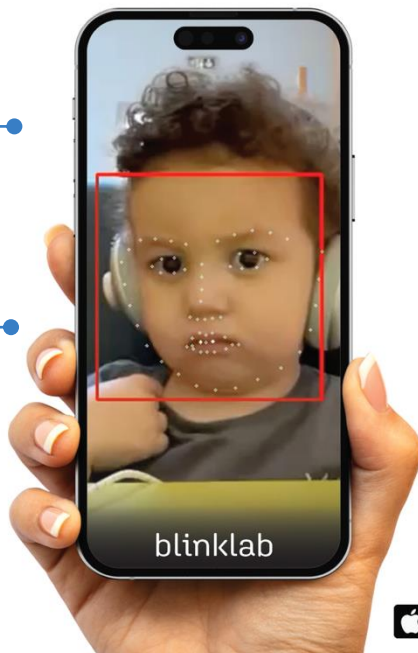
Minuscule facial reflexes, evoked by our app, generate a digital biomarker for autism.

Smartphone-based

Scientifically-proven **neurometric evaluations** conveniently at the home.

Evokes facial reflexes

By presenting visual and auditory stimuli during smartphone use.



Computer vision

Facial features are tracked on the smartphone and transferred to the **BlinkLab platform**.

Biomarker detection

Biomarkers are detected in **real-time** and made available to the clinician.

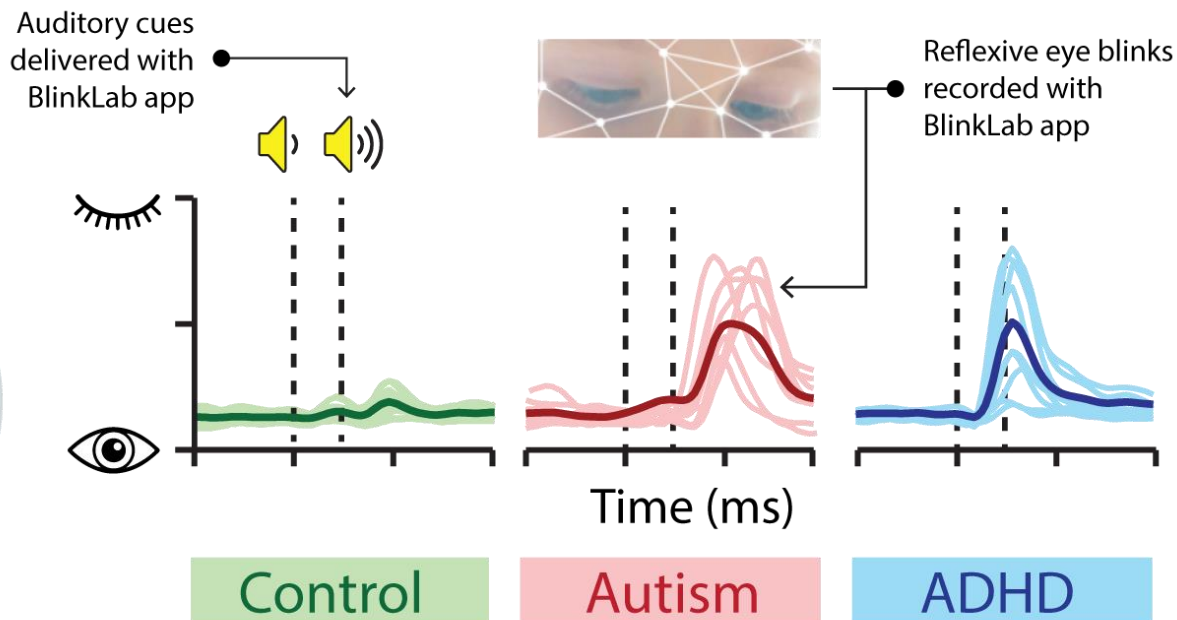
Evaluates brain function

State-of-the art analysis methods and AI modelling are used to **map the functioning of brain regions involved in autism**.

BlinkLab's AI-driven digital platform will address a significant unmet need for cost-effective and precise diagnostic alternatives.

How our AI technology detects autism and also ADHD

BlinkLab precisely measures the alterations in **sensory sensitivity** in people with autism and ADHD.



BlinkLab is fully developed, field tested, and ready to use

Validated in >6,000 subjects tested globally, including people with limited access to healthcare.

- **Remote testing**

Enables accessible and global diagnostics.

- **Scalable solution**

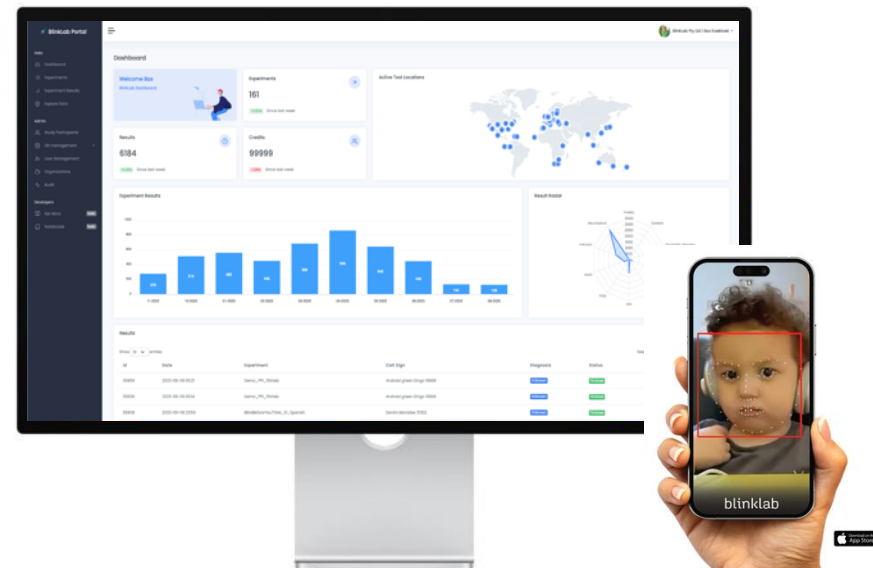
Easily adaptable for clinical and diverse research needs.

- **Real-time analysis**

Immediate insights in user tests and biomarker scores.

- **Rapid global adoption**

> 30 scientific and clinical institutes, special schools and, large healthcare providers around the globe already have started implementing BlinkLab (next slide).



BlinkLab is collaborating with world-leading institutions

Since our first product launched in 2022, we have established global partnerships with >30 academic and clinical institutes.

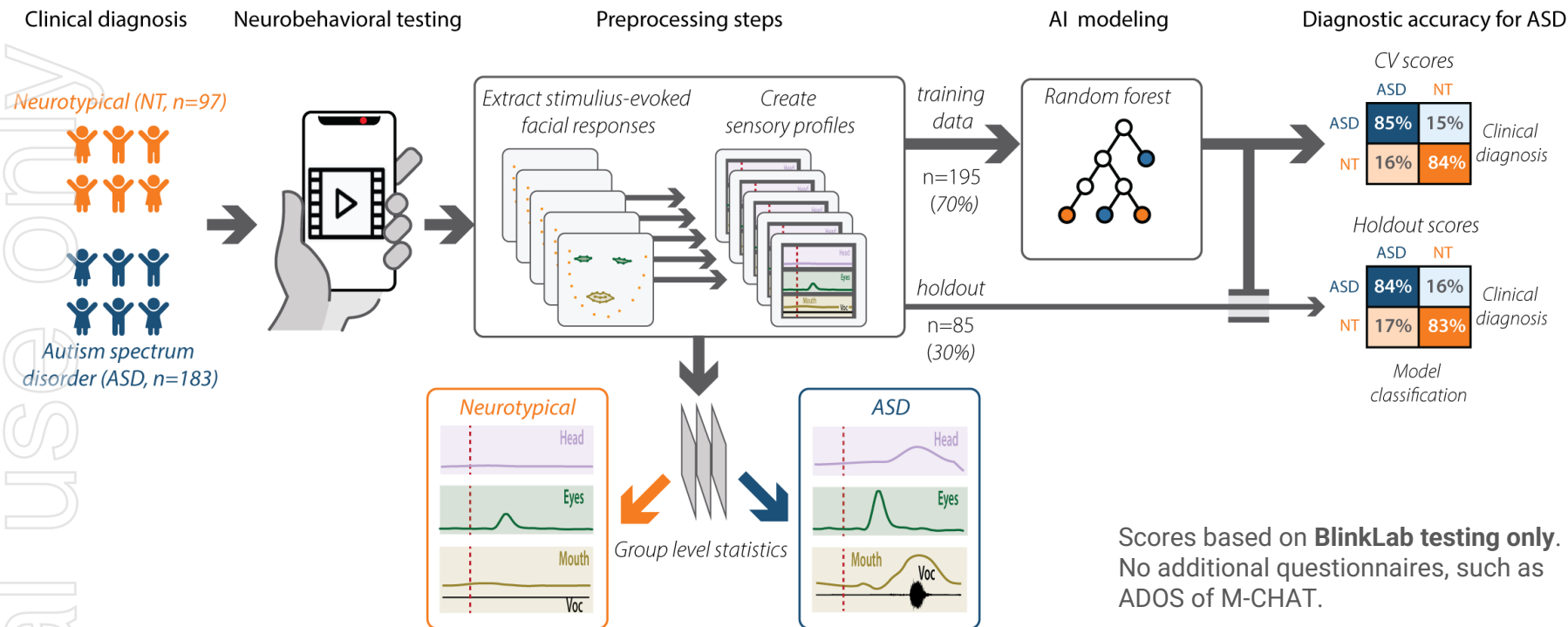


Prof. Samuel S. -H. Wang
(Princeton University)

"The BlinkLab app is easy to operate, substantially reduces the costs of diagnosis, and produces reliable and reproducible results."

Breakthrough data from large autism diagnostic study

In our multi-center study in non-European cohort, we attained a **sensitivity of 85%** and **specificity of 84%**



Scores based on **BlinkLab testing only**.
No additional questionnaires, such as ADOS or M-CHAT.

BlinkLab meets standard of care and outperforms FDA-approved digital peers

blinklab

cognoa



Sensitivity

85%

52%

71%



Specificity

84%

19%

81%



Smartphone-based

Yes

Yes

No



FDA approval

Not yet

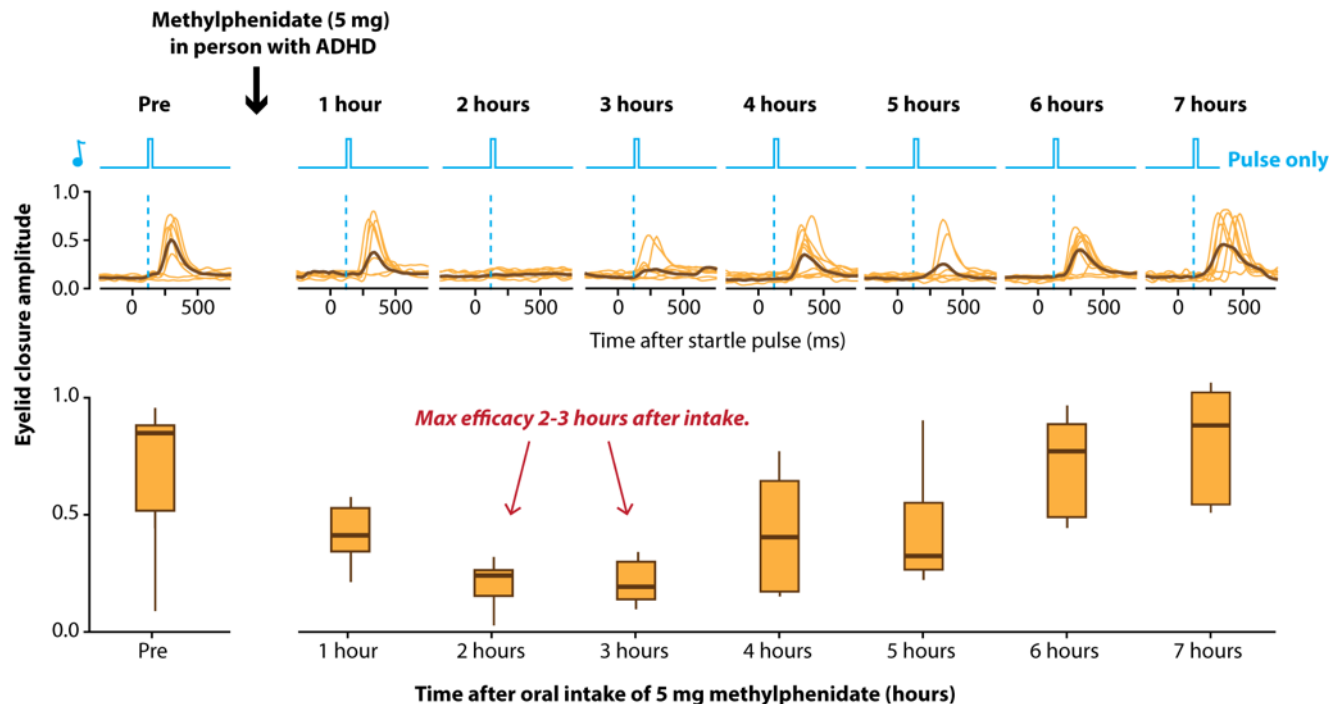
De novo

510(k)

We are leaders in the rapidly growing space of digital diagnostics **and** therapeutics.

First product to monitor the effect of therapy in real-time

Offers a path to even larger recurring revenues via subscription-based commercial models.



Real-time Ritalin monitoring capability builds path to recurring revenue streams.

We are experts in science, tech and commercialization

Our mission is to use neuroscience to improve the daily life of families with autism.



Henk-Jan Boele, CEO

MD, PhD, Neuroscientist and entrepreneur at Erasmus MC and Princeton University

Fifteen years of experience in neurobehavioral testing with over 35 publications. Recipient of many prestigious awards. Team leader and inventor of BlinkLab.



Anton Uvarov, COO
Executive director

MBA, PhD, Biotechnology Analyst with Citibank

Cofounder of two biotechnology companies, developed therapeutics for neurodegenerative disorders. Both successfully IPO and publicly traded.



Bas Koekkoek, CSO

PhD, Assistant Professor of Neuroscience. Erasmus MC

Twenty-six years of experience in neurobehavioral testing with over 55 publications in IEEE and the field of neuroscience. An innovator in heart and soul. Cofounder of Neurasmus BV.



Peter Boele, CTO

MA, PhD candidate, Erasmus MC

Born to code, with over 20 years of experience in software development, both as developer as well as executive.



We are backed up by an expert advisory board

World leading scientists and commercial advisors.

Company Chairman



Brian Leedman

Experienced Chairman and co-founder of five ASX listed healthcare companies including digital healthcare company ResApp Health, acquired by Pfizer for \$180M in 2022.



Company Director



Jane Morgan

Providing strategic investor and media relations services for over 16 years. Founder of JMM.



Company Director



Richard Hopkins

Experienced bio-pharmaceutical executive with over 20 years in corporate leadership roles with public biotechnology companies.



Scientific advisor



Prof. Samuel Wang

Professor of Neuroscience at Princeton University and author of 2 bestselling books.



Scientific advisor



Prof. Chris De Zeeuw

Professor of Neuroscience at Erasmus MC and vice-director of the NIN (Netherlands Institute of Neuroscience).



Scientific advisor



Prof. Javier Medina

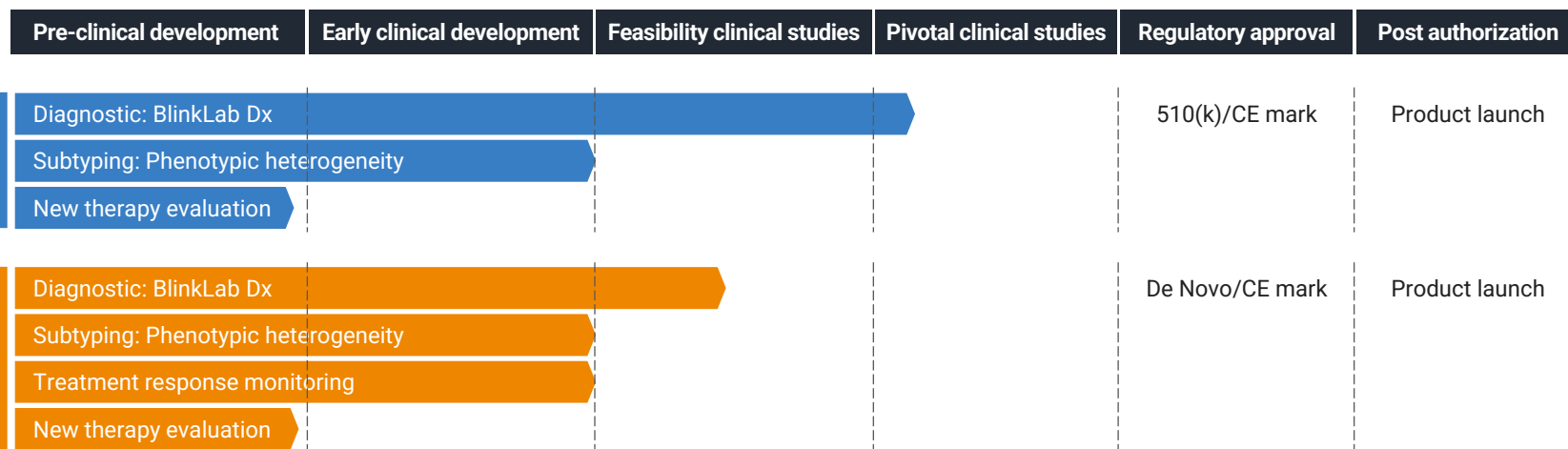
Professor in neuroscience at Baylor College of Medicine in Houston.



Meet the whole BlinkLab team
@ blinklab.org

R&D Pipeline

Our pipeline of diagnostic products, relevant development state and regulatory pathway.



blinklab

Important milestones


News pipeline: Updates on regulatory studies on autism and ADHD, new partnerships, new opportunities

Milestone	Timeframe
Start of activities for FDA registrational study in autism (appointment of CRO, selection and appointment of clinical sites to do the study, appointment of lead clinical investigator, key opinion leaders)	1H 2024
Initiation of ADHD discovery phase study	*1Q 2024
Completion of Autism study in Morocco / EU	*1Q 2024
Completion of pilot Schizophrenia study (EU)	1H 2024
Initiation of global Schizophrenia study (potentially registrational, tbc depending on pilot study outcome)	2H 2024
FDA registrational study in Autism starts	2H 2024
CE mark submission for Autism (EU)	2H 2024
Completion of ADHD discovery phase study	2H 2024
Completion of pilot saccadometry (sporadic pupil movement) study in Alzheimer's/MCI	2H 2024
CE Mark approval (6 months post submission)	1H 2025
Initiation of FDA registrational study in ADHD	4Q 2024 / 1Q 2025
Initiation of Alzheimers/MCI saccadometry study (potentially registrational tbc depending on pilot study outcome)	4Q 2024 / 1Q 2025
FDA registration study in Autism complete	1H 2025
510k FDA submission in Autism	2H 2025
510k FDA approval in Autism (approx. 6 months after submission)	1Q 2026

*Achieved

Use of Funds: Regulatory approval and ready for launch

FDA 510(k) and CE approval for BlinkLab as a diagnostic aid for autism spectrum disorder

 Allocation of funds	Full Subscription (\$7,000,000)	
	Total	%
Expenses of the Public Offer	\$695,945	8.79%
Software Improvement and Tech Support	\$1,656,568	20.93%
IP Protection	\$150,000	1.90%
Research and Business Development	\$1,031,500	13.03%
Clinical Studies and Regulatory (United States)	\$1,869,609	23.62%
Completion of Clinical Study and Regulatory Submission (Europe)	\$480,000	6.06%
General, Admin & Working Capital	\$1,691,114	21.37%
Ongoing Listing Costs	\$340,000	4.30%
Total (includes pre-IPO funds raised)	\$7,914,736	100%

Note: \$1.4M raised in pre-IPO

IPO metrics and capital structure

	Full Subscription (\$7,000,000)
Shares	
Shares on issue at the date of the prospectus	64,150,003
Shares to be issued under the public offer	35,000,000
Total shares on issue on completion of the public offer	99,150,003
Options	
Options on issue at the date of this prospectus @ 25c	33,750,000
Chairman Options to be issued to the Non-Executive Chairman on Admission	2,000,000
Total Options on issue on completion of the Public Offer	35,750,000
Performance Rights	
Performance Rights on issue at the date of this Prospectus	-
Performance Rights to be issued to the Directors and Officers	3,000,000
Total Performance Rights on issue on the completion of the Public Offer	3,000,000
Fully diluted Share capital	137,900,003
Gross Proceeds of the Public Offer	\$7,000,000
Market Capitalisation on completion of the Public Offer (undiluted) @ 20c	\$19,830,000
Market Capitalisation on completion of the Public Offer (fully diluted) @ 20c	\$27,580,000

BOARD AND MANAGEMENT



Brian Leedman
Chairman



Henk-Jan Boele
CEO



Anton Uvarov
Executive
Director



Jane Morgan
Non-Executive
Director



Richard Hopkins
Non-Executive
Director

Intellectual property

Our patents prohibit other parties to conduct neurometric testing using mobile devices.



BlinkLab has consistently prioritized the development and protection of its intellectual property since its seed funding round in August 2021. Our capital investments sourced from seed investors, government funding, and industry sponsorships - have been primarily utilized for IP and software development.



We are represented by the US-based law firm, Meagher Emanuel Laks Goldberg & Liao, LLP, which ensures our IP protection. We have filed National Stage Applications for 2020-2021 patents across various jurisdictions including the United States, Japan, Canada, Australia, Korea, and the European Patent Office (EPO) in March 2023.



Our portfolio comprises patents filed both by Princeton University, under an exclusive license agreement, and BlinkLab itself. These patents range from systems for neurobehavioral testing to methods for measuring emotional engagement, all of which firmly establish our innovation and leadership in the field.



Patents filed by Princeton University, with an exclusive license agreement in place between Princeton University and BlinkLab:

- PCT application number PCT/US2021/058698 Filed November 10, 2021, entitled "System and Method for Remote Neurobehavioral Testing"
- US patent application number 18/036,009 Filed May 9, 2023, entitled "System and Method for Remote Neurobehavioral Testing"
- European patent application number 21892692.1 Filed March 31, 2023, entitled "System and Method for Remote Neurobehavioral Testing"
- Japanese patent application number 2023-528017 Filed May 10, 2023, entitled "System and Method for Remote Neurobehavioral Testing"
- Canadian patent application number 3,195,596 Filed April 13, 2023, entitled "System and Method for Remote Neurobehavioral Testing"
- Korean patent application number 10-2023-7018839 Filed June 2, 2023, entitled "System and Method for Remote Neurobehavioral Testing"
- Australian patent application number 2021378273 Filed May 23, 2023, entitled "System and Method for Remote Neurobehavioral Testing"



Patents filed by BlinkLab:

- US Provisional patent application number 63/218,607 Filed on November 30, 2022, entitled "Psychopharmacological System and Method Using Eyelid Tracking"
- US Provisional patent application number 63/460,451 Filed on April 19, 2023, entitled "Method And System For Measuring Emotional Engagement"
- US Provisional patent application number 63/548,542 Filed on February 1, 2024, entitled "System And method For Detecting Neurological Condition"