19 March 2025

Blinklab Expands Autism Diagnostics into Adults Through a New Collaboration with VU Amsterdam and NAR

- Blinklab have joined forces with The Vrije Universiteit Amsterdam and the Netherlands Autism Register (NAR) to advance research on autism detection in adults.
- NAR, established by the Dutch Autism Association (NVA) in collaboration with Vrije Universiteit Amsterdam (VU), is one of the largest databases of its kind with 6,800 active participants.
- This collaboration with NAR represents the first study evaluating BlinkLab's autism detection app in adults and individuals with late-diagnosed autism, with a particular emphasis on autism in women.
- The study protocol has received IRB approval and data collection from up to 200 participants will commence in April 2025, with results anticipated in August 2025.
- Study complements the ongoing FDA-registrational trial that is targeting diagnosis in children ages 2-11 years old.

Blinklab Limited (ASX:BB1) ("**Blinklab**", or the "**Company**") is pleased to announce a new partnership with Netherlands Autism Register ("NAR") and Vrije Universiteit Amsterdam ("VU Amsterdam"), focussing on the detection of autism in adults. This study complements BlinkLab's ongoing FDA registrational trial for BlinkLab Dx 1, which is targeting autism diagnosis in children ages 2-11 years old. The new study with VU Amsterdam has the potential to significantly expand our addressable market for autism diagnosis by showing that Blinklab Dx 1 could be an effective platform for autism diagnosis across all age groups. There is an ongoing disparity between adult diagnoses in men and women, and historical methods for diagnosis of such conditions have led to an underdiagnosed population of adults today.

Blinklab test in adults and individuals with late-diagnosed autism

Autonomic reflexes, including eye-blink reflexes, present differently in adults compared to children, reflecting distinct neurometric profiles between age groups. By analysing these patterns, we aim to develop a clinical adjunct tool that is tailored specifically to adult autism diagnosis. This research will be conducted in collaboration with NAR and Vrije Universiteit Amsterdam in the Netherlands, combining BlinkLab's expertise to advance diagnostic solutions across all age groups. Our goal is to ensure that individuals receive accurate assessments and the support they need, no matter their age.

NAR and BlinkLab are entering a collaboration agreement to study the real-world clinical relevance of objective neurobehavioral evaluations in adults with autism. A previous study conducted by BlinkLab in children, aged between 4 and 12 years of age, has shown that these evaluations could achieve a sensitivity of 91% and specificity of 85% using this tool¹. However, it is unknown how this type of result would then translate to an adult population in detecting such conditions. To achieve these objectives, Blinklab will conduct a case-control study.

The participant cohort in this study will include a heterogeneous (age and gender-matched) population of 200 participants, comprising adults both with autism (50%) and without autism. The ultimate aim of the study is to test whether objective neurometric evaluations can be valuable as potential future tools to assist clinicians in diagnosing autism. Note that BlinkLab test is not intended to be used as a standalone device in the diagnosis process. Key performance metrics, such as sensitivity, and specificity will be analysed to quantify the tool's accuracy in correctly identifying autism, whilst minimising false positives related to other neurodevelopmental conditions and potential conflating factors.

About The Netherlands Autism Register (NAR)

The NAR is a unique and extensive database with approximately 6,800 participants, established in 2013 by the Nederlandse Vereniging voor Autisme (NVA) in collaboration with VU Amsterdam. NAR conducts long-term research on autism by collecting data through annual surveys, cognitive assessments, EEG measurements and even genetic screening, allowing researchers to track the experiences and development of autistic individuals over time. The research covers a wide range of topics, including diagnosis, treatment, education, employment, social participation, and overall well-being. By working closely with autistic individuals through co-creation, NAR ensures that its findings are both scientifically valuable and directly relevant to the autistic community.

In addition to contributing to academic research, NAR data is used for policy advocacy, helping to improve autism-friendly policies in areas such as education, healthcare, and employment. Through its continuous research efforts and collaborations, NAR plays a vital role in increasing awareness, promoting inclusion, and enhancing the quality of life for autistic individuals. The collaboration between Blinklab and NAR alongside VU Amsterdam is part of the SCANNER consortium.

About The SCANNER Consortium

The SCANNER Consortium in Europe, of which BlinkLab is a member, was recently awarded a \in 5.3 million grant from the Dutch Research Council. The mission of this consortium is to investigate sex differences in autism at a genetic, brain and behavioural level. Autism is diagnosed four times more often in men than in women. However, little is known about the biological mechanisms behind this disparity, or to what extent this overrepresentation in males may be attributable to bias in the medical research that is also present during the diagnostic process.

¹ ASX Announcement (19 November 2024) – "Large-Scale Study Validates and Enhances BlinkLab's Accuracy in Detecting Autism in Children"

Historically, female participants have often been excluded from medical studies, resulting in data being collected primarily from men and subsequently generalised to women. Similar biases are present in basic research, where men are overrepresented due to the lack of the estrous cycle (the reproductive hormone and ovarian activity cycle), resulting in a large gap in our basic biological and clinical knowledge. This translates into real-life disadvantages for women with neurodivergent conditions, as doctors often ignore the behaviours presented by women that may be symptomatic of such conditions. This means that women are less likely to be referred for diagnostic tests and receive timely support, with long-lasting negative consequences for their quality of life. It is therefore crucial to involve women at all levels of research in this area.

BlinkLab collaborates in the SCANNER Consortium with VU Amsterdam; Karakter – Academic Center for Child and Adolescent Psychiatry; Radboud University; Medical Center, Radboud University; Universiteit Utrecht; HAS Green Academy; Erasmus MC; Netherlands Institute for Neuroscience; Nivel – Netherlands Institute for Health Services Research; University of Twente; Philips Medical Systems Nederland B.V. (Philips MR); Nederlandse Vereniging voor Autisme; Arivis, Noldus Information Technology; Sophia Foundation; WOMEN Inc.; Female Autism Network of the Netherlands; Netherlands Autism Register; Generation R; National Association of General Practice Mental Health Professionals; Alliantie Gender & Gezondheid; National Network Autism in Young Children; National Network of Child and Adolescent Psychiatry; and Special Olympics Netherlands.

This announcement has been approved by the Board of Directors.

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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.



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