



24 January 2024

## **ASX ANNOUNCEMENT**

### **Autonomous Wheelchair Project - US Research Award**

Control Bionics Ltd (ASX: CBL) is pleased to announce that its 100% owned US subsidiary has received a research grant of US\$379,492 (to be provided over the next 18 months) from the Amyotrophic Lateral Sclerosis Association (**the ALS Association**) to further the development of CBL's world's first commercially offered autonomous wheelchair module for power wheelchairs, known as DROVE, and assist us to bring this groundbreaking advancement to the USA — the largest potential market.

#### **About the ALS Association**

Established in 1985, the ALS Association is the only nonprofit organisation in the US fighting ALS (often referred to as motor neurone disease or MND in Australia) on every front. By leading the way in global research, providing assistance for people with ALS, coordinating multidisciplinary care through certified clinical care centres, and fostering government partnerships, the Association is working to make ALS a liveable disease while urgently searching for new treatments and a cure. The Association leads the way in research, care services, public education, and public policy — giving help and hope to those facing the disease.

#### **Why is DROVE unique?**

Many people living with ALS use powered wheelchairs at some point after their diagnosis. Conventional powered wheelchairs only offer independence to the extent that a person can use a joystick or joystick alternative and can only navigate in relatively open spaces. The ALS Association has recognised that people living with ALS in the mid-to-late stages of the disease are not able to make the necessary movements to control or direct the wheelchair and/or make them in a timely manner. Additionally, people living with ALS may not have open spaces with easily navigable turns, especially in their homes.

The DROVE autonomous, self-driving wheelchair module allows people with advanced ALS to move safely and independently around their home or other locations. Users can use multiple assistive technology inputs (e.g., switch scanning, eye gaze) to select from an array of pre-determined locations. Once selected, the wheelchair will independently traverse a path, including turning, entering doorways, and reversing, without the need for any additional user input before stopping at the target location. Sensors designed to detect obstacles will trigger the system to independently stop the wheelchair.



## **Purpose of grant**

The ALS Association has provided the research grant to:

- Examine the practicality for technicians, family, and caregivers to install and use the DROVE system.
- Test navigation and collision avoidance in multiple real-world settings.
- Explore other indoor navigation technologies that could be reasonably accommodated by the system design.
- Create upgrade packages for multiple wheelchair types/manufacturers.
- Determine the FDA regulatory requirements necessary for market introduction.
- Create a roadmap for establishing third-party funding for the commercialised Drove product.

This grant will fund both internal Control Bionic costs as well as external third-party costs.

In announcing the grant, CBL's CEO Jeremy Steele said, 'We are delighted that the ALS Association has awarded us this grant in support of our efforts to bring this groundbreaking technology to the US under the guidance of James Schorey, our CTO and the principal investigator for this grant. Control Bionics remains focused on how we can develop technology to improve the lives of our customers and this award will support and accelerate this objective'. Further he said 'the US is a key market for Control Bionics but also represents a large market for our autonomous wheelchair product and we are excited by the potential this award brings us'.

Kuldip Dave, Ph.D., senior vice president of research at the ALS Association, was also enthusiastic about the award, saying: "Limitations with mobility significantly impact the lives of people with ALS. By supporting the development of assistive technologies like this autonomous wheelchair module, we can help people living with the disease move and maintain their independence for as long as possible. This is vital for improving quality of life and for making ALS truly 'liveable'."

This announcement was authorised by CBL CEO, Jeremy Steele.

## **About Control Bionics:**

Control Bionics is a medical device company assisting patients whose ability to communicate verbally or via text and social media is compromised by diseases such as Motor Neurone Disease (MND) and Amyotrophic Lateral Sclerosis (ALS). Our core patented NeuroNode technology is a wireless wearable device that detects minute signals sent from the brain to any skeletal muscle and is captured as EMG (Electromyography) output. This output is then sent wirelessly via the NeuroNode to a personal computer, enabling speech and other computer-controlled functions like email and texting. Our technology is integrated with eye gaze technology whereby the eye gaze enables a cursor to be moved about a computer screen, driven much like a mouse, and the NeuroNode acts like the mouse button. Control Bionics offers the only such product to harness three modalities — touch, eye and NeuroNode control — which combined yield unique benefits in terms of the ability of patients to express themselves with significantly faster speed and less fatigue.

In October 2023 Control Bionics announced the launch of its next generation NeuroNode device, the NeuroStrip. The ultra-lightweight device features a direct-to-skin electrode which has comprehensive physiological telemetry and is a material advancement on the NeuroNode. NeuroStrip has a range of potential new applications in disability, medtech, and consumer markets.

Control Bionics operates in North America, Australia, Singapore, and Japan.