

11 May 2026

## dorsaVi and Georgia Southern University Advance U.S. Department of Defense-Funded Program Targeting Reduction in Military Training Injuries

*Research via deployment of wearable sensor technology to support real-time gait optimisation in field-based military training environments*

### Key Highlights:

- **DoD-Funded Research Contract:** Georgia Southern University (GSU) has renewed its ongoing research agreement with dorsaVi for a further 12 months, with the study funded by the U.S. Department of Defense (DoD)<sup>1</sup>, targeting a reduction in injuries among military trainees in load bearing field environments.
- **Proven U.S. Defense Pedigree:** dorsaVi's DoD-funded track record includes prior work with U.S. fighter pilots capturing G-force data, providing meaningful credibility in mission-critical military applications and reinforcing the Company's position in this high-value market.
- **Leading US university (Georgia Southern University):** GSU to use dorsaVi sensors to monitor gait and running patterns with runners out in the field or in their natural environment.
- **High-Value Defense Application:** Stress fractures are among the most prevalent training injuries in the military<sup>2</sup>, particularly during load bearing runs on hard surfaces resulting in 6 to 18 weeks of lost operational capacity per incident.
- **Real-Time Biofeedback in Uncontrolled Conditions:** Building on peer-reviewed research in Nature (2021)<sup>3</sup>, the GSU study moves biofeedback from treadmill to field, providing trainees with live running technique data to lower tibial shock aiming to prevent injury before it happens. The project aims to provide normative data for running metrics and potentially provide biofeedback to the runners with the goal of improving their running technique and reducing injuries.
- **Proprietary Biomechanical Platform:** dorsaVi sensors capture vertical accelerometer data at 100Hz, computing Initial Peak Acceleration (IPA), Ground Reaction Force (GRF), Ground Contact Time (GCT), Cadence, and Foot Strike Pattern, metrics directly correlated to injury risk.
- **Two Granted U.S. Patents:** The GSU application is protected by two granted U.S. patents covering dorsaVi's methodology for injury reduction through gait modification.

<sup>1</sup> <https://www.georgiasouthern.edu/2023/10/18/georgia-southern-receives-1-5m-grant-from-u-s-army-medical-research-and-development-to-enhance-soldier-performance-and-readiness>

<sup>2</sup> <https://researchoutput.csu.edu.au/en/publications/incidence-and-risk-factors-for-the-development-of-stress-fracture/>

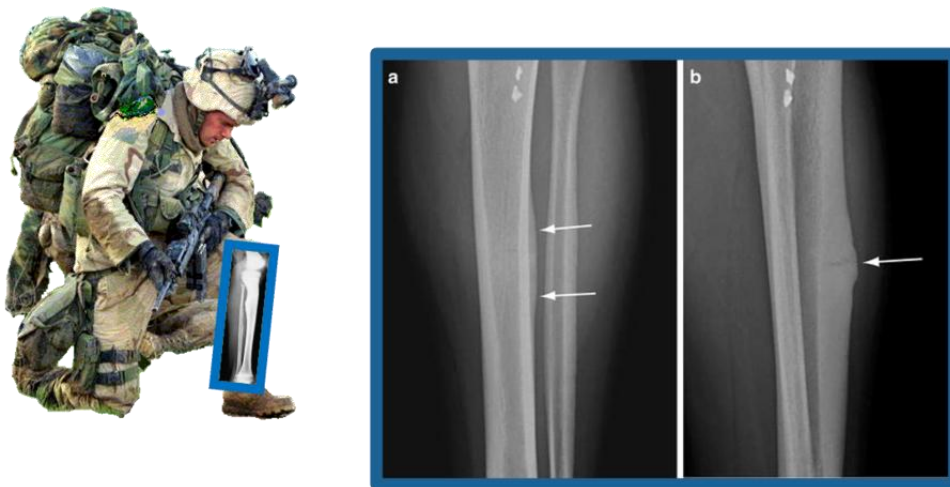
<sup>3</sup> [Music-based biofeedback to reduce tibial shock in over-ground running: a proof-of-concept study | Scientific Reports](#)

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- **Exoskeleton Strategy a Natural Progression:** The Company has identified next-generation exoskeleton systems as the first high-value application pathway for its sensor intelligence platform and RRAM neuromorphic semiconductor program as a direct and capital-efficient extension of the technology being proven in the GSU study.
- **No New Foundational R&D Required:** This entire strategic expansion from the GSU study to exoskeleton applications and broader robotics is built directly on capabilities dorsaVi already possesses or is actively developing, maximising return on existing investment.

**Melbourne, Australia, 11 May 2026** – dorsaVi Limited (ASX: DVL) (“dorsaVi” or “the Company”) is pleased to announce the renewal of its ongoing research contract with Georgia Southern University (GSU), funded by the U.S. Department of Defense (DoD)<sup>1</sup>. The project investigates dorsaVi’s advanced wearable sensor platform in understanding one of the military’s most persistent and costly training challenges, the high incidence of stress fractures among personnel training in load-bearing field environments<sup>2</sup>.

This contract reinforces dorsaVi’s standing as a trusted technology partner in high-stakes government and defence programs and represents a direct commercial validation of the Company’s “Intelligence at the Ultra-Edge”<sup>4</sup> strategy.



**Figure 1:** Load-bearing generic military field training (left) and tibial stress fractures captured on X-ray (right) the high-incidence, high-cost injury class targeted by the GSU study.

## The Problem: Stress Fractures and Military Readiness

Stress fractures represent a significant and measurable readiness problem for defence organisations globally. Injuries are particularly prevalent during intensive training programs that involve running on hard surfaces whilst carrying weighted loads, conditions that are fundamental to military preparation. Once sustained, stress fractures in the foot, tibia, or femur typically sideline personnel for between 6 and 18 weeks, depending on the severity and location of the fracture, creating a direct and quantifiable impact on operational continuity.

<sup>4</sup> Refer to ASX Announcement dated 06 May 2026

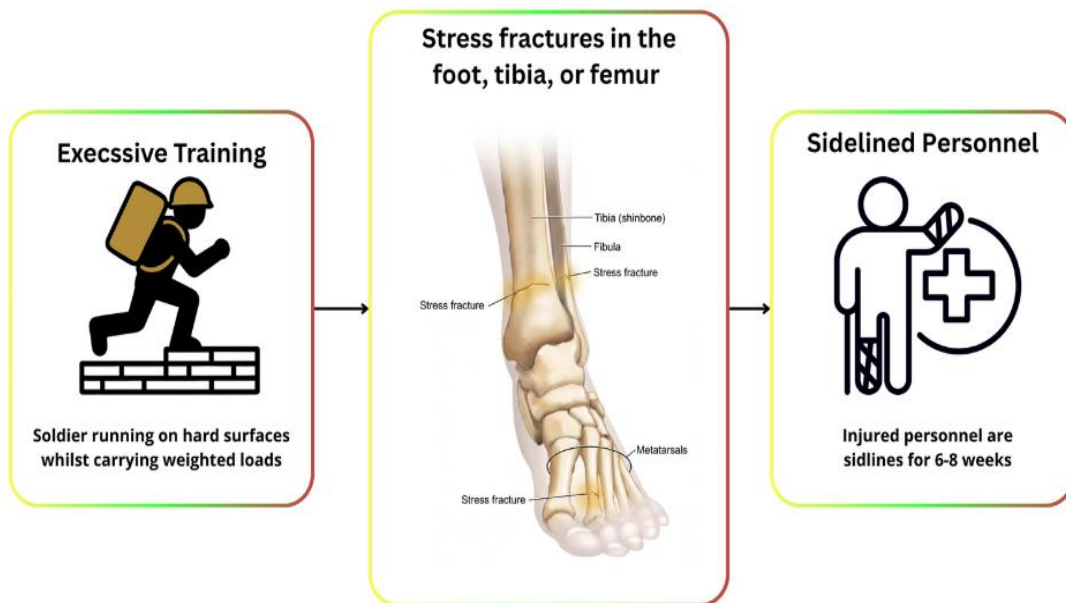
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The clinical evidence highlights elevated tibial shock, measured through **Initial Peak Acceleration (IPA)**, is directly correlated with an increased incidence of these injuries. Critically, peer-reviewed research published in Nature (2021)<sup>3</sup> demonstrated that runners can modify their technique in real time, specifically by “running more quietly” to reduce ground impact forces, when provided with appropriate biofeedback. The GSU study takes this evidence-based approach out of the controlled laboratory and into the field.

## The Solution: dorsaVi’s Sensor Platform in Action

dorsaVi’s FDA-cleared wearable sensors capture vertical accelerometer data at up to 1,125Hz, enabling the real-time computation of a comprehensive suite of biomechanical metrics that are directly relevant to injury risk and running performance:

- **Initial Peak Acceleration (IPA):** The primary correlate of tibial shock and the key metric driving the study’s biofeedback intervention.
- **Ground Reaction Force (GRF):** Measures the force exerted on the ground at foot strike, providing a direct indicator of impact load.
- **Ground Contact Time (GCT):** Tracks how long the foot remains on the ground per stride. Symmetry is critical; contact time decreases at higher running speeds.
- **Cadence:** The number of steps per minute. For elite and sub-elite runners, approximately 180 steps per minute is the established benchmark.
- **Foot Strike Pattern:** Classifies the runner as a forefoot, midfoot, or rear-foot striker a key variable in injury risk profiling.



*Figure 2: Visual illustration of how stress fractures occur and the resulting impact on soldiers*

Crucially, dorsaVi retains the raw 1,125Hz data from close to all subjects. This proprietary dataset is accumulated across thousands of runners over more than a decade, continuously refining the Company’s

AI models, creating a compounding data flywheel that increases the accuracy and commercial value of dorsaVi's intellectual property over time.

The goal of the GSU study is direct and measurable aiming to provide military trainees with real-time biofeedback on their running technique, reduce IPA, reduce tibial shock, and ultimately reduce the number of stress fractures and lower limb injuries sustained during training. This type of field-ready, injury-prevention capability, purpose-built for remote and challenging environments, is where dorsaVi's platform holds a distinct competitive advantage.

## The Bridge: From Field to Intelligent Human-Machine Systems

The GSU study is more than a clinical research program and serves as a live proving ground for a technology capability that extends well beyond injury prevention. The core challenge being solved here is capturing high-fidelity human movement data in an uncontrolled field environment, processing this data at the ultra-edge in real time, and translating it into an actionable signal that changes behavior in the moment.

This is precisely the intelligence problem that sits at the heart of the next generation of human augmentation technology. Exoskeletons, powered prosthetics, and collaborative robotics systems all share the same foundational requirement, and they must sense how the human body is moving, interpret that data in real time, and respond adaptively without lag, error, or the need for a laboratory setting.

The metrics being refined here such as ground contact time, peak acceleration, cadence asymmetry, force distribution are not niche biomechanical data points. They are the same variables that an exoskeleton's control system needs to synchronise with human gait, detect fatigue-induced movement degradation, and prevent both human injury and mechanical failure. dorsaVi is building the intelligence layer that makes that possible.

In this sense, the DoD-funded GSU program is not simply validating a product, but it is stress-testing and further maturing the platform. The data accumulated, the algorithms refined, and the edge-processing architecture hardened through this study can directly underpin dorsaVi's entry into the exoskeleton and broader robotics markets, as detailed in the sections that follow.

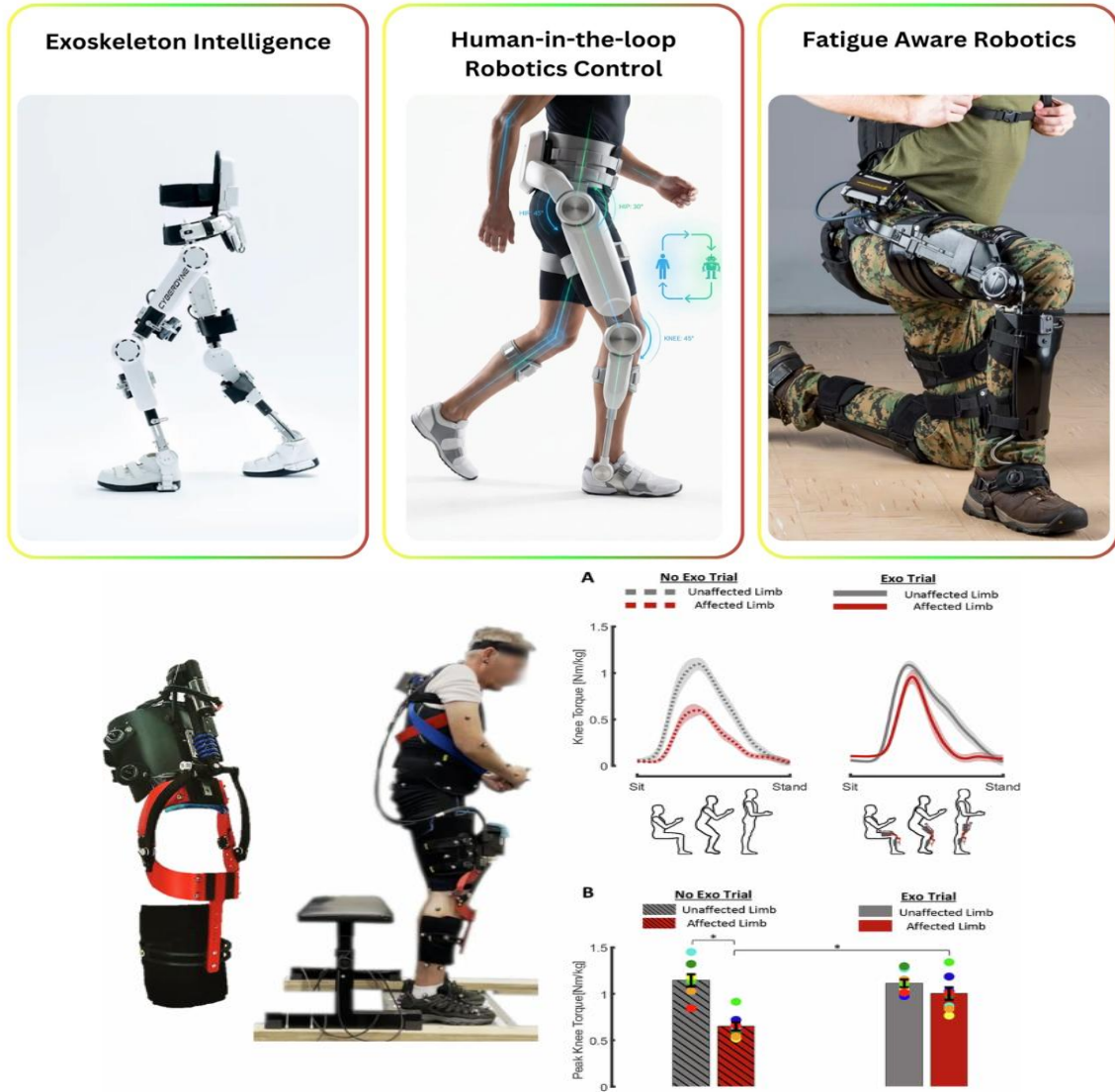
## Why Exoskeletons: The Strategic Logic

Powered exoskeletons are wearable robotic systems that augment human movement, strength, and endurance. No longer confined to R&D environments, these systems are moving rapidly into high-value commercial sectors. From frontline defense to aged care sector, as costs reduce and performance improves. The market is at an inflection point, migrating from early adoption into applications where

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intelligence at the ultra-edge, immediacy of decision making, safety, and energy efficiency are the critical differentiators.

The critical technology gap in current exoskeleton systems is intelligence: specifically, the ability to sense, interpret, and respond to human movement in real time with guaranteed safety. This is precisely dorsaVi's domain expertise.



**Figure 3&4:** Exoskeleton applications spanning defence augmentation, human-in-the-loop control, fatigue-aware robotics, and clinical rehabilitation, the high-value markets dorsaVi's sensor platform is positioned to address.<sup>5 6 7</sup>

<sup>5</sup> [www.cyberdyne.eu/en/products/medical-device/hal-limb/](http://www.cyberdyne.eu/en/products/medical-device/hal-limb/)

<sup>6</sup> [www.defensenews.com/digital-show-dailies/eurosatory/2022/06/16/the-army-could-take-a-run-at-developing-a-robotic-warrior-suit/](http://www.defensenews.com/digital-show-dailies/eurosatory/2022/06/16/the-army-could-take-a-run-at-developing-a-robotic-warrior-suit/)

<sup>7</sup> [Powered knee exoskeleton improves sit-to-stand transitions in stroke patients using electromyographic control | Communications Engineering](#)

The Company is formally exploring commercial opportunities across three high-value application areas, each a direct extension of capabilities it already possesses:

EXOSKELETON INTELLIGENCE LAYER	HUMAN-IN-THE-LOOP ROBOT CONTROL	FATIGUE-AWARE ROBOTICS
<p><b>Sensor-Driven Exoskeleton Control</b></p> <p><i>Fast to market   Clear demand</i></p> <p>DVL sensors embedded in exoskeleton systems as the real-time movement intelligence layer. Provides adaptive gait control, joint tracking, and force feedback to the exoskeleton's actuators. Licensing and OEM partnership model — fast path to revenue.</p>	<p><b>Closed-Loop Human-Robot Systems</b></p> <p><i>Differentiated   Defence + industrial</i></p> <p>DVL sensors combined with neuromorphic edge processing to create closed-loop human-in-the-loop control. The exoskeleton responds to the human; the human guides the robot — with mathematically guaranteed safety boundaries. Strong defence and industrial applications. RRAM neuromorphic chip enables on-body edge processing.</p>	<p><b>Predictive Fatigue &amp; Injury Prevention</b></p> <p><i>Unique positioning   Safety/compliance</i></p> <p>DVL's motion analytics detect fatigue patterns, asymmetric loading, and injury risk in real time. The exoskeleton automatically adjusts assistance based on the wearer's physical state. Addresses mandatory workplace safety compliance requirements globally. Creates a data flywheel: continuous biomechanical data feeds AI models that improve over time.</p>

## Market Opportunity: Growing and Strategically Aligned

The markets targeted by this platform are large and growing rapidly, driven by adoption across healthcare, defence, industrial, and rehabilitation applications. The broader human-robot collaboration ecosystem encompasses collaborative robots, autonomous mobile robots, and surgical robotics, representing a combined addressable market.

Key market segments directly addressable by dorsaVi's platform include:

- Defence & Military:** Soldier augmentation, load carrying, and endurance enhancement. Major programs active across the US, EU, and Asia-Pacific. Safety-certified human augmentation is a critical procurement requirement. dorsaVi's DoD-funded track record, including the GSU study and prior work with U.S. fighter pilots capturing G-force data, provides meaningful credibility in this high-value market.
- Industrial & Construction:** Reducing musculoskeletal injuries in heavy manual work. Workplace safety compliance is driving adoption globally. dorsaVi's fatigue-aware analytics address a direct regulatory need.
- Rehabilitation & Healthcare:** Powered exoskeletons for stroke recovery, spinal cord injury rehabilitation, and mobility assistance. Sensor-driven adaptive control is the key differentiator.
- Aged Care:** Assistive exoskeletons for elderly populations across Asia-Pacific. Policy-supported, high-growth market aligned with dorsaVi's geographic strengths.

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## RRAM & Neuromorphic Computing: The Ultra-Edge Advantage

A key enabler of dorsaVi's exoskeleton strategy is the Company's RRAM-based neuromorphic semiconductor development program. Neuromorphic computing mimics the architecture of the human brain, processing information in parallel with the ability to learn and adapt at the ultra-edge, while using minimal power. For exoskeleton applications, this is transformative.

Current exoskeleton processors rely on conventional architectures that are power-hungry, latency-prone, and often dependent on cloud connectivity. dorsaVi's neuromorphic approach enables:

- **On-body real-time processing:** Sensor fusion, safety calculations, and adaptive control algorithms run directly on the exoskeleton. No cloud round-trip required.
- **Ultra-low power consumption:** RRAM-based neuromorphic chips operate at a fraction of the power of conventional processors, critical for battery-powered wearable systems.
- **Continuous edge learning:** The neuromorphic architecture enables the processor to adapt to individual wearers over time, improving control precision and safety.
- **Vertically integrated stack:** DVL's neuromorphic chip combined with its proprietary sensor intelligence creates a purpose-built compute + sensing stack for human augmentation and collaborative robotics.

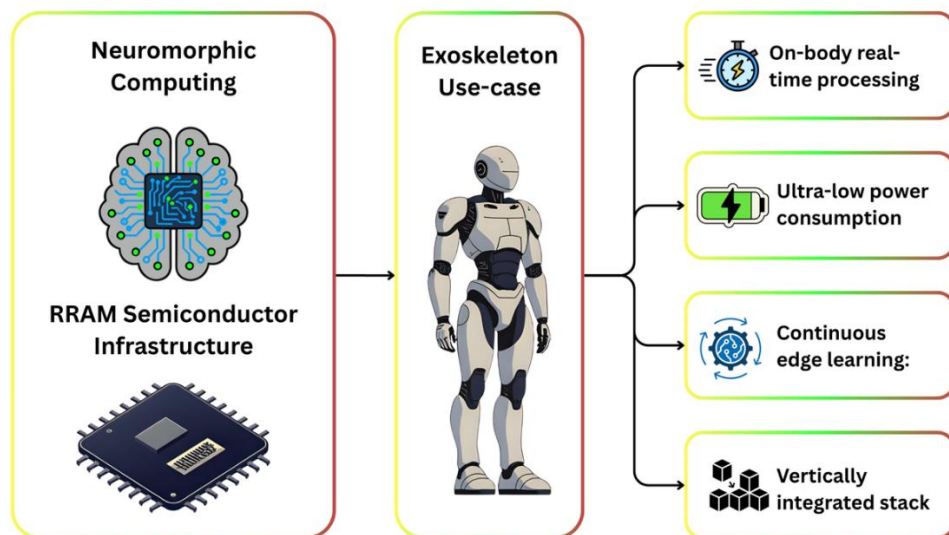


Figure 5: Illustration to show how Neuromorphic enabled RRAM enable Exoskeleton Use Case

Following the recently completed acquisition of neuromorphic and in-memory processing IP from one of the world's foremost research universities in electrical engineering and nanotechnology, dorsaVi has commenced discussions with strategic partners and venture capital firms in Israel to progress commercialisation. This IP provides additional depth in circuit-level design for memristor-based logic and in-memory computation, capabilities central to the Company's "Intelligence at the Ultra-Edge" strategy.

## Strategic Outlook

The successful execution of this roadmap establishes dorsaVi as a foundational intelligence platform for the multi-billion-dollar human-robot collaboration sector. By activating its existing sensor heritage, proprietary data assets, and RRAM neuromorphic program, the Company is creating a clear and capital-efficient path to commercial deployment across defence, industrial, and healthcare verticals. This strategy achieves three compounding objectives:

- **Commercial Entry:** Capturing a first-mover position in the high-growth exoskeleton market by providing the missing piece of real-time intelligence required for safe, adaptive control, validated in field conditions.
- **Capital Efficiency:** This entire strategic expansion requires no new foundational R&D. It activates the Company's existing medical-grade IP and sensor heritage, maximising return on investment for the Company's semiconductor and clinical programs.
- **Platform Expansion:** Building competitive advantages that extend beyond wearables into the USD 100 billion broader robotics ecosystem<sup>8</sup>, including cobots, surgical platforms, and autonomous mobile systems.

### Matthew Regan, Group Chief Executive Officer, dorsaVi:

*"We are excited to continue the project with the clinical team at GSU, who have been exceptional to work with. We are confident that delivering these biomechanical insights to runners in real time will enable meaningful technique improvements, reducing the risk of stress fractures and lower limb injuries. This research is transferable to all runners, particularly those in remote environments where technique feedback has simply not been available before."*

*"The GSU study is the proof of concept for everything that follows. We are not conducting a research project, we are field-testing a platform under some of the most demanding conditions imaginable, with DoD backing. The same sensor intelligence being used to prevent stress fractures in military trainees is the intelligence layer that a powered exoskeleton, a cobot, or an autonomous defence system needs to operate safely alongside a human being. By integrating our gold-standard motion data with our neuromorphic and RRAM architecture, we are giving robotics a digital nervous system. We are shifting from being a sensor company to providing the essential intelligence layer that allows advanced machinery to synchronise with human intent — and that is a very different, and considerably larger, business."*

## Other information

The Agreement includes standard termination clauses for the 12 month extension. dorsaVi will not incur any material costs in relation to this Agreement.

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<sup>8</sup> Refer to Table 3 in ASX Announcement dated 28 April 2026

This release has been authorised for lodgement to the ASX by the Board.

- ENDS -

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### Forward-Looking Statements

This announcement may contain certain forward-looking statements and projections. Such forward-looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. dorsaVi Limited does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projections based on new information, future events or otherwise, except to the extent required by applicable laws.

### About dorsaVi

dorsaVi Ltd (ASX: DVL) is an ASX company focused on delivering intelligence at the ultra-edge. Enabling real time AI-driven decisions to be made locally, at the point of sensing, without reliance on cloud connectivity. dorsaVi's wearable sensor technology captures, quantifies, and assesses detailed human movement and position outside a biomechanics lab, in both real-time and real situations for up to 24 hours, across clinical applications, elite sports, and occupational health and safety. Underpinning this vision, dorsaVi is building the hardware foundations of the ultra-edge through strategic investments in neuromorphic computing and RRAM memory technology. dorsaVi's focus is on three major markets:

- **Ultra-Edge Intelligence:** dorsaVi's sensor platforms are designed to process and act on data locally, embedding AI-driven inference directly at the point of capture. By investing in neuromorphic computing and RRAM memory technology, dorsaVi enables real-time decision-making without round-tripping to the cloud, delivering lower latency, lower power consumption, and reliable operation in latency- and connectivity-constrained environments across industrial, clinical, and autonomous systems applications.
- **Workplace:** dorsaVi enables employers to assess risk of injury for employees as well as test the effectiveness of proposed changes to OHS workplace design, equipment or methods based on

objective evidence. dorsaVi works either directly with major corporations, or through an insurance company's customer base with the aim of reducing workplace compensation and claims. dorsaVi has been used by major corporations including London Underground, Vinci Construction, Crown Resorts, Caterpillar (US), Boeing, Monash Health, Coles, Woolworths, Toll, Toyota, Orora, Mineral Resources and BHP.

- Clinical: dorsaVi is transforming the management of patients with its clinical solutions (ViMove+) which provide objective assessment, monitoring outside the clinic and immediate biofeedback. The clinical market is broken down into physical therapy (physiotherapists), hospital in the home and elite sports. Hospital in the home refers to the remote management of patients by clinicians outside of physical therapy (i.e. for orthopaedic conditions). Elite sports refer to the management and optimisation of athletes through objective evidence for decisions on return to play, measurement of biomechanics and immediate biofeedback to enable peak performance.

Further information is available at [www.dorsavi.com](http://www.dorsavi.com)

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