

## BLOOD FLOW MONITORING & THERAPEUTIC ULTRASOUND FOR VETERINARY MEDICINE

Portable Imaging and Therapeutic Devices

### BARRIERS TO ADVANCED VETERINARY CARE

Veterinary medicine faces significant challenges, including limited access to advanced imaging, high costs of traditional equipment, and complex regulatory pathways for new devices. These barriers can make it difficult for practices to adopt the latest technologies.

Additionally, veterinarians must address unique obstacles: many animal patients require anesthesia for procedures, there is a wide range of species and sizes to treat, and some animals are difficult to transport or access for care. Versatile, portable solutions are essential.

### Solution: Open-Motion and Open-LIFU

Openwater delivers advanced, noninvasive imaging and targeted therapies in a portable and modular platform designed for veterinary use. Our devices enable real-time blood flow measurements following musculoskeletal injuries. The devices also accelerate healing of tendon, ligament, and bone injuries through low-intensity focused ultrasound (LIFU).

Openwater's devices are uniquely suited to the needs of veterinary medicine, enabling early disease detection, real-time monitoring, and advanced interventions without invasive procedures or anesthesia.

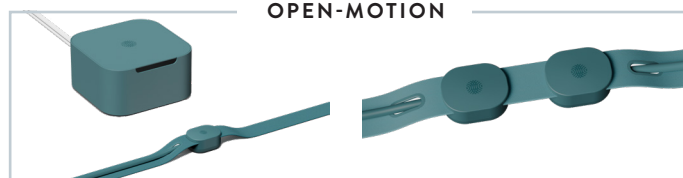
#### KEY BENEFITS:

- ◆ PORTABLE
- ◆ NON-INVASIVE
- ◆ NO RADIATION
- ◆ LIGHTWEIGHT
- ◆ LOW COST



*LIFU Accelerates Tendon and  
Ligament Healing Through Targeted,  
Noninvasive Ultrasound Therapy*

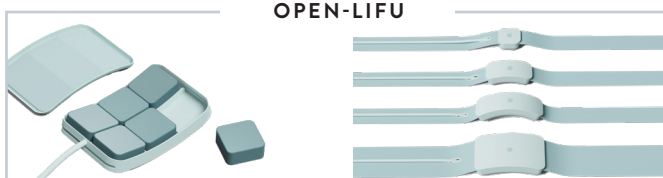
## OPEN-MOTION



A diagnostic platform designed for noninvasive measurement of blood flow, blood volume, micro-motions, and oxygenation deep beneath tissue surfaces.

- ◆ Wearable, modular design for a wide range of applications
- ◆ Microsecond laser pulses with high sensitivity and minimal exposure
- ◆ Integrated machine learning for real-time classification and analysis
- ◆ Compliance with IEC 60601-1; ISO 13485 certification in process
- ◆ Complete platform or OEM hardware/software components

## OPEN-LIFU



Delivers low-intensity focused ultrasound (LIFU) therapy with precision and flexibility.

- ◆ Patient-specific targeting
- ◆ Modular, scalable architecture for various applications
- ◆ Lightweight, wearable, and portable for field use
- ◆ Sophisticated software tools for planning, delivery, and monitoring
- ◆ Flexible pulse parameters for tailored therapeutic protocols
- ◆ Safety-focused design with IEC 60601-1 compliance
- ◆ Complete system or OEM hardware/software components

## *Open-LIFU Ultrasound Significantly Slows Glioblastoma Tumor Growth in Preclinical Mouse Study*

### Preclinical Study Shows Positive Results:

Stunning tumor shrinkage was observed in a preclinical study of 38 mice with glioblastoma after a single 2-minute Openwater ultrasound treatment. Using our wearable, non-invasive headset—adapted for smaller mice—tumor growth dramatically decreased compared to controls.<sup>1</sup>

The focused, low-intensity ultrasound precisely targeted tumors while sparing healthy tissue, and results suggest that optimizing ultrasound frequency may further enhance effectiveness. This breakthrough demonstrates the potential of Openwater's open-source therapeutic ultrasound platform to enable rapid, non-invasive cancer therapy and accelerate future clinical research.

<sup>1</sup>Openwater. Results Overview: Preclinical Oncolysis Study Using Focused Ultrasound for Glioblastoma Lysis. White paper. Openwater, 2024.



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