

MIMOSA Pro

Making the invisible, **VISIBLE**.

The MIMOSA Pro is a US FDA 510(k)-cleared pocket-sized imaging device that looks below the surface of the skin to assess how well the tissue is perfused and oxygenated.

3 IMAGES IN 1 CAPTURE

Capture tissue oximetry, temperature, and digital images in less than one second without requiring patient contact.

HIPAA-COMPLIANT WEB PORTAL

Gain real-time validation into efficacy of treatment modalities and proactively adapt care plans to improve patient outcomes.

ALL HEALTHCARE PROFESSIONALS

Pocket-sized lightweight technology that fits seamlessly into existing workflows and can be used by any healthcare professional in any health setting.

AI-DRIVEN INSIGHTS

Improve patient outcomes with real-time point-of-care insights that help drive informed decisions about next steps in care.



Seeing **BENEATH** the skin's surface.

Using infrared and near-infrared wavelengths, the MIMOSA Pro can process multiple images in less than one second.



Oximetry Image (Near-Infrared)

Represents oxygen perfusion in area of interest.

RED: healthy or high tissue oxygenation (>50%*)

BLUE: ischemic with no tissue oxygenation (<39%*)



Thermal Image (Infrared)

Illustrates temperature in °F

If temperature difference between sites is:

- 2°F*: charcot or inflammation
- 4°F*: infection (2.2 °F)



Digital Image

What the naked eye can see
(ie. exposed wounds, redness, bruising)

***DISCLAIMER:** these numbers are a guide to image interpretation.

Tracking **PATIENT PROGRESS** over time.

The images captured are then uploaded to a HIPAA-compliant MIMOSA web portal for further analysis.

- Monitor patient progress between treatments
- Identify early opportunities for intervention
- Collaborate with clinicians to improve patient outcomes



Visit www.mimosadiagnostics.com to learn more



CLINICAL APPLICATIONS

Using Near Infrared Spectroscopy (NIRS)

WOUND CARE, VASCULAR DISEASE, AND PRESSURE INJURIES

WOUND CARE:

Poor healing lower extremity wounds often require vascular evaluation to assess recovery potential and treatment options. Without insights into oxygen levels within the tissue on which the wound lies, wounds may become more severe and can even demand an otherwise avoidable limb amputation.

HYPERBARIC OXYGEN THERAPY (HBOT)

MIMOSA Pro helps practitioners identify good and bad candidates to maximize value and minimize costs of HBOT. Images to the right indicates that HBOT is effective for this individual and provides the necessary documentation for clinicians to optimize their use of HBOT.

LONGITUDINAL DOCUMENTATION

Case studies in which telemonitoring using the MIMOSA Pro was performed to screen for diabetic foot ulcer emergence and progression demonstrated the technology to be an efficacious and cost-effective approach¹. The mobile screening practices offered by MIMOSA thus create new avenues for at-home management of diabetic foot risk.

INVASIVE VASCULAR PROCEDURES:

Emerging data is demonstrating that multispectral NIRS can accurately detect early changes in microcirculation post-invasive treatment of chronic ulcers². These detections provide useful insights into the efficacy of invasive vascular treatments, ensuring that they performed optimally.

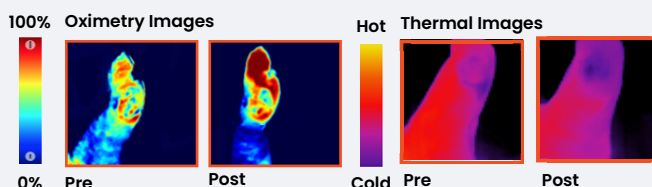
SCREENING FOR PERIPHERAL VASCULAR DISEASE:

Multiple studies have found that NIRS can accurately measure tissue oxygenation to be used as an indicator of peripheral vascular disease (PVD)³. Tissue oxygenation readings extracted using such technology has proven to be a more reliable screening tool for PVD than the ankle brachial index, skin temperature, or the transcutaneous oxygen measurement.

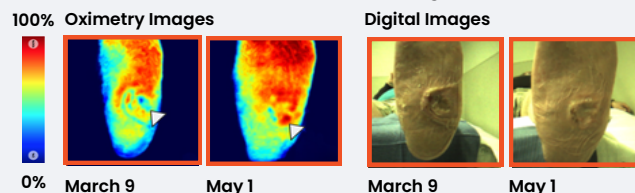
PRESSURE INJURIES:

On average, a 100-bed hospital in the US will spend \$5.2M on treating pressure injuries and associated litigation. However, with appropriate routine skin assessments, up to 60% of hospital-acquired pressure injuries are preventable⁴. Risk factors for pressure injuries include compromised perfusion, circulation and oxygenation of the skin, as well as body temperature. Real world data has shown the utility of the MIMOSA Pro to document and detect the formation of pressure injuries. Literature also shows that the use of thermography can support the identification of deep tissue injuries⁵.

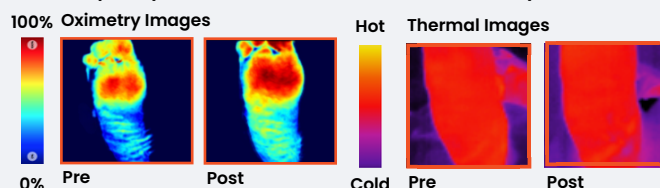
Diabetic Foot Ulcer | Medial Images (HBOT)



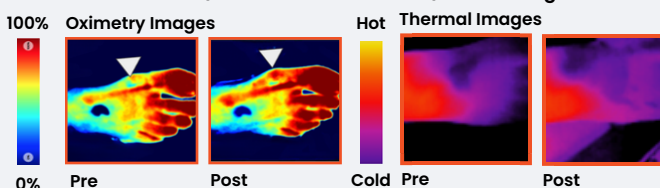
Diabetic Foot Ulcer | Total Contact Casting



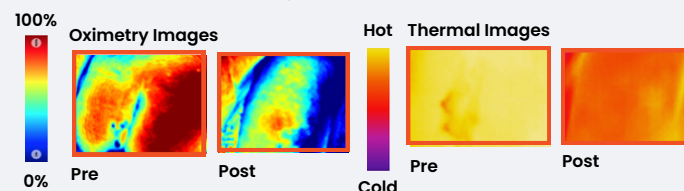
Radiofrequency Ablation | Chronic Venous Insufficiency | Plantar Images



Arterial Intervention | Critical Limb Ischemia | Dorsal Images

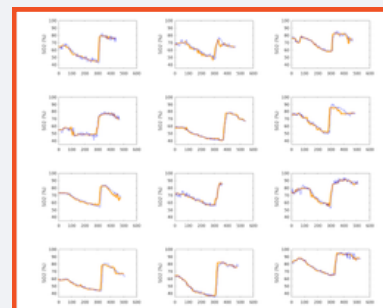


Pressure Injury | Sacrum Images



Comparison to the Traditional Gold Standard Technology

A study comparing the clinical performance of the MIMOSA device relative to the predicate StO₂ measuring technology (the ViOptix ODYSSEY). The study monitored tissue oxygen saturation in the thenar eminence and forearm during a vascular occlusion test using both devices. Based on a 95% confidence interval of the line of best fit, the study revealed the two device outputs to be in statistical agreement. These results support substantial equivalence between the two devices and no adverse events or complications were encountered during or after clinical testing. The MIMOSA device was found to not raise any new questions of safety or effectiveness, yet the MIMOSA device differed from the predicate technology through its non-contact application and use of additional wavelengths of light to the tissue in order to improve measurement reliability and provide a more robust dataset.



1. Rickards T., et al. "A Picture is worth a thousand words: Using Innovative Technology To Succor Older Adults with Diabetic Foot Ulcers to Age-in-place: A Case Series." (2023). *Adv Skin Wound Care*. Accepted for publication.
2. Oropallo A., et al. "The Use of Mobile Multispectral Near-Infrared Spectroscopy to Detect Revascularization of the Microcirculation of Individuals with Venous Leg Ulcers Post-treatment: A Case Series." *Symposium on Advanced Wound Care*, Spring 2023.
3. Chin, Jason A., Edward C. Wang, and Mellina R. Kibbe. "Evaluation of hyperspectral technology for assessing the presence and severity of peripheral artery disease." *Journal of vascular surgery* 54.6 (2011): 1679-1688.; Chiang, Nathaniel, et al. "Evaluation of hyperspectral imaging technology in patients with peripheral vascular disease." *Journal of Vascular Surgery* 66.4 (2017): 1192-1201.
4. Joyce Pittman, Terrie Beeson, Jill Dillon, Ziyi Yang, Janet Cuddigan; Hospital-Acquired Pressure Injuries in Critical and Progressive Care: Avoidable Versus Unavoidable. *Am J Crit Care* 1 September 2019; 28 (5): 338-350. doi: <https://doi.org/10.4037/ajcc2019264>
5. Langemo DK et al. *Adv Skin Wound Care* 2017; 30:109-19

Learn more

