

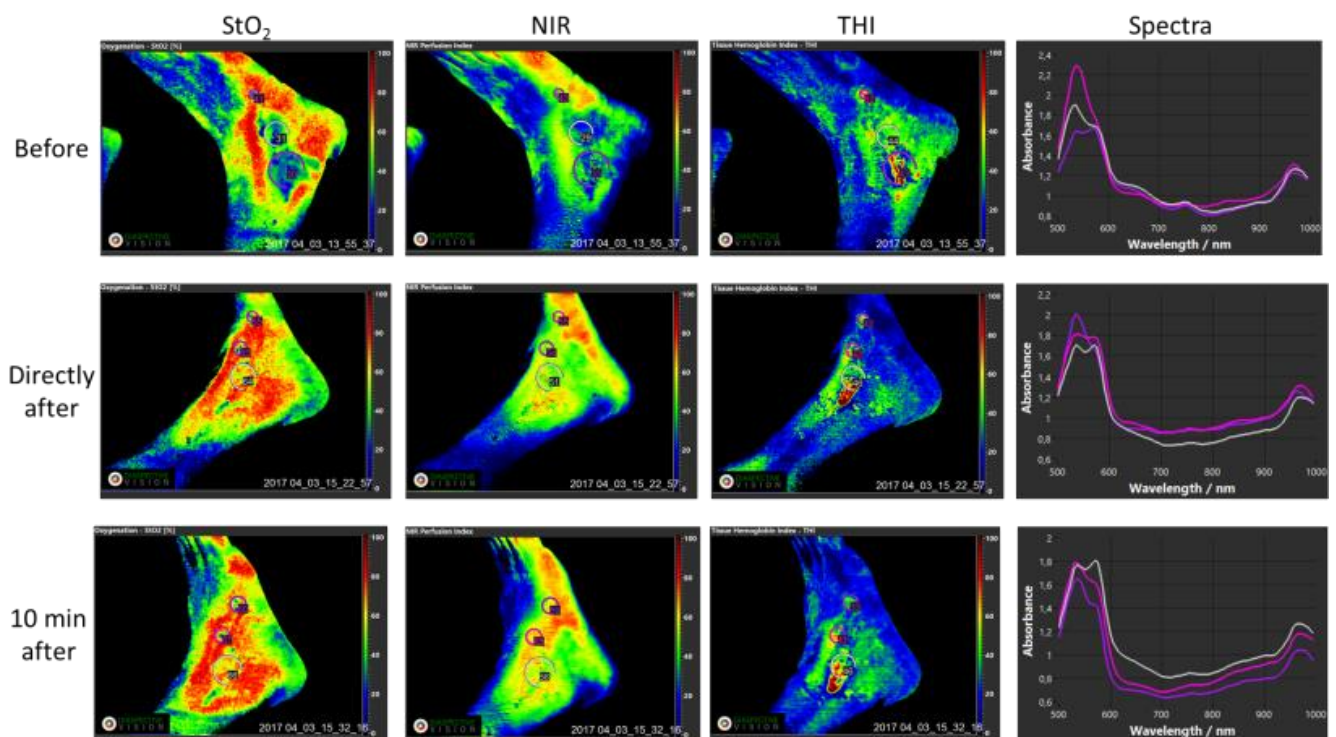
# Measurement of Tissue Oxygenation with a Hyperspectral Tissue Camera System before and after Topical Wound Oxygen (TWO<sub>2</sub>) therapy

## Male Patient, 82 years old, Peripheral Artery Disease (PAD)

Main diagnosis	Secondary diagnosis
Severe Arterial ulcer due to PAD of lower right leg Fontaine Stage IV: Necrosis / gangrene of the limb Condition remains after Percutaneous transluminal angioplasty (PTA) of A. tibular. post., A. fibular, A. plantar right (08/2014) Condition remains after PTA of A. tibular anterior, A. fibular right (03/2015)	Chronic venous insufficiency Coronary heart disease with bypass surgery in 1986 and 1994 Arterial hypertension. Intermittent atrial fibrillation Prostatectomy for prostate carcinoma in 2006 Right total hip replacement in 2007
Beginning of 2016	August 2015 - September 2016
New formation of a deep ulcer in the area of the back of the right foot with transition to lateral foot	Surgical treatment of the extensive ulceration with Reverdin Skin Graft fails and ulcer size increases

Hyperspectral Camera measurements made Before and After the application of Topical Wound Oxygen (TWO<sub>2</sub>) therapy for 60 mins. Comparison of the Before and After TWO<sub>2</sub> application  
Hyperspectral measured values:

1. Significant improvement of oxygen saturation in the superficial tissue (StO<sub>2</sub>)
2. Significant improvement of oxygen saturation in the deeper tissue layers (NIR)
3. Increase of total hemoglobin (THI)
4. Partially lasting effects in the entire distal lower limb and foot area

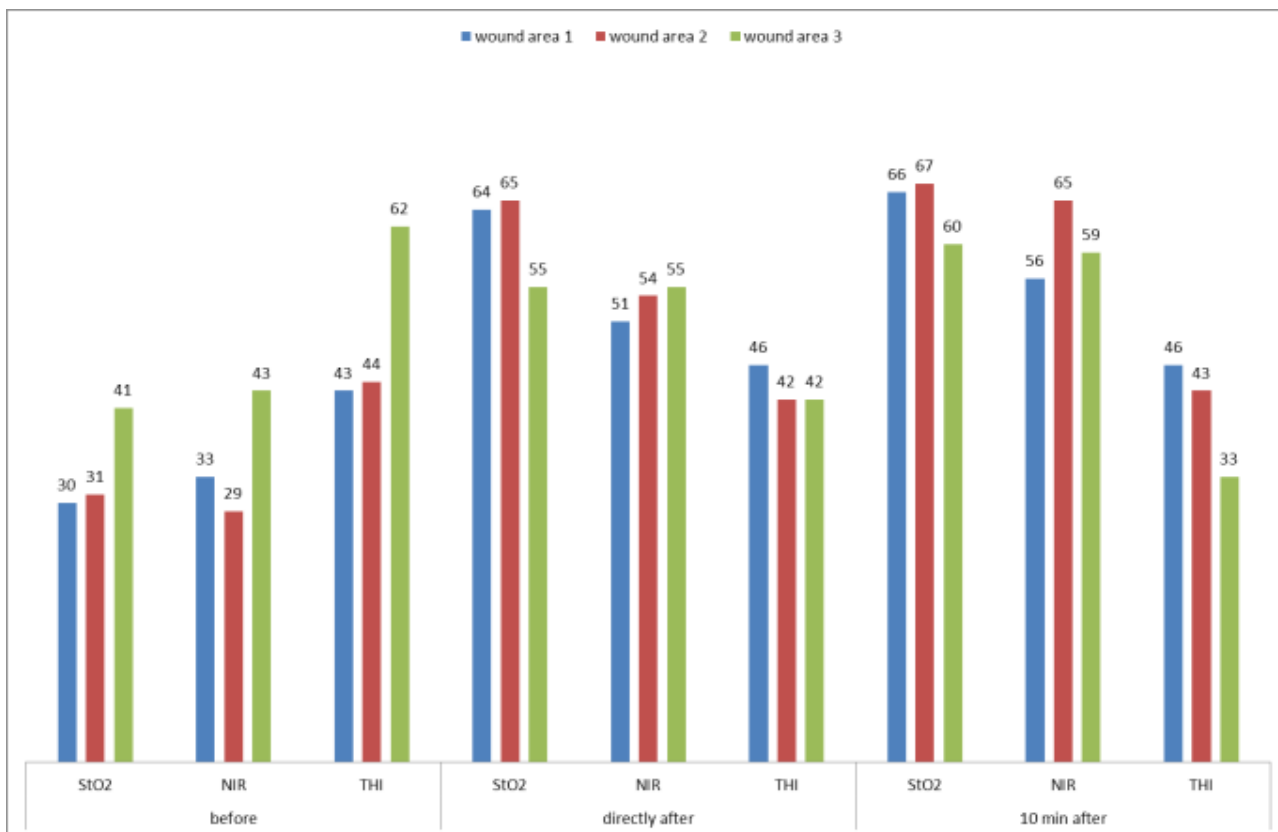


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### **About TIVITA™ Tissue – The Hyperspectral Tissue Camera for Objective Measurements of Physiological Parameters**

The TIVITA™ Tissue (Diaspective Vision GmbH, Germany) is an innovative imaging technology for the easy and flexible assessment and documentation of tissue areas. It allows for the contact-free, non-invasive recording of various tissue parameters of surfaces over larger areas. Important parameters such as Tissue Oxygenation and Perfusion can be measured within a few seconds.

The TIVITA™ Tissue System uses the Chemical Color Imaging Technology for data acquisition, calculation and display.

The visible (VIS) and near infrared (NIR) spectral range is recorded by the image acquisition system. It is like an imaging tissue oximeter and relies on the latest advantages in hyperspectral imaging. Instead of a single-spot-reading, the system creates several pseudo-color images of each parameter. For the measuring procedure, the TIVITA™ Tissue is placed approx. 50 cm above the subject.



### **About Advanced Oxygen Therapy (AOTI) and Topical Wound Oxygen (TWO<sub>2</sub>) therapy**



AOTI is dedicated to providing Advanced Wound Care products that utilize our patented non-invasive TWO<sub>2</sub> therapy. Our innovative products can help close all wound types, and are particularly effective in chronic (diabetic, pressure, and venous ulcers) and acute (post-surgical, cosmetic, and burn) wounds.

TWO<sub>2</sub> therapy is unique in that it can be applied at the patient's home or in any healthcare setting and helps to address the fundamental reasons chronic wounds fail to heal, by; reversing wound tissue hypoxia, stimulating the underlying cellular mechanisms needed for tissue regeneration, creating non-contact sequential compression to reduce edema and promote perfusion, and creating an environment that destroys unwanted pathogens and combats infection.