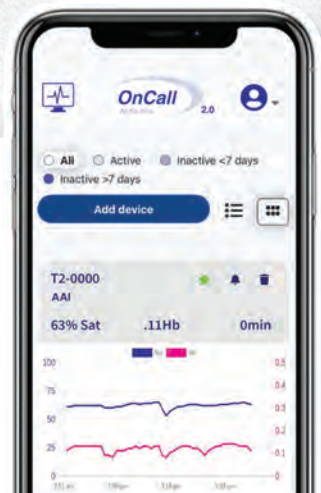


T-Stat

FREE FLAP PERFUSION UNDER CONTROL



SPECTROS

**REAL-TIME
ANYTIME
ANYWHERE**

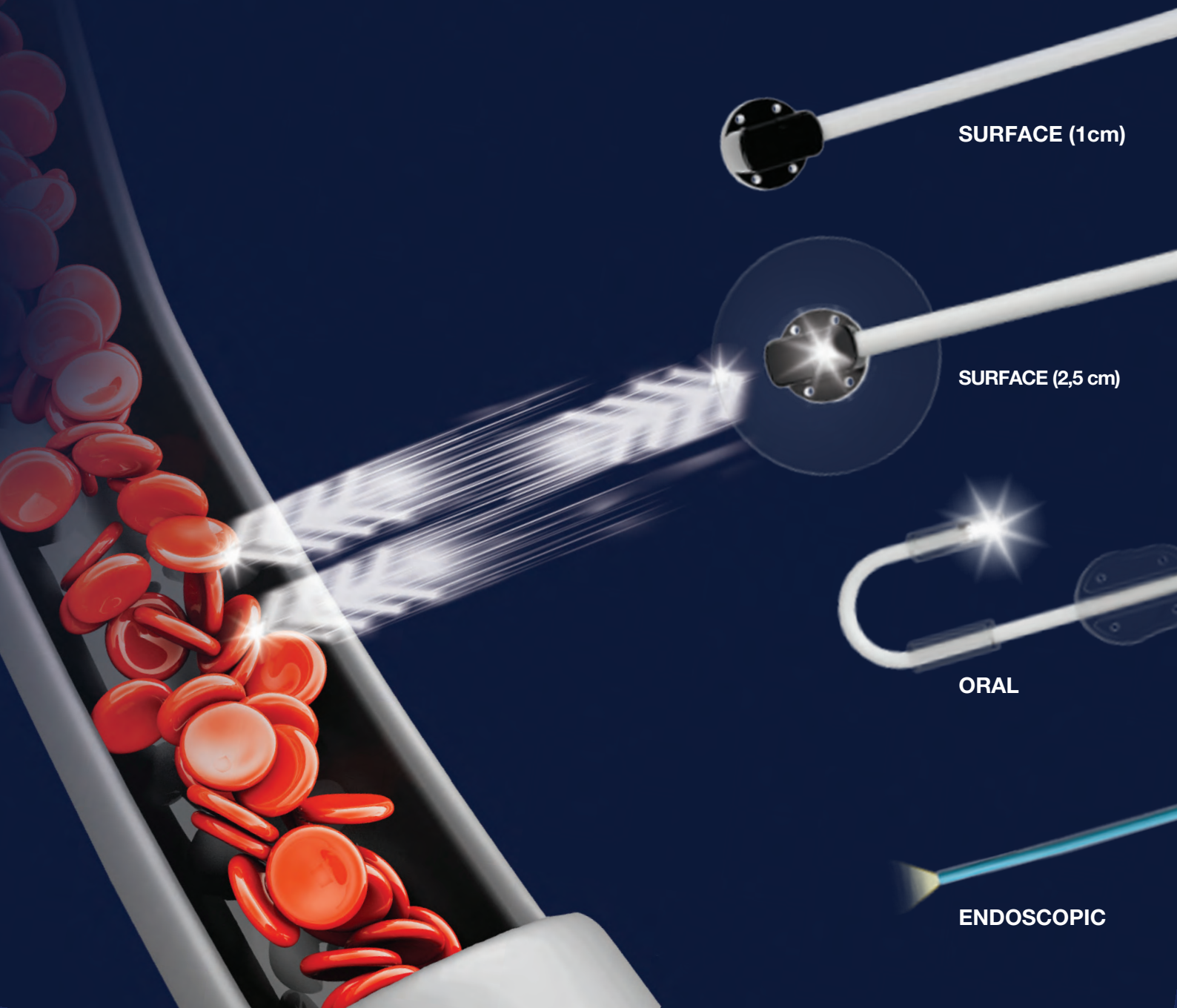


FREE FLAP MONITOR

The T-Stat tissue oximeter provides real-time, continuous, spectrographic monitoring of free flap perfusion. It works by emitting broadband white light into the microvascular network and analyzing light reflectance and absorbance with precision.

Using specialized optical fiber sensors, T-Stat is tailored to monitor various free flap types, ensuring **precise and reliable readings of oxygen delivery (O₂) and hemoglobin concentration (Hb)**, regardless of flap location, skin tones (including dark skin), or environmental lighting.

T-Stat offers 4 non-invasive sensor options to meet the specific needs of each case:



EARLY DETECTION OF ARTERIAL AND VENOUS COMPLICATIONS



The T-Stat system provides precise, capillary-weighted measurements of **StO₂%** and **Hb concentration** at a depth of 2-3mm, detecting even subtle arterial or venous flow complications **hours before they are visible** to the naked eye or detectable by other monitoring tools.

With its accurate, real-time readings, T-Stat enables early interventions, **where every minute is critical to the success of free flap salvage.**

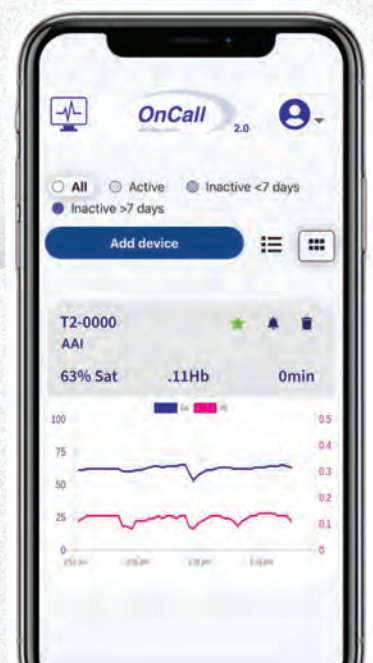
T-Stat eliminates the need for hourly Doppler assessments and frequent flap clinical examinations, helping reduce the workload for HCPs.

24H/7DAYS REMOTE MONITORING & ALERTS

T-Stat seamlessly integrates with the web-based OnCall app, providing **real-time visualization of free-flap monitoring via smartphone** or other devices. It sends instant text alerts for any perfusion complications, enabling timely decisions and interventions.

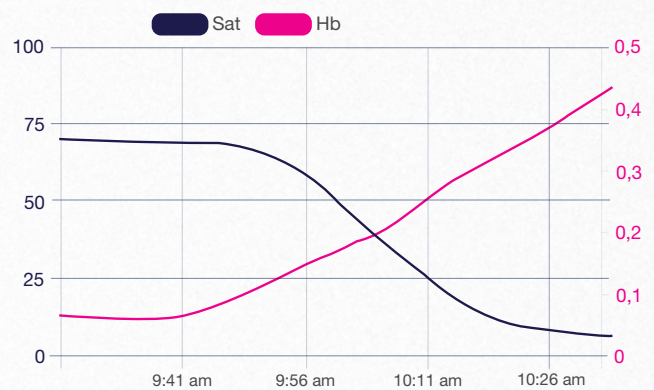
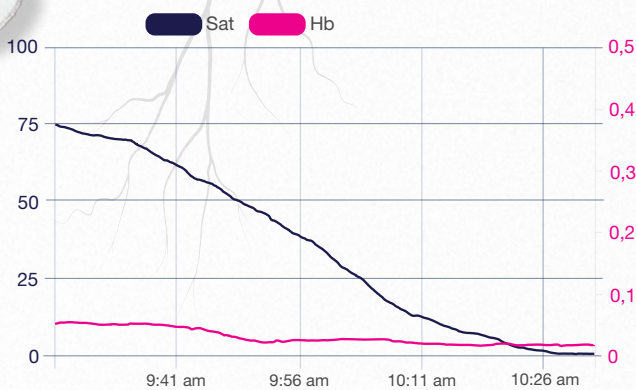
With encrypted, HIPAA-compliant data storage, T-Stat ensures patient information remains secure and delivers confidence and peace of mind.

ANYTIME. ANYWHERE.



IS THE COMPLICATION

ARTERIAL OR VENOUS?



ARTERIAL OCCLUSION

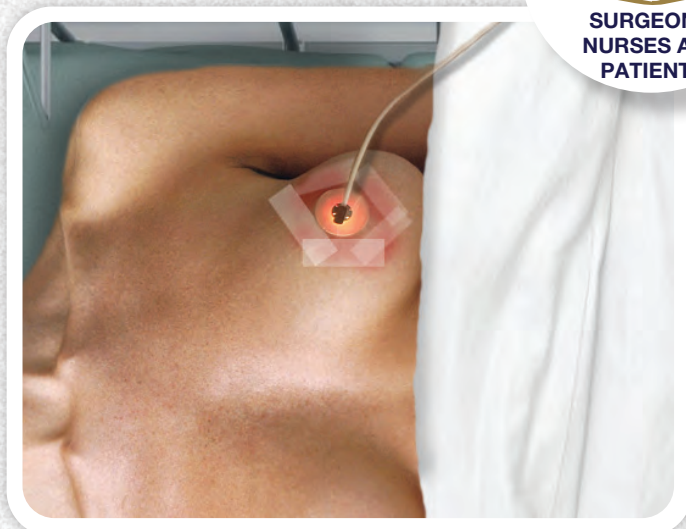
Arterial occlusion causes a rapid decline in both StO₂% and Hb levels. This pattern is indicative of compromised oxygen delivery.

VENOUS OCCLUSION

Venous occlusion causes pooling of blood in the flap, raising local Hb levels and decreasing StO₂%. This inverse trend provides critical insights to venous compromise.

FREE FLAPS UNDER CONTROL

- Breast
- Maxillofacial
- Head and Neck & ENT
- Limb and Hand/Finger
- Gender Reassignment
- GI Surgery





REDUCE HOSPITAL STAY IN DIEP FLAP SURGERY

ERAS (Enhanced Recovery After Surgery) protocols have become increasingly adopted for autologous breast reconstruction, specially in DIEP flap surgery, demonstrating improved quality of care and reduced hospital stays, leading to healthcare cost savings.

T-Stat has been integrated into the ERAS protocol for monitoring free flaps at the Division of Plastic Surgery, Northwestern Medicine, Lake Forest, Ill (US). They have evaluated T-STAT in a retrospective study with 107 selected patients (188 flaps) as part of a **SUCCESSFUL 24-48h DISCHARGE PROTOCOL**.

The study concluded that with T-STAT:

- 1 No need for ICU-level monitoring
- 2 100% success in detecting early vascular compromise
- 3 100% flap salvage in all takeback cases



Fracol, M., Teven, C. M., Selimos, B., Wier, S., Stockslager, C., Schoenfeldt, J., Connors, P., Monahan, D., Dumanian, G. A., & Howard, M. A. (2023). Pushing the DIEP envelope with ERAS: 24-hour discharge is safe in appropriately selected patients. *Plastic & Reconstructive Surgery-Global Open*, 11(6), e5070

PROVEN COST-SAVING BENEFITS

T-Stat significantly reduces the financial and operational costs associated with flap failure by improving patient outcomes, minimizing complications, and optimizing resource utilization and clinical workflows.



T-STAT REMOTE VIEWING

OnCall is a web-based application provided as part of the service, offering real-time access to T-Stat readings from any location with 24/7 technical support.

www.oncall.spectros.com



Ref.	Description	UOM
T-Stat 303/T2.0 Monitor	Tissue Oximeter	1u.
CTH-060-SUR-2.5cm	Sensor 2.5 cm	Box 5
CTH-060-SUR-1.0cm	Sensor 1 cm	Box 5
CTH-060-ENDO	Sensor Endo	Box 5
CTH-060-ORA M	Sensor Oral	Box 5

Linktree*



www.spectros.com

Design in Silicon Valley, California. Headquarters in Texas. Made in USA.

Spectros Medical Devices Inc. 2211 Norfolk St #1110 Houston, Texas 77098, USA.

24/7 Support - Phone: +1 (346) 338-7828 Email: info@spectros.com