

The only system using Intelligent Oximetry™ to provide quantitative, instantaneous tissue oxygen (StO₂) perfusion assessment

Intelligent Oximetry™ Advantages

- Instantaneous, quantitative results
- No need for dye injection or capital equipment
- Unlimited number of readings during a case
- Clinically validated by major medical centers
- *Comparable results to ICG imaging for confirmation of clinical margin*



Clear, bright OLED screen allows easy reading at any angle

Reusable processor reduces per use cost

New battery pack with each sterile kit allows 6+ hours of readings

Inexpensive sterile, disposable sheath

Instantaneous Results are
Now in the Surgeons' Hands

Clinical Abstract Accepted by ASCRS 2020

The Use of tissue oxygen measurements compared to ICG imaging for the assessment of intraoperative tissue viability of human bowel: A multi-institutional trial.

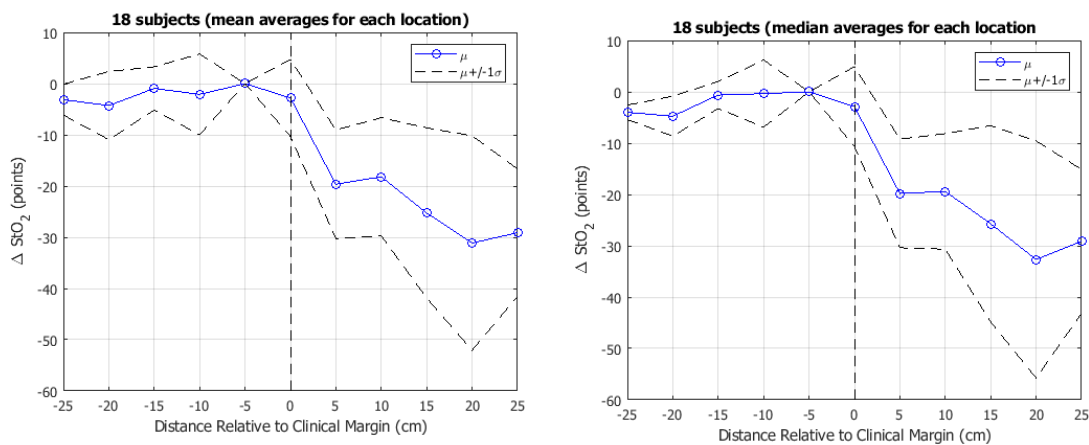
AUTHORS: Sherwinter, D. A. ; Rhee, R. ; Mongui, A. I. ; Chandler, P. I. ; Agnew, J. L. ; Pihokken, A. ; Addison, P. ; Nguyen Tran, N. ; Martz, J.

INSTITUTIONS: 1. Surgery, Maimonides Medical Center, Brooklyn, NY, United States. 2. Surgery, Lenox Hill Hospital, New York, NY, United States.

Conclusions/Discussion:

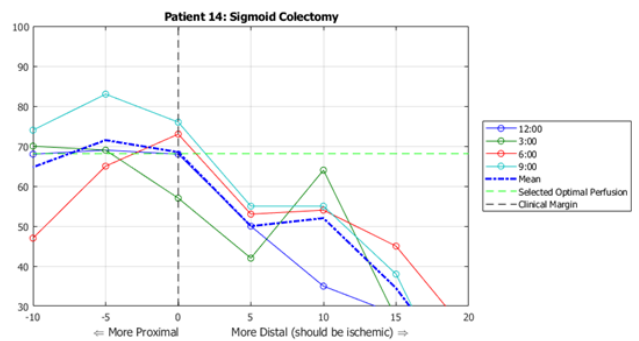
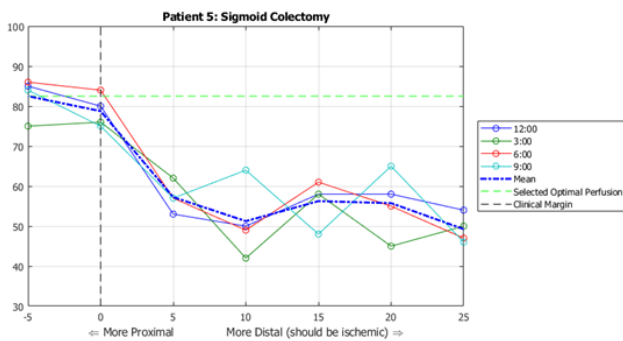
- Intra.Ox device reliably identified a margin of significant saturation “drop-off” which correlated with the NIR perfusion assessment
- Data indicate that tissue oxygenation may represent an appropriate surrogate for bowel viability
- Intra.Ox device may be a more cost-effective solution for surgeons looking for adjunctive evaluation of bowel viability

Mean and Median Calculations



For both mean and median calculations, the drop across the clinical margin (from the -5 position to the +5 position) has $\mu = -19.6$ pts and $\sigma = 10.6$ pts. In the case of using mean averages, 16/18 have a ≥ 10 pt drop across the margin. In the case of median averages, 17/18 show a ≥ 10 pt drop

Patient Examples

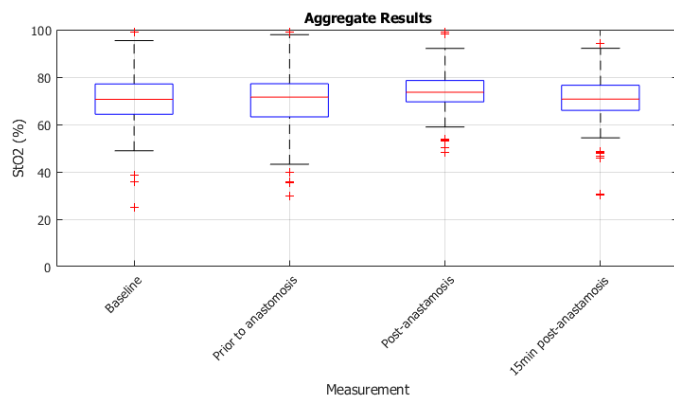


Readings taken at the 12:00, 3:00, 6:00 and 9:00 positions both proximal and distal to the clinical margin

Clinical Validation

The ViOptix Tissue Oximeter (StO₂) for the Assessment of Anastomotic Tissue Oxygenation During Colorectal Surgery in 35 Patients

Dr. Philip Fleshner, Cedars Sinai Medical Center, Los Angeles, CA



- All readings normal at time of surgery which indicates healthy tissue and no leaks occurred
- No false positives
- 5 ICG studies done, 100% correlation

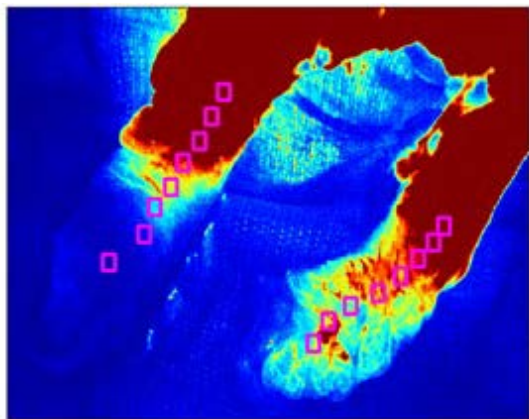
Clinical Validation

Measurement of Tissue Oxygen Perfusion Assessed Using Intra.Ox and Indocyanine Green Imaging

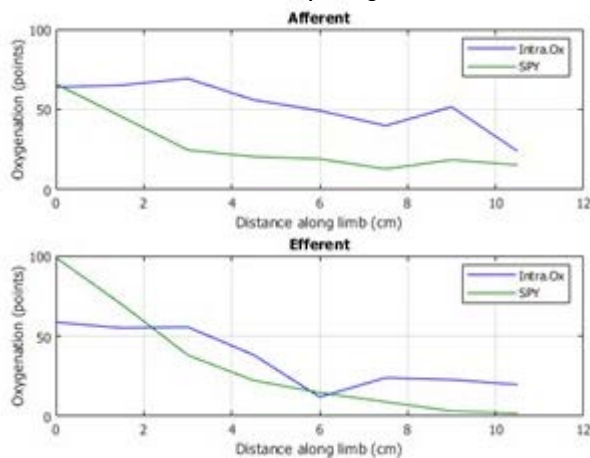
Nima Khavanin, MD, Department of Surgery, Johns Hopkins Medical School, Baltimore, MD

- Utilized porcine model (2 animals) to compare ICG images with Intra.Ox measurements
- Portions of bowel were rendered ischemic by resecting mesenteric arteries
- ICG images were taken and compared to readings taken every centimeter using Intra.Ox

SPY Image, Fig 2 follow-up
Measurement regions highlighted



Follow-up on Fig 2



Excellent correlation between Intra.Ox readings and ICG images including ability to identify pockets of perfusion among ischemic tissue. Note should be made of Intra.Ox's ability to provide more quantitative data

Intra.Ox™

Intelligent.Oximetry™

System Overview



OLED Display Screen

Reusable intelligent processor with attached disposable battery

Disposable Sheath

Sensor Face / Patient Contact



Optical QC Target



Sterile, disposable sheath kit for taking unlimited StO₂ readings during a surgical case

To Order Please Call: +1.510.226.5860 or
Fax: +1.510.226.5864 or Email: info@vioptix.com

Committed to Improving Surgical Outcomes™

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