![Vasoptic Medical Inc. logo]

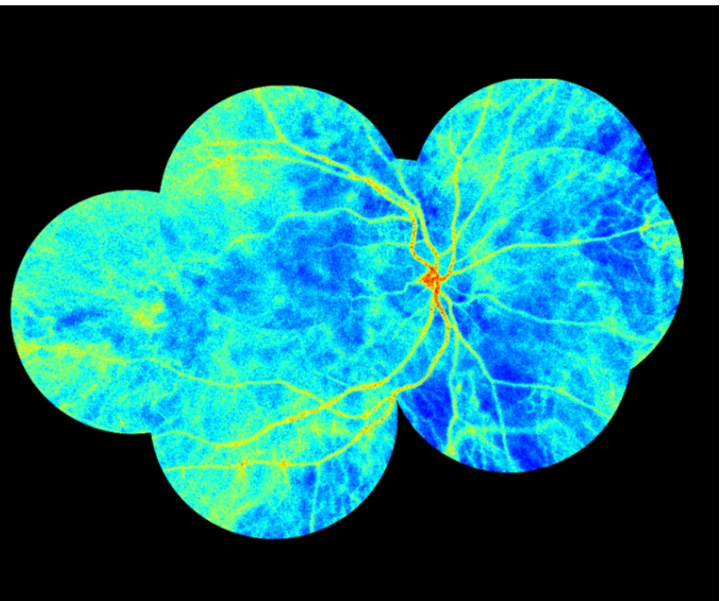# Dye-Free, Dynamic Blood Flow Monitoring

**The XyCAM RI is cleared for clinical use by the U.S. FDA.**

Monitoring of retinal blood flow is gaining importance as a means for conducting research potentially leading to clinical diagnostics of ophthalmological and other systemic ailments.

Studies have indicated correlations between retinal blood flow status and early stages of ophthalmic, neuro-ophthalmic, and cardiovascular conditions such as:

- Diabetic Retinopathy
- Glaucoma
- Alzheimer's Disease
- Stroke
- Coronary Heart Disease
- Retinopathy of Prematurity

Retinal blood flow status may provide key insights pertaining to early-stage disease pathophysiology, and support a data-centric approach to clinical disease management.
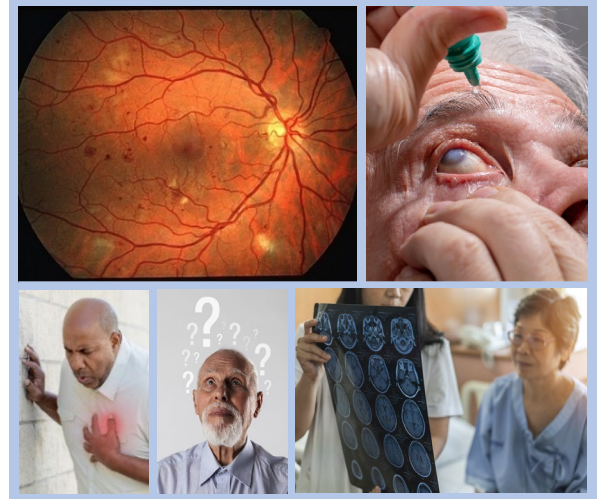
Introducing the XyCAM RI™

Next Generation Non-Invasive, Dynamic Imaging of Retinal Blood Flow

The **XyCAM RI** is an affordable, easy-to-use retinal imager designed to rapidly and non-invasively capture and extract vascular information from the retina.

- **Dynamic Blood Flow Video Data**: acquires complementary high frame-rate data for assessing ocular blood flow dynamics

- **Images retinal vessels and blood flow with:**
  - ✓ High spatio-temporal resolution,
  - ✓ High repeatability of measurements,
  - ✓ Dynamic flow-sensitivity over a wide range.

- **Advanced analytics:** XyCAM RI Software permits region- and feature-specific assessment of data, exportable for research.

- **Easy to use**: imaging workflow is similar to the standard color fundus photography, offering operators a seamless transition with minimal additional training.

- **Non-mydriatic image acquisition:** pupil dilation is not required in a dark room.

- **Soft IR illumination:** low-power, semi-visible illumination allows subjects to focus with ease.

- **Compact:** the small-footprint system allows the optimized use of space.

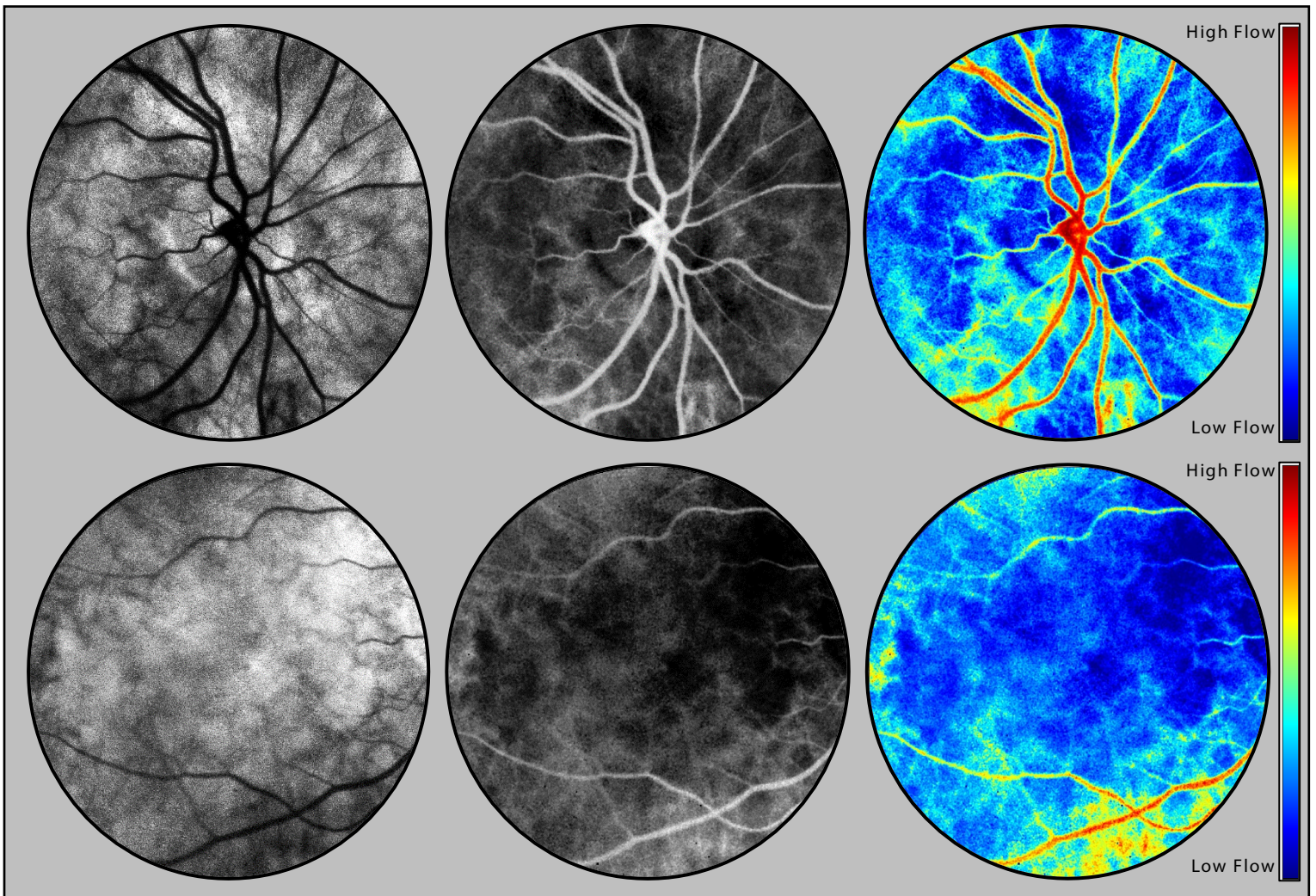**The XyCAM RI is cleared for clinical use by the U.S. FDA.**

Dynamic Imaging of Retinal Blood Flow Resolves Pulsation During Cardiac Cycles

- Up to 6 seconds of dynamic blood flow data acquisition
- Synchronized with finger pulse oximeter (optional)
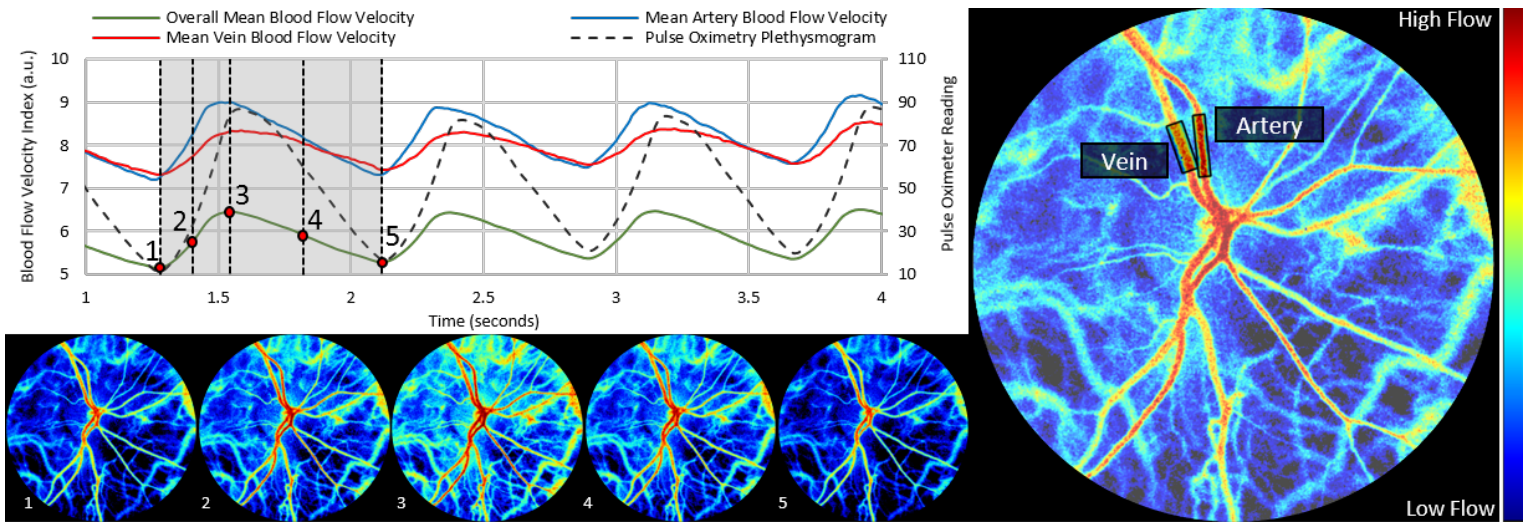
Multiple Display Modes for Different Applications

- Fundus Vessel Map
- Dye-Free Angiogram™
- Blood Flow Dynamics

The XyCAM RI is cleared for clinical use by the U.S. FDA.

XyCAM RI Specifications

Intended Use	The XyCAM RI system is intended to capture, store and display images of real time dynamic blood flow changes in the human retina, and to provide quantitative outputs of relative blood flow information.
Principle of Blood Flow Measurement	Laser Speckle Contrast Imaging
Imaging Resolution (Max)	1200W × 1216H Pixels
Field Angle	25° circular FoV (For an emmetropic eye – no refractive error)
Measurement Duration	3-6 seconds at 82 Hz
Blood Velocity Range Imaged	0 mm/s to 15 mm/s
Precision of Imaging Blood Velocity	Up to 1 mm/s
Repeatability & Reproducibility	Mean intra-session coefficient of variation: < 5% Mean inter-session coefficient of variation: < 10%
Focusing and Imaging Illumination	NIR Diode Laser (peak wavelength: 785nm ± 10nm) Class l Laser Product (IEC 60825-1: 2007) Group l Instrument (ANSI Z80.36–2016)
Software	**XyCAM RI Imaging Suite™:** 1) User & Patient Management 2) Image Acquisition 3) Image Analysis
	Analysis features: Blood Flow Visualization, Custom Reloadable Regions for Spatio-temporal Analysis, Waveform Analytics, Data Export, Report Generation

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About Vasoptic Medical Inc.

Vasoptic Medical, Inc. is a medical device company with a mission to advance healthcare through innovation in medical diagnostics. Headquartered in Maryland, USA, Vasoptic Medical is committed to creating and delivering value to the patient and healthcare system.