

CAN WE DETECT THE LOSS OF HEALTH BEFORE DISEASE BEGINS?

The Eye as an Underrecognized Biomarker Platform for Healthy Longevity

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>30 YEARS

CLINICAL OBSERVATION

120,000

PERSONALLY PERFORMED
INTRAOCULAR PROCEDURES

~100,000

PATIENT DATABASE

~15,000

OPTIC-NERVE / SLT CASES
DOCUMENTED SINCE 2007

THE EYE MAY REVEAL DECLINING BIOLOGICAL RESILIENCE BEFORE DISEASE BECOMES CLINICALLY APPARENT.

OCULAR CHANGE → DECLINING RESILIENCE → SYSTEMIC / BODY CORRELATION → CLINICAL DISEASE

CURRENT LANDSCAPE

AGING BIOMARKERS TODAY

Molecular · genetic · epigenetic
Blood-based markers and omics

THE MISSING WINDOW

HEALTH → DECLINING RESILIENCE

Early biological change may precede
the emergence of clinical disease.

OUR PROPOSITION

THE EYE AS A PLATFORM

One accessible organ reveals neural, vascular,
structural and metabolically relevant signals.

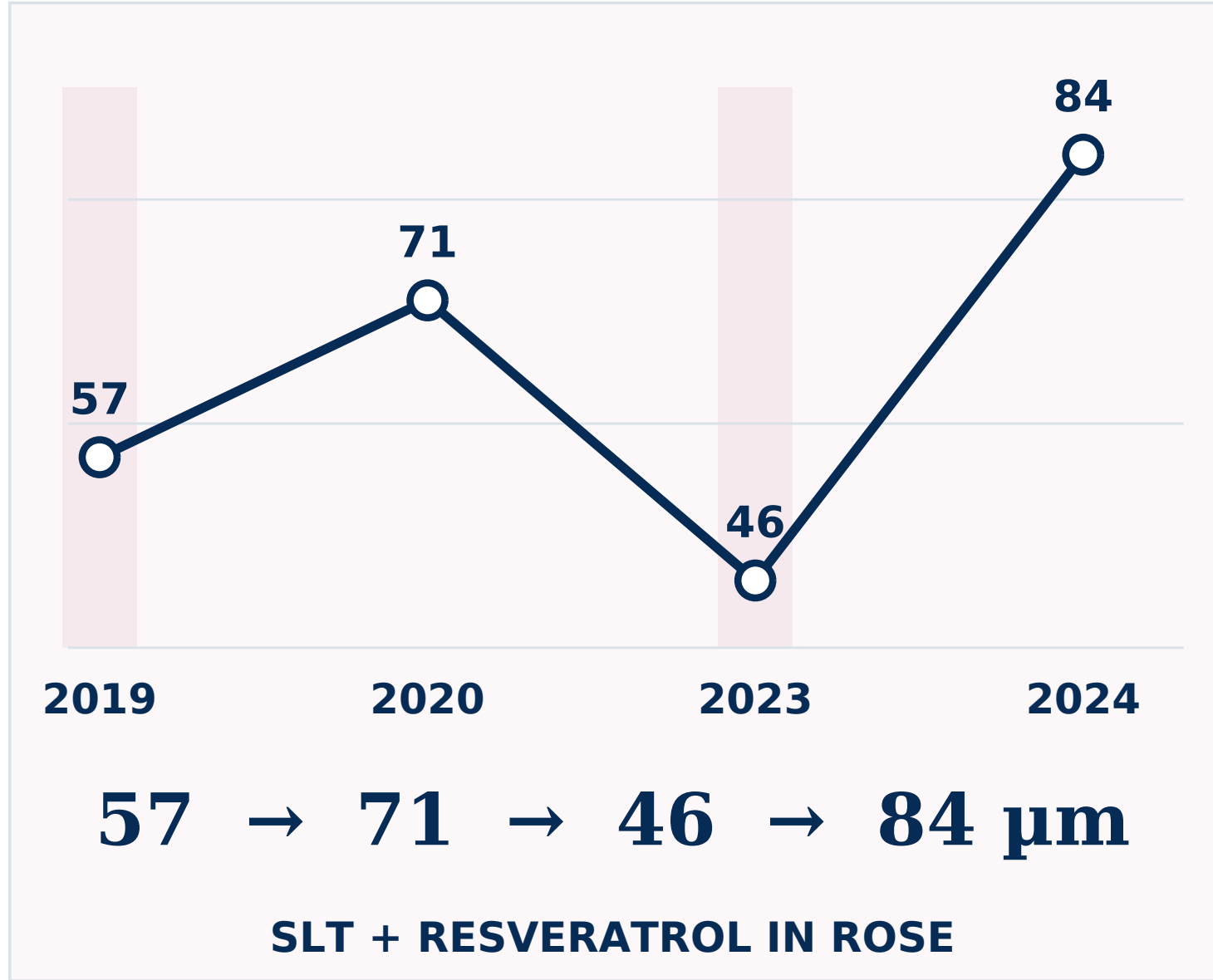
ONE ORGAN. MULTIPLE BIOLOGICAL SYSTEMS.

REPEATED MEASUREMENT OVER TIME CREATES BIOLOGICAL MEANING.

NEURAL

GLOBAL RNFL · OD · SAME EYE

Anonymized example · similar patterns observed in multiple patients

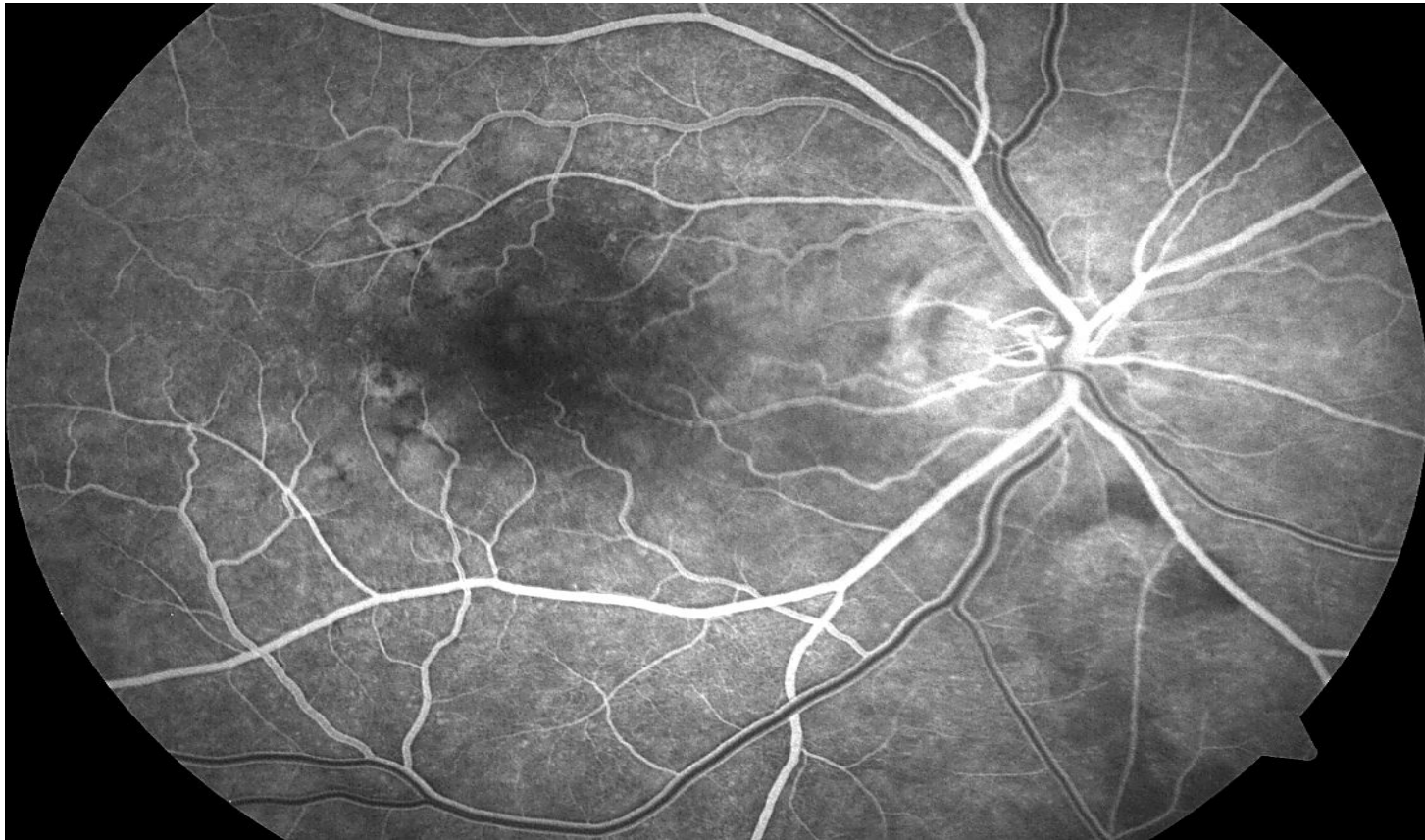


TWO RENEWED INCREASES DOCUMENTED

Consistent with recovery of viable,
metabolically stressed axons

VASCULAR

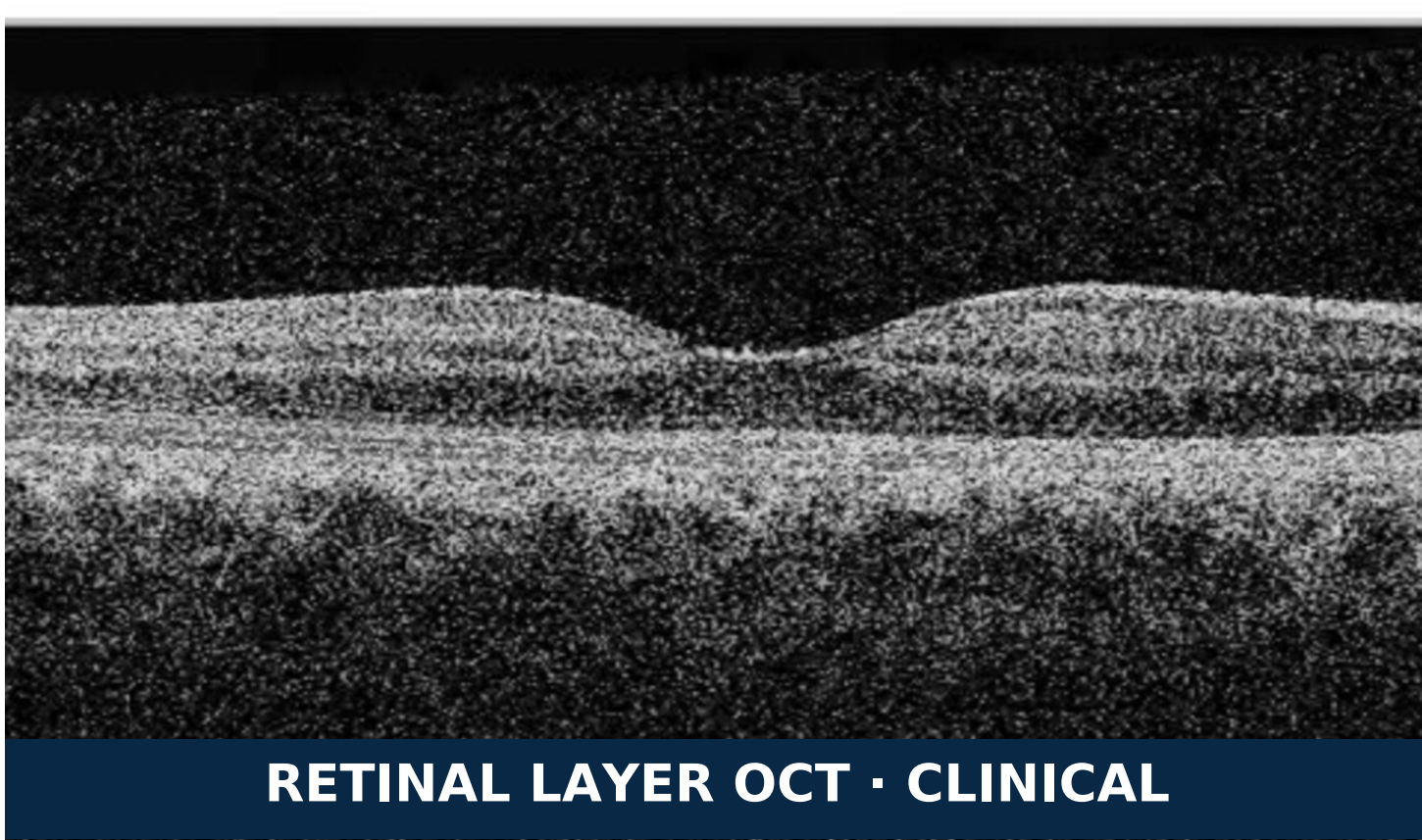
RETINAL MICROVASCULATURE



- Microvascular appearance
- Perfusion and vascular integrity
- Systemic associations to test

STRUCTURAL

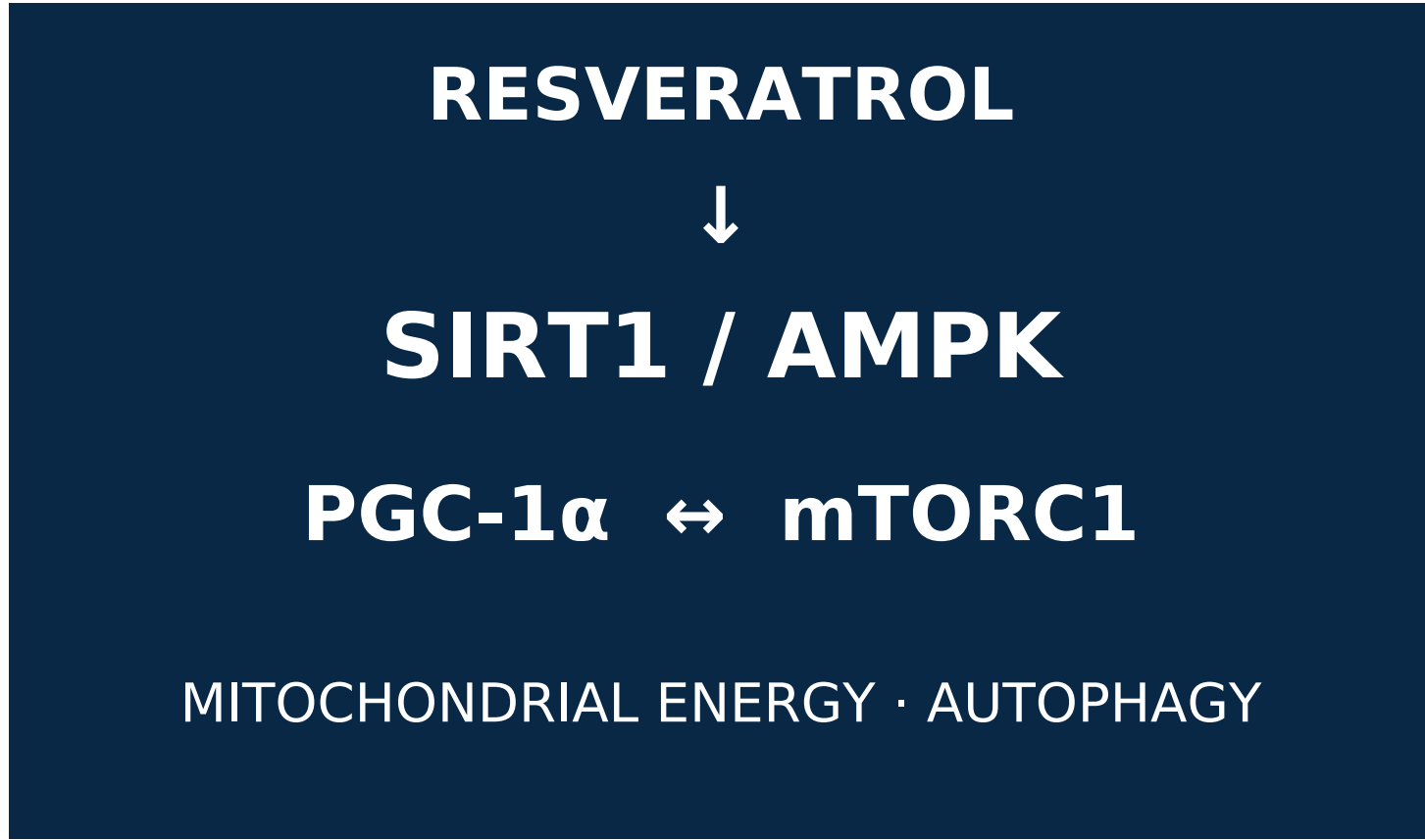
RETINAL LAYERS / CHOROID



- Retinal layer morphology
- Choroid as additional measure
- Prospective quantification

METABOLIC

BIOLOGICAL RATIONALE



- Published biological rationale
- Cellular clean-up and energy recovery
- Proposed link to viable axon recovery

SEE

directly accessible signals



MEASURE

individual change over time



CONNECT

eye · laboratory · clinical history



RECOGNIZE EARLIER

before clinical disease

PUBLISHED SCIENTIFIC FOUNDATION · 2024-2025

Paulig & Krause · 2024

Anti-Aging of Our Optic Nerve—
Dream or Reality?

Open J Ophthalmol · DOI 10.4236/ojoph.2024.144040

Paulig · 2025

The Eye as a Gateway to Our Body and Soul
Can We Separate Business and Healing?

OAJO · DOI 10.23880/oajo-16000337

Paulig · 2025

Two in One: Revolutionary Ideas for
Publications in Scientific Journals

OAJO · DOI 10.23880/oajo-16000341

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WHAT IS ALREADY DOCUMENTED

Longitudinal OCT documents two renewed within-eye RNFL increases after intervention;
the repeated pattern provides a recovery-associated neural entry signal for the platform.

WHAT MUST NOW BE TESTED

Whether multimodal ocular trajectories precede and correlate with
systemic health loss, laboratory change and later clinical disease.

A CLINICALLY ACCESSIBLE AND SCALABLE RESEARCH PLATFORM

Transform accessible, longitudinal eye data into validated signatures of declining biological resilience.

NEXT STEP

Prospective multimodal study · standardized imaging · laboratory and systemic correlation · clinical outcomes

FROM REACTIVE DISEASE CARE TO EARLIER, PREDICTIVE AND HEALTH-PRESERVING MEDICINE.