



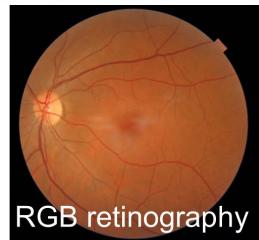
Colorimetric analysis of eye fundus structures with multispectral retinography

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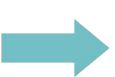
Centre for Sensors, Instruments and Systems Development,
Universitat Politècnica de Catalunya (Terrassa, Spain)

Colorimetric analysis of eye fundus structures with MS retinography

INTRODUCTION

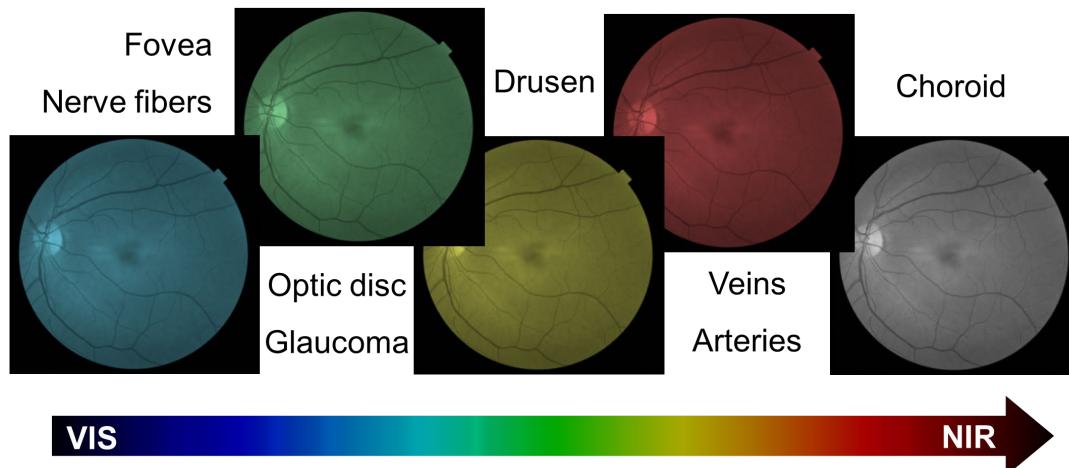


(Metamerism)



Solution:
Multispectral imaging

Diagnosis limited: restricted discrimination of structures

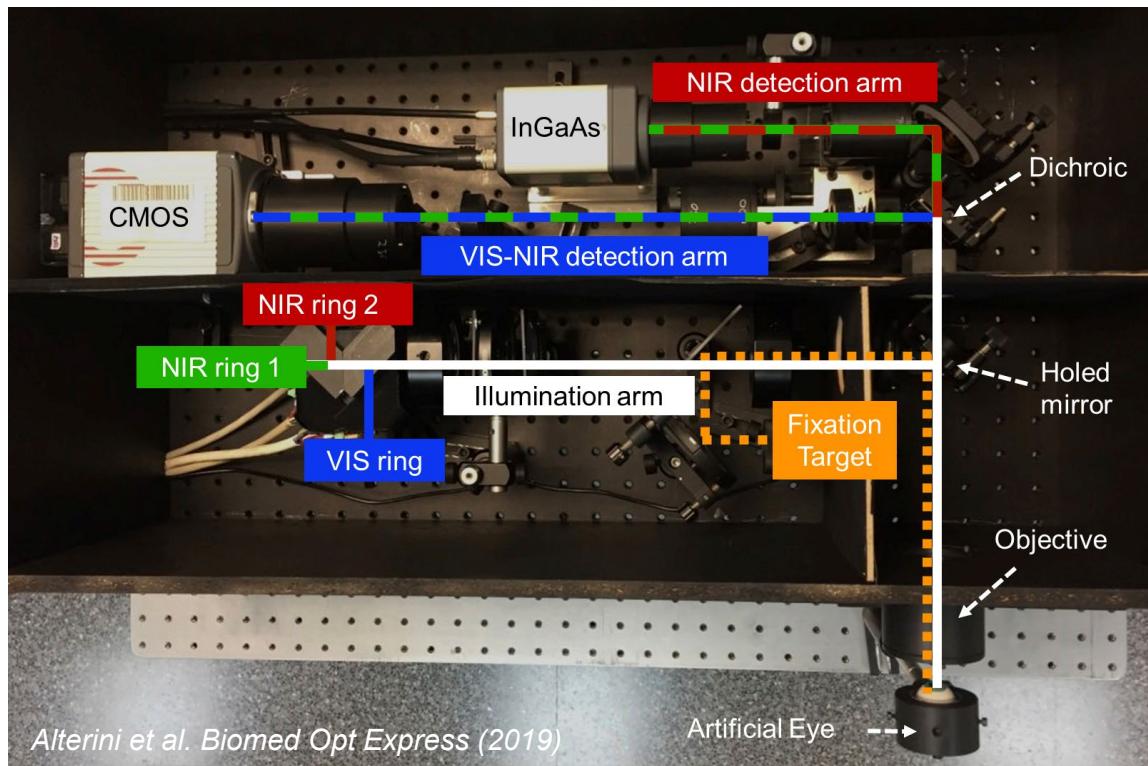


GOAL

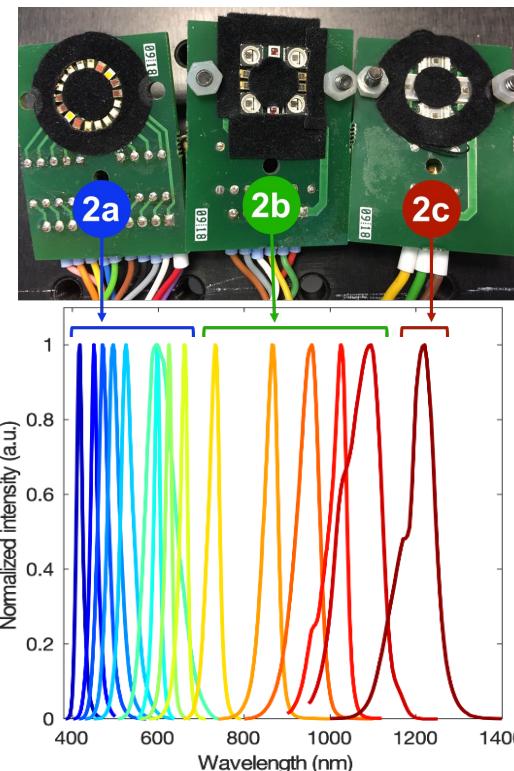
Study the **colorimetric** and **spectral features** of **eye fundus structures** in healthy and diseased subjects by means of a **fast visible and extended infrared multispectral fundus camera** (400 nm – 1300 nm) with high spectral and spatial resolution.

MULTISPECTRAL FUNDUS CAMERA

Setup

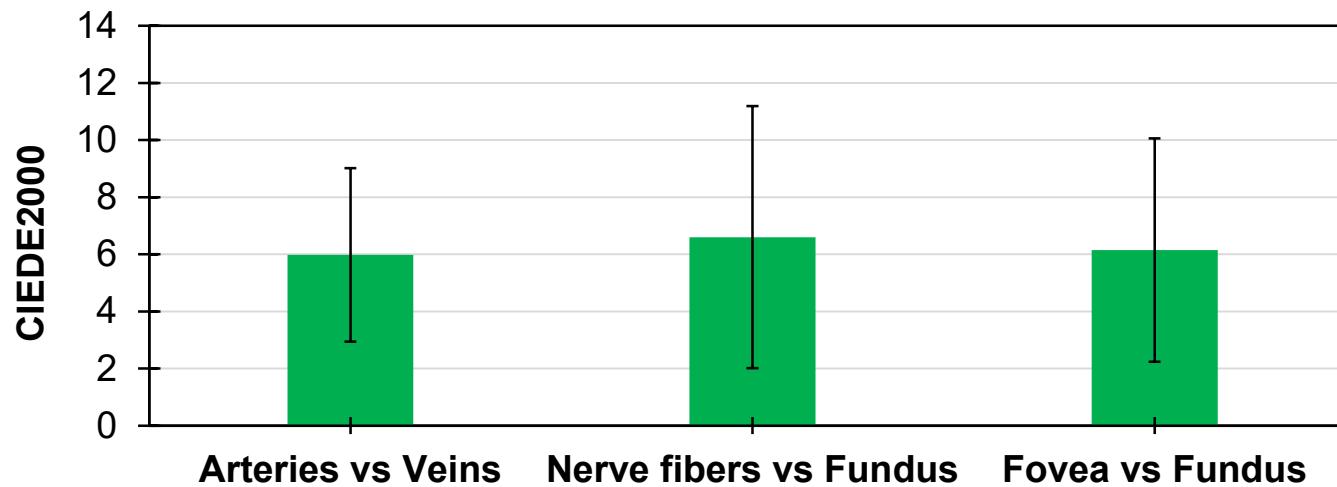
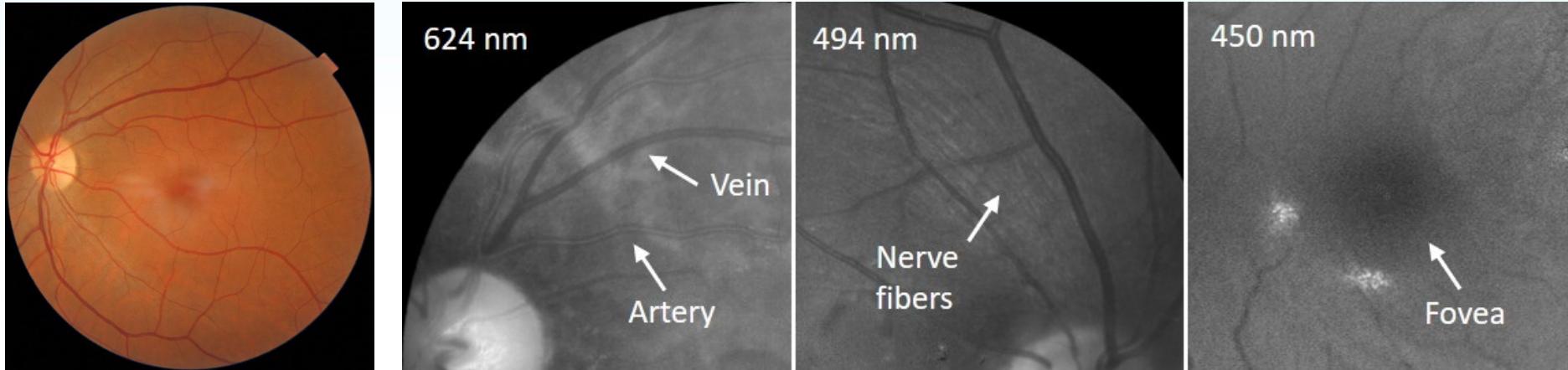


Light source



Colorimetric analysis of eye fundus structures with MS retinography

RESULTS: Healthy



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under Marie Skłodowska-Curie grant agreement No. 801342 (Tecniospring INDUSTRY) and the Government of Catalonia's Agency for Business Competitiveness (ACCIÓ).

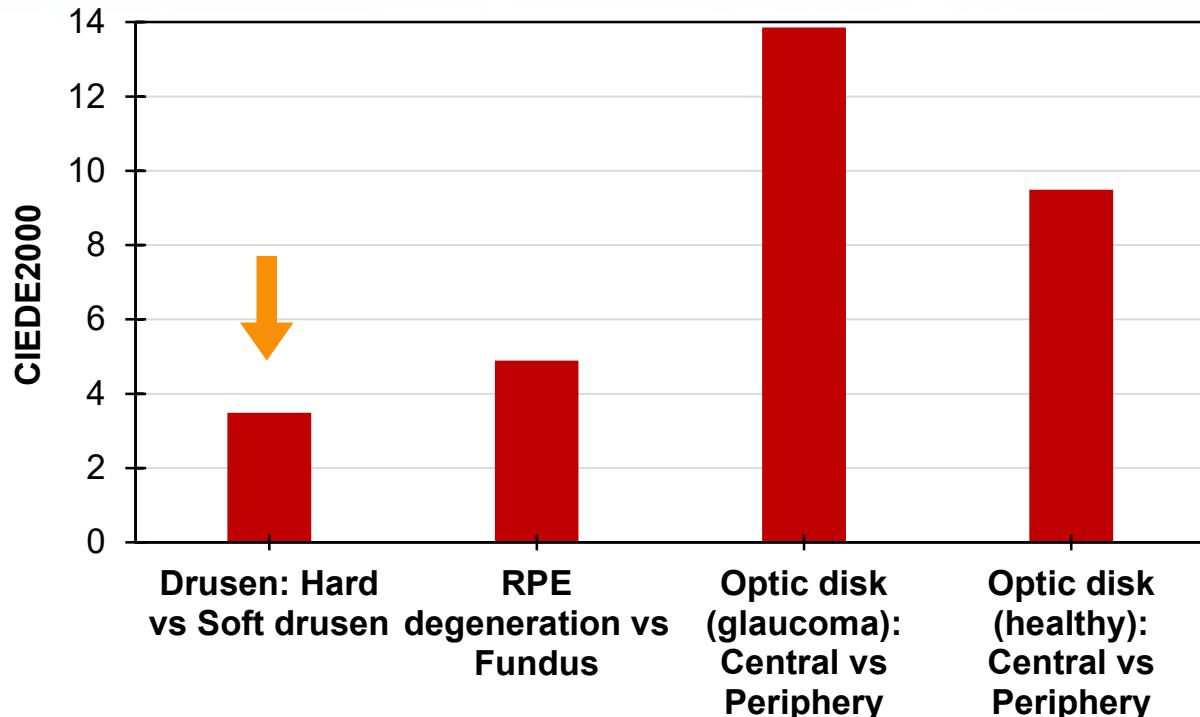
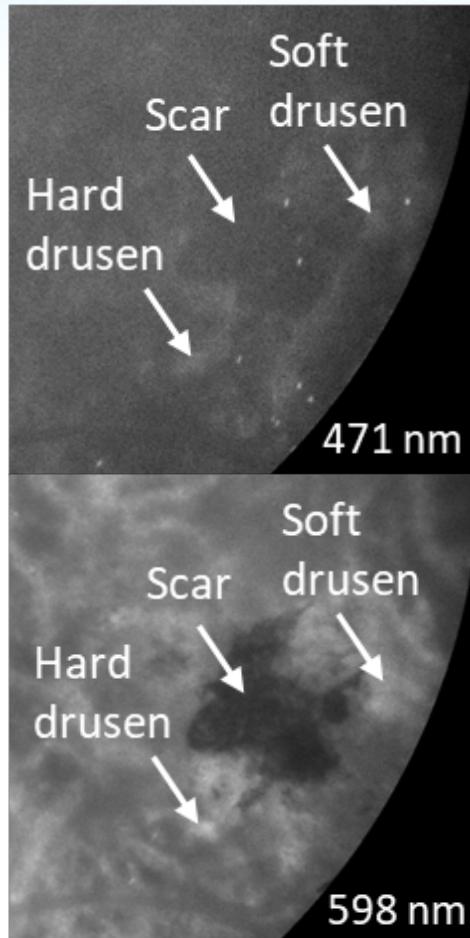


ACCIÓ

Generalitat de Catalunya
Government of CataloniaTecniospring
INDUSTRY

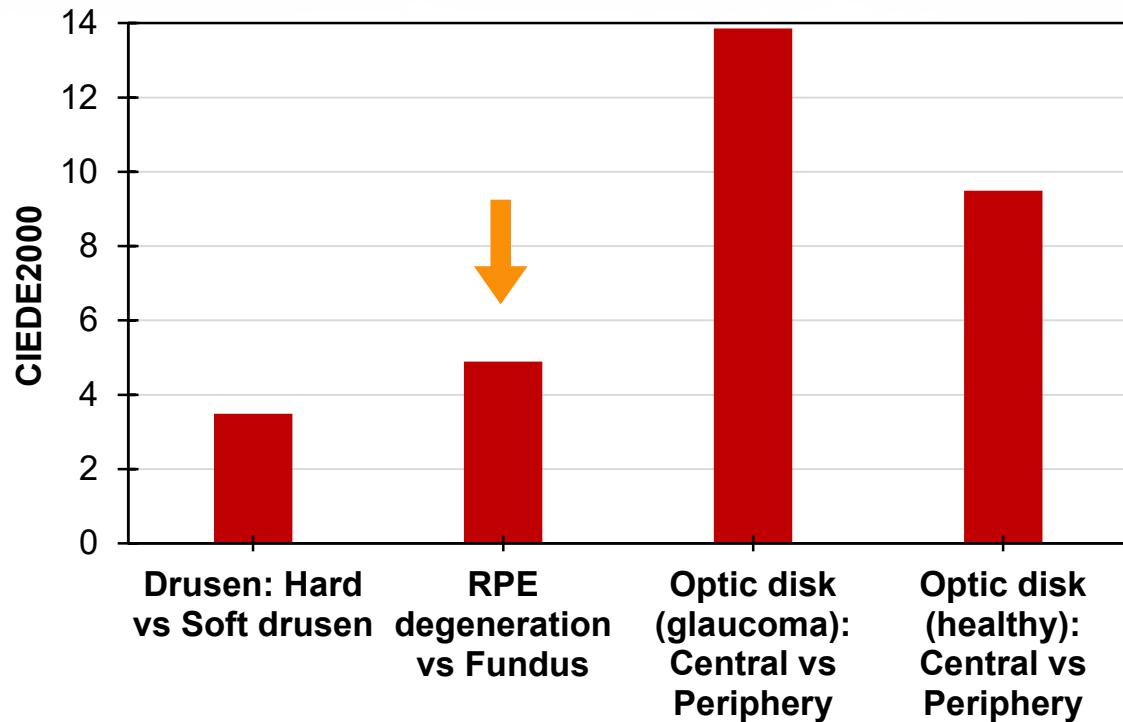
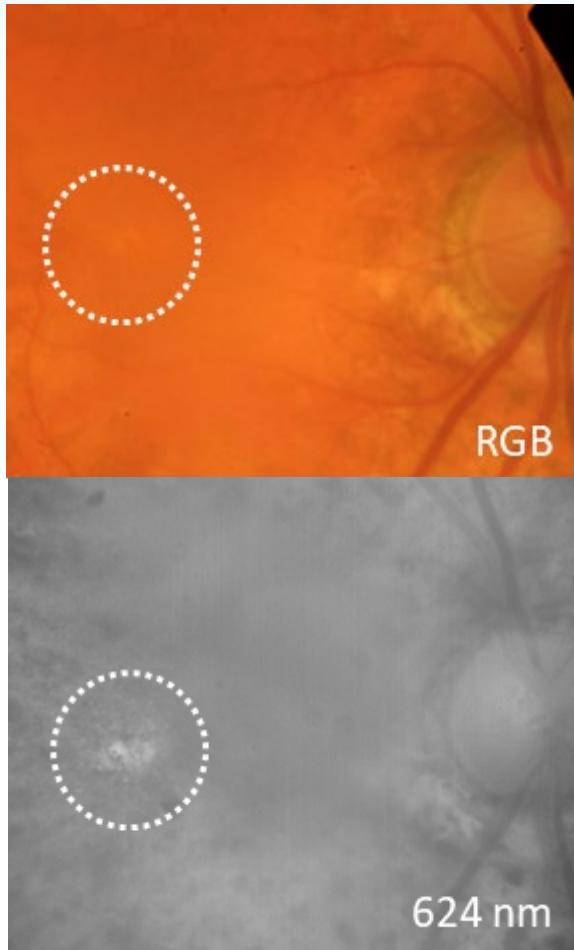
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RESULTS: Diseased. Age-related macular degen.



Colorimetric analysis of eye fundus structures with MS retinography

RESULTS: Diseased. RPE degeneration



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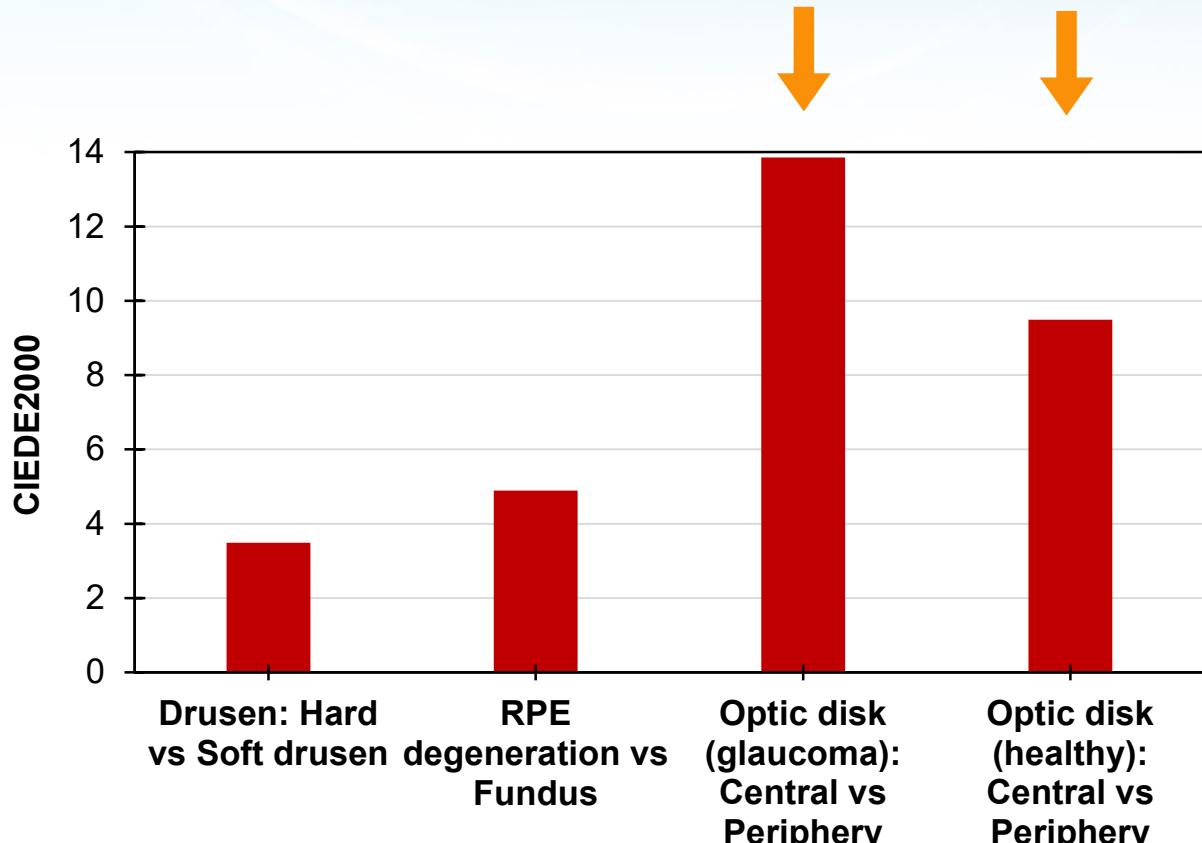
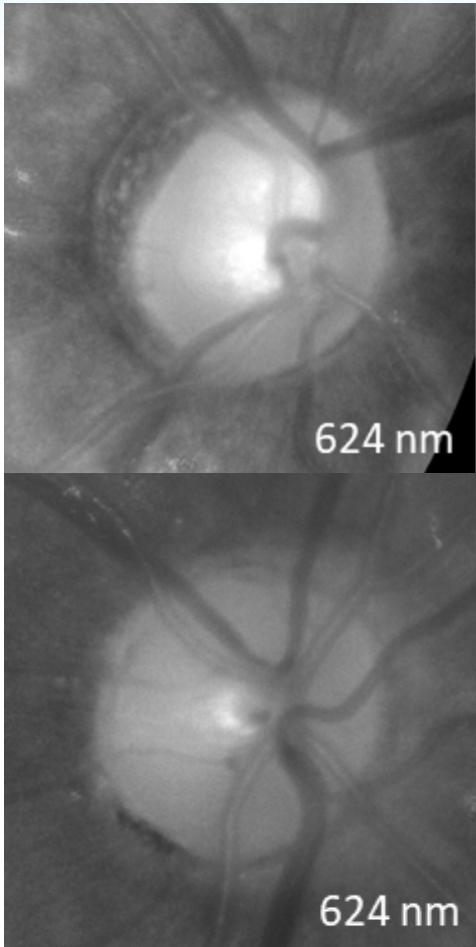
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INDUSTRY

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Colorimetric analysis of eye fundus structures with MS retinography

RESULTS: Diseased. Glaucoma



CONCLUSIONS

Powerful diagnostic tool

Precise color evaluation
from spectral reflectance
instead of RGB data.

Early detection =
Early treatment =
Less/No vision loss

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