ARVO 2024
Scientific Highlights
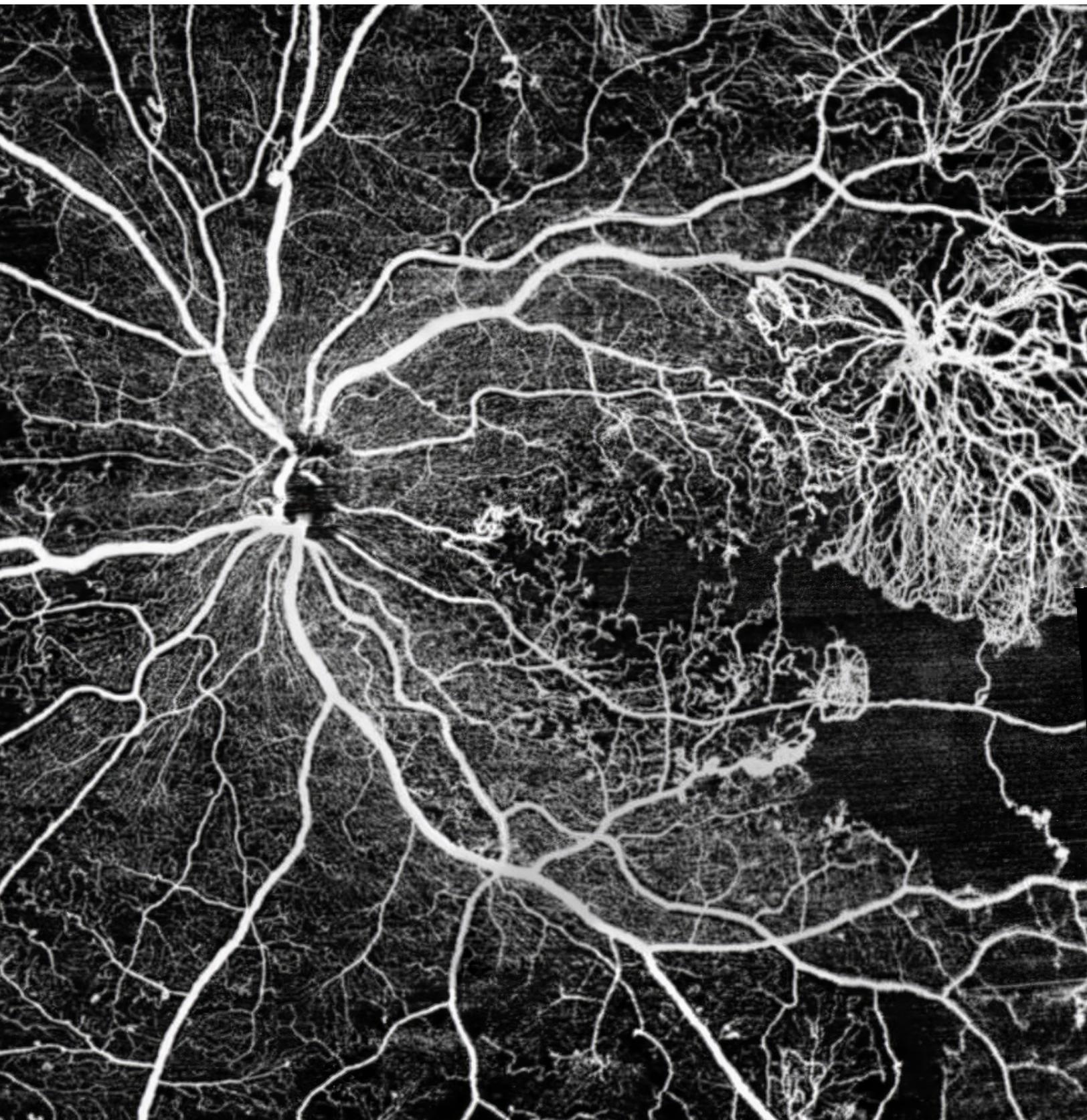
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Microaneurysms Detection by Two Optical Coherence Tomography Angiography Devices

A. Yasin Alibhai, Tim Steffens, Huiyuan Hou, Mary Durbin, Nadia K. Waheed

Demonstrates that Maestro OCTA performs as well as the state of the art at detecting microaneurysms.

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A Modern Workflow Approach to Screen Ocular Health and Disease

Juan Arias, Mary K. Durbin, Ece Turhal, Susan Su, Nevin W. El-Nimri

This study demonstrates that Topcon products can contribute to an efficient, effective pre-test workflow in eye care.

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Characteristics of a large real world database of healthy eyes from optometry practices: implications for a real-world reference database

Donald C. Hood, Sol La Bruna, Mary Durbin, Christopher Lee, Yi Sing Hsiao, Aziza Ganihanova, Gustavo De Moraes, Emmanouil Tsamis

This demonstrates the efficacy of a big data approach to reference data.

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Improving specificity in glaucoma diagnosis using OCT reference databases constructed considering retinal vessel patterns

Yi Sing Hsiao, Huiyuan Hou, Nevin W. El-Nimri, Donald Hood, Emmanouil Tsamis, Tony H. Ko, Mary Durbin

TEMPO (IMOvifa) binocular perimetry results correlate strongly with HFA with significantly shorter (-39%*) test times.

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Cover image: OCT-A composite image of Proliferative Diabetic Retinopathy captured on DRI Triton SS-OCT

Binary Classification of OCT Images using the Retina Foundation Model on Limited Data

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Emergency Department Non-Mydriatic Fundus Photography Expediates Care For Patients Referred For "Papilledema"

Amy (Mung Yan) Lin, Hetal Ray, Andrew Pendley, Avital Lily Okrent Smolar, Mariana Duran, Mariam Torres Soto, Gabriele Berman, Beau Bruce, David Wright, Nancy J. Newman, Valerie Biousse

Shows the value of Maestro OCT in a non-eyecare setting.

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Integration of Optical Coherence Tomography in Remote Screenings for Macular Edema in Type 1 Diabetes Mellitus

Shane Thomas Meledathu, Alexandra Sanchez, Helen Nguyen, Myriam Amy Lin, Rita Vought, Victoria Vought, Bernard Szirth, Albert S. Khouri

Shows the value of Maestro OCT in screening for diabetes.

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The first prospective study of Toku's CLAiR technology: advancing cardiovascular risk assessment through retinal imaging in the Middle Eastern population

Katie Geraghty, Ehsan Vaghefi, Esmaeil Arbabi, Igor Kozak

Showcases the potential of CLAiR by using retinal images in non-invasively estimating cardiovascular risk in a middle eastern population.

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Reliability of Blood Flow Measurements Using Speckle Analysis of Optical Coherence Tomography of Retinal Blood Vessels

Richard Spaide, Jenwei Kuo, Kyungmoo Lee, Mary Durbin, Masahiro Akiba, Tony Ko

Demonstrates an innovative way of collecting information about blood flow in the eye.

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Sequential versus simultaneous visual field testing: comparison of two perimeters

Catharine Chisholm, Derek Ho, Nevin W. El-Nimri, Juan D. Arias, Mary Durbin

This study demonstrates that the binocular testing performed by TEMPO reduces the impact of fatigue on the measured Mean Deviation. This shows that this innovation in visual field testing may improve over the previous gold standard.

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Reference Database for a Novel Binocular Visual Function Analyzer

Vincent Michael Patella, Nevin W. El-Nimri, John G. Flanagan, Timothy Bossie, Derek Ho, Mayra Tafreshi, Michael A. Chaglasian, David Kasanoff, Sasan Moghimi, Takashi Nishida, Murray Fingeret, Robert N. Weinreb

Describes the construction of a reference database for the TEMPO. This database is statistically sound and collected using gold standard methods. It compares favorably to the RDB on HFA. To our knowledge no other novel perimeter has generated a reference database with this level of rigor.

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Predicting Risk of Glaucoma Development in Suspect Eyes Using Swept-Source Optical Coherence Tomography-based Risk Scores

Huiyuan Hou, Alireza Kamalipour, Pooya Khosravi, Natchada Tansuebchueasai, Mohsen Adelpour, Mary Durbin, Christopher Lee, Robert Weinreb, Sasan Moghimi

Extends the clinical value of an AI that is intended for use with screening by showing that it can also predict which eyes are most likely to progress.

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Chronos

Comparison of accommodative response between binocular and monocular visions and between open and closed Badal-lens viewings

Takafumi Yukimori, Ryoka Kon, Manabu Sakaihara, Yoko Hirohara, Makoto Saika, Masakazu Hirota, Takashi Fujikado

Abstract 6308 - B0570

This prospective observational study aims to determine the differences in AR under binocular- and monocular-viewing conditions using binocular open-view optometer and binocular closed-view Badal optometer.

Maestro

Ocular blood flow waveforms in patients with cardiovascular disease using OCT blood flowmeter

Masahiro Akiba, Kana Minamide, Youngseok Song, Tomofumi Tani, Takamitsu Tatsukawa, Nobuyoshi Azuma

Abstract 4853 - B0575

The OCT blood flowmeter is a device that noninvasively and automatically measures the hemodynamics of blood vessels in the fundus of the eye. The purpose of this study is to evaluate the alteration and dynamism of blood flow in arteries in patient of arteriosclerosis by using OCT blood flowmeter.

Microaneurysms Detection by Two Optical Coherence Tomography Angiography Devices

A. Yasin Alibhai, Tim Steffens, Huiyuan Hou, Mary Durbin, Nadia K. Waheed

Abstract 5529 - B0632 (Featured)

To evaluate the detection of microaneurysms (MAs) in healthy and diseased eyes by two different OCTA devices, using fluorescein angiography (FA) as the gold standard.

A Modern Workflow Approach to Screen Ocular Health and Disease

Juan Arias, Mary K. Durbin, Ece Turhal, Susan Su, Nevin W. El-Nimri

Abstract 1857 - B0220 (Featured)

Effective screening of vision-threatening diseases requires a comprehensive and dependable pretest workflow to enable accurate pathology detection. In this study we aim to demonstrate that a workflow consisting of three devices can offer a wide array of screening capabilities and supplement growing telehealth needs in optometry and ophthalmology practices.

Characterizing Eyes of Older Normal Subjects for Use in Testing Diagnostic Algorithms

Mary K. Durbin, Anya Guzman, Juan D. Arias, Hannah Hou, Mayra Tafreshi1, David Kasanoff, Jessica Menou, Nevin W. El-Nimri

Abstract 4047 - B0166

Algorithms intended to identify and monitor pathology are frequently proposed using modalities that are not routinely performed on asymptomatic subjects. The goal of this study was to test the feasibility of acquiring a cohort of older controls for use in evaluating such algorithms.

Robotic Spectral-domain versus Swept-source OCT in the association between OCT-Angiography metrics and glaucoma severity

Massimo Antonio Fazio, Mark E. Clark, Christopher A. Girkin

Abstract 1212 - B0016

To assess the association between OCT-Angiography (OCTA) metrics and glaucoma severity in subjects imaged by a Spectral-domain (SD) robotic OCT and a swept-source (SS) OCT.

Testing the repeatability and reproducibility of glaucoma risk score models on spectral domain and swept source optical coherence tomography data

Anya Guzman, Mary K. Durbin, Yi Sing Hsiao, Christopher Lee, Tony H. Ko

Abstract 4838 - B0560

To evaluate the repeatability and reproducibility of four glaucoma risk score models on spectral domain optical coherence tomography (SD-OCT) and swept source optical coherence tomography (SS-OCT) 12mm by 9mm widefield OCT scans.

Characteristics of a large real-world database of healthy eyes from optometry practices: implications for a real-world reference database

Donald C. Hood, Sol La Bruna, Mary Durbin, Christopher Lee, Yi Sing Hsiao, Aziza Ganihanova, Gustavo De Moraes, Emmanouil Tsamis

Abstract 2545 - A0469 (Featured)

To describe the characteristics of a real-world database (RW-DB) of "healthy" eyes obtained from optometry practices.

Improving specificity in glaucoma diagnosis using OCT reference databases constructed considering retinal vessel patterns

Yi Sing Hsiao, Huiyuan Hou, Nevin W. El-Nimri, Donald Hood, Emmanouil Tsamis, Tony H. Ko, Mary Durbin

Abstract 4844 - B0566 (Featured)

To investigate the potential of using real-world data from eyes with comparable retinal vessel patterns to construct an OCT RDB and to assess if applying it to data with similar features improves specificity.

Glaucoma Screening in Myopic Eyes Using Optical Coherence Tomography-based Scores

Lukas Huebschmann, Nevin W. El-Nimri, Anya Guzman, Mary Durbin, Huiyuan Hou
Abstract 4050 - B0169

To evaluate the diagnostic accuracy of a solely optical coherence tomography (OCT)-based glaucoma risk score, Fukai Nakano score, for glaucoma detection in eyes with myopia, and to compare with single OCT measurement parameter, including thickness of circumpapillary retinal nerve fiber layer (cpRNFL) and macular ganglion cell–inner plexiform layer (GCIPL).

A deep learning model for identification of geographic atrophy using en-face OCT images

Reza Jafari, Huiyuan Hou, Tim Steffens, Tony H. Ko, Mary Durbin
Abstract 3745 - B0408

To present a deep learning algorithm that can automatically detect geographic atrophy (GA). The goal is to enable detection of GA in primary eye care settings, leading to access to intervention and better patient care.

Axial length estimation using automated OCT scans

Tony H. Ko, Yi Sing Hsiao, Atsushi Kubota, Masahiro Akiba, Huiyuan Hou, Mary Durbin
Abstract PB00106

To construct an axial length (AL) estimation model using calibration and scan-time data from Spectral Domain (SD)-OCT devices. And to evaluate its use for aiding clinical evaluation.

Testing the performance of optical coherence tomography-based glaucoma risk score models

Tony H. Ko, Anya Guzman, Mary Durbin, Christopher Lee, Yi Sing Hsiao
Abstract 1627 - A0345

To compare the performance of glaucoma risk score models developed by Fukai et al. (2022) to the UNC OCT Index model, developed by Mwanza et al. (2013) on healthy and diseased eyes scanned using a spectral domain optical coherence tomography (SD-OCT) device.

Binary Classification of OCT Images using the Retina Foundation Model on Limited Data

David Kuo, Qitong Gao, Miroslav Pajic, Majda Hadziahmetovic
Abstract 1616 - A0250 (Featured)

Foundation models have transformed machine learning, demonstrating the ability to perform few-shot and in-context learning among other emergent behaviors. In this study, we measure the data efficiency of the RetFound model in learning to identify normal vs. abnormal OCT B-scans.

Automated Segmentation of BMO in 3D OCT Wide Scan for Glaucoma Detection

Jenwei Kuo, Susan Su, Huiyuan Hou, Nevin W. El-Nimri, Mary Durbin, Tony H. Ko
Abstract OD51

This study presents an innovative approach for the automated segmentation of the Bruch's membrane opening (BMO). Additionally, we evaluate the utility of the BMO minimum rim width (MRW) metrics derived from the automated segmentation technique in enhancing the accuracy of glaucoma diagnosis.

Emergency Department Non-Mydriatic Fundus Photography Expediates Care For Patients Referred For "Papilledema"

Amy (Mung Yan) Lin, Hetal Ray, Andrew Pendley, Avital Lily Okrent Smolar, Mariana Duran, Mariam Torres Soto, Gabriele Berman, Beau Bruce, David Wright, Nancy J. Newman, Valerie Biousse
Abstract 77 - A0304 (Featured)

We installed a non-mydriatic hybrid color fundus camera/OCT [Topcon Maestro2] in 06/2023 in our ED with the goal to improve patients' outcomes and reduce length of stay. Our aim was to evaluate whether the NMFP/OCT could avoid in-person ED ophthalmology consultations and accelerate the evaluation of "papilledema' in the ED.

Integration of Optical Coherence Tomography in Remote Screenings for Macular Edema in Type 1 Diabetes Mellitus

Shane Thomas Meledathu, Alexandra Sanchez, Helen Nguyen, Myriam Amy Lin, Rita Vought, Victoria Vought, Bernard Szirth, Albert S. Khouri
Abstract 6255 - B0165 (Featured)

Diabetic Retinopathy (DR) is one of the leading causes of Vision Threatening Disease. We incorporated Ocular Coherent Tomography B-scan (OCT) into our mobile remote screening to help identify and refer DME early for clinical management.

Automated Grading of OCT Reports for Usability in a Reference Database

Theodore Spaide, Mary Durbin
Abstract 2538 - A0462

Reference databases of healthy patients are useful for clinicians in diagnosis of glaucoma. However, construction of these databases requires expert judgement to remove individuals with glaucoma and scans of poor quality. We propose a deep learning algorithm to predict usability of these scans based on health and scan quality.

Detection of Geographic Atrophy Using Color Fundus Photo and en face OCT Images

Tim Steffens, Huiyuan Hou, Mary Durbin, Reza Jafari
Abstract 5946 - B0547

Color fundus photography represents the historical gold standard for diagnosis of geographic atrophy (GA)1. With the popularization of optical coherence tomography angiography (OCT) imaging at primary eye care, this study aimed to evaluate the identification of GA using en face OCT images against color fundus photo (CFP).

MYAH

Repeatability of Pupil Size Measurements Using a Multimodal Diagnostic Device

Jessica Sun, Hemali Dave, Lana J. Luccitti, Juan D. Arias, Mary Durbin, Nevin W. El-Nimri
Abstract 6615 - B0434

Assessment of pupillometry holds crucial significance in many clinical and research applications, including the diagnosis of disease through the observation of pupil abnormalities and the monitoring of pupillary reflexes in response to therapeutic interventions. This prospective study investigates the intrasession repeatability of pupil size measured with a multimodal diagnostic device.

NW500 / NW400

The first prospective study of Toku's CLAiR technology: advancing cardiovascular risk assessment through retinal imaging in the Middle Eastern population

Katie Geraghty, Ehsan Vaghefi, Esmaeil Arbabi, Igor Kozak
Abstract 3771 - B0434 (Featured)

Atherosclerotic Cardiovascular Disease (ASCVD) remains a significant global health concern necessitating innovative approaches for early risk identification. This study aimed to validate Toku's CLAiR technology prospectively and externally in predicting 10-year ASCVD risk using retinal images in the Middle Eastern population.

Feasibility of external imaging using a non-mydriatic robotic fundus camera

Sarah Armstrong, Juan Arias, Jessica Menou, David Kasanoff, Nevin W. El-Nimri
Abstract 5545 - B0648

To evaluate the clinical usefulness of external images acquired with a fundus camera.

TEMPO

A Modern Workflow Approach to Screen Ocular Health and Disease

Juan Arias, Mary K. Durbin, Ece Turhal, Susan Su, Nevin W. El-Nimri
Abstract 1857 - B0220 (Featured)

Effective screening of vision-threatening diseases requires a comprehensive and dependable pretest workflow to enable accurate pathology detection. In this study we aim to demonstrate that a workflow consisting of three devices can offer a wide array of screening capabilities and supplement growing telehealth needs in optometry and ophthalmology practices.

Influence of Age and Gender on Visual Field Test Duration in Healthy Subjects

Jacqueline S. Armani, Lana J. Luccitti, Susan Su, Mary Durbin, Derek Ho, Mayra Tafreshi, Vincent Michael Patella, Timothy Bossie, David Kasanoff, Michael A. Chaglasian, Nevin W. El-Nimri
Abstract 6354 - B0616

This study investigates the impact of age and gender on test duration of binocular VF testing within a cohort of healthy subjects.

Metric Comparison Between Two Perimeters for the Central Visual Field

Brittney Brady, Ashley Speilburg, Anne Rozwat, Patricia Salazar, Peterson Andrew, Susan Su, Michael A. Chaglasian, Lana J. Luccitti, Mary Durbin
Abstract 4794-B0457

A new perimeter is available that does not require a dark room and can be performed binocularly. The purpose of this study was to compare the performance of two perimeters in the central 10 and 24 degrees of the visual field in a cohort of primarily African American glaucoma patients.

Sequential versus simultaneous visual field testing: comparison of two perimeters

Catharine Chisholm, Derek Ho, Nevin W. El-Nimri, Juan D. Arias, Mary Durbin
Abstract 4811 - B0474 (Featured)

This study compares sequential versus simultaneous Standard Automated Perimetry (SAP) measured sequentially with the Humphrey Field Analyzer (HFA3, Zeiss Inc. Dublin, CA, USA), and simultaneously with the TEMPO/IMOvifa (Topcon Healthcare/CREWT Medical Systems, Tokyo, Japan), a novel binocular perimeter providing simultaneous, randomized binocular testing of each eye.

Characterizing Eyes of Older Normal Subjects for Use in Testing Diagnostic Algorithms

Mary K. Durbin, Anya Guzman, Juan D. Arias, Hannah Hou, Mayra Tafreshi1, David Kasanoff, Jessica Menou, Nevin W. El-Nimri
Abstract 4047 - B0166

Algorithms intended to identify and monitor pathology are frequently proposed using modalities that are not routinely performed on asymptomatic subjects. The goal of this study was to test the feasibility of acquiring a cohort of older controls for use in evaluating such algorithms.

Influence of Refractive Error on Visual Field Sensitivity and Reliability in Healthy Subjects

Nevin W. El-Nimri, Mayra Tafreshi, Derek Ho, Kelly Cieslinski, Christopher Lee, Huiyuan Hou, Juan D. Arias, Juho Uotila, Mary Durbin
Abstract 6355 - B0617

To investigate the impact of refractive error (RE) on visual field (VF) mean sensitivity (MS) and reliability in a cohort of healthy subjects.

Repeatability and Comparability of a Novel Visual Field Analyzer

Christopher Lee, Juan D. Arias, Mary Durbin, Mayra Tafreshi, David Kasanoff, Jessica Menou, Sasan Moghimi, Nevin W. El-Nimri
Abstract 4812 - B0475

This study aims to measure the repeatability of a novel binocular perimeter, as well as the comparability to another perimeter, in a population that includes healthy eyes and eyes with a wide range of glaucomatous damage.

Reference Database for a Novel Binocular Visual Function Analyzer

Vincent Michael Patella, Nevin W. El-Nimri, John G. Flanagan, Timothy Bossie, Derek Ho, Mayra Tafreshi, Michael A. Chaglasian, David Kasanoff, Sasan Moghimi, Takashi Nishida, Murray Fingeret, Robert N. Weinreb
Abstract 3066 - A0242 Featured

To construct a comprehensive reference database for a novel binocular automated perimeter.

Triton

Machine Learning Quantification of Fluid Volume in Eyes with Retinal Vein Occlusion Undergoing Treatment with Aflibercept: The REVOLT study

Netan Choudhry, Niveditha Pattathil, Mohammed Khan, Simrat Sodhi, Samantha Orr, John Golding, Austin Pereira, Ashley Patel, Jonathan Oakley, Daniel Russakoff, Anuradha Dhawan
Abstract 2395 - A0287

To investigate the combined relationship between ischemia, retinal fluid and layer thickness measurements with visual acuity outcomes for RVO patients and derive insights into disease pathology.

The Effect of the Water Drinking Test on Subfoveal Choroidal Thickness in Healthy Subjects

Nevin W. El-Nimri, Susan Su
Abstract PB0041

This preliminary study aims to examine changes in subfoveal choroidal thickness after water drinking test in healthy eyes utilizing swept-source OCT.

Robotic Spectral-domain versus Swept-source OCT in the association between OCT-Angiography metrics and glaucoma severity

Massimo Antonio Fazio, Mark E. Clark, Christopher A. Girkin
Abstract 1212 - B0016

To assess the association between OCT-Angiography (OCTA) metrics and glaucoma severity in subjects imaged by a Spectral-domain (SD) robotic OCT and a swept-source (SS) OCT.

Predicting Risk of Glaucoma Development in Suspect Eyes Using Swept-Source Optical Coherence Tomography-based Risk Scores

Huiyuan Hou, Alireza Kamalipour, Pooya Khosravi, Natchada Tansuebchueasai, Mohsen Adelpour, Mary Durbin, Christopher Lee, Robert Weinreb, Sasan Moghimi
Abstract 4049 - B0168 Featured

To assess the use of risk scores that are solely derived from swept-source optical coherence tomography (OCT) measurements to predict the development of perimetric glaucoma in suspect eyes.

Optical Coherence Tomography Angiography Features of Benign Intraocular Tumors

Neslihan Dilruba Koseoglu, Anam Akhlaq, J Fernando Arevalo
Abstract 5531 - B0634

Optical coherence tomography angiography (OCT-A) is a non-invasive imaging technique that allows dye-free detection of chorioretinal blood flow, and may serve as a supplementary imaging tool for ocular tumors. This study reports OCT-A features of rare benign intraretinal tumors.

Testing the performance and application of glaucoma risk score models on swept source optical coherence tomography data

Atsushi Kubota, Anya Guzman, Yi Sing Hsiao, Mary Durbin, Tony H. Ko
Abstract 4048 - B0167

To evaluate the diagnostic accuracy and applicability of four glaucoma risk score models, when applied to swept source optical coherence tomography (SS-OCT) scans of both healthy and diseased eyes. Comparative analysis was also conducted using SS-OCT scans and spectral domain optical coherence tomography (SD-OCT) scans acquired on the same eyes.

Utilizing image denoising and machine Learning segmentation to quantify fluid volume in Eyes with vascular retinal diseases: the STATIC study

Niveditha Pattathil, Netan Choudhry, Mohammed Khan, Samantha Orr, Amin Hatamnejad, John Golding, Simrat Sodhi, Austin Pereira, Anuradha Dhawan
Abstract 2399 - A0291

To utilize a combination of a denoising algorithm with an automated OCT segmentation algorithm to quantify intraretinal fluid (IRF) and subretinal fluid (SRF) volumes in patients with retinal vascular diseases.

Regional macular and peripapillary vessel density changes associated with the water drinking test

Susan Su, Juan D. Arias, Mary Durbin, Nevin W. El-Nimri
Abstract 1226 - B0030

The water drinking test (WDT) serves as a stress test for the eye and a useful tool to assess circadian peaks and instability of intraocular pressure (IOP). This preliminary study examines changes in macular and peripapillary vessel densities (VD) after WDT in healthy eyes.

Other

Measuring Pulsatile Retinal Blood Flow using Structural OCT Image

Masahiro Akiba, Jenwei Kuo, Kyungmoo Lee, Richard Spaide, Mary Durbin, Tony Ko
Abstract PB0047

To evaluate the ability to measure pulsatile retinal blood flow using structural optical coherence tomography (OCT) scans. To compare OCT speckle-based flow measurements in retinal vessels of normal subjects to those obtained using Doppler OCT analysis.

Development of a quantitative evaluation method for ellipsoid zone damage using OCT en-face image

Riku Kuji, Hiroaki Sakai, Masato Tamura, Toshihiro Mino, Yoshikiyo Moriguchi, Masahiro Akiba, Hiroshi Enaida
Abstract 5939 - B0540

To develop a quantitative method that enables to evaluate the degree of structural abnormalities by utilizing the reflectance differences of the ellipsoid zone (EZ) in OCT en-face image.

Open Access Publishing in Eyecare-Related Research Journals in the US and Europe

Tobias Kurzke
Abstract 4180 - B0632

Open Access makes viewing, citations and sharing of work more possible and may also contribute to better quality assurance as research is visible to more people. This study reviews OA policies and compares them between the US and Europe.

Quantification of relative blood flow velocity in macular neovascularization using SS-OCTA and VISTA techniques

Yoshikiyo Moriguchi, Fumi Tanaka, Toshihiro Mino, Hidenori Nagahama, Masahiro Akiba, Yuji Oshima, Hiroshi Enaida
Abstract 3432 - A0347

To quantify relative blood flow velocity in macular neovascular vessels (MNV) in neovascular age-related macular degeneration (nAMD) using swept source optical coherence tomography angiography (SS-OCTA) and variable interscan time analysis (VISTA).

Comparisons of retinal nerve fiber layer (RNFL) defect assessment with RNFL optical texture analysis (ROTA) between Triton and Maestro2 optical coherence tomography (OCT)

Yuen Ching Ng, Yawen Guo, Gilda Lai, Lukas Huebschmann, Christopher Kai-Shun Leung
Abstract 4828 - B0550

To compare the diagnostic performance of ROTA for detection of RNFL defects in glaucoma between two swept-source optical coherence tomography with different scan resolutions – Triton and Maestro2; and to (2) evaluate the inter-device and inter-observer agreements for measurements of the angular width of RNFL defects.

Reliability of Blood Flow Measurements Using Speckle Analysis of Optical Coherence Tomography of Retinal Blood Vessels

Richard Spaide, Jenwei Kuo, Kyungmoo Lee, Mary Durbin, Masahiro Akiba, Tony Ko
Abstract PP0010   (Featured)

To evaluate the reliability of speckle-based flow measurements in retinal vessels of normal subjects using optical coherence tomography (OCT) and explore the use of this methodology in eyes with disease.

Posterior eye curvature map in children estimated by widefield OCT

Masato Tamura, Takahiro Hiraoka, Gaku Kiuchi, Yoshimi Sugiura, Yosuke Takahashi, Kenichi Yoshino, Riku Kuji, Toshihiro Mino, Yoshikiyo Moriguchi, Masahiro Akiba, Tetsuro Oshika
Abstract 6613 - B0432

We studied posterior eye curvature map in children to investigate the relationship between the posterior curvature and myopia.

Accuracy and Repeatability of a New Multimodal Diagnostic Prototype Compared to Standard Methods

Ece Turhal, Nevin W. El-Nimri, Juan D. Arias, Mary Durbin, Mayra Tafreshi, Amy Minshall, Yukari Kanemichi, Akihiro Harada, Masahiro Takahashi
Abstract 5546 - B0649

This study aims to evaluate the accuracy and repeatability of IOP and pachymetry measurements of this new multimodal non-invasive prototype with a simple one-touch operation.
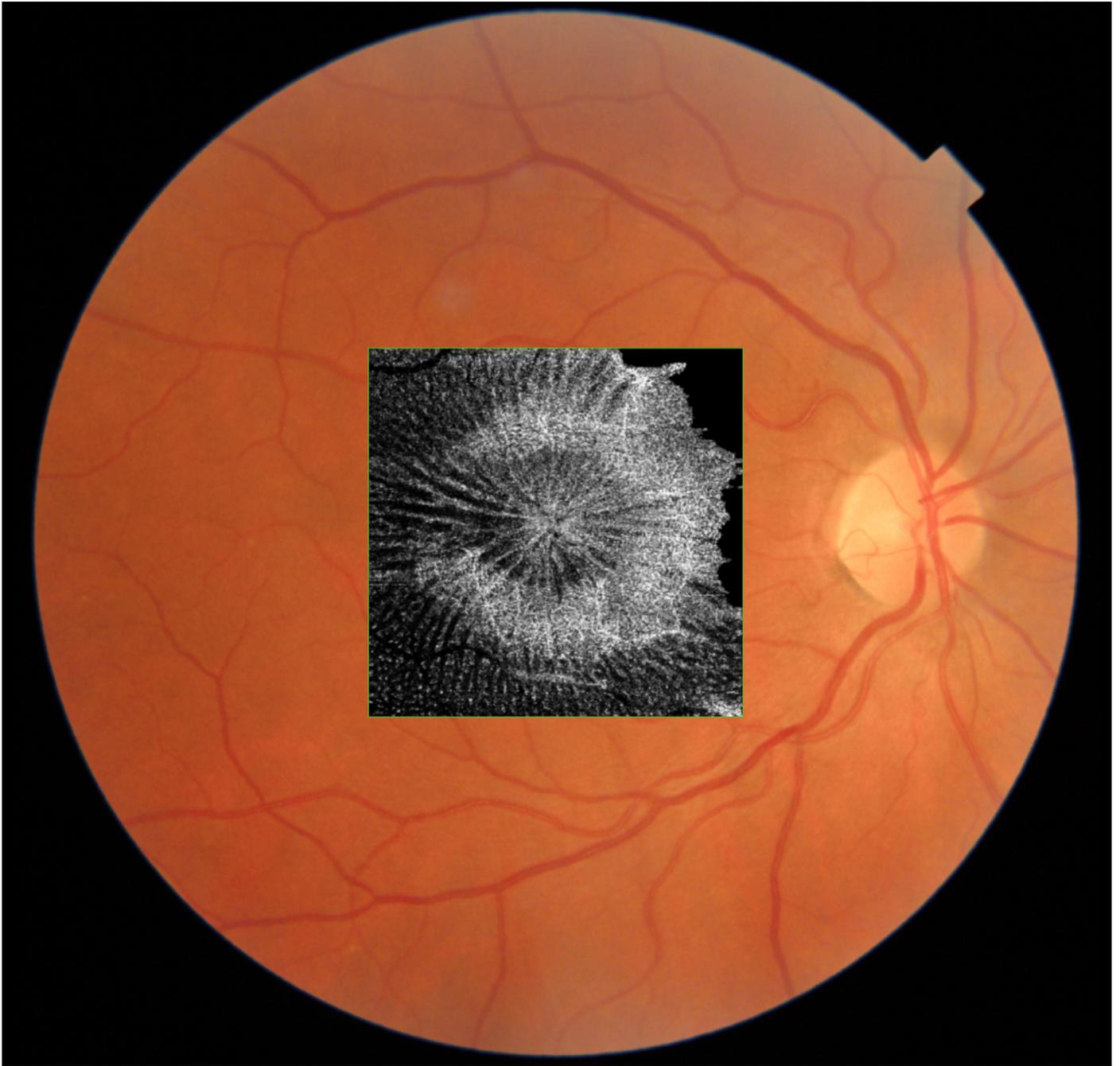
OCT-A overlay over fundus photo captured on Topcon DRI Triton SS-OCT

TOPCON Healthcare