MAESTRO
LITERATURE INDEX

TOPCON Healthcare

PREFACE

Topcon Healthcare's mission is to empower eyecare professionals by providing robotic diagnostic technologies, intelligent digital solutions, and an inclusive data connectivity platform to enhance patient care.

As an established global leader in OCT technology, we give clinicians the tools to see deeper, locate abnormalities more efficiently, and see them more clearly. Our current OCT portfolio is evidence of our commitment to continual innovation in pursuit of this vision.

Maestro's robotic capture technology provides amazing capture efficiency and ease of use. Maestro has changed the perception of OCT and has become one of the top-selling OCTs globally.

This literature index is intended as an introduction to the breadth of research on or utilising the Maestro. In addition to exploring this index of peer-reviewed clinical articles, we encourage you to learn more about the Maestro2 here.

Table of Contents

MAESTRO

ANALYSIS & IMAGE QUALITY

The development of a reference database with the Topcon 3D OCT-1 Maestro.

Chaglasian M, Fingeret M, Davey PG, Huang WC, Leung D, Ng E, Reisman CA.

PMID: 29765199 DOI: 10.2147/OPTH.S155229

Report the range of thickness values for the new Topcon Maestro 3D optical coherence tomography device with 2 scan size settings: the 12×9 mm wide field and 6×6 mm scans.

Optic disc morphometry using spectral domain optical coherence tomography in a Nigerian population.

Awe OO, Onakpoya OH, Adeoye AO.

PMID: 33863262 DOI: 10.1177/11206721211008781

Assess morphological optic disc dimensions using spectral-domain optical coherence tomography in a Nigerian population.

Automated Identification of Referable Retinal Pathology in Teleophthalmology Setting.

Gao Q, Amason J, Cousins S, Pajic M, Hadziahmetovic M.

PMID: 34036304 DOI: 10.1167/tvst.10.6.30

Meet a growing need for a fully automated, learning-based interpretation tool for retinal images obtained remotely (e.g. teleophthalmology) through different imaging modalities that may include imperfect (uninterpretable) images.

Comparison of the Thickness of the Fiber Layer of the Retinal Nerves in Spectral Domain Optical Coherence Tomography in Normal Eyes Older Than 40 Years.

Gündogan M, Kiliç S.

PMID: 34528230 DOI: 10.1055/a-1554-5663

Compare measurements of the thickness of the retinal nerve fibre layer and assess the agreement between three different devices for spectral domain optical coherence tomography.

Use of Teleophthalmology for Evaluation of Ophthalmic Emergencies by Ophthalmology Residents in the Emergency Department.

Shah YS, Fliotsos MJ, Alaqeel A, Boland MV, Zafar S, Srikumaran D, Woreta FA.

PMID: 34619063 DOI: 10.1089/tmj.2021.0334

Ophthalmology residents were trained to use a Topcon 3D Optical Coherence Tomography-1 Maestro to capture optical coherence tomography images and fundus photos in patients presenting to the emergency department with urgent ophthalmic concerns.

Optical Coherence Tomography Retinal Nerve Fibre Layer and Ganglion Cell Complex Measurements in Normal Southern Nigerian Eyes.

Obasuyi OC, Osuji UE, Ifijen CO, Imafidon MA, Ovienria WA, Eguaojie IE, Eigbedion TE, Alikah AA.

PMID: 36726929 DOI: 10.7759/cureus.33101

Provide the measurements of retina nerve fibre layer, ganglion cell layer, and ganglion cell layer and inner plexiform layer in normal eyes of southern Nigerian patients and specifically to evaluate the relationship of these measurements to gender, age, intra-eye variability, and the Topcon optical coherence tomography normative database.

Evaluation of the inclusion of spectral domain optical coherence tomography in a telemedicine diabetic retinopathy screening program: a real clinical practice.

Arruabarrena C, Rodríguez-Miguel A, Allendes G, Vera C, Son B, Teus MA.

PMID: 37155959 DOI: 10.1097/IAE.0000000000003832

Evaluate whether combining spectral domain optical coherence tomography with monoscopic fundus photography using a nonmydriatic camera (MFP-NMC) improves the accuracy of diabetic macular edema (DME) referrals in a teleophthalmology diabetic retinopathy screening program.

RETINAL DISORDERS

Evaluating the impact of optical coherence tomography in diabetic retinopathy screening for an Aboriginal population.

O'Halloran RA, Turner AW.

PMID: 28677229 DOI: 10.1111/ceo.13018

Evaluate the use of optical coherence tomography combined with a fundus camera compared with a fundus camera only in a telehealth diabetic retinopathy screening program for Aboriginal Australians.

The Outcome of Manual Small Incision Cataract Surgery and Anterior Vitrectomy for Persistent Fetal Vasculature in an 18-Year-Old Woman: A One-Year Follow-Up.

Egbu E.

PMID: 33123424 DOI: 10.7759/cureus.10605

Report the surgical management of persistent fetal vasculature.

Retinal microvascular signs in COVID-19.

Sim R, Cheung G, Ting D, Wong E, Wong TY, Yeo I, Wong CW.

PMID: 33741583 DOI: 10.1136/bjophthalmol-2020-318236

Explore if retinal findings are associated with COVID-19 infection.

NEUROLOGICAL DISORDERS

Usefulness of peripapillary nerve fiber layer thickness assessed by optical coherence tomography as a biomarker for Alzheimer's disease.

Sánchez D, Castilla-Marti M, Rodríguez-Gómez O, Valero S, Piferrer A, Martínez G, Martínez J, Serra J, Moreno-Grau S, Hernández-Olasagarre B, De Rojas I, Hernández I, Abdelnour C, Rosende-Roca M, Vargas L, Mauleón A, Santos-Santos MA, Alegret M, Ortega G, Espinosa A, Pérez-Cordón A, Sanabria Á, Ciudin A, Simó R, Hernández C, Villoslada P, Ruiz A, Tàrraga L, Boada M.

PMID: 30397251 DOI: 10.1038/s41598-018-34577-3

The use of optical coherence tomography has been suggested as a potential biomarker for Alzheimer's disease based on previously reported thinning of the retinal nerve fiber layer in Alzheimer's disease and Mild Cognitive Impairment.

Evaluation of macular thickness and volume tested by optical coherence tomography as biomarkers for Alzheimer's disease in a memory clinic.

Sánchez D, Castilla-Marti M, Marquié M, Valero S, Moreno-Grau S, Rodríguez-Gómez O, Piferrer A, Martínez G, Martínez J, Rojas I, Hernández I, Abdelnour C, Rosende-Roca M, Vargas L, Mauleón A, Gil S, Alegret M, Ortega G, Espinosa A, Pérez-Cordón A, Sanabria Á, Roberto N, Ciudin A, Simó R, Hernández C, Tárraga L, Boada M, Ruiz A.

PMID: 32005868 DOI: 10.1038/s41598-020-58399-4

The use of optical coherence tomography to report thinning of the macula in Alzheimer's disease and mild cognitive impairment patients, has been proposed as a potential biomarker for Alzheimer's disease.