



## Systemic Health Reflective Learning Module – March, 2025

### SECTION 1: REFERENCE-BASED QUESTIONS (questions 1-13)

These questions are based on the references listed below, which emphasize landmark studies, review of critical concepts, and new information relevant to optometry within the area of systemic health.

Topic: Hypertension guidelines (Questions 1-4)

In November 2017, the American College of Cardiology (ACC) and the American Heart Association (AHA) jointly released a revised clinical practice guideline for the prevention, detection, evaluation, and treatment of high blood pressure in adults. All health care professionals need to be familiar with the updated, more stringent definitions of high blood pressure and the new classification categories. The full text of the new guideline is 122 pages long ([2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults \(jacc.org\)](https://www.jacc.org)), but we've identified two summary articles that will be sufficient for purposes of this module.

Rubens M. 2017 Guidelines for High Blood Pressure in Adults. American College of Cardiology, 2018. <https://www.acc.org/latest-in-cardiology/ten-points-to-remember/2017/11/09/11/41/2017-guideline-for-high-blood-pressure-in-adults> (PART 1 ONLY)

Whelton PK, Carey RM, et al. 2017 Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults: Guidelines Made Simple. American College of Cardiology, 2018. [https://www.acc.org/~media/Non-Clinical/Files-PDFs-Excel-MS-Word-etc/Guidelines/2017/Guidelines Made Simple 2017 HBP.pdf](https://www.acc.org/~media/Non-Clinical/Files-PDFs-Excel-MS-Word-etc/Guidelines/2017/Guidelines_Made_Simple_2017_HBP.pdf) (PAGES 4-15 ONLY)

Topic: Plaquenil screening guidelines (Questions 5-8)

In 2016, the American Academy of Ophthalmology revised its recommendations on screening for chloroquine and hydroxychloroquine retinopathy based on new information about the toxicity, risk factors, fundus distribution and effectiveness of screening tools.

Marmor MF, et al. Recommendations on Screening for Chloroquine and Hydroxychloroquine Retinopathy (2016 Revision). American Academy of Ophthalmology, March 2016. <https://www.aao.org/clinical-statement/revised-recommendations-on-screening-chloroquine-h>

In 2021 four major medical societies, representing rheumatology, dermatology and ophthalmology, issued a joint statement outlining management guidelines for the use of hydroxychloroquine, stressing the importance of communication among health care providers.

ACR, AAD, RDS, and AAO 2020 Joint Statement on Hydroxychloroquine Use with Respect to Retinal Toxicity. American Academy of Ophthalmology, February 2021. <https://www.aao.org/clinical-statement/acr-aad-rds-aao-2020-joint-statement-on-hydroxychl-2>



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Topic: OCT and OCT-A in neurological diseases (Questions 9-13)

Data obtained through retinal imaging may provide biomarkers that can improve the diagnosis and treatment of various neurological conditions.

Questions 9-11: Maldonado RS, Mettu P. The application of optical coherence tomography in neurological disease. *Neurol Clin Pract.* 2015; 5(5): 460-469.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5762027/>

Questions 12-13: Tsokolas G, et al. Optical Coherence Tomography Angiography in Neurodegenerative Diseases: A Review. *Eye Brain.* 2020;12:73-87

<https://doi.org/10.2147/EB.S193026>

### **SECTION 2: FUNDAMENTAL KNOWLEDGE QUESTIONS (questions 14-20)**

These questions are considered “fundamental knowledge” within the area of systemic health. This is information that has not changed substantially in the past 5-10 years, and with which all optometrists should be familiar or be able to access quickly.

The following outline is provided as a general guide for this section.

- Patient education regarding preventive health care measures (obesity, smoking cessation)
- Coordination of care with other health care providers/specialists of patients with systemic disease
- Indications for and interpretation of blood pressure measurement
- Managing ocular side effects of systemic medications
- Patient education to patients with systemic disease with or without eye-related findings
- Indications for and/or interpretation of blood chemistry (CBC, ESR, A1c, etc.)
- Use of oral medications (prescription and OTC), including contraindications/complications
- Use of nutraceuticals and supplements

If you wish to review prior to answering these questions, we recommend the following references:

- Kaiser and Friedman, *Mass Eye and Ear Illustrated Manual of Ophthalmology*, 4th ed. (2014)
- *The Wills Eye Manual*, 7<sup>th</sup> ed. (2017)