

INVENTORY AND ROADMAP for American Academy of Optometry Glaucoma Section Diplomate Program Clinical Track Case Reports

Candidate: (NAME) _____

Mentor: (NAME) _____

| Primary open-angle glaucoma and general glaucoma items | CASE REPORT Core # | DATE Accepted |
|---|-----------------------|------------------|
| Risk factor analysis | | |
| a. Risk factors for conversion from non-glaucoma to glaucoma | _____ | _____ |
| 1. Ocular Hypertension present OR | _____ | _____ |
| 2. Ocular Hypertension not present | _____ | _____ |
| b. Risk factors for glaucoma progression | _____ | _____ |
| c. Risk factors for glaucoma-related blindness | _____ | _____ |
| d. Quality of life impacts in glaucoma/important factors | _____ | _____ |
| e. Review of demographic risk factors | | |
| 3. Age | _____ | _____ |
| 4. Gender | _____ | _____ |
| 5. Race/ethnicity | _____ | _____ |
| f. Review of systemic health risk factors | _____ | _____ |
| 6. Relative strength of evidence | _____ | _____ |
| 7. Limitations in using these factors clinically | _____ | _____ |
| g. Life expectancy: why is this important ? | _____ | _____ |
| 8. Methods to determine this metric | _____ | _____ |
| 9. Impact on glaucoma management decisions | _____ | _____ |
| h. IOP | | |
| 10. Forms of tonometry | _____ | _____ |
| 11. Tonometry accuracy and precision (how much can we trust individual readings ? (repeatability/reproducibility) | _____ | _____ |
| 12. Factors affecting tonometry accuracy/precision | _____ | _____ |
| 13. Peak/trough/fluctuation of IOP review | _____ | _____ |
| 14. 24-hr variation of IOP/when does peak occur ? | _____ | _____ |
| 15. Positional and patient behavior effects on IOP | _____ | _____ |
| 16. Relative importance of IOP asymmetry | _____ | _____ |

- i. Gonioscopy
 - 17. Techniques of gonioscopy _____
 - 18. How does compression aid evaluation ? _____
 - 19. Indications/Frequency of testing _____
 - 20. Important/critical findings _____
 - 21. Adjunct role of UBM and AS-OCT _____

- j. Visual field testing: every case needs detailed description of visual field testing for that case but extensive discussion on each topic below only need occur in one of the case reports
 - 22. Types of VF testing/strategies _____
 - 23. Strengths/limitations of VF testing _____
 - 24. Interpretation of visual fields _____
 - 25. Role of 10-2 VF testing in glaucoma _____
 - 26. Identifying glaucomatous VF loss
(vs. no loss vs other forms of VF loss) _____
 - 27. Issues associated with frequency of testing _____
 - 28. Identifying presence & rate of glaucomatous
VF progression _____

- k. Optic nerve evaluation: every case needs detailed description but only one case needs to go into extensive detail about the specific topics below
 - *Types/strengths/limitations of structural testing/strategies
 - i. Clinical optic nerve evaluation
 - 29. Types of clinical optic nerve abnormalities _____
 - 30. Methods to identify abnormalities _____
 - 31. Intra- and inter-observer variability _____
 - 32. Role of disc size in assessing optic
nerve health _____
 - a. Discrepancy between clinical estimates
and SD-OCT microstructural
estimates of disc size _____
 - b. Disc hemorrhage: characteristics/
relationship to disease _____
 - c. Role of peripapillary atrophy _____
 - d. Current knowledge of optic nerve
biomechanics and evolution
of glaucomatous optic neuropathy _____
 - e. Changes in optic nerve morphology
with progressive glaucoma _____

 - ii. High-tech imaging of the optic nerve:
strengths/limitations _____

- f. Artifacts: causes/remedies _____
- g. False positives/false negatives _____
- h. Strategies to measure optic nerve parameters including rim width _____
- i. Patterns of RNFL damage _____
- j. Micro-anatomy of peripapillary atrophy on OCT/OCT-A _____
- 33. High tech imaging of the retinal nerve fiber layer
 - a. Artifacts: causes/remedies _____
 - b. False positives/false negatives _____
 - c. Strategies to measure RNFL _____
 - d. Role of asymmetry _____
 - e. How to evaluate/interpret longitudinal change in RNFL _____
- 34. High-tech imaging of the macula
 - a. Strategies for using macular thickness for glaucoma _____
 - b. Strengths/limitations of macular structure for glaucoma
 - i. Diagnostic capability _____
 - ii. Reproducibility _____
 - iii. Effects of retinal/macular disease on scans _____
- 35. Correlation of structure/function and structure/structure
 - a. Clinical confidence linked to correspondence _____
 - b. Frequency of discordance _____
 - c. Sources of discordance _____
 - d. Implications of discordance _____
- 36. Issues associated with frequency of testing _____
- 37. Identifying presence and rate of glaucomatous structural progression _____
- 38. How does age affect structure over time _____

I. Treatment

- 39. When to treat _____
- 40. Considerations for observation vs. treatment _____
- 41. How to initiate or advance glaucoma treatment _____
- 42. Considerations regarding treatment choices _____
- 43. Medical agents
 - a. Benefits/side effects/contraindications _____
 - b. Mechanisms _____
 - c. Indications _____

- d. Issues related to adherence/persistence/
ability to successfully instill drops
into eyes _____
- e. Comorbidities associated with treatment _____
- f. Laser trabeculoplasty _____
 - i. Types _____
 - ii. Mechanisms _____
 - iii. Indications _____
- g. Invasive surgical options _____
 - i. Trabeculectomy vs. tube shunt _____
 - ii. MIGS options _____
- m. Staging of disease: what methods are available to stage disease _____
 - iii. Advantages and disadvantages of various systems _____
 - iv. How does disease stage impact glaucoma
decision-making _____
 - v. Are there discrepancies between ICD-10 staging codes
and clinical assessment of stage ? _____

ADDITIONAL FACTORS TO SPECIFICALLY ADDRESS WITHIN ANGLE CLOSURE CASE REPORTS

- a. Epidemiology _____
- b. Known mechanisms/course of disease/plateau iris status _____
- c. Associated demographics _____
- d. IOP-related characteristics _____
- e. Anterior segment characteristics _____
- f. Drainage angle characteristics _____
- g. Structure/function relationships specific to angle closure _____
- h. Specific treatment options _____
- i. Follow-up care/prognosis _____

ADDITIONAL FACTORS TO SPECIFICALLY ADDRESS WITHIN PSEUDOEXFOLIATION GLAUCOMA CASE REPORTS

- a. Epidemiology _____
- b. Known mechanisms/course of disease/plateau iris _____
- c. Associated demographics _____
- d. IOP-related characteristics _____
- e. Anterior segment characteristics _____
- f. Drainage angle characteristics _____
- g. Structure/function relationships specific to angle closure _____
- h. Specific treatment options _____
- i. Follow-up care/prognosis _____

ADDITIONAL FACTORS TO SPECIFICALLY ADDRESS WITHIN PIGMENTARY GLAUCOMA/DISPERSION CASE REPORTS

- a. Epidemiology _____
- b. Known mechanisms/course of disease/plateau iris _____
- c. Associated demographics _____
- d. IOP-related characteristics _____
- e. Anterior segment characteristics _____
- f. Drainage angle characteristics _____
- g. Structure/function relationships specific to angle closure _____
- h. Specific treatment options _____
- i. Follow-up care/prognosis _____

ADDITIONAL FACTORS TO SPECIFICALLY ADDRESS WITHIN SECONDARY GLAUCOMA CASE REPORTS

- a. Epidemiology _____
- b. Known mechanisms/course of disease/plateau iris _____
- c. Associated demographics _____
- d. IOP-related characteristics _____
- e. Anterior segment characteristics _____
- f. Drainage angle characteristics _____
- g. Structure/function relationships specific to angle closure _____
- h. Specific treatment options _____
- i. Follow-up care/prognosis _____