

RELIABILITY CHECKLISTS

Steps for improved interpretation of visual field testing and OCT imaging.



BY SANJAY ASRANI, MD



BASIC RELIABILITY CHECKLIST	
Visual Field	ОСТ
□ Reliability: Check patient age, correct add, and reliability parameters	□ Reliability: Check signal strength, assess for presence of posterior subcapsular cataract, posterior capsular opacification, or high myopia
□ Reliability: Confirm the correct blind spot location	□ Reliability: Rule out tracking or torsion errors
□ Progression: Assess the mean deviation, pattern standard deviation, and slope of progression of the visual field index	□ Progression: Use slope or sector average thickness for progression
□ Rule out masquerader: Determine if visual field loss respects the vertical midline	□ Rule out masquerader: See if there is a vertical cutoff in the ganglion cell thickness map
□ Rule out masquerader: Note sudden hemispheric loss of visual field	Rule out masquerader: Determine if there is a hemispheric pattern of change in retinal nerve fiber layer and macula, suggesting a vascular event or nonarteritic anterior ischemic optic neuropathy

ADVANCED RELIABILITY CHECKLIST	
Visual Field	ОСТ
□ Rule out artifacts: Determine actual decibel level change at each location to confirm that improved spots are not masking worsening spots on global parameters	□ Rule out artifacts: Look for the presence of an epiretinal membrane, posterior vitreous detachment, floater shadow, myopic schisis, vitreous traction, and correct segmentation of layer boundaries
□ Real change? Confirm reproducibility on repeat testing	□ Real change? Confirm that retinal nerve fiber layer loss matches macular/ganglion cell-inner plexiform layer loss
Glaucoma type: Note change in paracentral spots (indicating low-tension glaucoma) versus peripheral areas (indicating high-pressure glaucoma)	□ Glaucoma type: Determine if the change is in the temporal area (indicating low-tension glaucoma) or in the superotemporal and inferotemporal bundles (indicating high-pressure glaucoma)

SANJAY ASRANI, MD

- Professor of Ophthalmology and Head of the Glaucoma OCT Reading Center,
 Duke University, Durham, North Carolina
- Director, Duke Eye Center of Cary, North Carolina

- sanjay.asrani@duke.edu
- Financial disclosure: None

44 GLAUCOMA TODAY | MARCH/APRIL 2019

0319GT_F2_Asrani.indd 44 44