Test-Retest Reproducibility of Optic Disk Deterioration

(Presenter name goes here)
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PURPOSE

- To determine the reproducibility of optic disc progression by the Optic Disc Reading Center (ODRC)

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METHODS

- Quality control photographs were inserted into the ODRC reading stream
- Read in a masked fashion annually for 5 years
- Graded for glaucomatous progression by side-by-side comparison with baseline photograph

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METHODS

Gold Standard Negatives

50 photos of eyes showing no change from baseline

Gold Standard Positives

36 photos of eyes showing progression due to POAG and their 36 confirmation photos

122 photos are graded independently of each other and separately by two primary readers

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RESULTS

SPECIFICITY

N=50 normal eyes

Percent of eyes correctly called **NO** progression

2000	98%
2001	98%
2002	100%
2003	100%
2004	100%

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SENSITIVITY

N=36 eyes with POAG disc progression

percent of eyes correctly called PROGRESSION

Year	Annual N=36	Confirmation N=36	Both N=36
2000	86 %	81%	72%
2001	72%	81%	64%
2002	69%	89%	67%
2003	81%	89%	69%
2004	94%	83%	81%

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RESULTS

KAPPA: Coefficient of agreement which adjusts for the proportion of agreement due to chance

>0.75 = Excellent Agreement

0.40 - 0.75= Fair to Good Agreement

	Annual & Confirmation
2000	0.73
2001	0.65
2002	0.70
2003	0.73
2004	0.83

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CONCLUSION

- The determination of optic disc progression by the ODRC has been reproducible over time

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OHTS Clinical Centers

- Bascom Palmer Eye Institute
- Baylor Eye Clinic
- Charles R. Drew University
- Devers Eye Institute
- Emory University Eye Center
- Eye Associates of Washington, DC
- Eye Consultants of Atlanta
- Eye Doctors of Washington
- Eye Physicians and Surgeons of Atlanta
- Glaucoma Care Center
- Great Lakes Ophthalmology
- Henry Ford Hospitals
- Johns Hopkins University
- Jules Stein Eye Institute, UCLA
- Kellogg Eye Center
- Kresge Eye Institute
- Krieger Eye Institute
- Maryland Center for Eye Care
- Mayo Clinic/Foundation
- New York Eye & Ear Infirmary
- Ohio State University
- Salus University
- Scheie Eye Institute
- University of California, Davis
- University of California, San Diego
- University of California, San Francisco
- University of Louisville
- University Suburban Health Center
- Washington Eye Physicians & Surgeons
- Washington University, St. Louis

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OHTS Resource Centers

Study Chairman's Office
&
Coordinating Center
Washington University
St. Louis, MO

Optic Disc Reading Center
Bascom Palmer Eye Institute
University of Miami
Miami, FL

Visual Field Reading Center
University of California, Davis
Sacramento, CA

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