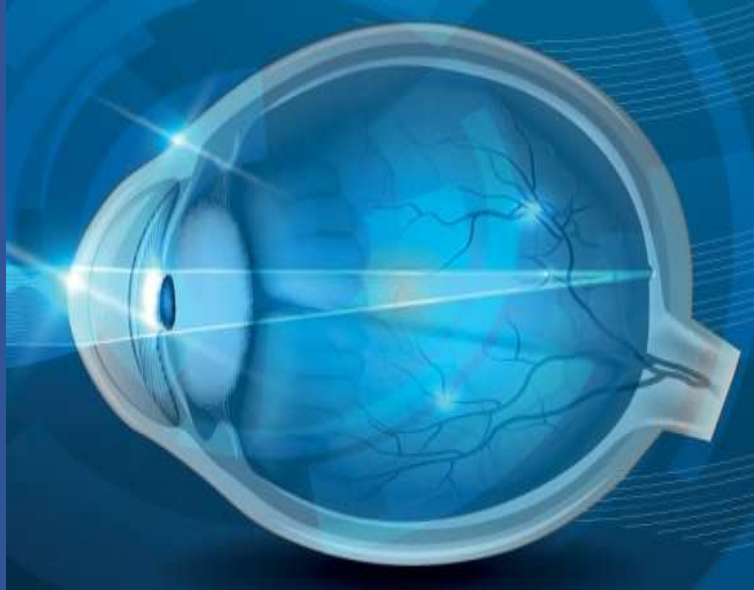


[About Analyzer](#)

[Logjn](#)

[SignUP](#)



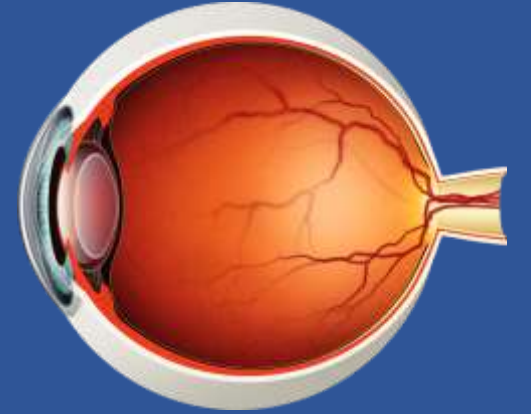
# Automated Fundus Image Analysis for Glaucoma Detection

---

A Smart AI Glaucoma Analyzer: The Future of Vision Preservation

## About

# Automated Fundus Image Analysis for Glaucoma Detection or FIA-G (Fundus Image Analysis - Glaucoma)



FIA-G (Fundus Image Analysis - Glaucoma) is equipped with advanced Imaging algorithms to help detect an early onset of Glaucomatous disc damage. Built with the insight from numerous industry experts, FIA-G analyses three different parameters to detect glaucoma. It estimates glaucomatous disc damage with high accuracy and precision.

# Analyze glaucoma with three risk

## CDR Test Factors

Estimates Glaucoma damage in the retina and optic nerve. With futures like Vertical CDR & Horizontal CDR, Cup to Disc Ratio (CDR) analysis is now more accurate and reliable than ever before.

## ISNT Test

The changes in the appearance of neuro retinal rim holds the key to quantifying glaucomatous disc damage. The Analyzer carefully examines the neuro retinal rim, the pattern of thickness and areas of focal thinning.

## DDLS Test

Disc Damage Likelihood Scale (DDLS) is a reproducible method of estimating the amount of optic nerve damage caused by glaucoma. Taking advantage of the smart algorithms, analyzer accurately stages the optic nerve according to the DDLS.

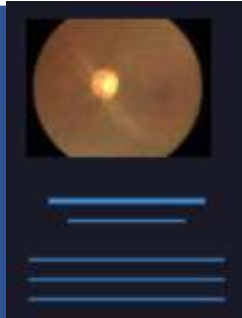
# Work Process

Patient visits the doctor to get his eyes examined



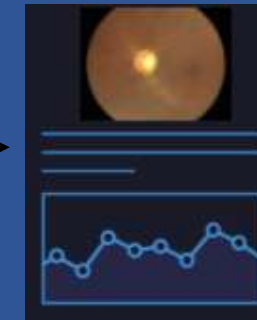
Doctor scans the eye using advanced fundus camera

Fundus Image



FIA-G

FIA-G analysis



FIA-G analyses the images & sends back the result

Fundus image is sent to FIA-G Server.

Doctor makes an informed decision based on the analysis.



# Cup to Disc Ratio



→ Fundus Image  
(Uploaded for processing  
in FIA-G)



→ Detected Blood vessels



→ Blood vessels Implanted



→ Cup gets detected



→ Disc gets detected

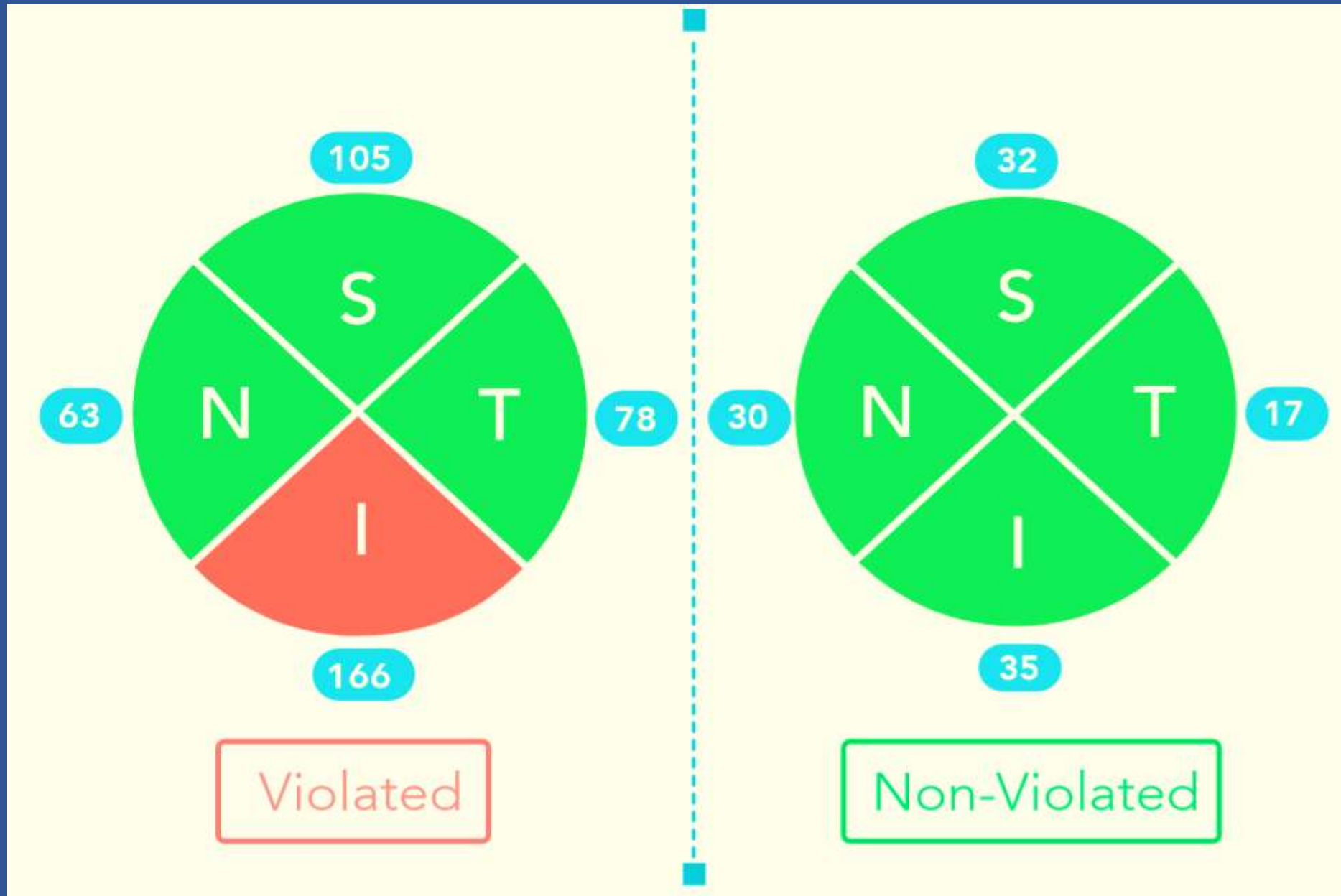
Features for CDR	
Rim Area	
Disc Area	14808
Avg. CDR	0.53
Horizontal CDR	0.51
Vertical CDR	0.55

# Disc Damage Likelihood Scale

The Glaucoma Process		
DDLS	NO DAMAGE	1
		2
		3
		4
DDLS	ASYMPTOTIC GLAUCOMA DAMAGE	5
		6
		7
DDLS	GLAUCOMATOUS DISABILITY	8
		9
		10

FIA-G uses a color coding standards to help differentiate between a glaucomatous eye & a normal healthy eye. 1-4 on DDLS scale shows a green color, 5-7 shows a yellow color & anything above 7 on DDLS scale shows a red color which means the person is having glaucoma.

# Inferior Superior Nasal Temporal

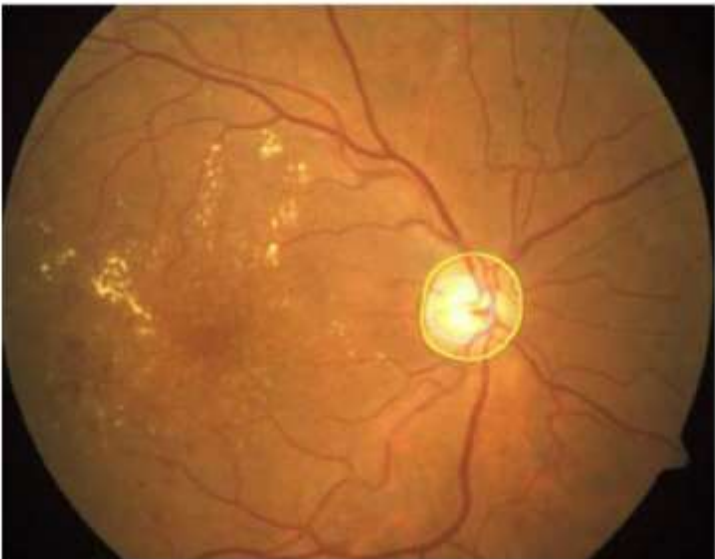




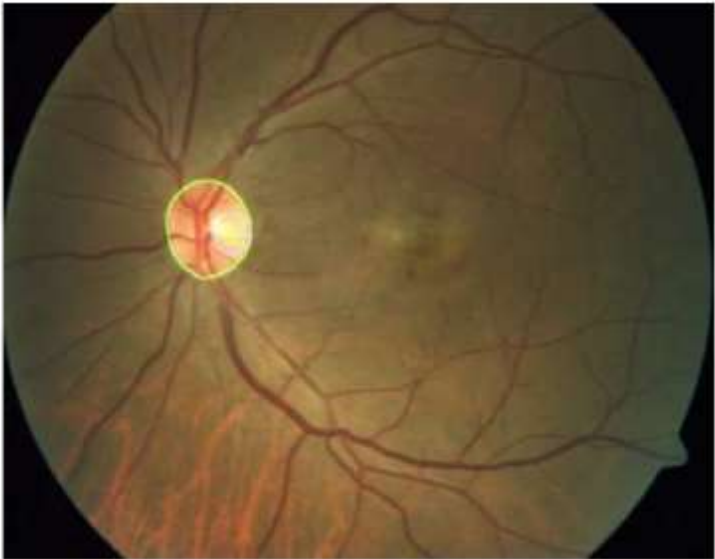
# Final Report

Patient Name:

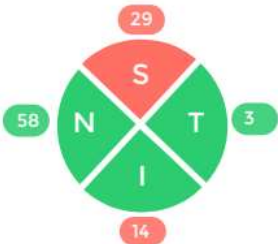
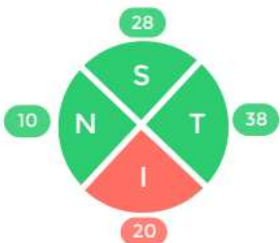
PREF ID:



FEATURES		
11043	Rim Area	11043
14808	Disc Area	14808
14808	Avg. CDR	14808
0.51	Horizontal CDR	0.51
0.51	Vertical CDR	0.51



ISNT RULE



DDLs

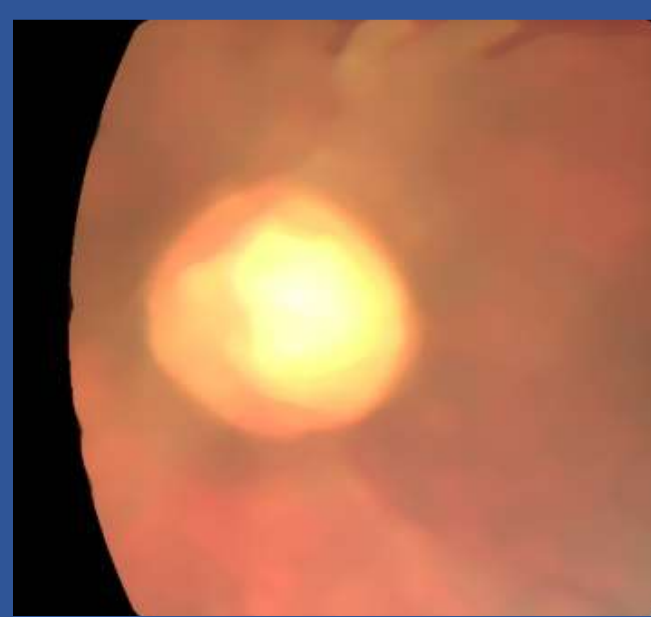
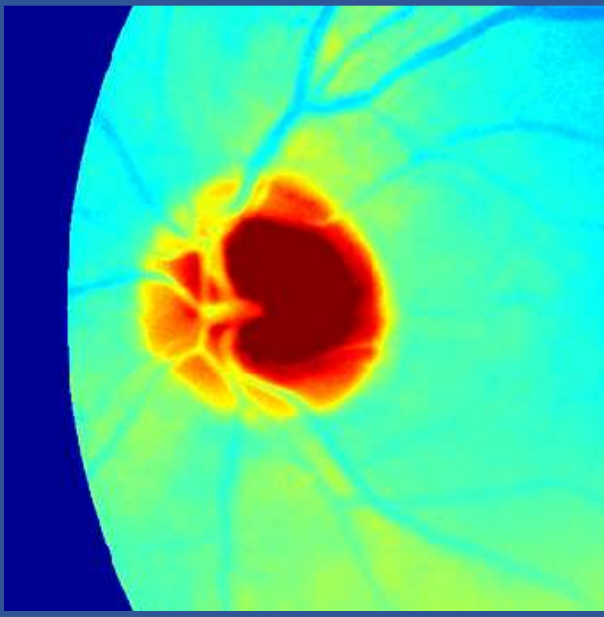
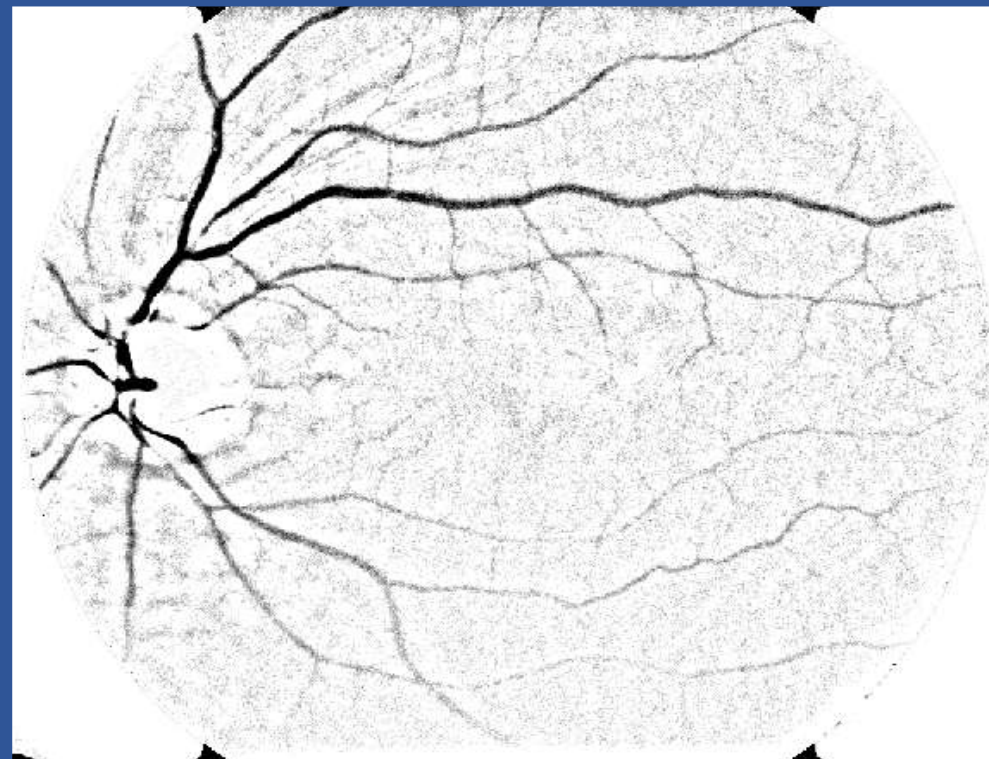
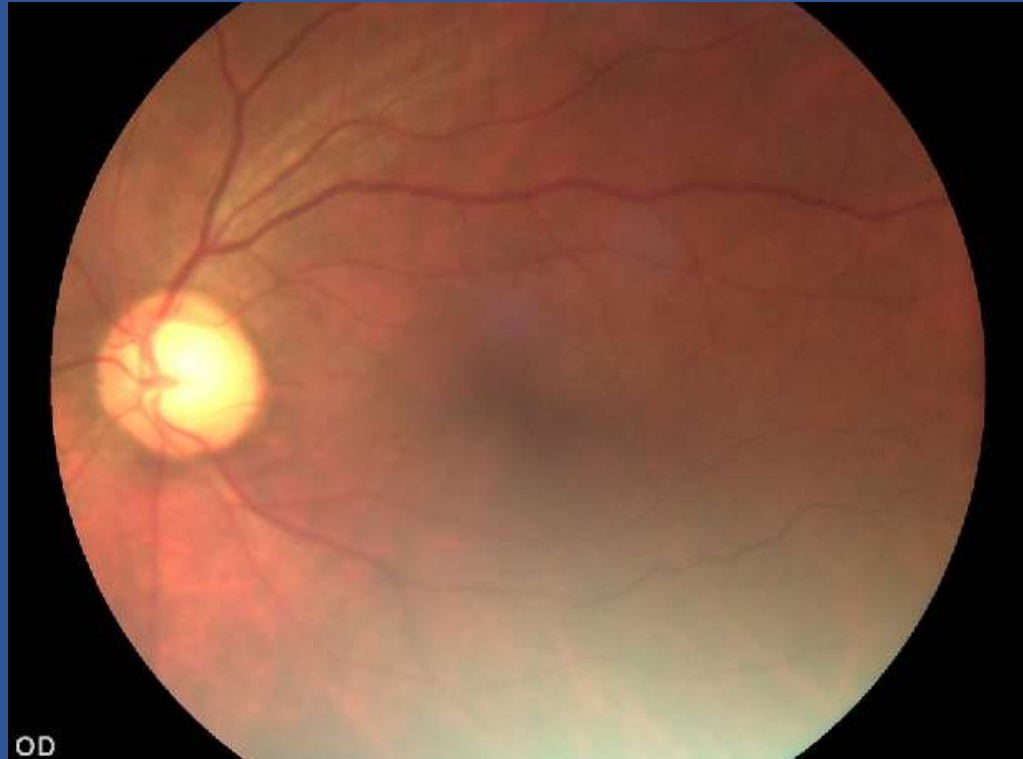
DDLs

4

DDLs

7





Disk Vertical Diameter : 153  
Disk Horizontal Diameter : 148  
Cup Vertical Diameter : 107  
Cup Horizontal Diameter : 107  
Horizontal CDR: 0.72297  
Vertical CDR : 0.69935

Disk Area : 17148  
Cup Area: 9074  
**Cup to Disk Area Ratio : 0.52916**

Minimum Rim Width : 9.434  
Rim To Disk Diameter Ratio : 0.067165  
Rim Area: 8074  
DDLS Stage(New): 4; DDLS Stage(Old): 2

Inferior Distance : 0.27174  
Superior Distance : 0.26087  
Nasal Distance : 0.32609  
Temporal Distance : 0.1413  
**Violates ISNT Rule**

