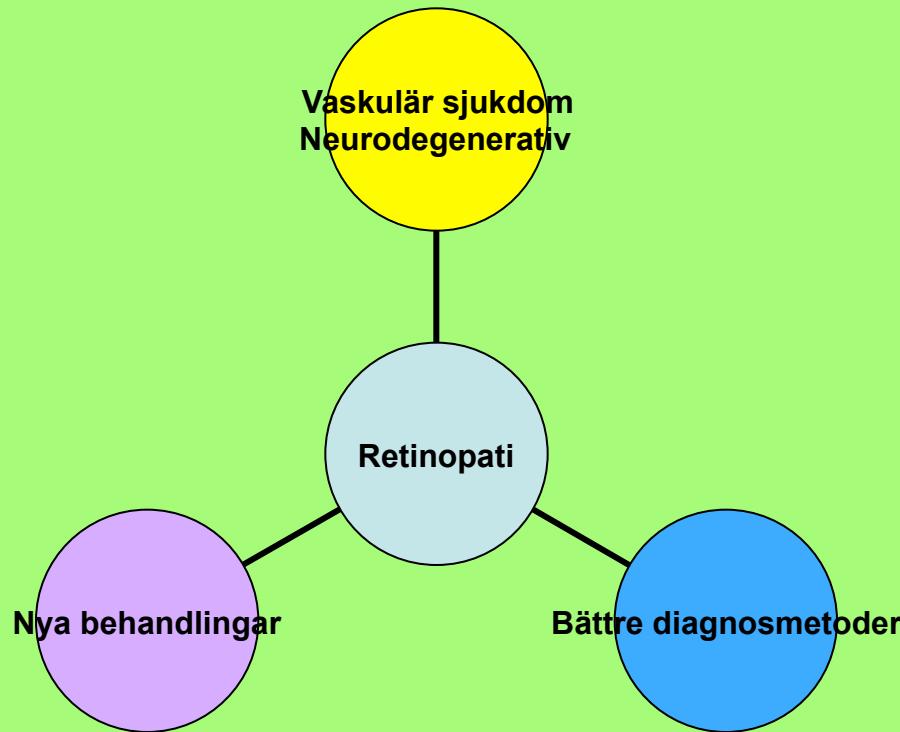
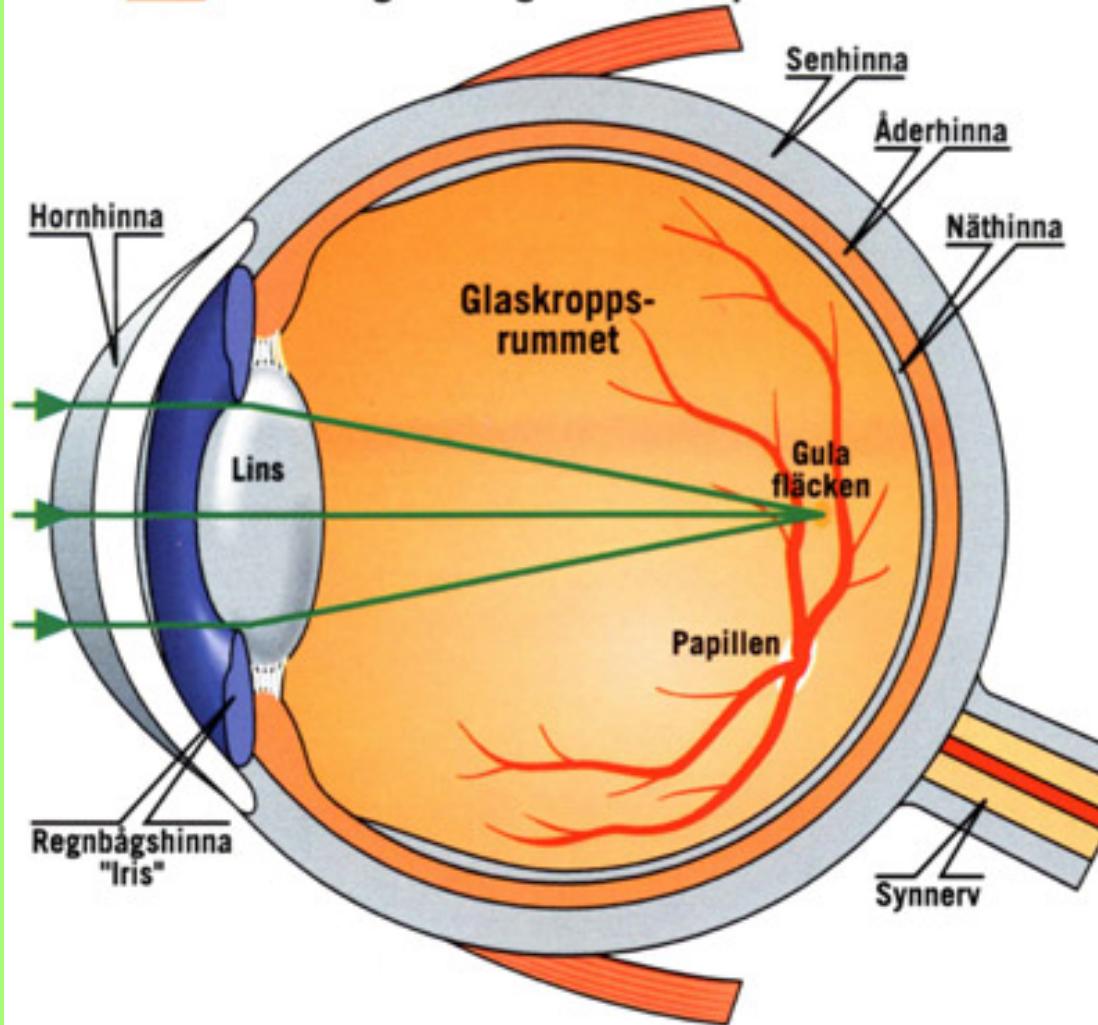


# Diabetesretinopati idag-finns det något nytt?

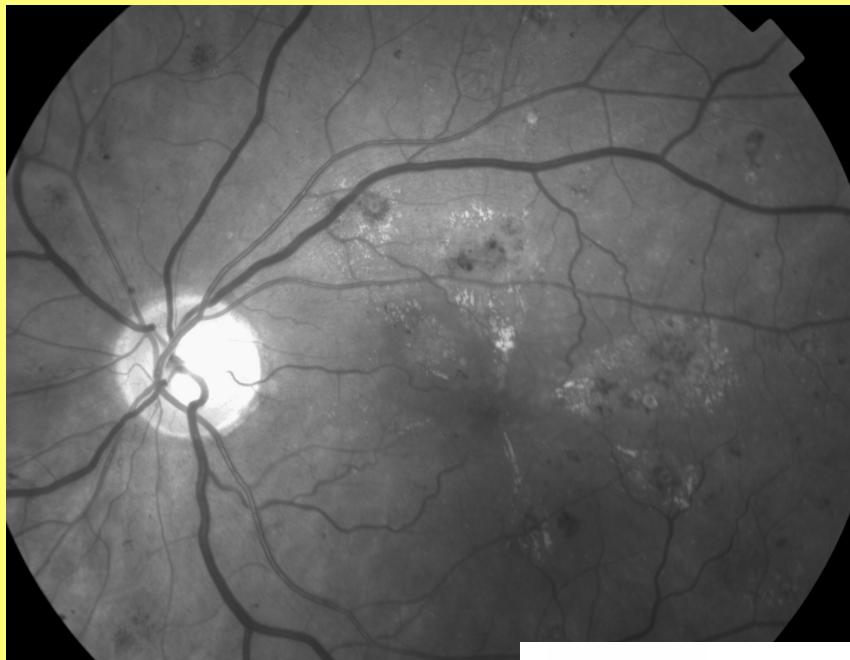


**1** Ögat i genomskärning visande ljusets väg och fokuseringen mot gula fläcken på näthinnan.

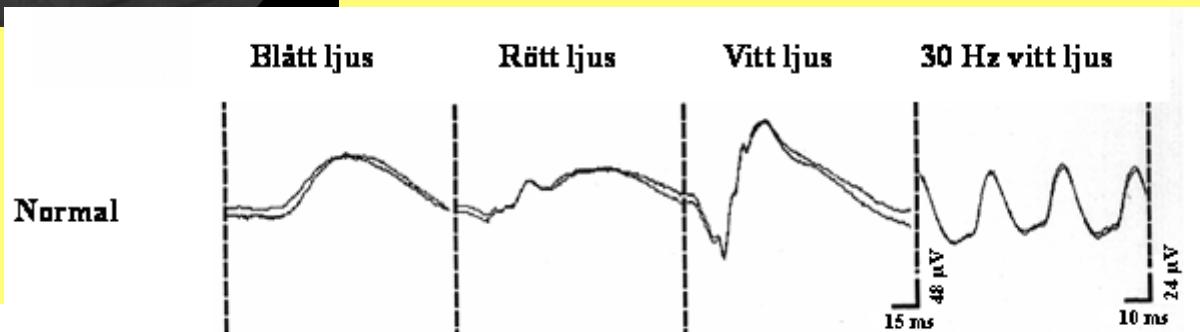


# Hur mår syncellerna?

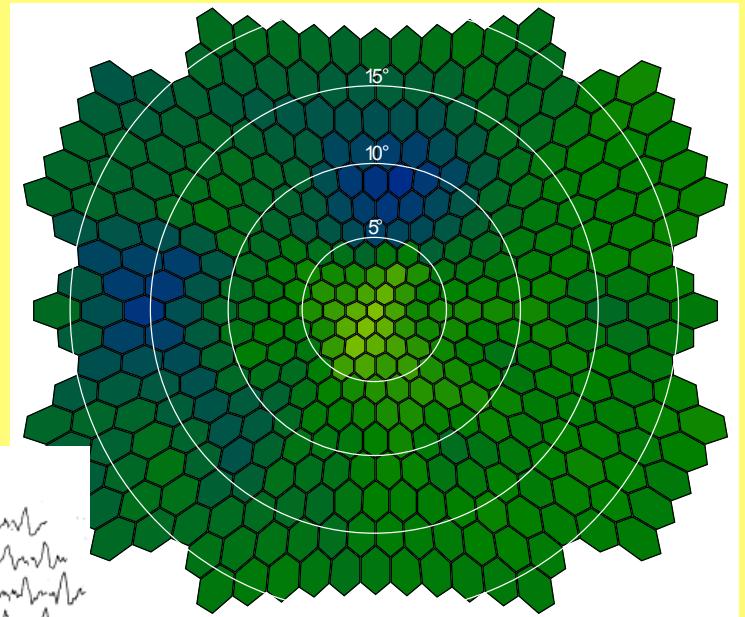
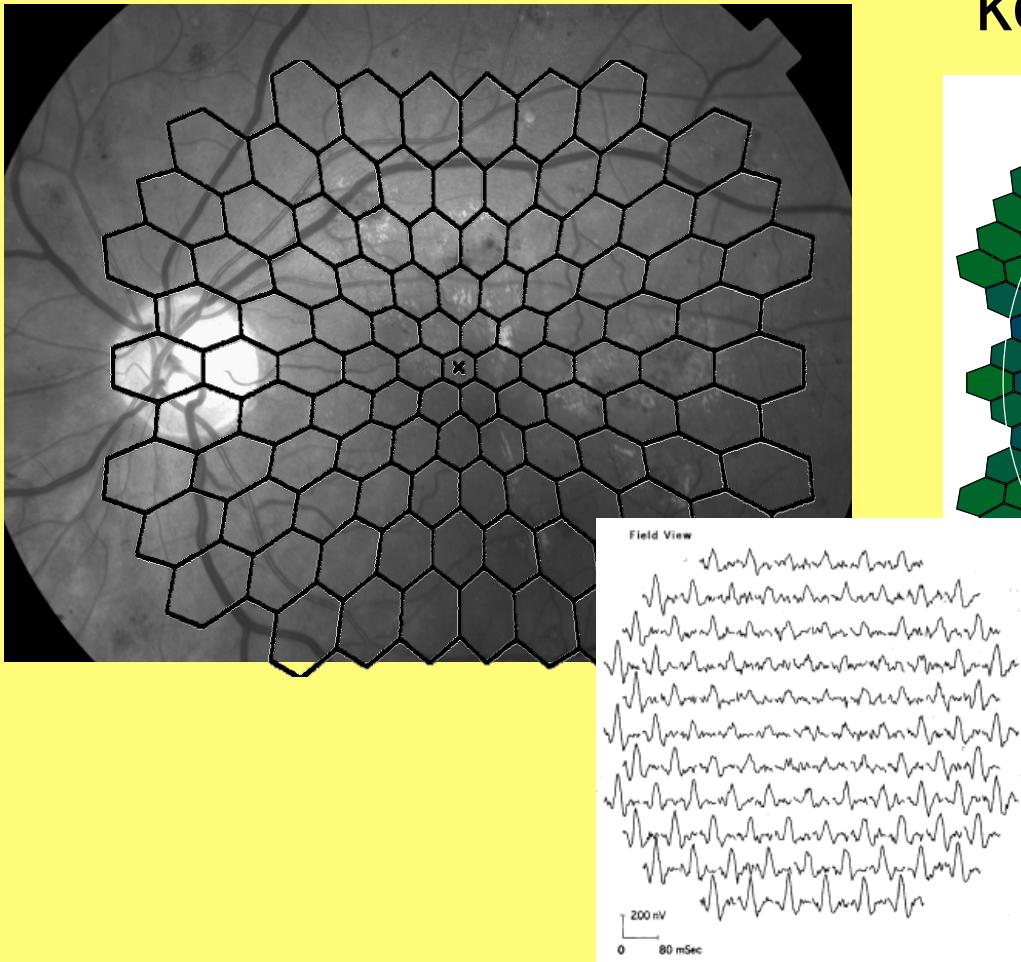
- Vaskulär sjukdom



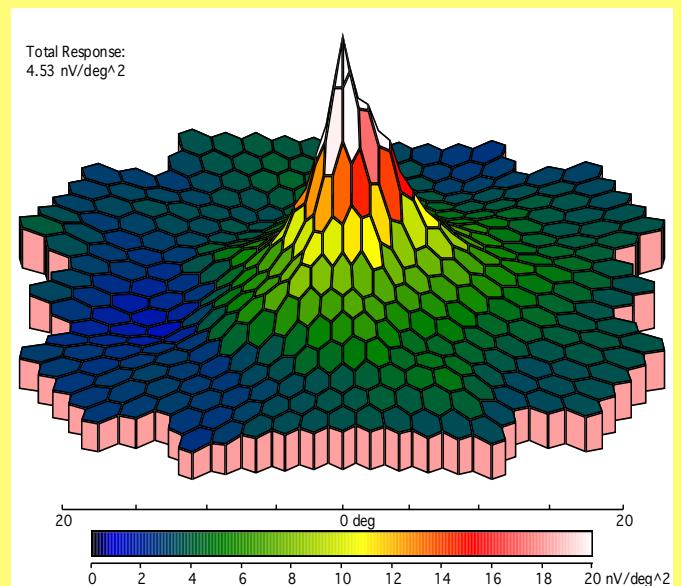
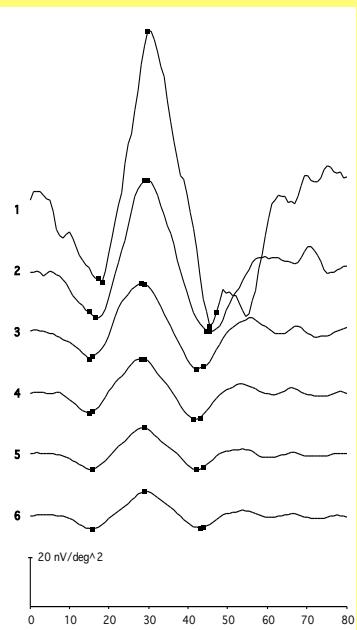
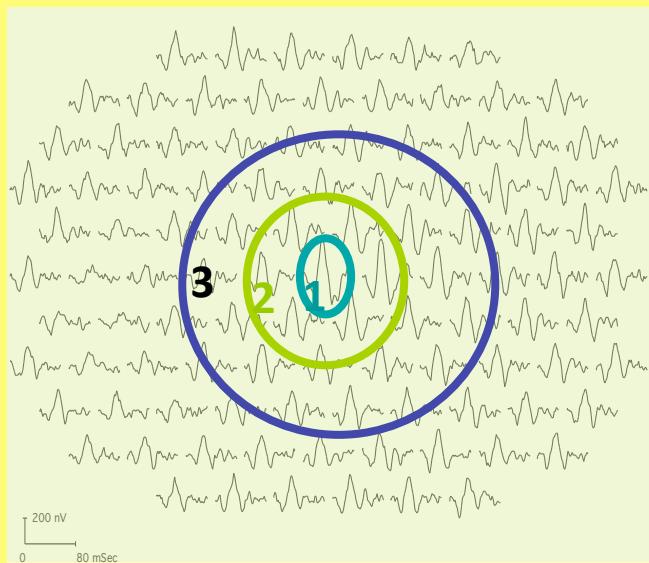
- Neurodegenerativ komponent???



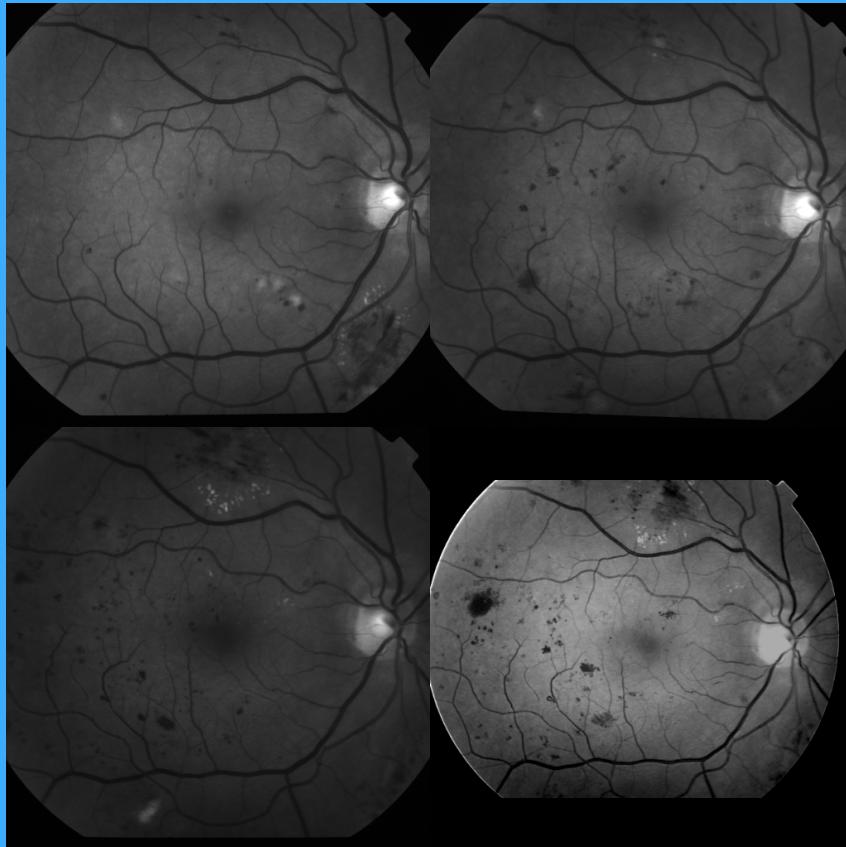
- Vaskulär sjukdom
- Neurodegenerativ komponent



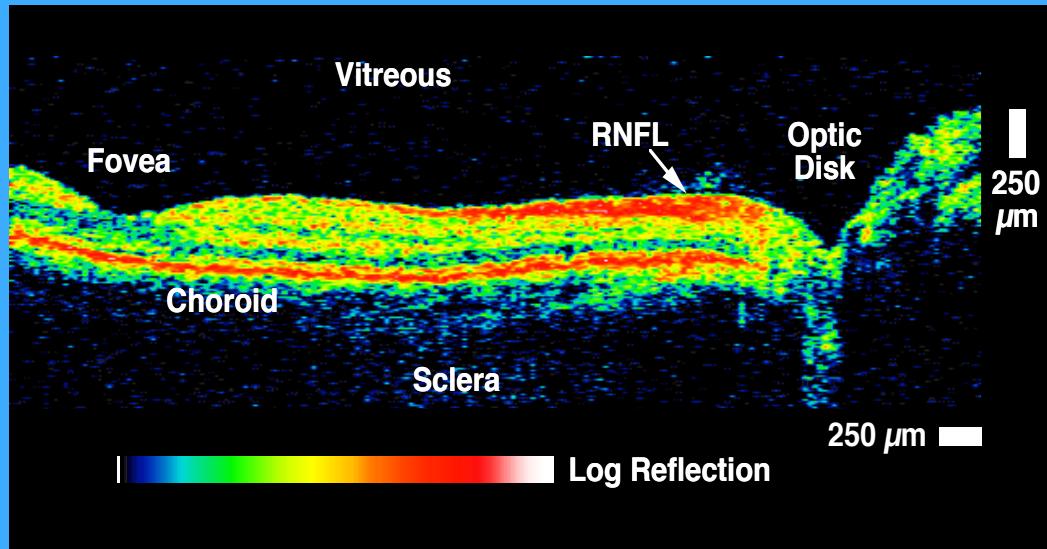
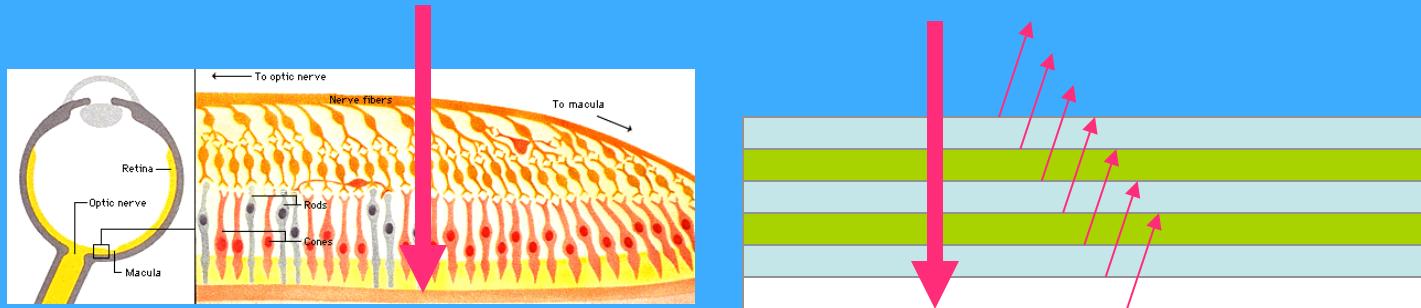
# Metod: multifokal ERG



# Bättre möjligheter att undersöka retina!



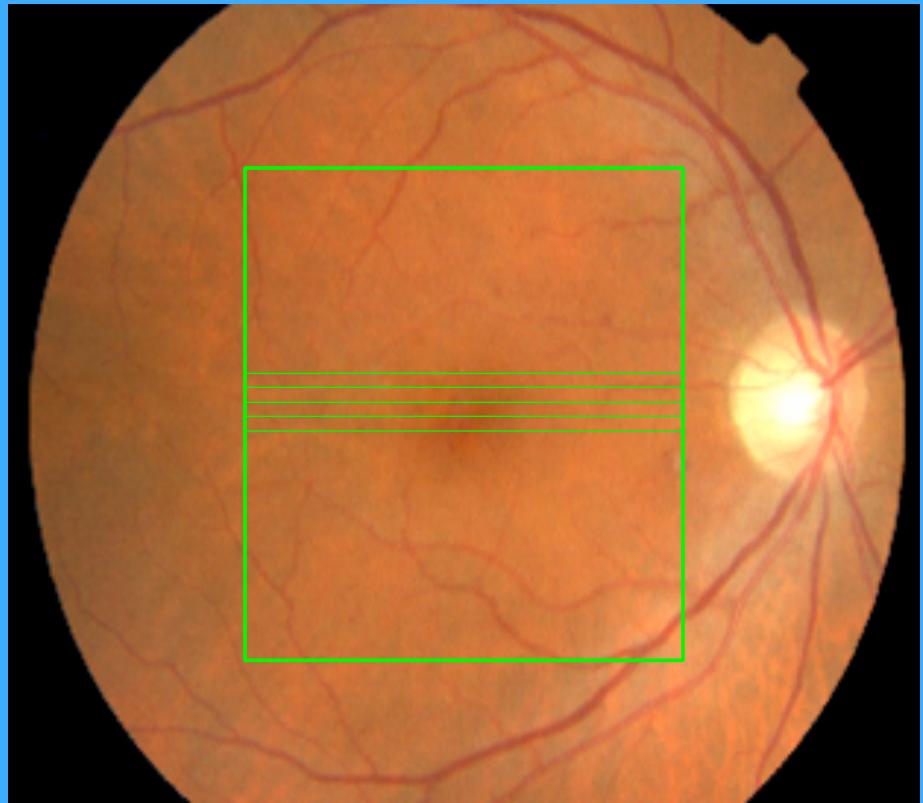
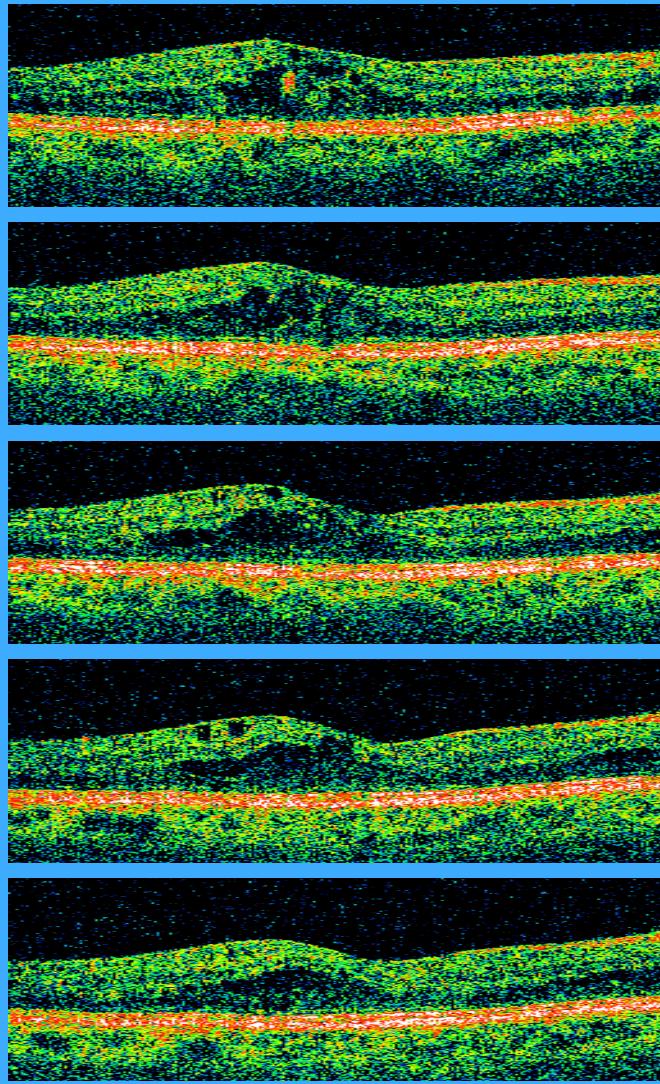
# Principle of OCT

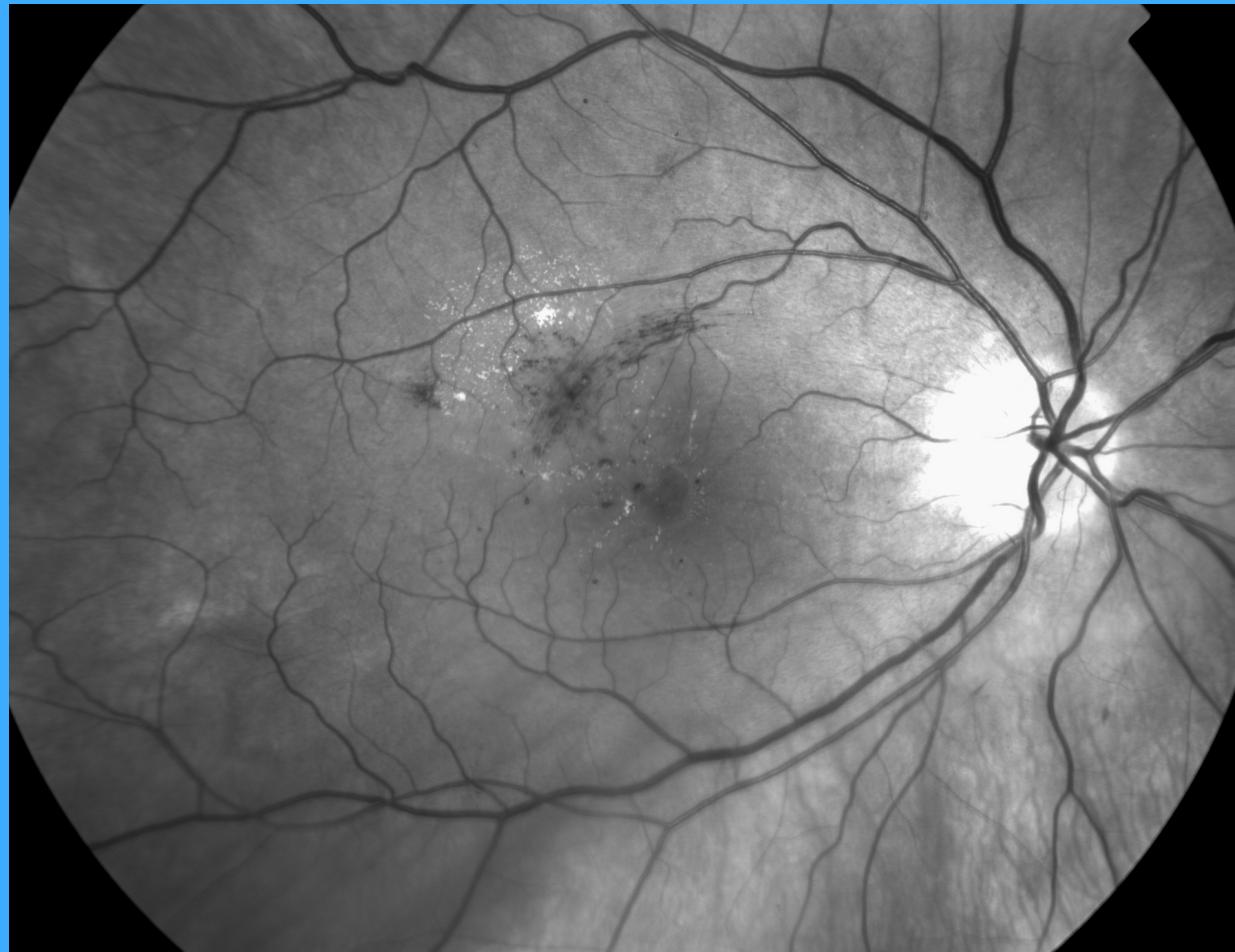


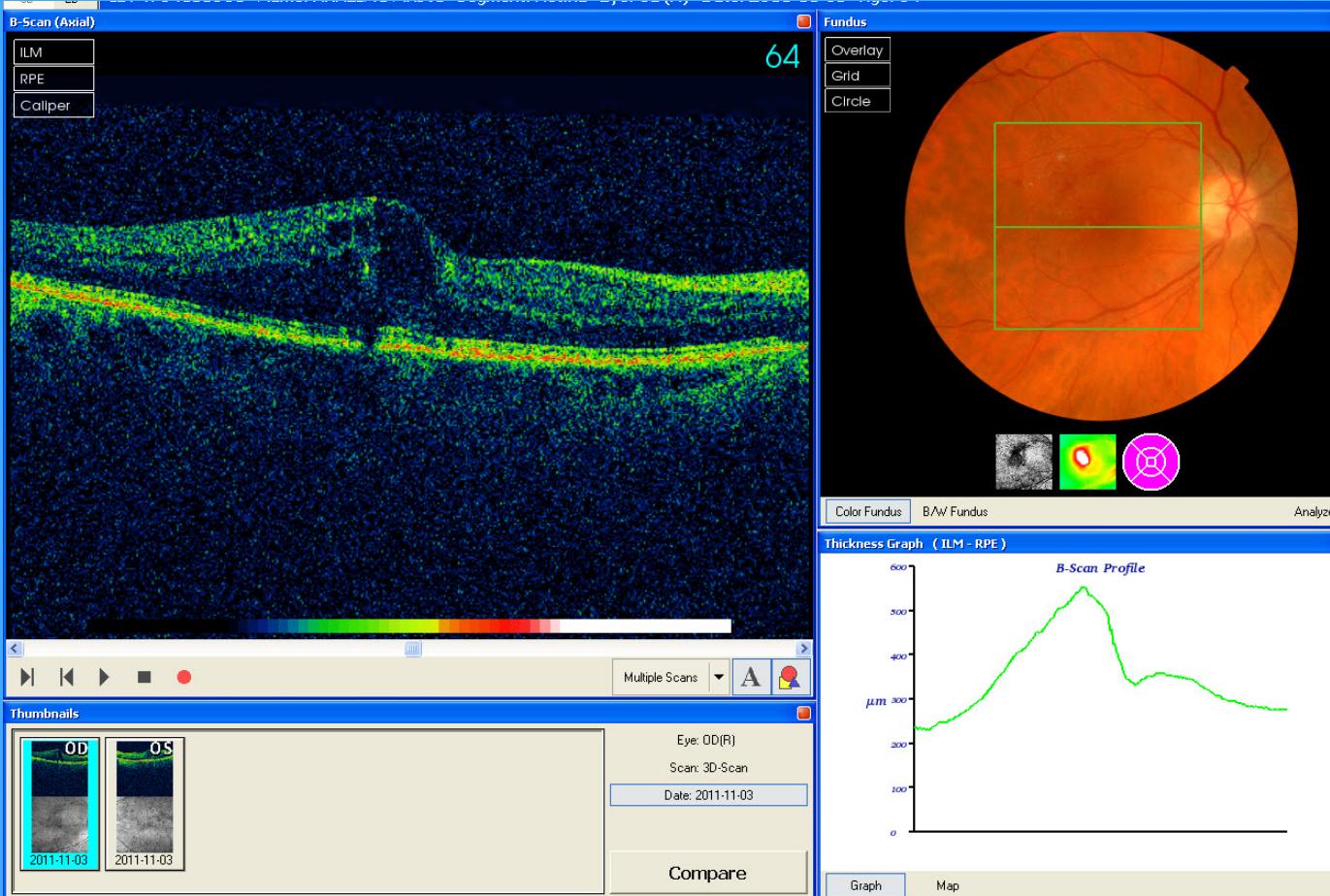
Optical coherence tomography image of the retina

# B-scans

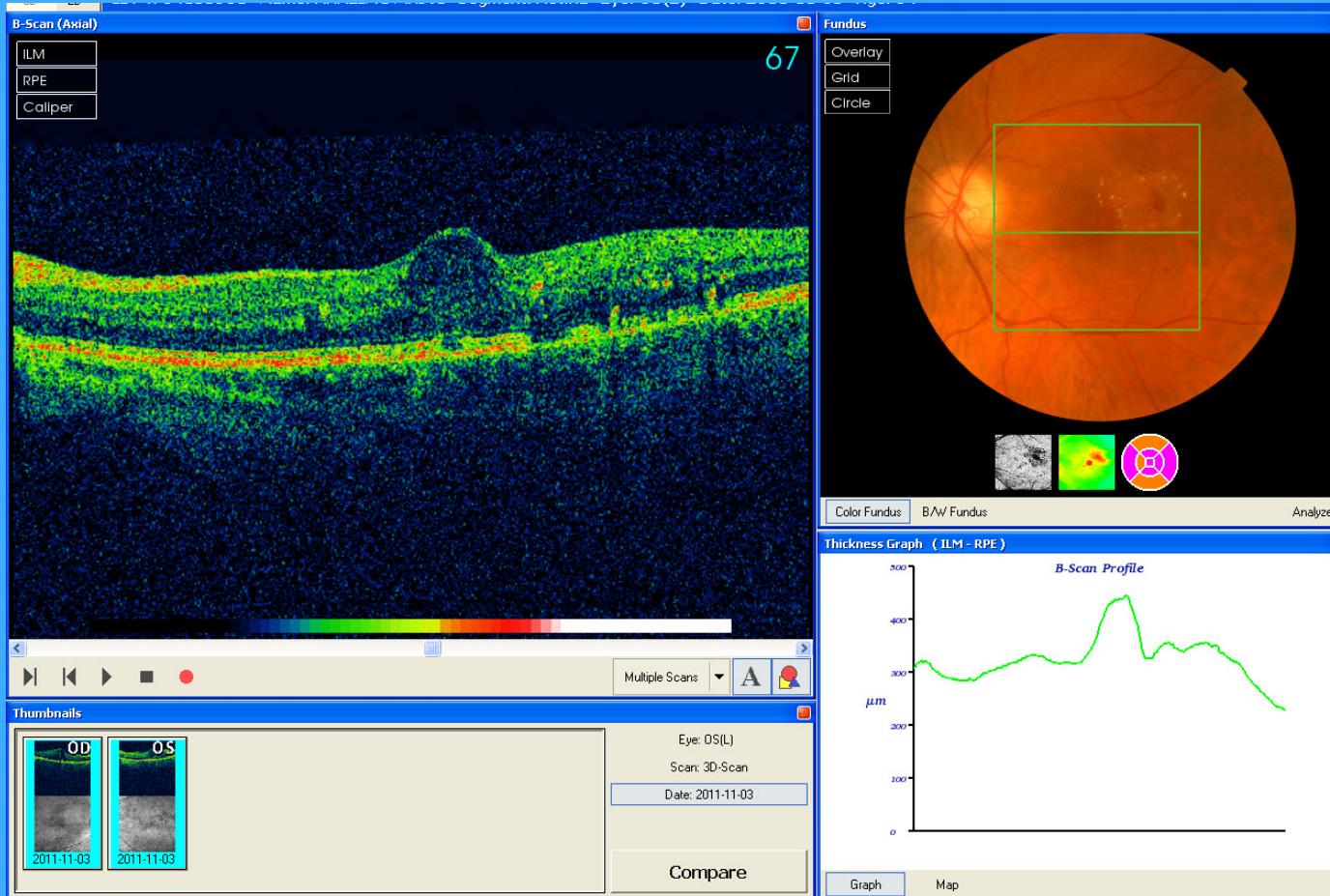
---





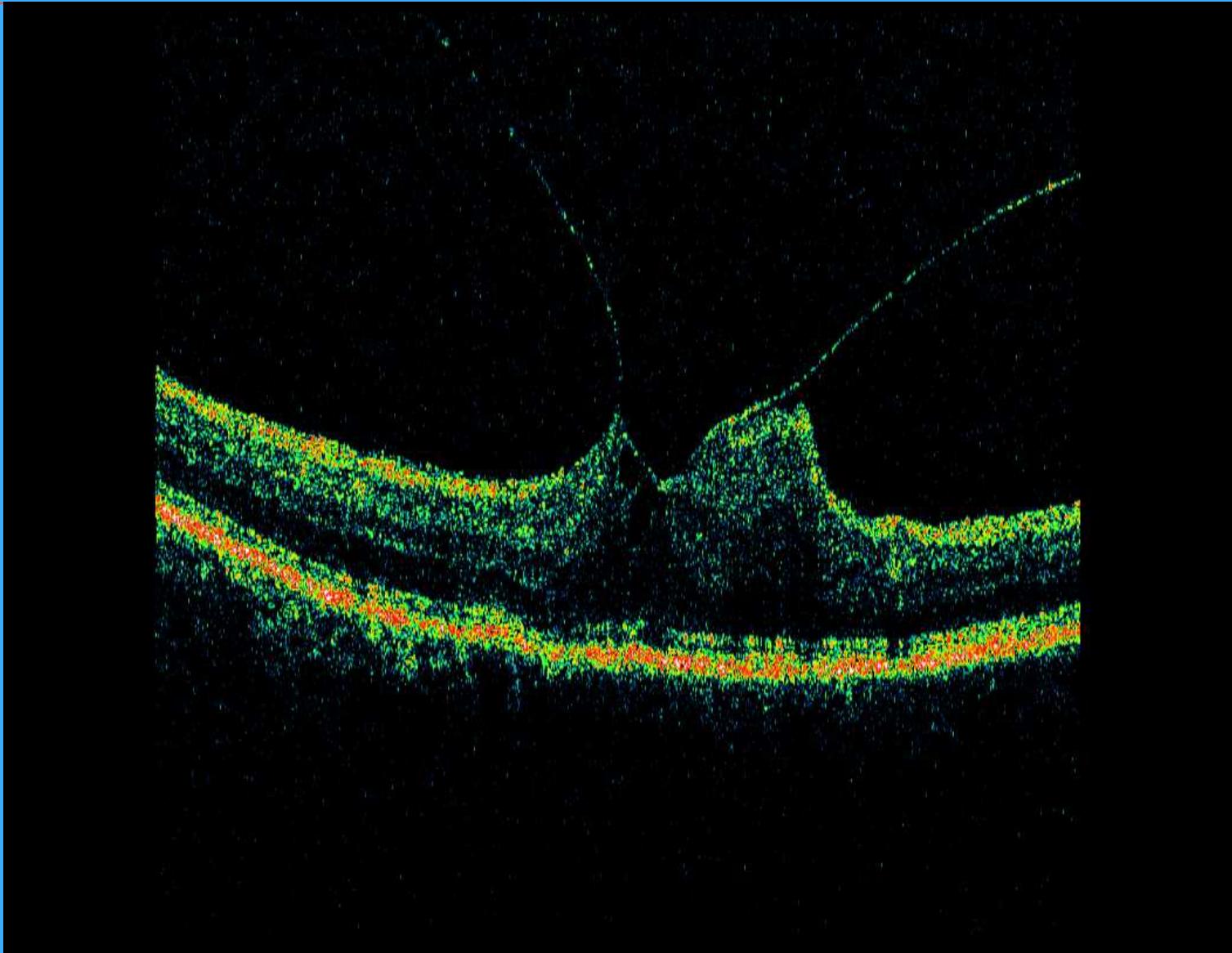




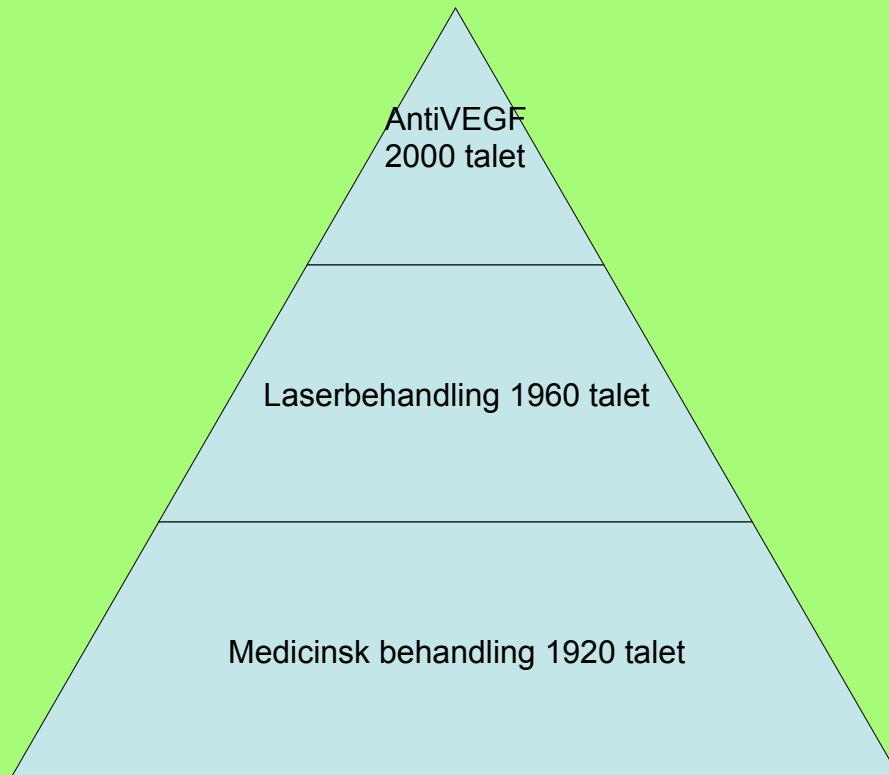


# Traktions ödem

---



# Hur behandla diabetesretinopati?



# Linköping studie

- Minskande incidens av svår retinopati (laserkrävande) över de senaste 5 decennierna hos pat med 25-30 års duration.
  - Efter 25 år
  - 1961-65; 47%
  - 1966-70 28%
  - 1971-75; 24%
  - Efter 30 år
  - 1961-65 53%
  - 1966-70; 44%
- **Authors:** Nordwall, M.; Bojestig, M.; Arnqvist, H. J.; Ludvigsson, J.  
**Journal:** Diabetologia **Year:** 2004 **Volume:** 47 **Issue:** 7 **Pages:** 1266-1272 **Provider**

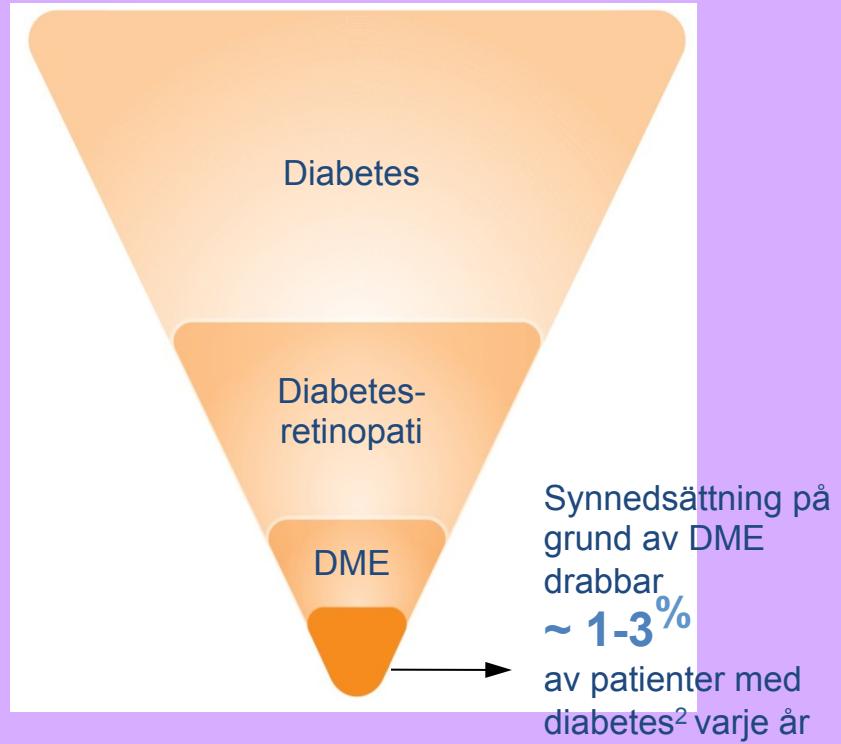
# Behandling

- God metabolisk kontroll
- Antihypertension
- Laserbehandling
- Anti VEGF?

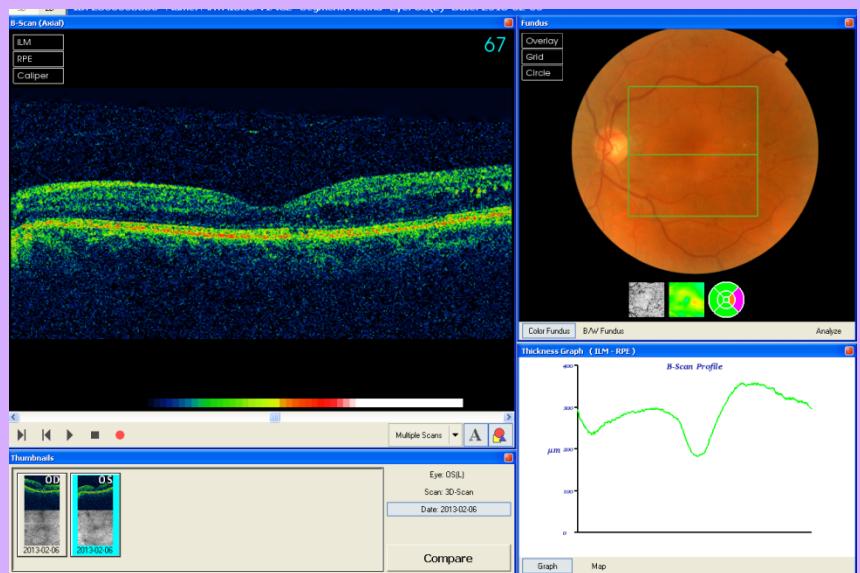
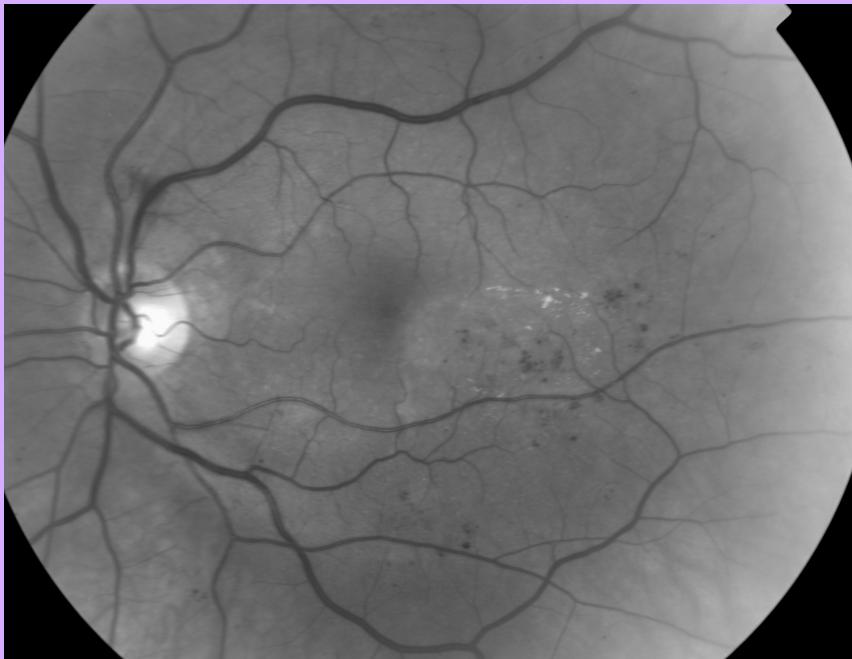
# DME kan leda till synnedsättning

Diabetesretinopati, kan leda till makulaödem (DME) med synnedsättning, vilket är en betydande orsak till blindhet hos personer i arbetsförför ålder<sup>1</sup>

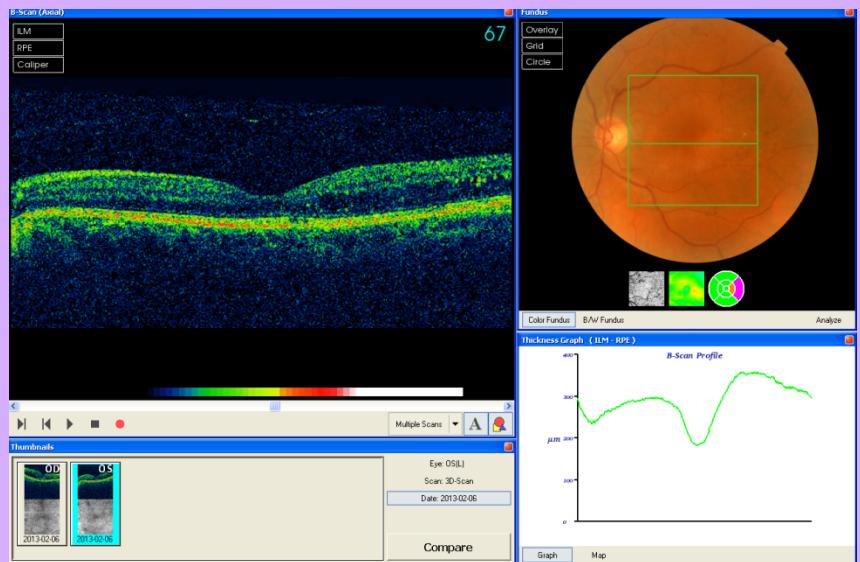
Den vanligaste orsaken till synpåverkan vid diabetes är ödem och hårda exudat i makularegionen, som i avancerade fall kan leda till mycket kraftig synnedsättning och social blindhet (synskärpa  $\leq 0,1$ )<sup>3</sup>



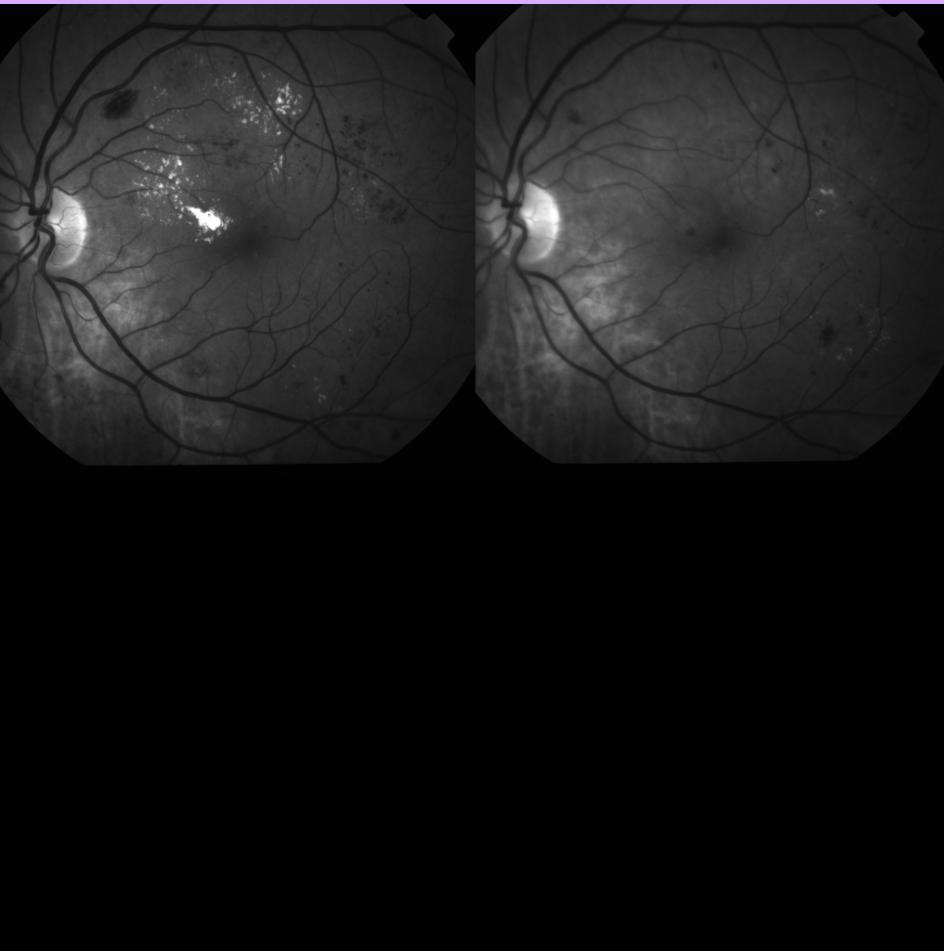
# Detta går att laserbehandla



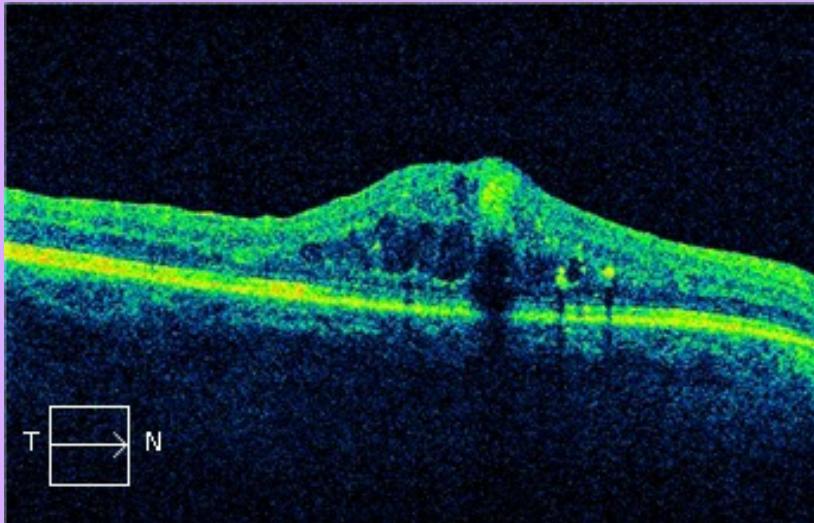
# Detta går att laserbehandla



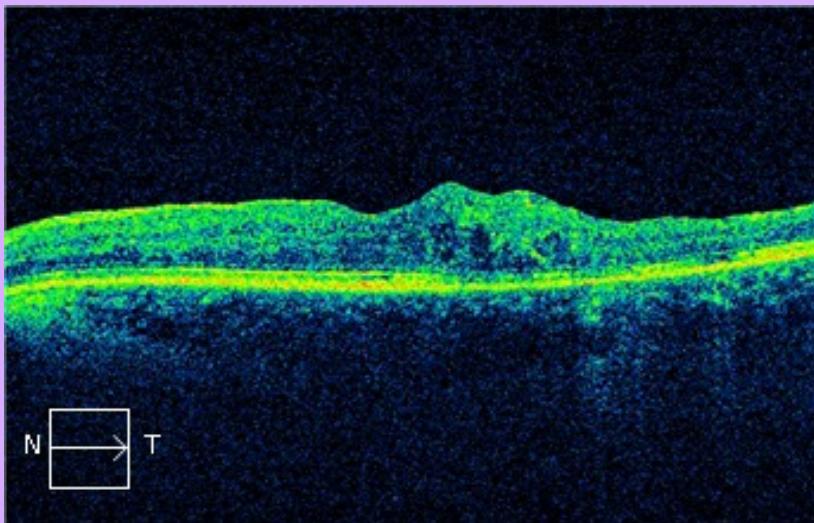
# Laser fortfarande effektivt



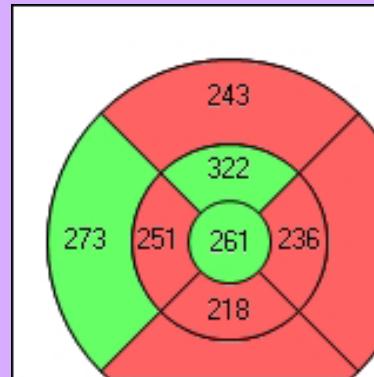
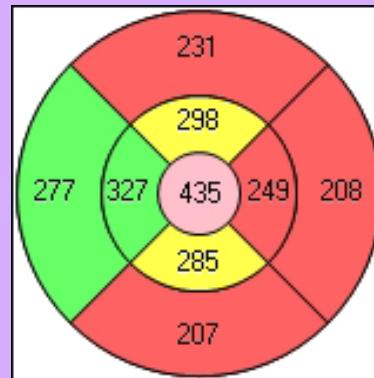
# Effektivt på ödemet!



T → N

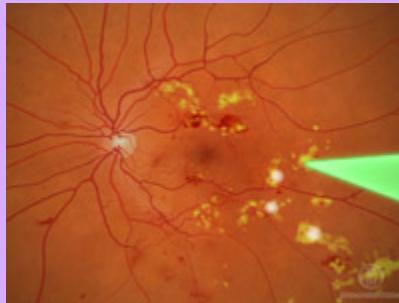


N → T

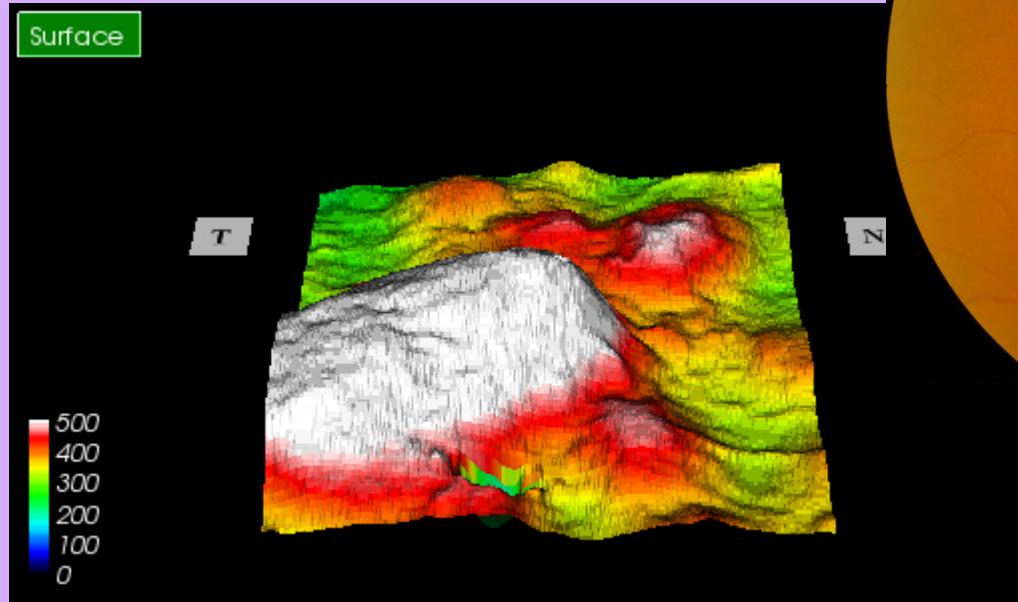


# Laserbehandling

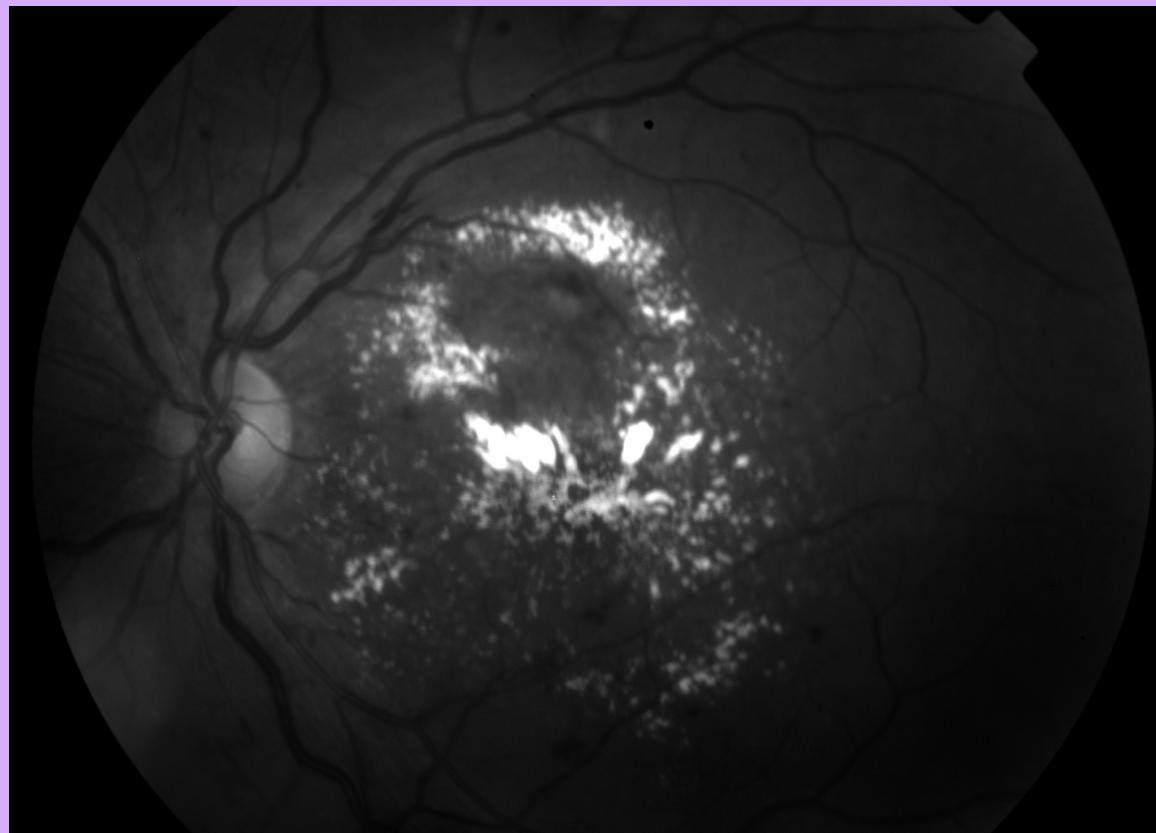
- Minskar synförlust med ca 50%
- Visusförbättring ses hos ca 16%



# När finns det indikation för anti-VEGF behandling?



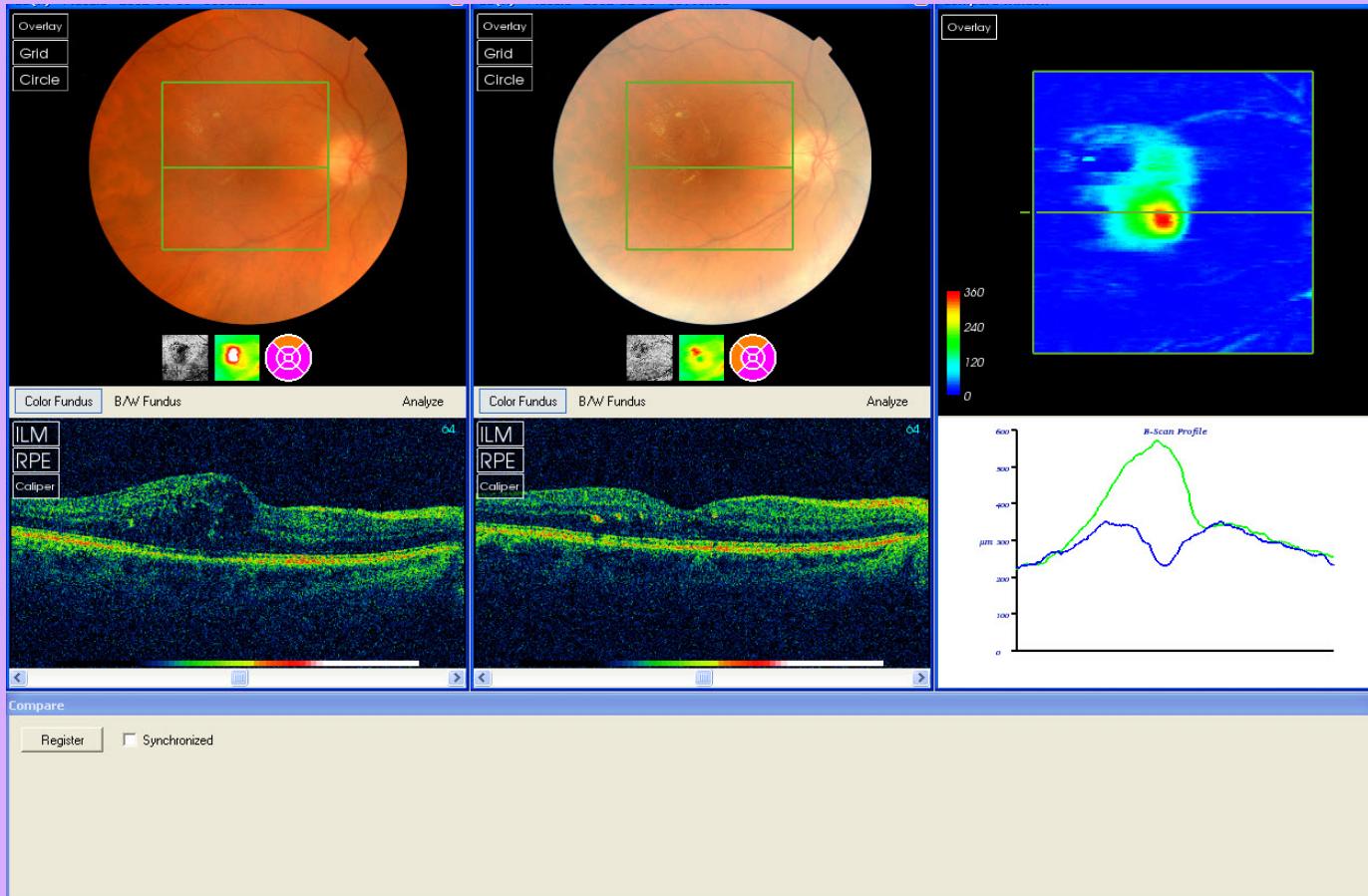
# Uttalat centraalt maculaödem



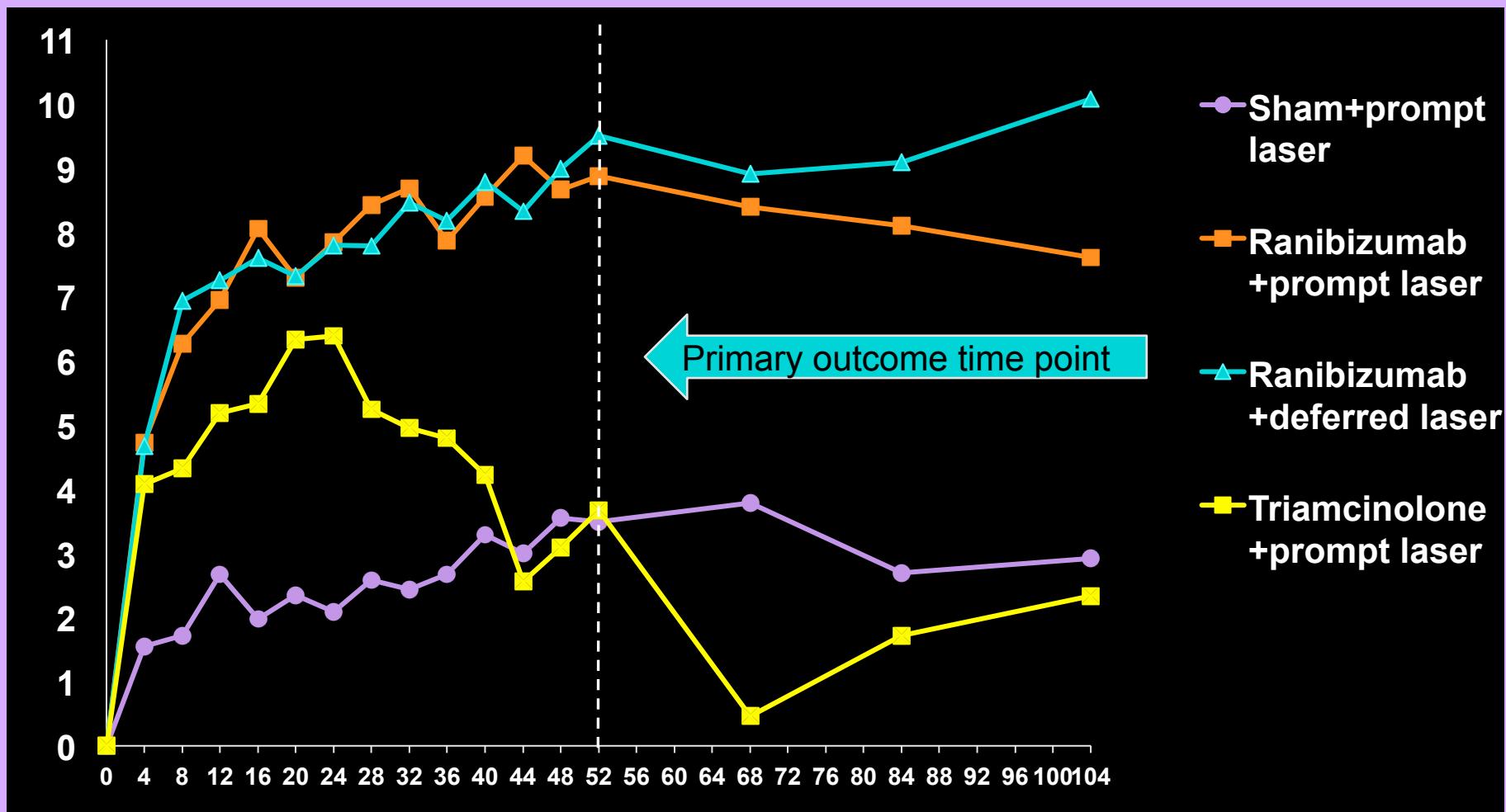
# Intravitreala injektioner



# Före/efter Lucentis injektion



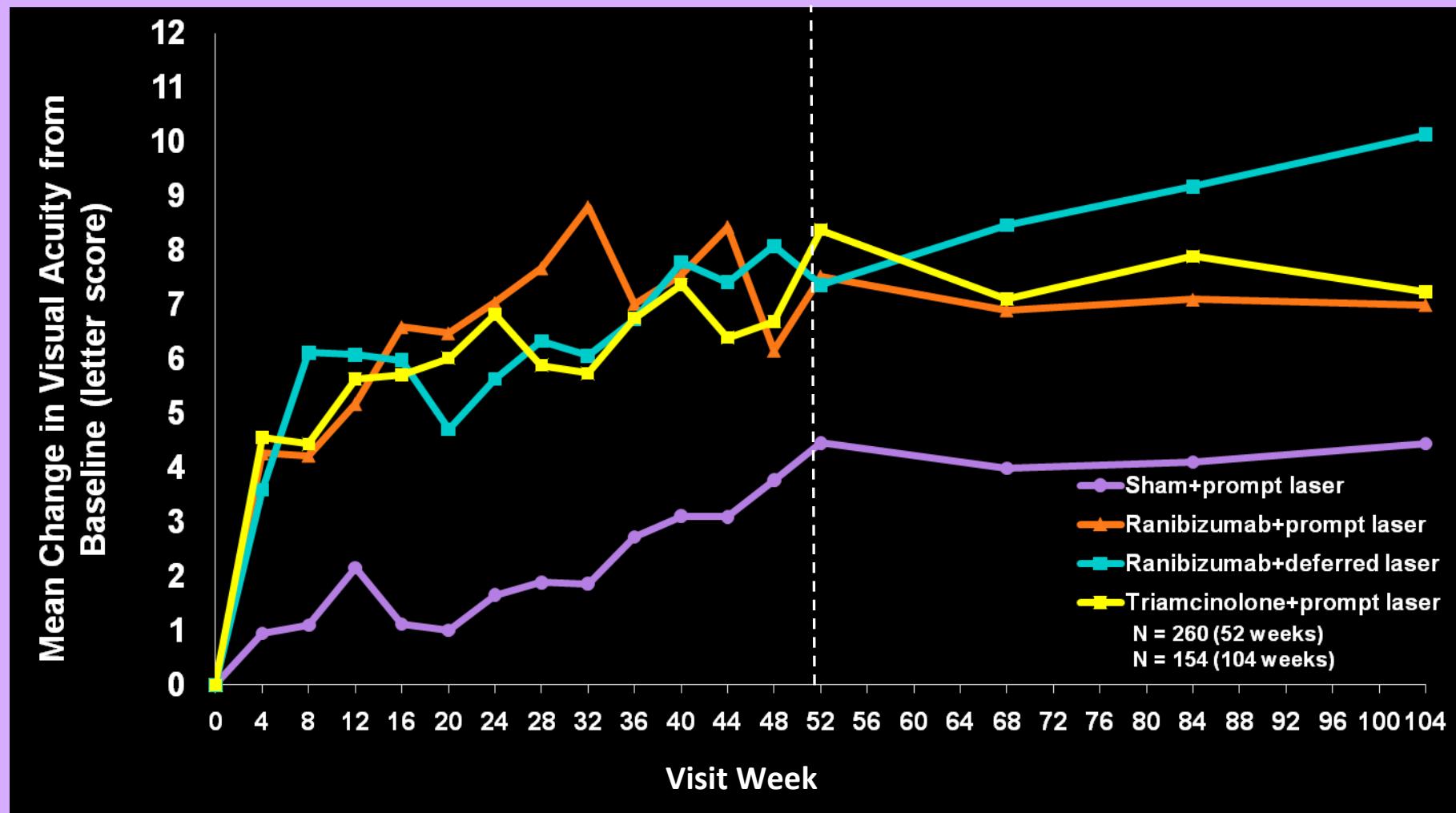
# Mean Change in Visual Acuity\* at Follow-up Visits



\* Values that were  $\pm 30$  letters were assigned a value of 30

P-values for difference in mean change in visual acuity from sham+prompt laser at the 52-week visit: ranibizumab+prompt laser <0.001; ranibizumab+deferred laser <0.001; and triamcinolone+prompt laser=0.31.

# Mean Change in Visual Acuity at Follow-up Visits among Eyes that were Pseudophakic at Baseline\*



\* Values that were  $\pm 30$  letters were assigned a value of 30

# Fall

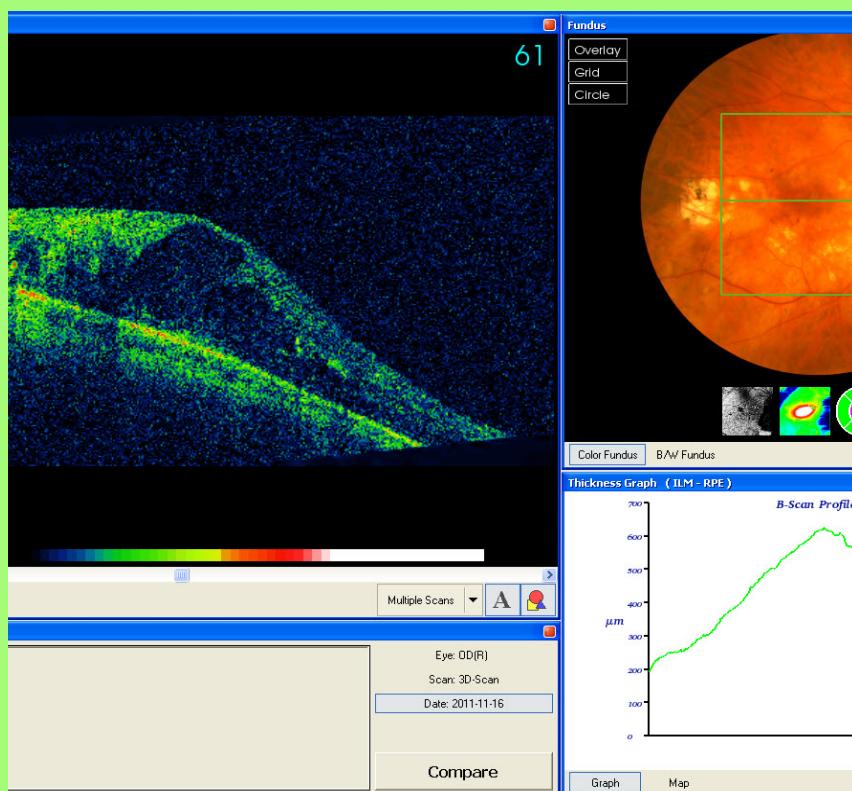
- 72 årig man
- Diabetes sedan 1982
- Insulinbehandlad
- HbA1c kring 7
- Bltr ok

# Ögonen nov 2011

- Hö
- Laserbehandlad
- Visus 0.3; Lix 8p
- Vä
- Laserbehandlad
- Visus 0.7; 4 p

# 2012

Jan; visus 0.25;Lix 7pktr



Dec. visus 0.4

