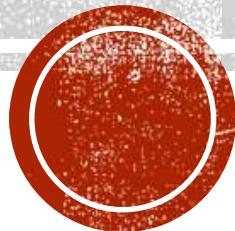
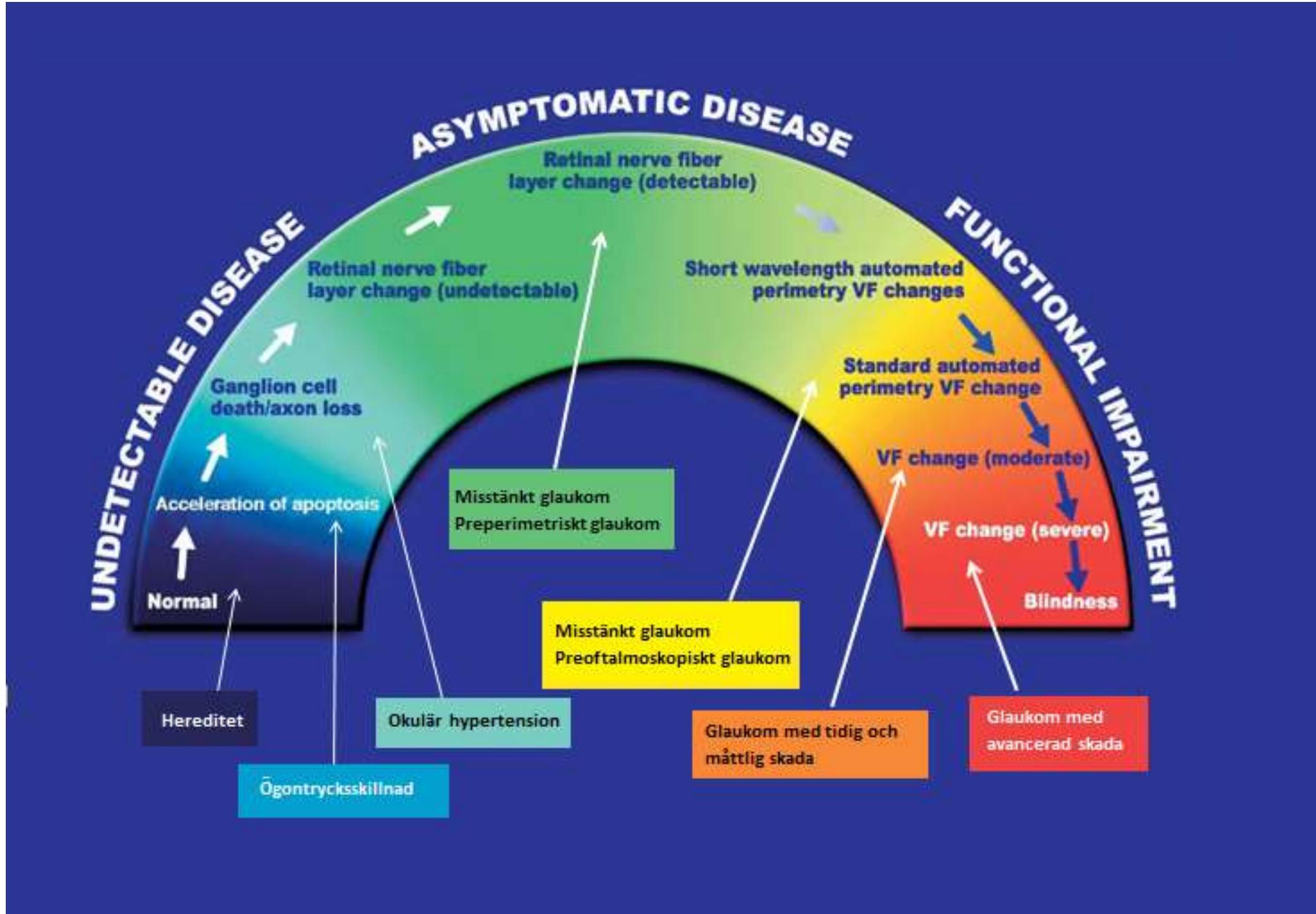


# **NYDIAGNOSTISERADE AVANCERADE GLAUKOM SKALL MONO-BEHANDLAS FRÅN START**

Lucian Vancea

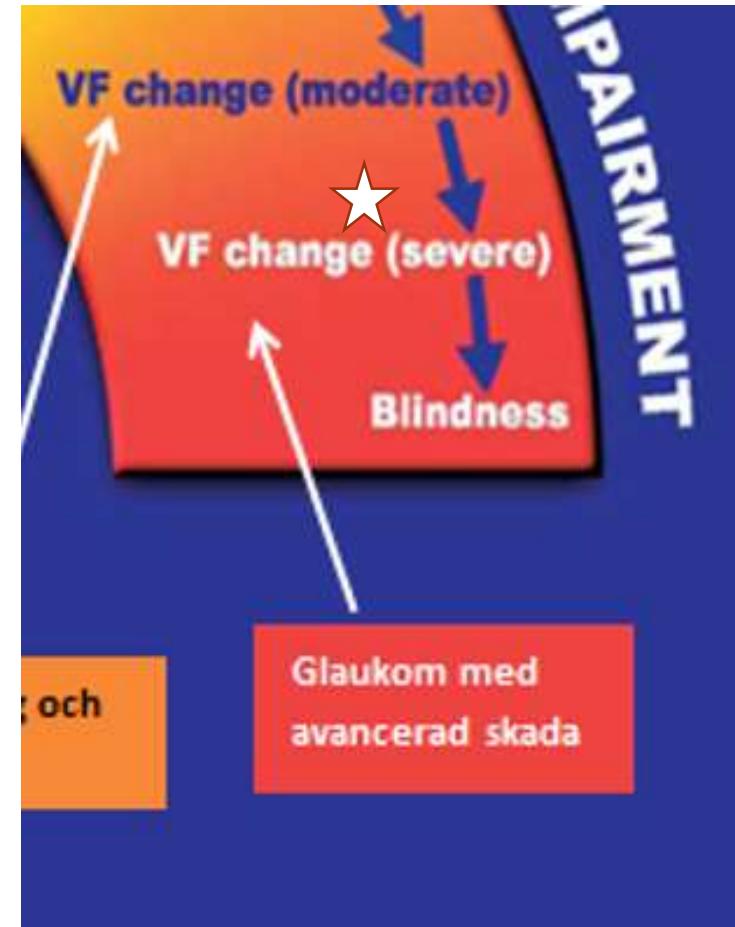
2016





# GLAUKOM MED AVANCERAD SKADA

- Synfältsdefekter på båda sidorna horisontella meridianen
- $Md > - 12 \text{ dB}$
- $VFI < 65 - 60\%$
- Subjektiva besvär:
  - Synnedsättning på grund av glaukom
  - Störande synfältsdefekter



# SVÅRIGHETER VID NY DIAGNOSTIK

- Ibland osäker diagnos
- Oftast osäker trycknivå = för få mätningar
- Okänt sjukdomsförlopp
- Okänd progresshastighet
- Omöjligt att förutse vad som händer vid olika trycknivåer
- Att sänka trycket är inte riskfritt:
  - biverkningar / komplikationer
  - dekompressiv retinopati

**Hur pass lågt tryck är lågt nog? = Måltryck**



# MÅLTRYCK

- Procentuell trycksänkning (20%, 30% ,... etc.)
- En siffra (18 mm Hg, 14 mm Hg, 12 mm Hg,...etc.)
- Ett intervall (kring 18 mm Hg, kring 14 mm Hg, ...etc.)
- Enkla formler
- Komplicerade formler



# BEHANDLINGSPRINCIPER

- Patienten skall kallas med hög prioritet = fixtider.
- Behandlingen startas snart, utan bedömning av progresshastighet.
- Målsättningen är att behålla den synfunktion som finns.
- Ögontryck/måltryck skall nås snabbt inom 2-3 månader. Täta kontrollintervaller.
- **Måltryck / Tryckreduktion:**
  1. **Oftast kring de lägre 10-talen**
  2. **Vid NTG kan det ibland vara nödvändigt med tryck < 10 mm Hg**
  3. **Betydande tryckreduktion med minst 30 – 50 % om möjligt**
  4. **Om behandlingen har bra effekt kan högre måltryck än vid punkt 1 accepteras.**  
**T.ex. från 30-40 mm Hg till kring 18 mm Hg.**
- Kirurgisk trycksänkande åtgärd samt kataraktoperation övervägs tidigt.



# FRÅN AGIS EN POST-HOC SANNING...

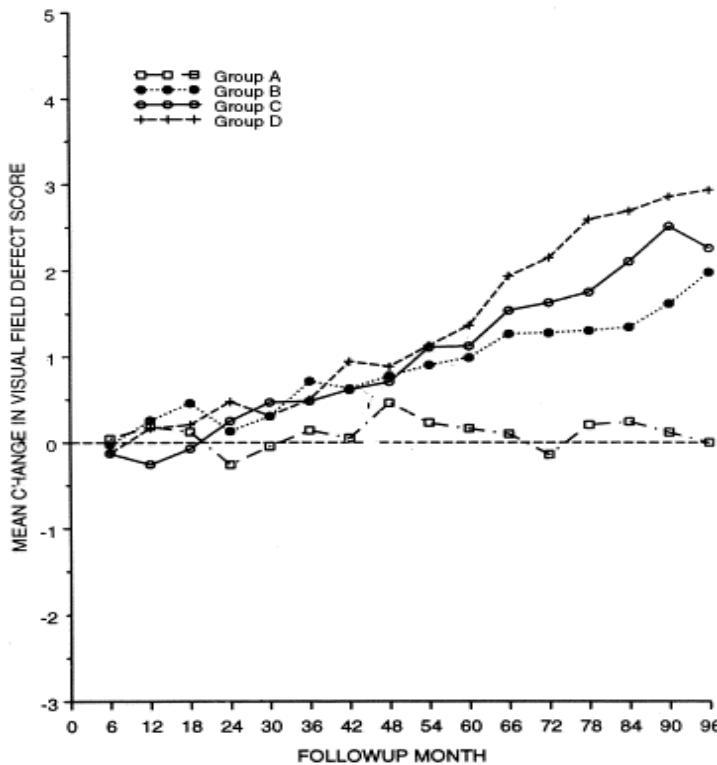


Figure 3. Associative Analysis. Mean change in visual field defect score by percent of visits over 6 years at which an eye presented

with **intraocular pressure less than 18 mm Hg**

(group A is 100%, group B is 75% to less than 100%, group C is 50% to less than 75...)

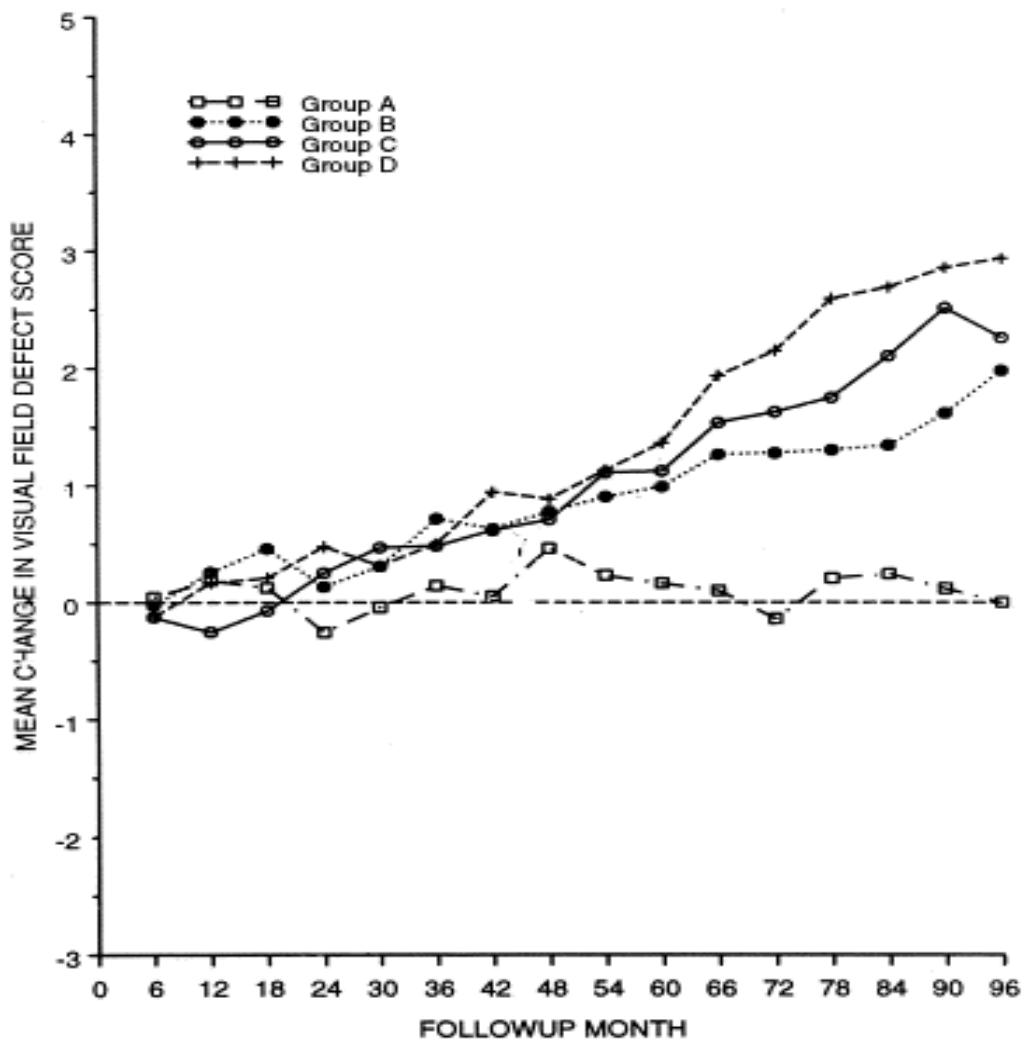


**The advanced glaucoma intervention study (AGIS): 7. the relationship between control of intraocular pressure and visual field deterioration ☆**

American Journal of Ophthalmology, Volume 130, Issue 4, 2000, 429–440



# ...MED MODIFIKATION!



Mean IOP  
20.2 mm Hg  
16.9 mm Hg  
14.7 mm Hg  
12.3 mm Hg

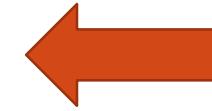


Figure 3. Associative Analysis. Mean change in visual field defect score over 6 years



# EGS PRAG 2016



- **George Spaeth:**

” A truth presented with the aim to deceive is still a lie”

- **Kuldev Singh:**

” Anyone ready to present the study results in this way was offered 3000 \$ and the opportunity to do it”



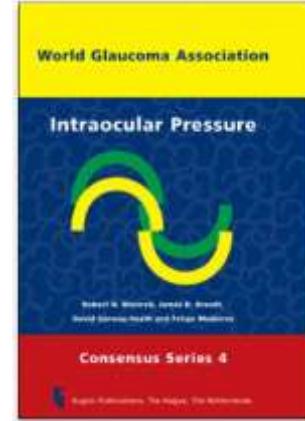
# AGIS RESULTAT OCH SLUTSATS

- Worsening  $\geq$  4 VF units = 14,4%
- Improvement  $\geq$  4 VF units = 18%

...“it is clear that maintaining IOP less than 18 mm Hg **does not** ensure the preservation of visual field.”



# ÄR ALLA MILLIMETRAR LIKA?

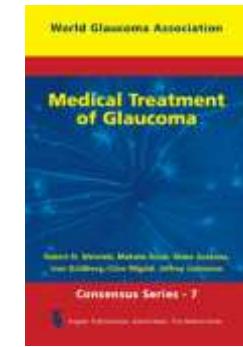


INTRAOCULAR PRESSURE  
WGA CONSENSUS SERIES 4

- EMGT; 1 mm Hg = 10% riskreduktion!
  - kan inte mätas i praktiken: intraobserver variation = 2.5 mm Hg  
interobserver variation =  $\pm$  4 mm Hg
  - svårt att tillämpa: 40 mm Hg - 20 mm Hg = 200% riskreduktion!
- CIGTS; > 2 mm Hg har ingen betydelse!
- CNTGS; obehandlat baseline IOP har ingen betydelse för progresshastigheten!



# FIRST-CHOICE VS FIRST-LINE TREATMENT



MEDICAL TREATMENT OF GLAUCOMA  
WGA CONSENSUS SERIES 7

- **First-choice drug treatment:**

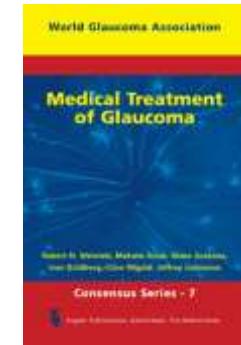
A drug that a physician prefers to use as initial IOP-lowering therapy

- **First-line drug treatment:**

A drug approved by an official controlling body (i.e. EMEA, CMPMP or FDA) for initial IOP-lowering therapy



# PROSTAGLANDINE ANALOGS

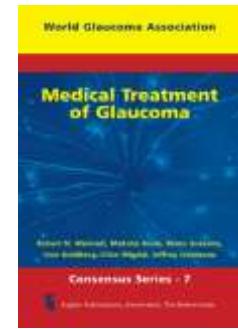


MEDICAL TREATMENT OF GLAUCOMA  
WGA CONSENSUS SERIES 7

- All prostaglandines analogues are approved as first-line treatment
- Most potent glaucoma drugs with 28 – 29% (trough) and 31 - 33% (peak) IOP reduction
- Lowering efficacy of any other adjunctive agent to PGAs is limited; less than 15% of added IOP reduction



# FIXED-COMBINATIONS



MEDICAL TREATMENT OF GLAUCOMA  
WGA CONSENSUS SERIES 7

- Are neither licensed nor recommended for use as first-line treatment
- Although not stated in international guidelines, it is the opinion of the authors of the current article that ... patients **may benefit from early aggressive treatment with FCs.**

P. Denis, H. Thieme, N. Pfeiffer. ...page 86

- Although **theoretically FCs offer significant benefits** for patients, there is **insufficient evidence** that these **perceived advantages translate into real advantages.**

C. Traverso, A. Hommer, S. Gandolfi, F. Cordeiro, R. Parikh, I. Goldberg ... page 137



# FIXED COMBINATION OF LATANOPROST AND TIMOLOL VS THE INDIVIDUAL COMPONENTS FOR PRIMARY OPEN ANGLE GLAUCOMA AND OCULAR HYPERTENSION: A SYSTEMATIC REVIEW AND META-ANALYSIS

YI XING, FA-GANG JIANG, TENG LI, INT J OPHTHALMOL, 2014 OCT 18;7(5)

- Xalcom vs Timolol = - 2,92
- Xalcom vs Latanoprost = **- 1,11**
- Xalcom in the morning vs unfixed L + T = **+ 1,10**
- Xalcom in the evening vs unfixed L + T = **+ 0,34**



# **EFFICACY AND SAFETY OF SWITCHING TO LATANOPROST 0.005%-TIMOLOL MALEATE 0.5% FIXED-COMBINATION EYEDROPS FROM AN UNFIXED COMBINATION FOR 36 MONTHS**

## **CONCLUSION:**

- IOP and the visual field were maintained for 3 years when a latanoprost and timolol maleate eyedrop regimen was changed to Xalcom eyedrop regimen. However, administration of **Xalcom** eyedrops **was discontinued in approximately 27%** of cases because of **insufficient IOP decrease and adverse reactions.**

Inoue K<sup>1</sup>, Okayama R<sup>1</sup>, Higa R<sup>1</sup>, Tomita G<sup>2</sup>.

Clin Ophthalmol. 2014 Jul 3;8:1275-9



# **THE EFFICACY OF A LATANOPROST/TIMOLOL FIXED COMBINATION VERSUS LATANOPROST AND TIMOLOL GEL-FORMING SOLUTION UNFIXED COMBINATION ON DAYTIME INTRAOCULAR PRESSURE**

- At week 8, the mean IOP reduction was  $3.2 \pm 2.1$  mm Hg in Xalcom and  $5.7 \pm 3.2$  mm Hg in L + T

## **CONCLUSIONS:**

- The use of latanoprost and Timosan leads to a larger additional IOP reduction and lower daytime IOP levels as compared with Xalcom.

Özyol E, Özyol P.; J Glaucoma. 2016 Feb;25(2):135-9.



# **24-HOUR EFFICACY OF THE BIMATOPROST-TIMOLOL FIXED COMBINATION VERSUS LATANOPROST AS FIRST CHOICE THERAPY IN SUBJECTS WITH HIGH-PRESSURE EXFOLIATION SYNDROME AND GLAUCOMA**

- Baseline, mean untreated 24-h IOP = 31.1 mm Hg
- Mean 24-h IOP with Ganfort = 18.9 mm Hg
  - ....with latanoprost = 21.2 mm Hg

Konstas AG<sup>1</sup>, Holló G, Mikropoulos DG, Haidich AB, Dimopoulos AT, Empeslidis T, Teus MA, Ritch R.

Br J Ophthalmol. 2013 Jul;97(7):857-61

- ✓ En skillnad på 2,3 mm Hg motiverar inte användningen av Ganfort
- ✓ Man kan få bättre effekt med Timosan + latanoprost
- ✓ Eller starta med Lumigan om bimatoprost är first-choice!



# SLUTSATS

- **Kombo-behandling med prostaglandinanalוג och betablockare är:**

- ✓ Inte särskilt effektiv
- ✓ Svårare att utvärdera
- ✓ Kan leda till sämre alternativ för tilläggsterapi  
= Sämre för patienten



- **Nydiagnostiserade avancerade glaukom skall mono-behandlas från start!**

