

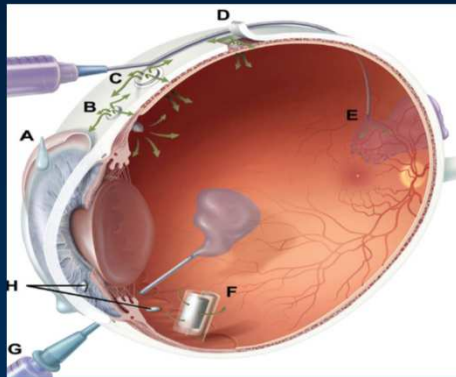
Azienda Ospedaliera di Rilievo Nazionale e di Alta Specializzazione Garibaldi Catania



Unità Operativa Complessa di Oftalmologia

Direttore: Dott. Antonio Rapisarda

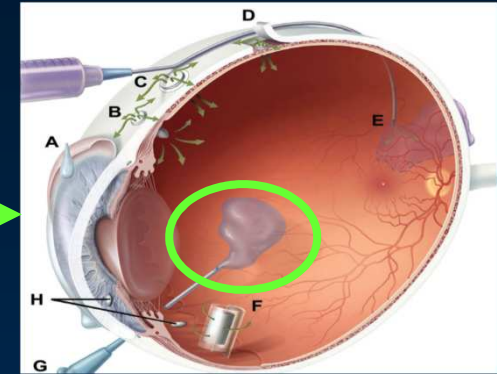
Intraocular pressure post intravitreal steroid



Antonio Marino

Steroidi – Intravitreali (IVT)

Iniezioni

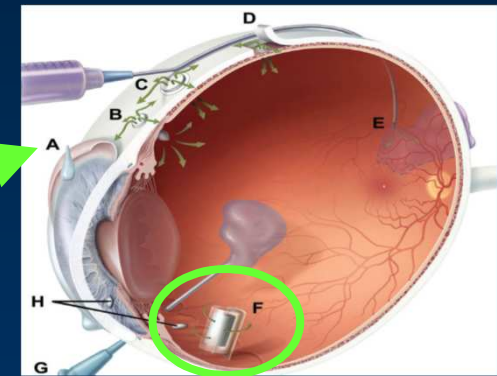


Lento rilascio

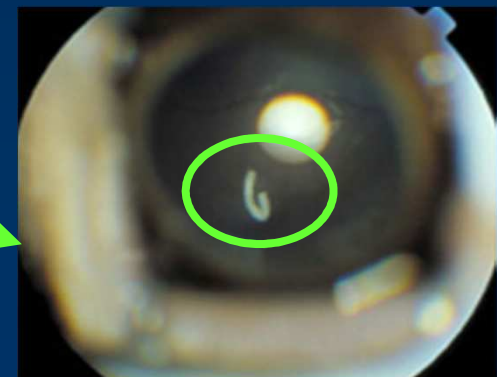
Impianti

No Biodegradabile

Biodegradabile



Numero somministr.

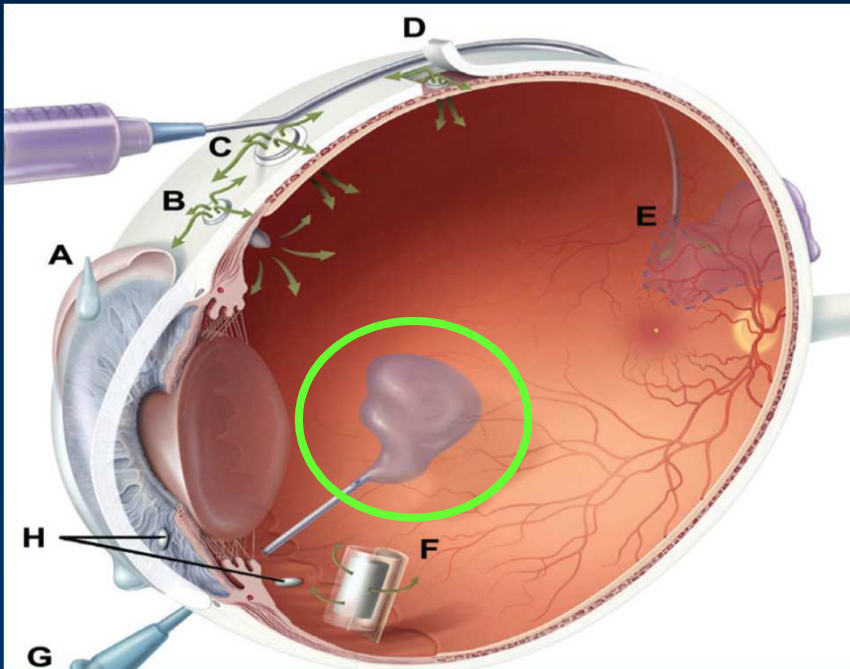


Steroidi IVT – Iniezioni

Iniezioni

Triamcinolone (TA) 4 mg

Desametasone 0.8 mg



Steroidi IVT – Impianti **No Biodegradabili**

Retisert®

Fluocinolone acetonide

Uveite non infettiva
FDA - 2005
Trial: Occl.venosa retina (OVR)
Edema maculare diab.

Fluocinolone 0.4µg/die
Durata 30 mesi

I-vation™

Triamcinolone

Trial fase II: Edema maculare
Sospeso 2008

Triamcinolone 1-3µg/die.
Durata 2 anni

Iluvien/Medidur™

Fluocinolone acetonide

Trial fase III: Edema maculare
diabetico
No FDA Tossicità

Fluocinolone 0.2-0.5µg/die.
Durata 18-30 mesi

Retisert®

Treatment of Posterior Uveitis With a Fluocinolone Acetonide Implant

ARCHIVES EXPRESS

Three-Year Clinical Trial Results

David G. Callanan, MD; Gl

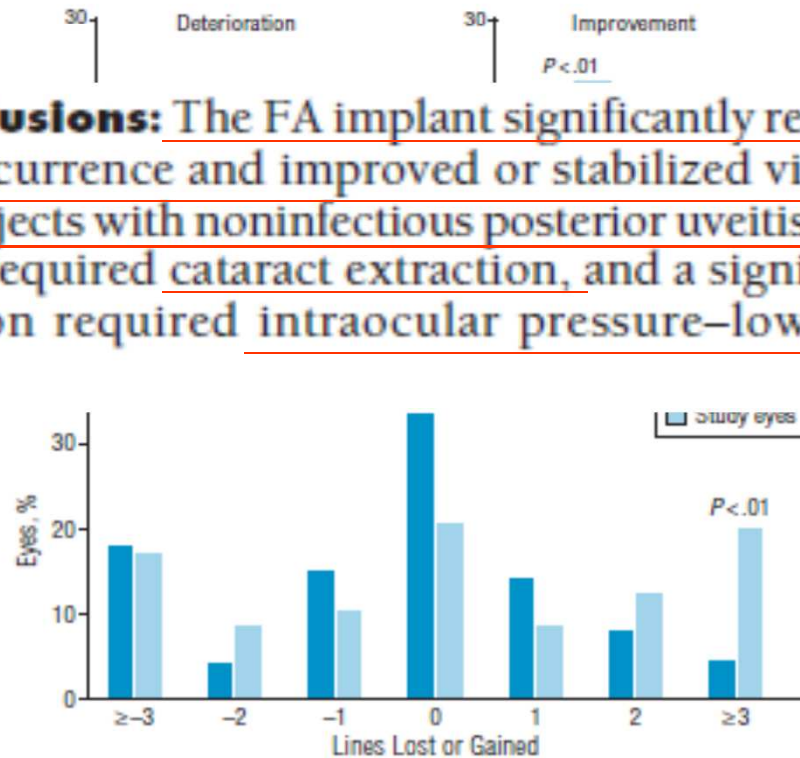
MD; Timothy L. Comstock, OD

phthalmol. 2008;126(9):1191-1201

Conclusions: The FA implant significantly reduced uveitis recurrence and improved or stabilized visual acuity in subjects with noninfectious posterior uveitis. Most subjects required cataract extraction, and a significant proportion required intraocular pressure–lowering surgery.

Table 3. Uveitis Rec

Implant Dose, mg	
Study eye	
0.59	
2.1	
Original and redesigned com	
Original	
Redesigned	
Fellow eye	
0.59	
2.1	
Original and redesigned com	



	value ^a	No. (%)	P Value ^b
	<.01	22 (20)	<.01
	<.01	69 (41)	<.01
	<.01	40 (57)	.06
	<.01	29 (29)	<.01
	<.01	65 (59)	<.01
	<.01	92 (55)	<.01

Steroidi IVT – Impianti Biodegradabili

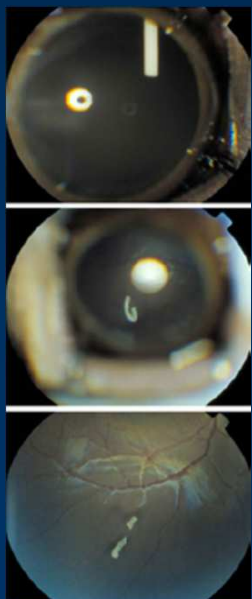
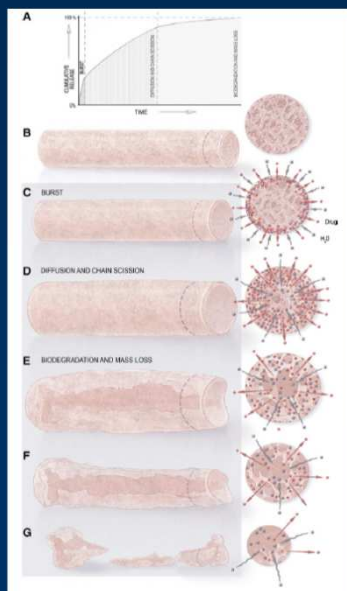
Ozurdex®
Desametasone

Edema maculare OVR e
uveite FDA – 2009-2010

Trial: Edema maculare diab.

Desametasone 0.7 mg.

Durata 6 mesi



3 giorni

151 giorni

181 giorni



Pharm Res (2010) 27:2043–2053

Ozurdex®

Microinjector – 23 gauge

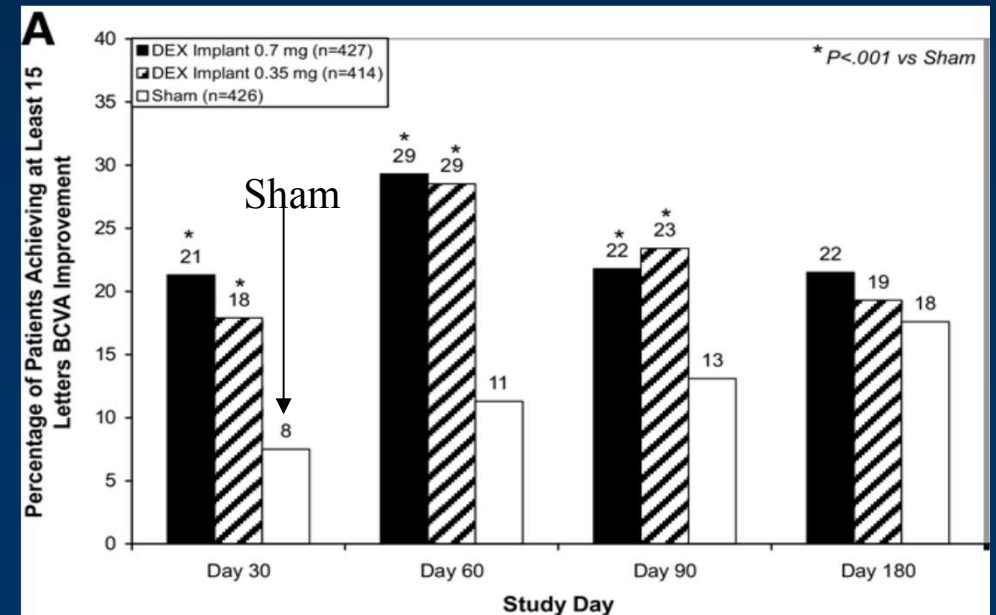
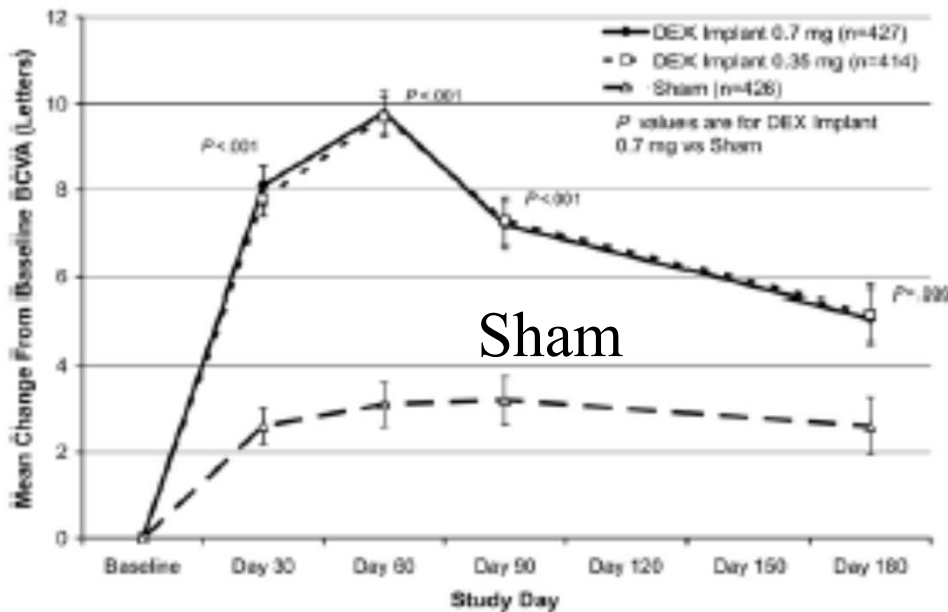


Randomized, Sham-Controlled Trial of Dexamethasone Intravitreal Implant in Patients with Macular Edema Due to Retinal Vein Occlusion

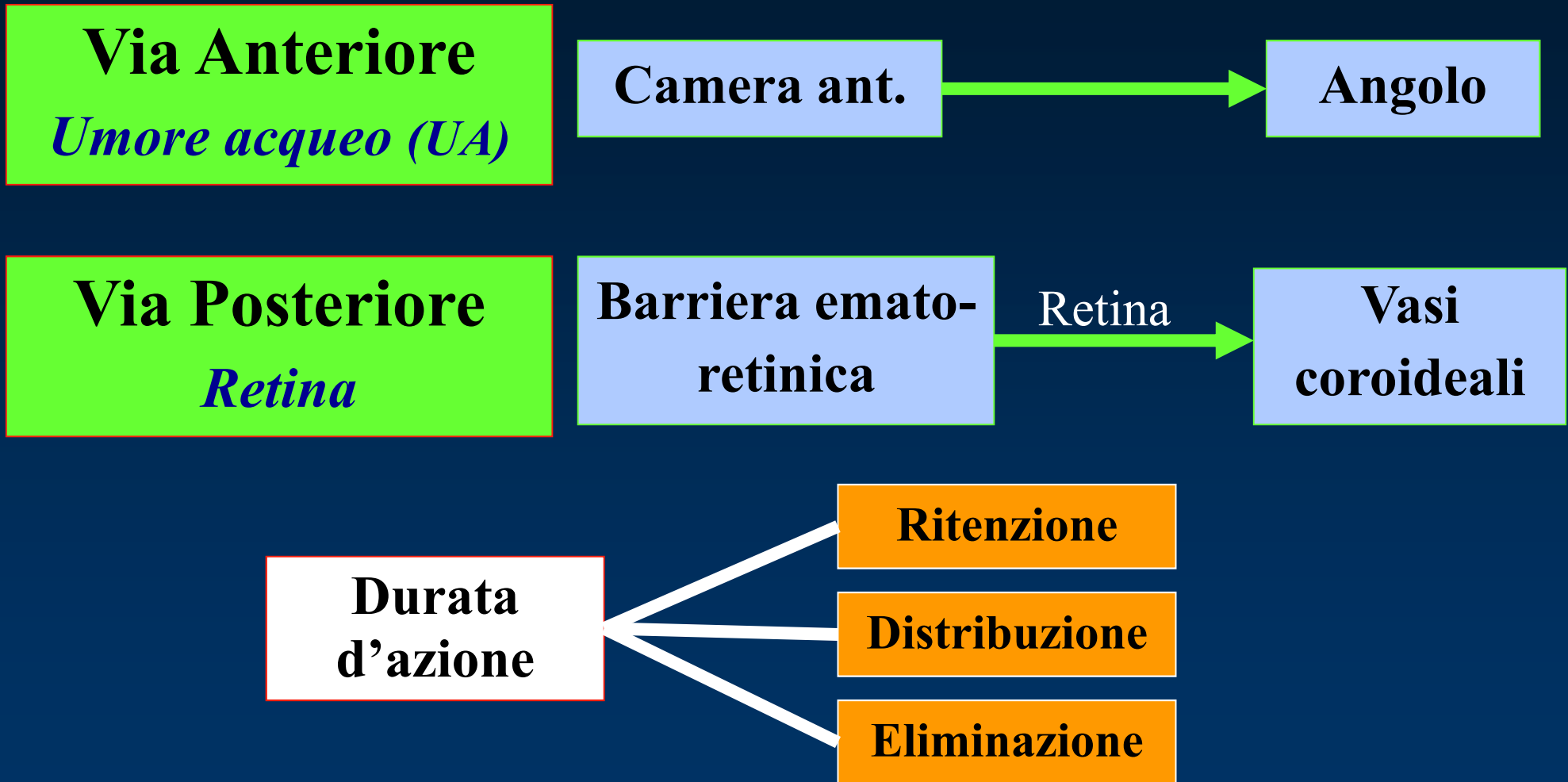
Julia A. Haller, MD,¹ Francesco Bandello, MD,² Rubens Belfort, Jr., MD,³ Mark S. Blumenkranz, MD,⁴ Mark Gillies, MD,⁵ Jeffrey Heier, MD,⁶ Anat Loewenstein, MD,⁷ Young-Hee Yoon, MD,⁸ Marie-Louise Jacques, MD,⁹ Jenny Jiao, PhD,¹⁰ Xiao-Yan Li, MD,¹⁰ Scott M. Whitcup, MD,¹⁰ for the OZURDEX GENEVA* Study Group

Ophthalmology 2010;117:1134–1146

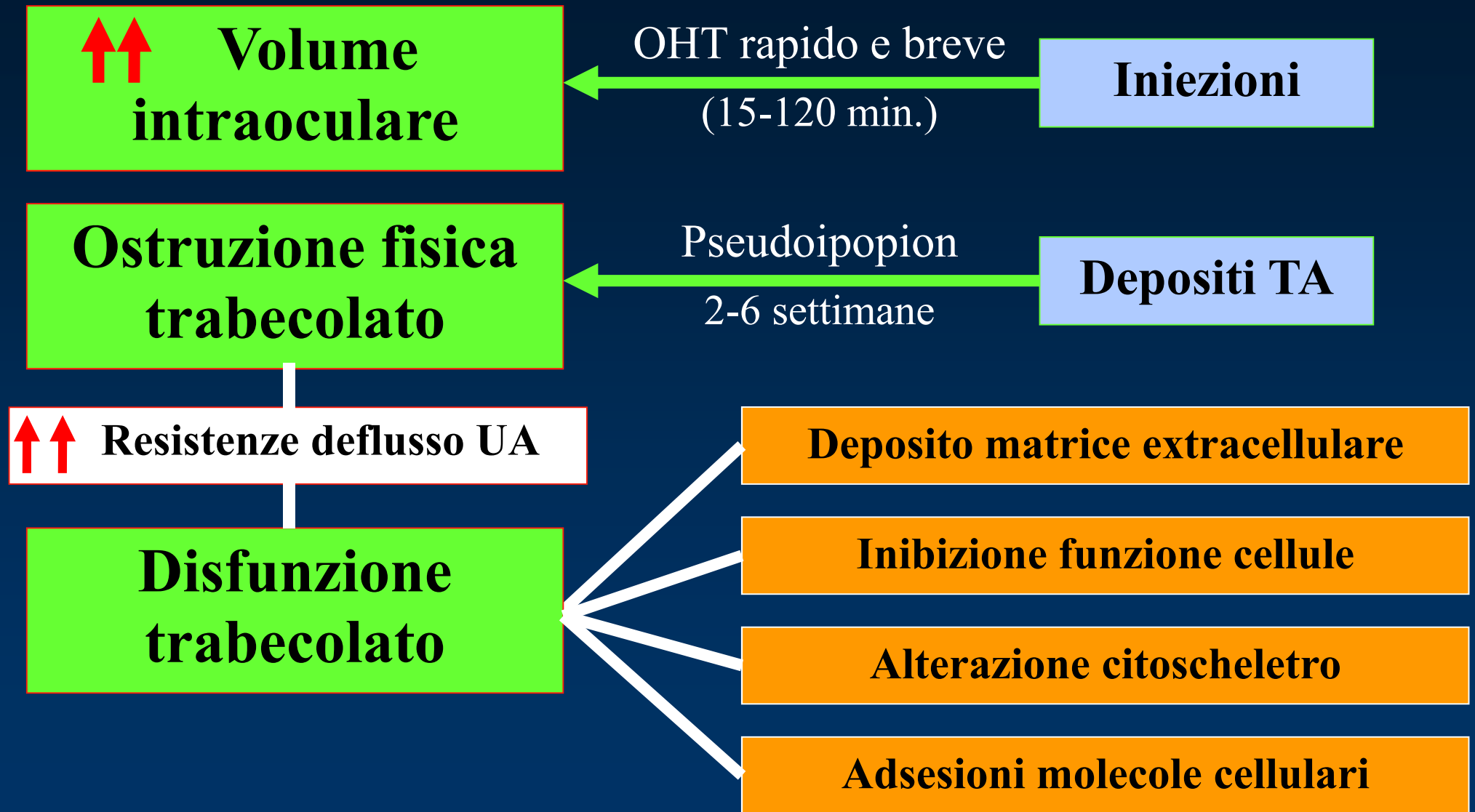
Conclusions: Dexamethasone intravitreal implant can both reduce the risk of vision loss and improve the speed and incidence of visual improvement in eyes with ME secondary to BRVO or CRVO and may be a useful therapeutic option for eyes with these conditions.



Steroidi IVT – Farmacocinetica



Steroidi IVT – Iperensione oculare (OHT)



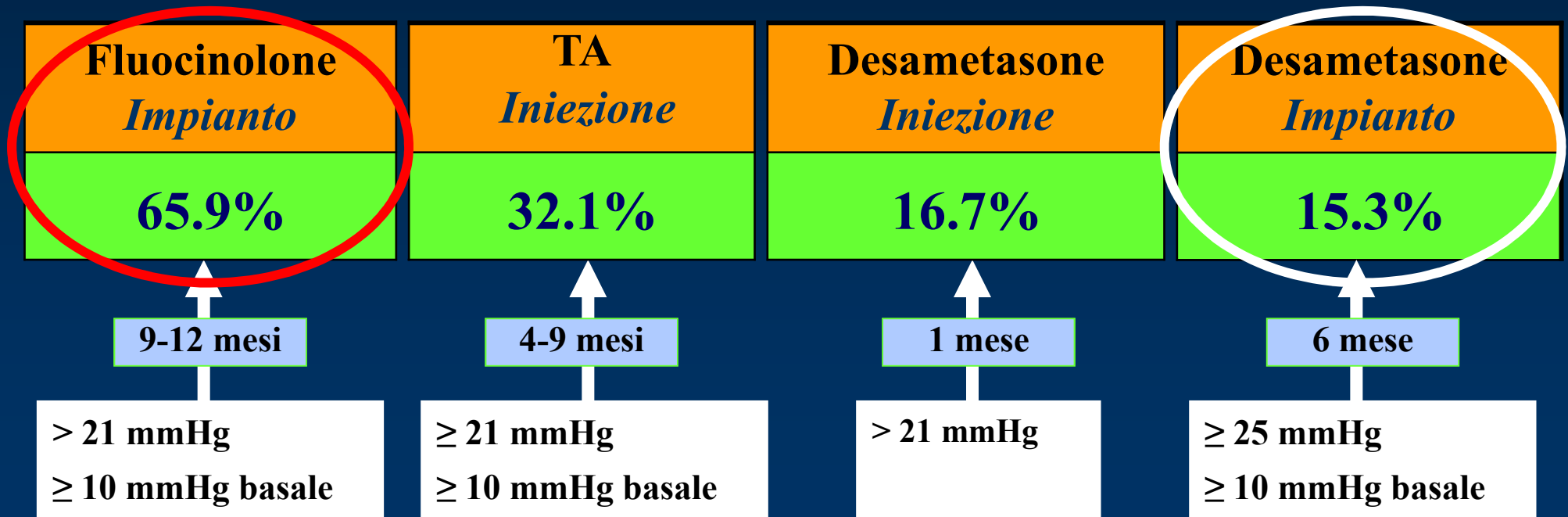
Steroidi IVT – OHT Risultati

MAJOR REVIEW

Intraocular Pressure Monitoring Post Intravitreal Steroids: A Systematic Review

Weerawat Kiddee, MD,^{1,2} Graham E. Trope, MB, PhD, FRCSC,¹
Lisa Sheng, MD, MPH, PhD,³ Laura Beltran-Agullo, MD,¹
Michael Smith, MBChB, FRCOphth,⁴ M. Hermina Strungaru, MD, PhD,¹
Jasrajbir Baath, MD,⁵ and Yvonne M. Buys, MD, FRCSC¹

SURVEY OF OPHTHALMOLOGY VOLUME 58 • NUMBER 4 • JULY–AUGUST 2013



Steroidi IVT – OHT Fattori di rischio

OHT - Precoce

Fachia

Ipermetropia

Storia di glaucoma

Ago di piccolo calibro

↑↑ Volume iniezione

No reflusso vitreo

OHT - Tardivo

Giovane età

Uveite

IOP basale ≥ 15 mmHg

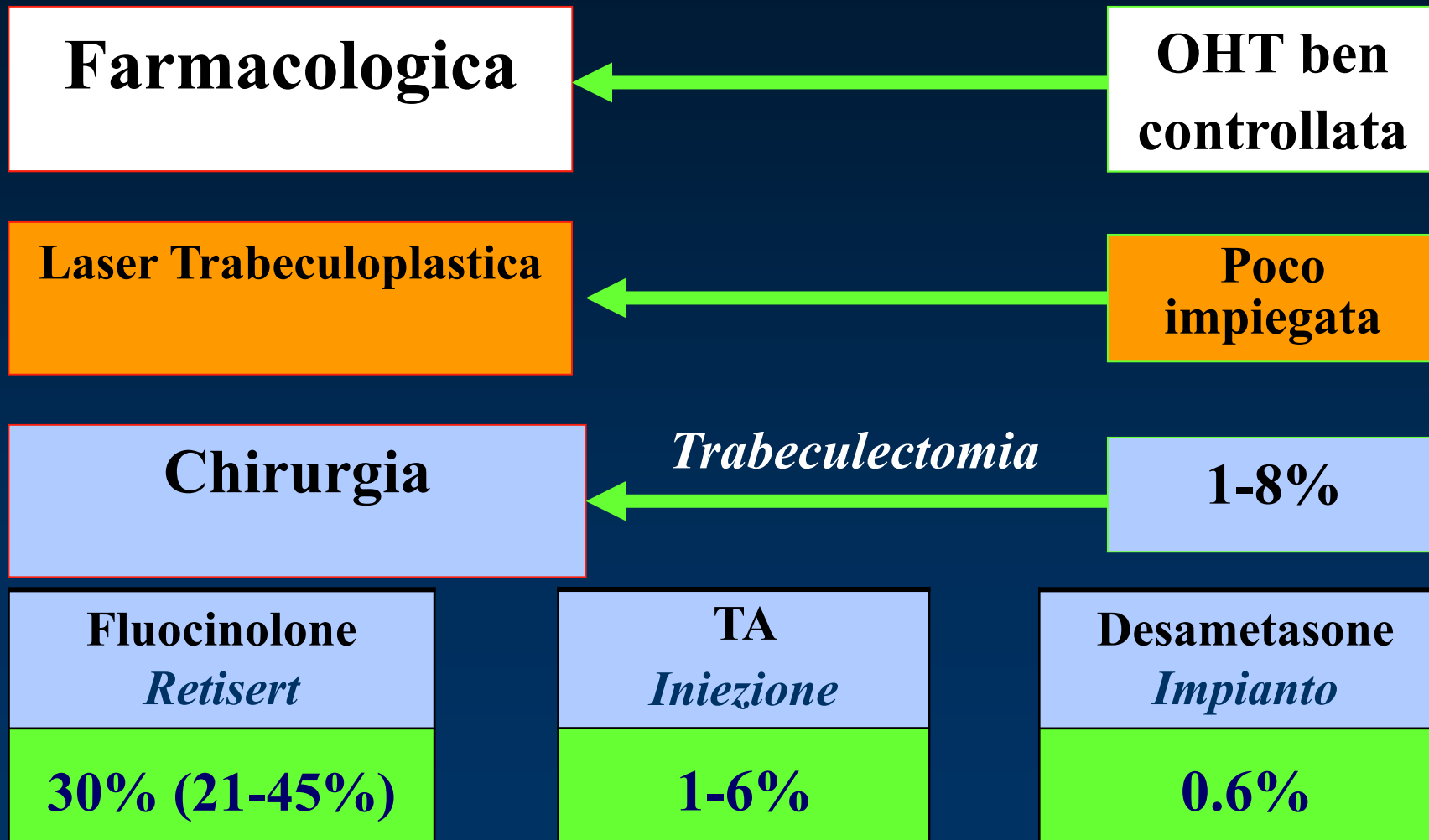
Glaucoma

OHT in precedente IVT

↑↑ Dosaggio steroide

Fluocinolone IVT

Steroidi IVT – OHT Terapia



Steroidi IVT – OHT Terapia

Effect of Dorzolamide/Timolol or Brinzolamide/Timolol Prophylaxis on Intravitreal Anti-VEGF Injection-Induced Intraocular Hypertension

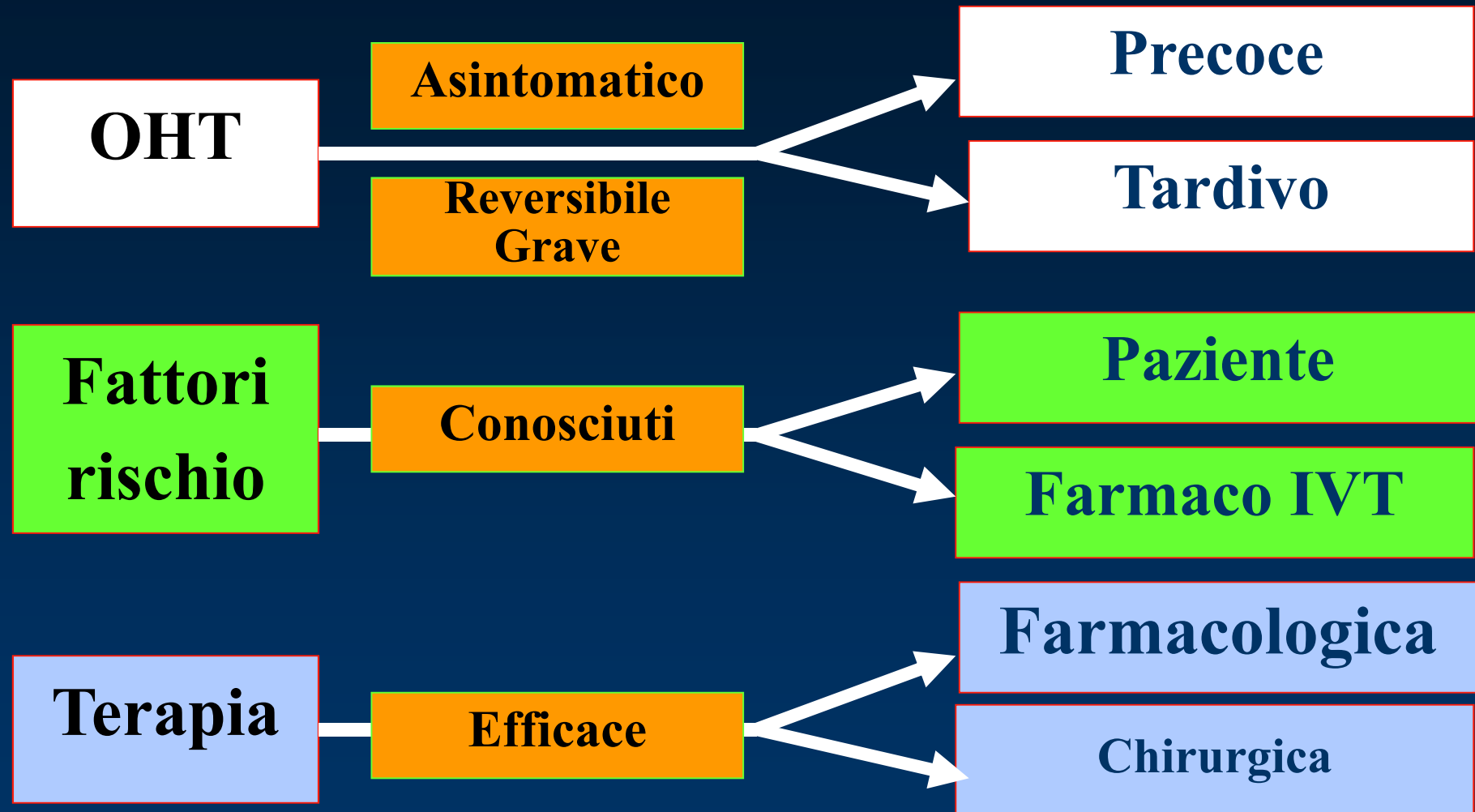
Gyu Nam Kim¹, Yong Seop Han^{1,2}, In Young Chung^{1,2}, Seong Wook Seo^{1,2},
Jong Moon Park^{1,2}, and Ji Myong Yoo^{1,2}

Seminars in Ophthalmology, 2013; 28(2): 61-67

Novartis) prevents intraocular hypertension after the injection. Subjects and methods: In total, 166 patients (175 eyes) scheduled for intravitreal anti-VEGF injection treatment were prophylactically treated 1 hour before the procedure with Dorzolamide/Timolol (Cosopt,[®] MSD) (Group 1, 53 eyes) or Brinzolamide/Timolol (Elazop,[®] Alcon) (Group 2, 84 eyes) or left untreated (Group 3, 29 eyes). Intraocular pressure was analyzed 5

intraocular pressure 5 and 30 minutes after the procedure. Conclusion: The prophylactic administration of anti-glaucomatic drugs prior to intravitreal anti-VEGF injection effectively reduced the early intraocular pressure elevation. This approach was also safe and could be performed accurately.

Steroidi IVT – OHT Conclusioni



Steroidi IVT – OHT Monitoraggio

Preoperatorio

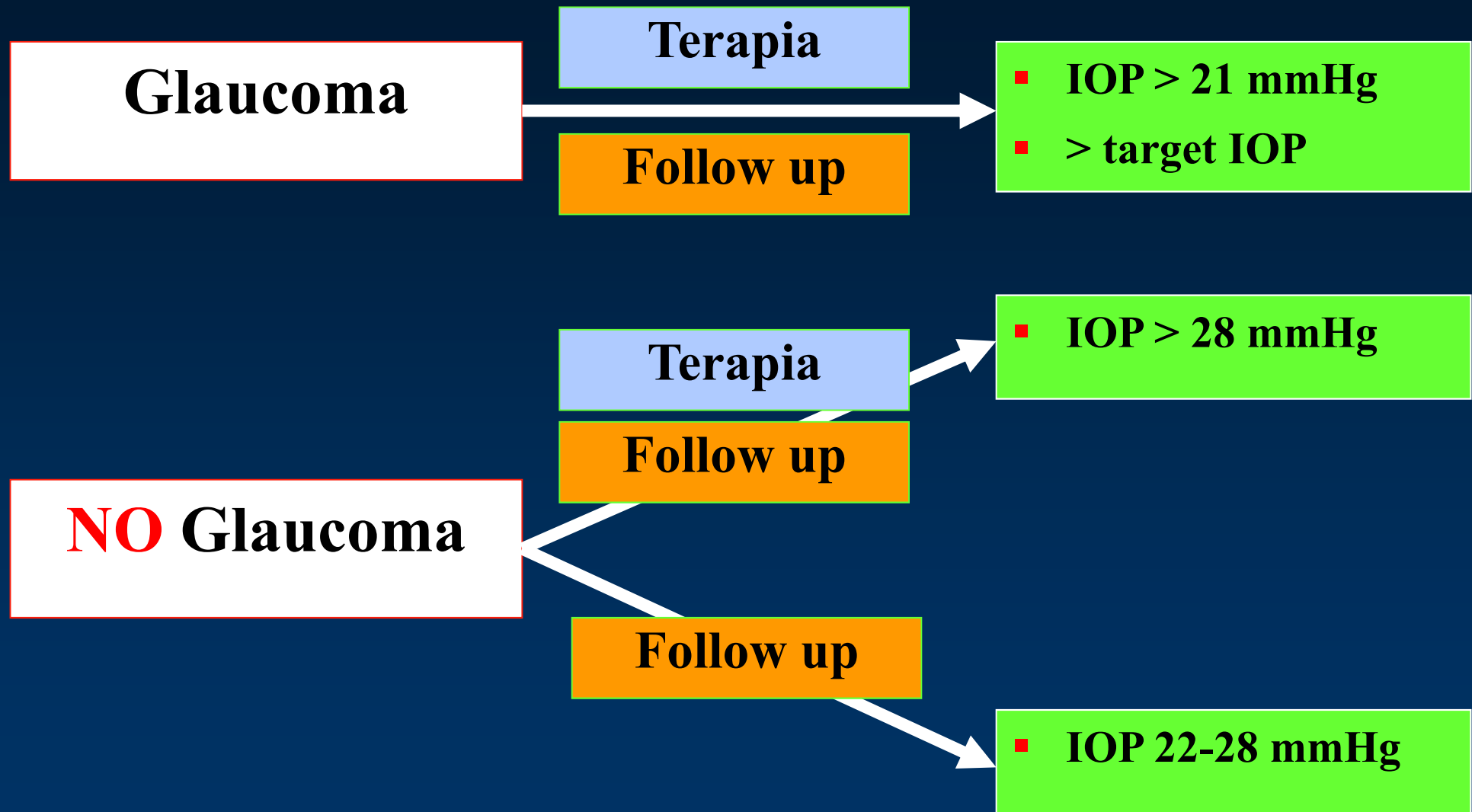
- Valutare fattori rischio
- Misurare IOP

Perioperatorio

- IOP subito dopo IVT se glaucoma
- IOP dopo 30 min. dopo tutte IVT
- IOP >28 paracentesi o farmaci

	TA <i>iniezione</i>	Desametasone <i>Impianto</i>	Fluocinolone <i>Impianto</i>
30 min. dopo	+	+	+
1 sett. dopo	+		
2 sett. dopo		+	+
Ogni 2 sett. per 1 mese	+	+	+
Ogni mese per 6 mesi	+	+	
Ogni mese per 9 mesi			+

Steroidi IVT – OHT Quando trattare?



I-vation™



I-vation Implant
0.5 x 0.21 mm

Intraocular Sustained-Release Delivery Systems for Triamcinolone Acetonide

Saffar Mansoor,¹ Baruch D. Kuppermann,¹ and M. Cristina Kenney^{1,2,3}

Pharmaceutical Research, Vol. 26, No. 4, April 2009

the development of slow-release devices. As described in this review, most of the developed devices showed sustained-release of TA and induce marked therapeutic effects on experimentally induced eye diseases. However, polymer degradation in the implants may cause toxicity and the need for challenging surgical techniques has hampered the further development of these systems for routine clinical use. Therefore, additional studies to develop safe, innovative, efficient, sustained-release devices/system for TA should be pursued in order to provide novel therapies to treat chronic diseases of posterior segment of the eyes.