our widespread netther, organize and a timely manner re it is published. xed for quick, ly for fast reference.

> Place Stamp Here





# FOR OPHTHALMOLOGY

## **Editorial Consultants and Contributors**

Clement A. Weisbecker, RPh, Director of Pharmacy, Wills Eye Hospital, Philadelphia, PA F.T. Fraunfelder, MD, Director, National Registry of Drug-Induced Ocular Side Effects, Oregon Health Sciences University,

Portland, OR
Michael Naidoff, MD, Cornea Service, Wills Eye Hospital, Philadelphia, PA
Douglas Rhee, MD, Wills Eye Hospital, Philadelphia, PA
Richard Tippermann, MD, Wills Eye Hospital, Philadelphia, PA

Vice President of Directory Services: Stephen B. Greenberg

Director of Product Management: David P. Reiss Senior Product Manager: Mark A. Friedman Associate Product Manager: Bill Shaughnessy National Sales Manager: Dikran N. Barsamian National Account Manager, Customized Projects:

Anthony Sorce

Senior Account Manager: Don Bruccoleri

Account Managers: Marion Gray, RPh, Lawrence C. Keary, Jeffrey F. Pfohl, Christopher N. Schmidt,

Jeffrey F. Pfohl, Christopher N. Schmidt, Stephen M. Silverberg, Suzanne E. Yarrow, RN

National Sales Manager, Trade Group: Bill Gaffney Director of Direct Marketing: Michael Bennett Direct Marketing Manager: Lorraine M. Loening

Promotion Manager: Donna R. Lynn
Director, Professional Support Services:

Mukesh Mehta, RPh

Senior Drug Information Specialist:

Thomas Fleming, RPh

Drug Information Specialist: Maria Deutsch, MS, RPh, CDE

Editor, Special Projects: David W. Sifton
Vice President of Production: David A. Pitler
Director of Print Purchasing: Marjorie A. Duffy
Director of Operations: Carrie Williams
Manager of Production: Kimberly H. Vivas

Senior Production Coordinators: Amy B. Brooks,

Dawn B. McCall

Production Coordinator: Mary Ellen R. Breun Index/Format Manager: Jeffrey D. Schaefer Senior Format Editor: Gregory J. Westley

Index Editors: Johanna M. Mazur, Robert N. Woerner

Art Associate: Joan K. Akerlind

Senior Digital Imaging Coordinator: Shawn W. Cahill Digital Imaging Coordinator: Frank J. McElroy, Ill Electronic Publishing Designer: Robert K. Grossman

Fulfillment Managers: Stephanie DeNardi, Kenneth Siebert

Copyright © 1998 and published by Medical Economics Company, Inc. at Montvale, NJ 07645-1742. All rights reserved. None of the content of this publication may be reproduced, stored in a retrieval system, resold, redistributed, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of the publisher. PHYSICIANS' means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of the publisher. PHYSICIANS' permission of the publisher. PDR° Family Guide to Prescription Drugs°, PDR For Ophthalmology°, Pocket PDR°, and The PDR° Family Guide to Prescription Drugs° are registered trademarks used herein under license. PDR Companion Guide™, PDR° for Herbal Medicines™, PDR° Medical Dictionary™, PDR° Nurse's Handbook™, PDR° Nurse's Dictionary™, PDR° Atlas of Anatomy™, The PDR° Family Guide Encyclopedia of Medical Care™, PDR° PDR° Nurse's Handbook™, PDR° Drug Interactions, Side Effects, Indications, Contraindications System™ are trademarks used herein under license.

Officers of Medical Economics Company: President and Chief Executive Officer: Curtis B. Allen; Vice President, New Media: L. Suzanne BeDell; Vice President, Corporate Human Resources: Pamela M. Bilash; Vice President and Chief Information Officer: Steven M. Bressler; Senior Vice President, Finance, and Chief Financial Officer: Thomas W. Ehardt; Vice President, Directory Services: Stephen B. Greenberg; Vice President, New Business Planning: Linda G. Hope; Executive Vice President, Healthcare Publishing and Communications: Thomas J. Kelly; Executive Vice President, Magazine Publishing: Lee A. Maniscalco; Vice President, Group Publisher: Terrence W. Meacock; Vice President, Production: David A. Pitler; Vice President, Group Publisher: Thomas C. Pizor; Vice President, Magazine Business-Management: Eric-Schlett; Senior Vice President, Operations: John R. Ware

ISBN: 1-56363-290-X



ring family of PL 00-232-7379 or f

netics (FD&C) Act, 3 labeled, promote or only those uses f ess have been esta ations 201.100(d)( in products require Desk Reference F i, dosages, route on of administratic s, contraindication it be in the "san oved labeling for the same language ar se of the approve Furthermore, infi s emphasized by t 3, boldface, or italk in Physicians' De

FD&C Act does no hysician may use: s been approved e it for uses or lations that are n A also observes the des drug use that g. For products th s, the publisher ha bing such produc have access to a nd informed decision er-the-counter dieta ed that this inform he Food and Dr. 3 are not intended lisease.

ompilation, organia tion. Each produ e manufacturer, at ufacturer's media medical consultar terial in Physician e publisher does fi ducts described, ( connection with # herein. Physician es not assume, a obtain and include vided to it by # I that by making th advocating the us or is the publish lue to typographic ly product may

# **CONTENTS**

Section 1: Indices	Page I
1. Manufacturers' Index	
2. Product Name Index	
3. Product Category Index	
4. Active Ingredients Index	IX
Section 2: Pharmaceuticals in Ophthalmology	Page 1
1. Mydriatics and Cycloplegics	2
2. Antimicrobial Therapy	
3. Ocular Anti-inflammatory Agents	7
4. Anesthetic Agents	9
5. Agents for Treatment of Glaucoma	
6. Medications for Dry Eye	13
7. Ocular Decongestants	
8. Ophthalmic Irrigating Solutions	
9. Hyperosmolar Agents	
10. Diagnostic Agents	
11. Viscoelastic Materials Used in Ophthalmology	
12. Off-Label Drug Applications in Ophthalmology	
13. Ocular Toxicology	19
Section 3: Suture Materials	Page 23
Section 4: Ophthalmic Lenses	Page 25
1. Soft Contact Lenses	25
2. Aphakic Lenses	
3. Comparison and Conversion Tables	
Section 5: Vision Standards and Low Vision	Page 56
1. Vision Standards	56
2. Low-Vision Aids	
Section 6: Evaluation of Permanent Visual Impairment	59
1. Criteria and Methods	59
2. Visual System Impairment Values	
3. Combined Values Chart	



Section 7: Product Identification Guide	Page 101
1. Index	102
2. Full-Color Product Photographs	103
Section 8: Pharmaceutical and Equipment Product Informatio	n Page 201
Listed alphabetically by manufacturer	
Section 9: Intraocular Product Information	Page 315
Key to Controlled Substances Categories	Page 319
Key to FDA Use-in-Pregnancy Ratings	Page 320
Amsler's Grid	Inside Front Cover

SECTION 1

# INDICE

This section offers for mation you need:

- 1. Manufacturers' participating manufacturers manufacturers graphs in the Procond to product i addresses and teleheadquarters and re
- 2. Product Name I uct information alp mond symbol to the tograph of the Identification Guide page number refers

## PART I/MANUF

#### AKORN, INC. .....

2500 Millbrook Driv Buffalo Grove, IL 60 Direct Inquiries to: Customer Service (800) 535-7155

#### **ALCON LABORATOR**

and its Affiliates Corporate Headqua 6201 South Freewa Fort Worth, TX 761 Direct Inquiries to: Ophthalmic/VisionC (Pharmaceuticals/L Surgical: (800) 862 (Instrumentation/S Systems: (800) 28: (Medical Managem Systems)

### ALLERGAN .....

2525 Dupont Drive P.O. Box 19534 Irvine, CA 92623-9 For Medical Inform Outside CA: (800) CA: (714) 246-45C Sales and Ordering Outside CA: (800) CA: (714) 246-45C

# BAUSCH & LOMB. PHARMACEUTIC

8500 Hidden Rivel Tampa, FL 33637



## 6. MEDICATIONS FOR DRY EYE

Dry eye refers to a deficiency in either the aqueous or mucin components of the precorneal tear film. The most commonly encountered aqueous-deficient dry eye in the United States is keratoconjunctivitis sicca, while mucin-deficient dry eyes may be seen in cases of hypovitaminosis A, Stevens-Johnson syndrome, ocular pemphigoid, extensive trachoma, and chemical burns.

Dry eye is treated with artificial tear preparations (see **Table 20**) and ophthalmic lubricants (see **Table 21**). The lubricants form an occlusive film over the ocular surface and protect the eye from drying. Administered as a nighttime medication, they are useful both for dry eye and in cases of recurrent corneal erosion.

#### TABLE 20

#### **ARTIFICIAL TEAR PREPARATIONS**

MAJOR COMPONENT(S)	<b>CONCENTRATION</b> (%)	TRADE NAME	PRESERVATIVE/EDTA*
Carboxymethyl cellulose	0.5% 1% 0.25%	Refresh Plus Celluvisc Theratears	None None None
Glycerin	3%	Dry Eye Therapy	None
Hydroxyethył cellulose, polyvinył alcohol		TearGard	Sorbic acid, EDTA
Hydroxypropyl cellulose		Lacrisert (biode- gradable insert)	None
Hydroxypropyl methylcellulose	0.5%	Isopto Plain Isopto Tears Tearisol Isopto Alkaline	Benzalkonium chloride Benzalkonium chloride Benzalkonium chloride, EDTA Benzalkonium chloride
Hydroxypropyl methylcellulose, dextran 70		Bion Tears Ocucoat Ocucoat PF Tears Naturale II Tears Naturale Free Tears Renewed	None Benzalkonium chloride, EDTA None Polyquad None Benzalkonium chloride, EDTA
Methylcellulose	1%	Murocel	Methyl-, propylparabens
Polycarbophil, PEG-400, dextran 70		AquaSite AquaSite multi-dose	EDTA EDTA, Sorbic acid
Polysorbate 80		Viva Drops	EDTA
Polyvinyl alcohol	1.4%	AKWA Tears Dry Eyes	Benzalkonium chloride, EDTA Chlorobutanol
Polyvinyl alcohol, PEG-400, dextrose	3% 1%	Liquifilm Tears  HypoTears  HypoTears PF  Puralube Tears	Chlorobutanol  Benzalkonium chloride, EDTA  EDTA  Benzalkonium chloride, EDTA
Polyvinyl alcohol, povidone	1.4% 0.6%	Murine Tears Refresh Tears Plus	Benzalkonium chloride, EDTA None Chlorobutanol

<sup>\*</sup>EDTA = ethylenediaminetetraacetic acid.

# SET/DURATION ACTION

min/5–6 h 60 min/6 h 45 min/5–6 h

# ONSET/DURATION OF ACTION

2 h/4-6 h

5-10 min/2 h

30 min/6 h

2 h/4-6 h

# SIZE(S)(mL)

5 single use bottle 5, 10, 15

SIZE(S)(mL) 2.5



#### TABLE 21

#### **OPHTHALMIC LUBRICANTS**

TRADE NAME	COMPOSITION OF STERILE OINTMENT  White petrolatum, liquid Ianolin, and mineral oil	
AKWA Tears Ointment		
Dry Eyes	White petrolatum, liquid lanolin, and mineral oil	
Duolube	White petrolatum and mineral oil	
Duratears Naturale	White petrolatum, liquid lanolin, and mineral oil	
HypoTears	White petrolatum and light mineral oil	
Lacri-Lube S.O.P., Lubritears	42.5% mineral oil, 55% white petrolatum, lanolin alcohol, and chlorobutanol	
Puralube	White petrolatum, liquid lanolin, and mineral oil	
Refresh P.M., Dry Eyes Lubricant	41.5% mineral oil, 55% white petrolatum, petrolatum, and lanolin alcohol	

## 7. OCULAR DECONGESTANTS

These topically applied adrenergic medications are commonly used to whiten the eye. Three types are available. Those containing naphazoline and tetrahydrozoline are more stable than those with phenylephrine. Usual dosage is 1 or 2 drops no more than 4 times a day (see **Table 22**).

#### TABLE 22

#### **OCULAR DECONGESTANTS**

DRUG	TRADE NAME	ADDITIONAL COMPONENTS
Naphazoline hydrochloride	AK-Con* Albalon*	Benzalkonium chloride, edetate disodium Benzalkonium chloride, edetate disodium
	Clear Eyes	Benzalkonium chloride, edetate disodium
	Naphcon	Benzalkonium chloride, edetate disodium
	Vasoclear	Benzalkonium chloride, edetate disodium
	Vasocon Regular*	Phenylmercuric acetate
Oxymetazoline hydrochloride	Visine L.R.	Benzalkonium chloride, edetate disodium
	Ocuclear	Benzalkonium chloride, edetate disodium
Phenylephrine hydrochloride	AK-Nefrin	Benzalkonium chloride, edetate disodium
	Eye Cool	Thimerosal, edetate disodium
	Prefrin Liquifilm	Benzalkonium chloride, edetate disodium
	Relief	_
Tetrahydrozoline hydrochloride	Collyrium Fresh	Benzalkonium chloride, edetate disodium
	Murine Plus	Benzalkonium chloride, edetate disodium
	Visine	Benzalkonium chloride, edetate disodium
DECONGESTANT/ASTRINGENT COMBINATIONS		
Naphazoline hydrochloride	Clear Eyes ACR	Benzalkonium chloride, edetate disodium
plus zinc sulfate	(allergy/cold relief)	
Phenylephrine hydrochloride		
plus zinc sulfate	Zincfrin	Benzalkonium chloride
Tetrahydrozoline plus zinc sulfate	Visine Allergy Relief	Benzalkonium chloride, edetate disodium
*Prescription medication.		

# 8. OPHTHA

Listed in **Table 23** general ophthalmic products. There ar tions available for

TABLE 23

## OPHTHALMIC II

TRADE NAME

AK-Rinse

Collyrium Fresh Eyes

Dacriose

Eye-Stream

**Irigate** 

Lavoptik Eye Wash

## 9. HYPER

Hyperosmolar (hy They act through

TABLE 24

## HYPEROSMO

#### **GENERIC NAME**

A. Therapeutic prepa Sodium chloride

B. Diagnostic prepa Glycerin

# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

# **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

### API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

#### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

#### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

## **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

