

CLINIC BUDDY: OPHTHALMIC CLINICAL REFERENCE GUIDEBOOK

by

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CLINIC BUDDY: OPHTHALMIC CLINICAL REFERENCE GUIDEBOOK

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ABSTRACT

Background: A need for brief but pertinent, comprehensive, and clinically-relevant optometric data exists for optometry students and recent graduates. The purpose of this project is to identify the most useful clinical data and present it in a manner that is easy to use by students and novice clinicians. *Methods:* The clinical reference guidebook is a compilation of key clinical information that I have compiled over the course my optometry graduate program. *Results:* The book is divided into the following sections: Ophthalmic Drugs—Topical and Systemic; Ocular Disease; Binocular and Pediatric Vision; Contact Lenses; Coding, Billing, and Paperwork; and Primary Care and Low Vision. Most of the information within each section is information that is easily quantifiable in table or chart format or is information that is pertinent to clinic but is advanced thus many students may not have fully mastered. *Conclusion:* Several optometry students and recent graduates have trialed the pocket-sized book. They have reported that the information contained within seems to be very clinically relevant. In particular, the section on drugs, especially the systemic medications with ocular manifestations, seems to be used the most and contact lenses is used almost as often. I am hopeful that the book will be of use to other students and that it will continue to evolve into a valuable, essential tool for all optometry students.

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The Clinic Buddy is dedicated to my husband, Matthew William Cardwell. This book is a miniscule example of his unwavering support in my professional endeavors which lead me down a career path in optometry. Undoubtedly, without him I would not be where I am today.

TABLE OF CONTENTS

BACKGROUND	1-2
METHODS.....	2-3
RESULTS.....	3-4
CONCLUSION.....	4
AUTHOR'S NOTE TO READERS	4-5
APPENDIX.....	6-103
OPHTHALMIC DRUGS—TOPICAL AND SYSTEMIC.....	6-64
Glaucoma Medications.....	6-9
Ophthalmic NSAIDS, Anti-inflammatories, Restasis.....	10
Ophthalmic Allergy Medications.....	11-14
Ophthalmic Steroids.....	15
Ophthalmic Antibiotics.....	16-18
Ophthalmic Combo Antibiotics & Antibiotic/ Steroids.....	19
Systemic Antibiotics.....	20-22
Dosing of Systemic Antibiotics For Ocular Disease.....	23-24
Generic to Trade Key of Systemic Medications.....	25-29
Listing of Systemic Medications by Type/Class.....	30-34
Systemic Medications with Ocular Implications by Trade Name.....	35-63
Rx Writing.....	64

Medications that Can Cause Us Problems !.....	64
OCULAR DISEASE.....	65-82
Optic Nerve Assessment.....	65-66
Macula.....	67
Headaches.....	68-69
Bones of the Orbit.....	70
Pigmentation Disorders & Diseases.....	71
Bloodwork to Order.....	72-73
Prosthetic Eye Fit.....	74
Acute Angle Closure Glaucoma Emergency Treatment.....	75
Humphrey's Visual Field Testing.....	76
Select Urgent Referral Guidelines.....	77
Treatment and Management of Open-Angle Glaucoma.....	78
Blood Pressure.....	79
Pupils Flowchart.....	80
Typical Conjunctivitis Differentials.....	81
Diabetes Ranges and Normatives.....	82
BINOCULAR AND PEDIATRIC VISION.....	83-89
Non-Strabismic Disorders and Normatives.....	83-84
Donders' Amplitude of Accommodation.....	85
Binocular Vision Normatives.....	86
Dynamic Retinoscopy.....	87

Vision Therapy Exercises.....	88
Parks Three Step Test for Diagnosing Neurological Disorders.....	89
CONTACT LENSES.....	90-94
Lens Vertex Chart.....	90
Diopters to Radius Conversion Chart.....	90
Popular Spherical Soft Contact Lens Data.....	91
Popular Toric Soft Contact Lens Data.....	92
Silicone Hydrogel Trade & Generic Names.....	93
Radiuscope Instructions.....	93
BC – K = TL + CLs = SRx.....	94
CODING, BILLING, & PAPERWORK.....	95-96
Diagnosis Codes and Website.....	95
Patient Log / e-value.net Spreadsheet.....	96
PRIMARY CARE & LOW VISION.....	97-98
Calibrating Tono Pen.....	97
Michigan Vision Driver's License Standards.....	97
Tentative Add Determination Table.....	98
ENGLISH ABBREVIATIONS.....	99
LATIN ABBREVIATIONS.....	100
REFERENCES.....	101-103

BACKGROUND: The knowledge and skills an optometry student must assimilate in a four year time span is vast. Between classroom lectures, home studies, and the application of this knowledge-base in clinic, it is difficult, at best, to effectively assimilate all of this information upon first-time exposure. Many experts believe that in order to truly learn a principle or fact, one must be exposed to the information at least 6 different times before it will “stick”. To add to the learning process, the student must develop skills that will allow “book knowledge” to readily be translated into clinical skill and efficiency. In order to meet this objective, students must have reference material close at hand to periodically refer to over and over. Often, these students either rely on each other, their clinical preceptor, or large, sparsely distributed textbooks to get answers to their questions. When I was a second year student, I sometimes found this approach be impractical and inefficient. Because of this, I started to find ways to remedy my problem.

First, I began making notes on a bi-fold clipboard that already contained pre-printed basic ophthalmic information. After a while, much of this information became unnecessary because I had assimilated most of it, but the need to add more information to my permanent data banks arose. I started taking charts and pasting them into a blank pocket-sized book and wrote my own comments and notes in it when I was in clinic. I continued to use the book into my 4th year rotations, every now and again adding more information and cutting old information out. The book

became bulky, parts once again became obsolete, and the need to add more advance information became necessary. I also needed a meaningful senior project. I quickly stepped up the pace and developed the first pocket-size book which contained a variety of information, sent it to the director of clinics and persuaded him to let me use this book as my senior project. He agreed and thus Clinic Buddy was born.

METHODS: The purpose of the ophthalmic clinical reference guidebook is designed to provide concise, relevant, and easy-to-reference information most used in a clinical setting. Every effort has been made to ensure the information contained within is accurate and sound. In no way is this guidebook a substitute for sound clinical knowledge or judgment. Rather, the book is a tool which provides basic information enabling the student to efficiently take care of patients' needs while still being able to draws upon conceptual knowledge for sound medical decision-making.

The book is divided into the following sections: Ophthalmic Drugs; Ocular Disease; Binocular & Pediatric Vision; Contact Lenses; Coding, Billing, & Paperwork; and Primary Care & Low Vision. Most of the information within each section is information that is easily quantifiable in table or chart format or is information that is pertinent to clinic but is advanced information that many students have not fully mastered.

Other information such as color vision testing and stereo testing was not included because these tests usually have a key within the test

and thus I found to include it would be somewhat redundant to include. Also, I believe that these types of tests can be fairly easily interpreted to some degree of accuracy even without referring to the test's key. Lastly, in an effort to be concise, some material simply needed to be omitted.

Like many books, subsequent editions are often continuously released as the body of knowledge within the book evolves. It is my hope that this clinical reference guidebook will continue to evolve as well. For example, a small copy of this guidebook is currently being developed for students to carry with them in clinic. In addition, is small enough to fit inside a clinic jacket pocket so that it may be readily reviewed at any time. It is my hope to have the six sections color coded on the edges of the sheets and that the sheets be temporarily bound together so that the owner of the book may easily remove sections that s/he finds unnecessary and bulky and retain sections that are still useful to him/her. The student will be able to write on the pages and make notes if s/he wishes and can even add blank pages to each section to allow personal notes to be written within. In essence, the small book becomes a customizable working body of knowledge and tool to facilitate clinical efficiency and learning for its owner.

RESULTS: I have trialed this pocket-size clinic book with several optometry students and recent graduates and have received very positive feedback. Specifically, the information contained within seems to be very

clinically relevant. In particular, the section on drugs, especially the systemic medications with ocular manifestations, seems to be used most. The contact lens section is probably used almost as often. I am hopeful that this will be of use to other students and that the book will continue to evolve into a valuable, essential tool for all optometry students.

CONCLUSION: A need for brief but pertinent and clinically-based optometric data exists for optometry students and recent graduates. Currently, it appears as though there is only one such published source, which is offered at the Illinois College of Optometry through the S.V.O.S.H. (Student Volunteer to Optometric Services to Humanity) program. This clinic guide contains excellent clinical information, however, it is incomplete, is not organized in an easy to use fashion, and the books are somewhat difficult to find (only after developing this clinical reference guidebook did the existence of SVOSH clinic guide surface). This project attempted to identify the most useful clinical data. Then that data was compiled and organized in a manner that is easy to use by students and novice clinicians. It has been designed in a manner which facilitates quick referencing ability and ease of use.

AUTHOR'S NOTE TO READERS: The purpose of the ophthalmic clinical reference guidebook is to provide concise, relevant, and easy-to-reference information that is most used in a clinical setting. **Every effort has been**

made to ensure the information contained within is accurate and sound. In no way is this guidebook a substitute for sound clinical knowledge or judgment. Rather, the book is a tool which provides basic information enabling the student to efficiently take care of patients' needs while still being able to draw upon conceptual knowledge for sound medical decision-making.

A "-" indicates that the category under which it is listed is not a major factor or concern. For example, if a - is listed under contraindications then no major known contraindications for this item were found while researching the item.

APPENDIX A

CLINIC BUDDY: OPHTHALMIC CLINICAL REFERENCE GUIDEBOOK

Glaucoma Medications ^{1,2,3,4}

Generic	Trade	MOA	Conc & Sz	Max Dos.	C/I	Caution w/	Cap Color	Misc
levobunolol HCL	Betagan®	↓ Aq. Prod.	0.5% sol 10 & 15 mL	2 gt bid	Heart and lung cond	DM, cerebrovasc. insuff, hepatic impairment, hyperthyroid	B, Y	may potentiate muscle weak. (ptosis, diplopia), sexual dysfxn, ↑ lipids
cartelol HCl	Ocupress®	↓ Aq. Prod.	1% sol 5, 10, 15 mL	1gt bid	Heart and lung cond	DM, hyperthyroid, catecholamine drugs (reserpine), may antagonize epinephrine	W, Y	may potentiate muscle weakness & systemic effects with oral β blockers, sexual dysfxn, affects lipid profile less, affects depression less
timolol maleate	Timoptic®	↓ Aq. Prod.	0.25% & 0.5% sol 5, 10, 15 mL	1 gt bid	Heart and lung cond	syst absorp, DM, hyperthyroid	Y, B	may potentiate muscle weakness, sexual dysfxn, ↑ lipids
timolol maleate	Timoptic-XE® (gel)	↓ Aq. Prod.	0.25% gt 2.5 & 5 mL, 0.5% gt 5 mL	qhs	Heart and lung cond	syst absorp, DM, hyperthyroid	W	may potentiate muscle weakness, sexual dysfxn, ↑ lipids
levobetaxolol	Betaxon®	↓ Aq. Prod.	0.25, 0.50?	1 gt bid	Heart and lung cond	DM, hyperthyroid	W	sexual dysfxn, ↑ lipids
betaxolol HCl	Betoptic-S®	↓ Aq. Prod.	0.25% susp 5, 10, 15 mL	1 gt bid	Heart and lung cond	DM, hyperthyroid	B	may potentiate muscle weak. (ptosis, diplopia), sexual dysfxn, ↑ lipids; d/c before gen. anesthesia, avoid abrupt wdrl; may preserve VFs at higher IOPs than timolol
travoprost	Travatan®	↑ UvS Out.	0.004% sol 2 & 5 mL	1gt qpm	macular edema, oc inflam	preg/br.feed, renal, hepatic impair, aphakia, pseudop with torn post lens cap	B	may cause growth and darkening of eyelashes, ocular adnexal pig, iris darkening

6

Glaucoma Medications ^{1,2,3,4}

Generic	Trade	MOA	Conc & Sz	Max Dos.	C/I	Caution w/	Cap Color	Misc
travaprost-z	Travatan-ZC® (no BAK)	↑ UvS Out.	0.004% sol 2 & 5 mL	1 gt qpm	macular edema, oc inflam	pregnancy/breast feeding, renal, hepatic impair, aphakia, pseudophakia with torn post lens cap	B	may cause growth and darkening of eyelashes, ocular adnexal pig, iris darkening, may → less oc inflam
latanoprost	Xalatan®	↑ UvS Out.	0.005% sol 2.5 mL	1 gt qpm	macular edema, oc inflam	BAK sens, pregnancy/breast feeding, renal, hepatic impair, aphakia, pseudophakia with torn post lens cap	W, B	may cause growth and darkening of eyelashes, ocular adnexal pig, iris darkening
bimatoprost	Lumigan®	↑ UvS Out.	0.03% sol 2.5, 5, 7.5 mL	1gt qpm	macular edema, intraocular inflam	renal, hepatic impair, aphakia, pseudop with torn post lens cap, may be most effective and harshest of PGs	B	may cause growth and darkening of eyelashes, ocular adnexal pig, iris darkening
unoprosterone isopropyl	Rescula®	↑ UvS Out.	0.15% sol 15 mL	1gt bid	macular edema, oc inflam	BAK sens, pregnancy/breast feeding, renal, hepatic impair, aphakia, pseudophakia with torn post lens cap	W	may cause growth or ↓ in lashes, darkening of eyelashes, ocular adnexal pig, iris darkening, last line PG
apraclonidine	lopidine®	↓ Aq. Prod., ↑ UvS Out.	0.5% sol 5 & 10 mL; 1% 0.1 mL single (24 doses)	0.5% 2gtt tid, 1% 1 gt 1 hr pre-op	hypersens to clonidine, concomitant MAOIs, sickle cell	monitor VFs, renal or hepatic dysfxn, HTN, heart conditions, Raynaud's, depression, pregnancy, hypoglycemia		may cause dizziness, somnolence, dry mouth, taste perv, mydriasis, lid retraction; 1 gt pre and post ocular surgery

4

Glaucoma Medications ^{1,2,3,4}

Generic	Trade	MOA	Conc & Sz	Max Dos.	C/I	Caution w/	Cap Color	Misc
brimonidine tartrate	Alphagan-P®	↓ Aq. Prod., ↑ UvS Out.	0.1% sol 15 mL; 0.15% 5, 10, 15 mL	1 gt bid or qam	MAOIs, sickle cell	heart conds, orthostatic hypotens, hepatic or renal dz, depression, Raynaud's, CNS depressants, antihypertensives, TCAs	P	oral dryness, drowsiness, mydriasis, lid retraction, taste perv; may provide neuroprot./good w/NTG; (-) BAK
brinzolamide	Azopt®	↓ Aq. Prod.	1% susp 10 & 15 mL	1gt tid	Sulfa allergies, corn. endo dz	hepatic, renal impair, syst absorp, high dose salicylates, oral CAIs	R	taste disturbances and oc irritation
dorzolamide HCl	Trusopt®	↓ Aq. Prod.	2% sol 10 mL	1gt tid	Sulfa allergies, corn. endo dz	hepatic, renal impair, syst absorp, high dose salicylates, oral CAIs	W	taste disturbances and oc irritation
dorzolamide HCl 2%, timolol 5%	Cosopt®	↓ Aq. Prod.	2%, 5% sol 5 & 10 mL	1 gt bid	Sulfa allergies, corn. endo dz, heart and lung conditions	hepatic, renal impair, syst absorp, high dose salicylates, oral CAIs and β blockers, DM, hyperthyroid, Quinjine	W	may potentiate muscle weak., taste disturbances and oc irritation
methazolamide	Neptazane®	↓ Aq. Prod.	25, 50 mg tab	100 mg tid	low K+ or Na+, kidney, liver, adrenal dz, acidosis, l/t angle closure tx	fatalities 2' to hypersens (rare), emphysema or pulmonary obstructions, high ASA	N/A	may cause anorexia, tachypnea, lethargy, coma, parasthesia, tinnitus, taste perv, nausea, vomiting, diarrhea, plyuria, metabolic acidosis, death; risk of hypokalemia w steroids
acetazolamide	Diamox®	↓ Aq. Prod.	250, 500 mg tab	500 mg po then 250 mg q4h, or 2 tabs q12h	sulfa allerg, low K+ or Na+, kidney, liver, adrenal dz, acidosis	fatalities 2' to hypersens (rare), emphysema or pulmonary obstructions, high ASA	N/A	transient myopia, coma, parasthesia, taste perv, nausea, vomiting, diarrhea, met. acidosis, death; risk of hypoK+ w steroids

8

Glaucoma Medications ^{1,2,3,4}

Generic	Trade	MOA	Conc & Sz	Max Dos.	C/I	Caution w/	Cap Color	Misc
glycerol/ glycerin	Osmoglyn®	hyperos motic	oral: 1 mL/kg diluted w equal amt of H2O	1 mL/kg diluted w equal amt of H2O	DM	dehydration	N/A	may cause HA, vomiting, dehydration.
mannitol	Osmitol®	hyperos motic	IV--1.0 mg/kg IV	1.5 mg/kg IV	DM, renal failure, heart failure	pulmonary edema, dehydration	N/A	may cause mania, anaphylaxis, nausea, vomiting, dehydration.
Isosorbide	Ismotic®	hyperos motic	oral: 100 g po (220 mL of a 45% soln)	100 g po (220 mL of a 45% soln)	kidney dz	dehydration	N/A	may cause HA, vomiting, dehydration. Absolutely C/I in DM.
isosorbide <i>dinitrate</i>	Dilatrate- SR®	hyperos motic	oral: 3-5 oz on the rocks	5 oz	anesthetics, ED meds (viagra)	ergot alkaloids/caffeine, ethanol, amifostine, heparin, hydralazine, hypotension, dehydration, cardiac dz, anticholinergics, TCAs, phenothiazine, etc.	N/A	headaches, dizziness, hypotension (including orthostatic) are common rxns

Prostaglandins reduce IOP ~30%; Beta Blockers reduce IOP ~25%; Rest reduce IOP ~<20%

W=White, B=Blue, R=Red, P=Purple, Y=Yellow

Ophthalmic NSAIDs, Anti-Inflammatories, Restasis ^{1,2,3,4}

Generic	Trade	Rx?	Use	[Conc], sz	Dosing	Precau	Sx	Notes
diclofenac Na	Voltaren®	Y	pain, GPC, VKC, Seas. All	0.1% sol, 2.5 & 5 mL	pre-surg: 4 gtt; post surg: 1 gt q4h; seas all/pain: 1 gt q4h	bleeding tendencies, preg/lact	corneal melting with generic	preg cat b
ketorolac tromethamine	Acular®	Y	pain, CME, GPC, VKC, Seas. All.	0.5% sol, 3, 5 & 10 mL	CME: 1 gt q4h; pre-surg: 4 gtt; post surg: 1 gt q4h; seas all/pain: 1 gt q4h	bleeding tendencies, preg/lact	-	preg cat c
ketorolac tromethamine	Acular LS®	Y	pain, CME, GPC, VKC, Seas. All.	0.4%, 5 mL	pre-surg: 4 gtt; post surg: 1 gt q4h; seas all/pain: 1 gt q4h	bleeding tendencies, preg/lact	-	
bromfenac	Xibrom®	Y	pain, GPC, VKC, Seas. All	0.09% sol, 2.5 & 5 mL	pre-surg: 4 gtt; post-surg: 1gt bid; seas. all/pain.: 1 gt bid	bleeding tendencies, preg/lact	-	preg cat c; better penetration?
nepafenac	Nevanac®	Y	pain, GPC, VKC, Seas. All	0.1% sol, 3 mL	pre-surg: 4 gtt; post-surg: 1 gt tid; seas. all/pain.: 1 gt tid	bleeding tendencies, preg/lact	-	preg cat c; better penetration?
cyclosporin A	Restasis®	Y	dry eye, KCS	0.05% emulsion, 30 vials	1gt q12h	c/l with ocular infxns; wait 15 min before inserting cls	-	preg cat c; 1-3 mos for full effect;

10

Ophthalmic Allergy Medications ^{1,2,3,4}

Generic	Trade(s)	Category	Rx?	MOA	Use	[Conc]	Max Dos	C/I	Precaution	Sx	Notes
naphazoline	Clear Eyes®	Decongest	N	a1 ag	congest, minor irrit	0.1% soln	2 gtt qid	-	narrow angles, cls	hyperemia, mydriasis, SPK	preg cat c
"	Naphcon®	Decongest	N	a1 ag	congest, minor irrit	0.012% soln	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
"	Vasoclear®	Decongest	N	a1 ag	congest, minor irrit	0.1% soln	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
oxymetazoline	Ocuclear®	Decongest	N	a1 ag	congest, minor irrit	-	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
"	Visine LR® (lasting relief)	Decongest	N	a1 ag	congest, minor irrit	-	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
phenylephrine	Prefrin®	Decongest	N	a1 ag	congest, minor irrit	-	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
"	Zincfrin®	Decongest	N	a1 ag	congest, minor irrit	-	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
tetrahydrazoline	Visine®	Decongest	N	a1 ag	congest, minor irrit	-	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
"	Murine®	Decongest	N	a1 ag	congest, minor irrit	-	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
naphazoline	Vasocon® Regular	Decongest	N	a1 ag	congest, minor irrit	0.1% soln	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c

11

Ophthalmic Allergy Medications ^{1,2,3,4}

Generic	Trade(s)	Category	Rx?	MOA	Use	[Conc]	Max Dos	C/I	Precaution	Sx	Notes
"	Naphcon Forte®	Decongest	N	a1 ag	congest, minor irrit	0.1% soln	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
"	Albalon®	Decongest	N	a1 ag	congest, minor irrit	0.1% soln, 15 mL	2 gtt qid	-	narrow angles, cls	rebound hyperemia, mydriasis, SPK	preg cat c
emedastine difumarate	Emadine®	Antihist	Y	H1 block	type 1 allergy, myokemia	0.05% soln 5 mL	1 gt qid	MAOIs	Cls (fr BAK); narrow angles	mydriasis	preg cat b;
pheniramine maleate	Naphcon-A®	Antihist	N	H1 block	type 1 allergy, myokemia	-	2 gt qid	MAOIs	narrow angles; cls	mydriasis	preg cat c
antazoline phosphate	Vasocon-A®	Antihist	N	H1 block	type 1 allergy, myokemia	-	3 gt qid	MAOIs	narrow angles; cls	mydriasis	preg cat c
cromolyn sodium	Crolom®	MCS	N	MCS	seasonal, vernal, atopic conjitis and GPC	-	4% 2 gtt bid	-	Cls (fr BAK)	-	preg cat b; max onset=days /weeks; not as potent as other MCS; safe for l/t use
"	Opticrom®	MCS	N	MCS	seasonal, vernal, atopic conjitis and GPC	-	4% 2 gtt qid	-	Cls (fr BAK)	-	max onset=days /weeks;
lodoxamide tromethamine	Alomide®	MCS	Y	MCS	seasonal, vernal, atopic conjitis and GPC	0.1% 10 mL	2 gtt qid	-	Cls (fr BAK)	-	max onset=days /weeks; Tx

12

Ophthalmic Allergy Medications ^{1,2,3,4}

Generic	Trade(s)	Category	Rx?	MOA	Use	[Conc]	Max Dos	C/I	Precaution	Sx	Notes
nedocromil sodium	Atocril®	MCS	Y	MCS	seasonal, vernal, atopic conjitis and GPC	2%, 5 mL	2 gtt bid	-	CIs (fr BAK)	-	preg cat b; max onset=days /weeks (shortest with nedocromil); safe for l/t use
pemirolast K+	Alamast®	MCS	Y	MCS	seasonal, vernal, atopic conjitis and GPC	0.1%, 10 mL	2 gtt qid	-	CIs (fr LAK)	-	max onset=days /weeks;
ketotifen fumerate	Zaditor®	Dual	N	MCS + Antihist	allerg conjitis	-	2 gtt tid	-	CIs (fr BAK)	-	preg cat c (but safe); quick onset; excellent
"	Alaway® (B&L)	Dual	N	MCS + Antihist	allerg conjitis	-	2 gtt tid	-	CIs (fr BAK)	-	preg cat c (but safe); \$\$\$*, quick onset
olopatadine HCl	Patanol®	Dual	Y	MCS + Antihist	allerg conjitis	0.1%, 5 mL	2 gtt bid	-	CIs (fr BAK)	-	preg cat c (but safe); \$\$\$*, quick onset

13

Ophthalmic Allergy Medications ^{1,2,3,4}

Generic	Trade(s)	Category	Rx?	MOA	Use	[Conc]	Max Dos	C/I	Precaution	Sx	Notes
Olopatadine HCl	Pataday®	Dual	Y	MCS + Antihist	allerg conjitis	0.2%, 2.5 mL	qd	-	Cls (fr BAK)	-	preg cat c (but safe); \$\$\$*, quick onset
Azelastine HCl	Optivar®	Dual	Y	MCS + Antihist	allerg conjitis	0.05, 6 mL	2 gtt tid	-	Cls (fr BAK)	-	preg cat c (but safe); \$\$\$*, quick onset
Epinastine HCl	Elestat®	Dual	Y	MCS + Antihist	allerg conjitis	0.05%, 5 mL	2 gtt tid	-	Cls (fr BAK)	-	preg cat c (but safe); \$\$\$*, quick onset

when cls c/i or precautioned, cls wear only allowed when eye is not actively red and only 10 minutes after gt is instilled

*expensive but can start out on dual acting and after ~ 1 mo switch to MCS alone

14

Ophthalmic Steroids 1, 2, 3, 4

Generic	Trade(s)	[Conc]	Max Dos	C/I	Precau	Sx	Notes
dexamethasone phosphate	AK-Dex®	0.05% ung 3.5 g, 0.1 sol 5 & 15 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	
dexamethasone alcohol	Maxidex®	0.1% susp 5 & 15 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	
dexamethasone phosphate	AK-Dex®	0.5% ung 3.5 g	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	
loteprednol	Alrex®	0.2% susp 5 & 10 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	can Rx for l/t control of allergies; soft steroid
loteprednol	Lotemax®	0.5% susp 5, 10, 15 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	can Rx for l/t control of allergies; soft steroid
fluorometholone	FML®, Flarex®, eFlone®	0.1% susp 5 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	can Rx for l/t control of allergies; soft steroid
fluorometholone	FML Forte®	0.25% susp 5 & 10	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	can Rx for l/t control of allergies; soft steroid
fluorometholone	FML S.O.P®	0.1% ung 3.5 gm	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	can Rx for l/t control of allergies; soft steroid
prednisolone acetate	Pred Mild®, Econopred®	0.12% susp 10 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	excellent for price, avail, potency
prednisolone phosphate	Inflamase Mild®	0.125% sol 5 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	excellent for price, avail, potency
prednisolone acetate	Econopred Plus®	1% susp 5 & 10 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	excellent for price, avail, potency
prednisolone phosphate	Inflamase Forte®	1% sol 5 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	excellent for price, avail, potency
rimexolone	Vexol®	1% susp 5 mL	2 gtt qh, pulse/taper	infxns w/o ab cov.	sulfite sens, preg, lact	glaucoma, PSCs, 2 infxn, mydriasis, ptosis	least propensity to increase IOP

*acetates and alcohols penetrate cornea better than phosphates

5

Ophthalmic Antibiotics ^{1,2,3,4,5}

Generic	Trade	Class	Mechanis	[Conc], Form	Dosage	Gm + / -	Use	C/I	Caution	S/E	Preg	Misc
bacitracin	AK-Tracin®	bacteriocidal	CWS inhib	500 u/gm ung 3.5 gm	q 15 min - q4h	+>>-	bleph/staph	-	myasthenia gravis	-	c	Rx polysporin for +/- coverage
erythromycin	Ilotycin®	macrolide	50s PSI	5 mg/g ung 3.5 g	q 15 min - q4h	+>>-	neonatal gonorrhea or trachoma prophylaxis	-	-	-	b	very safe
chloramphenicol	AK-Chlor®, Chloroptic®, Chloromycetin®	bacteriocidal	50s PSI	0.5% sol; 10 mg/g ung; NOT AVAILABLE	q 15 min - q4h	broad	not recommended	-	-	blood dyscrasias, aplastic anemia	c	avoid; very effective; product not available in US
gentamicin	Genoptic®, Gentak®, Garamycin®, Gentacidin®	Aminoglycoside	30s PSI	0.3% sol 5 mL; 0.1% ung 15 g	q 15 min - q4h	->>+	bact keratitis	-	-	-	c	some resistance & toxicity
neomycin, polymixin B, bacitracin	Neosporin® ung	various	neo=30s	various/non Rx	q 15 min - q4h	broad	bleph/staph	-	-	allergy to neomycin	c	no Rx
tobramycin	Tobrex®, AKTob®	Aminoglycoside	30s PSI	0.3% sol 5 mL; 3 mg/g ung 3.5 g	q 15 min - q4h	broad; ->>+	bact keratitis	-	-	-	b	
sulfacetamide Na	Bleph-10®, Sodium Sulamyd®, AK-Sulf®	various	folic acid inhib	10% sol 15 mL, 15%, 30% sol (X mL?); 10% ung 3.5 g	q 15 min - q4h	+>>-	trachoma w/systemic sulfonamide	-	-	-	c	resistance with staph; not used much; synergistic with trimethoprim

16

Ophthalmic Antibiotics 1,2,3,4,5*

Generic	Trade	Class	Mechanism	[Conc], Form	Dosage	Gm + / -	Use	C/I	Caution	S/E	Preg	Misc
sulfisoxazole	Gantrisin®	sulfonamide	folic acid inhib; bacteriostatic	4% sol	q 15 min - q4h	broad +/-	-	-	-	-	c	not used much
neomycin, polymixin b, bacitracin (as combo only)	Neosporin® ung, AK-Spore® (combo)	various	PSI, cell membrane perm	various/non Rx	q 15 min - q4h	gm + & -	blep/staph	-	-	-	c	no Rx; allergies with neomycin
trimethoprim, polymixin b (as combo only)	Polytrim®	various	folic acid inhib	0.1% sol 10 mL	q 15 min - q4h	gm + & -	haemoph, strep	oph. neonatorum	-	superinfxn	c	used a lot with kids (safe); synergistic with sulfacetamide
gramicidin, neomycin, polymixin b (combo only)	Neosporin® Solution	various	various	10 mL sol	q 15 min - q4h	gm + & -	similar to neosporin ung	-	-	-	c	
polymixin b & bacitracin (combo only)	Polysporin®	various	cell memb. disrupt	sol & ung non Rx	q 15 min - q4h	->>+	pseudomonas; bleph	-	-	-	c	no Rx needed; +/- coverage; use when neomycin allergy
ciprofloxacin	Ciloxin®	fluoroquin 1st gen	DNA synth inhib; cidal	0.3% sol 2, 5, 10 mL; 0.3% ung 3.5 g	q 15 min - q4h	broad	bact keratitis, pseudomonas, corneal ulcers, conjunctivitis	-	-	-	c	okay for kids

17

Ophthalmic Antibiotics ^{1,2,3,4,5*}

Generic	Trade	Class	Mechanism	[Conc], Form	Dosage	Gm +/-	Use	C/I	Caution	S/E	Preg	Misc
norfloxacin	Chibroxin®	fluoroquin 1st gen	DNA synth inhib (gyrase)	0.3% sol	q 15 min - q4h	broad +/-	bact keratitis, pseudomonas	-	-	-	c	okay for kids
ofloxacin	Ocuflox®	fluoroquin 1st gen	DNA synth inhib; cidal	0.3% sol 5 & 10 mL	q 15 min - q4h	gm + & - aerobic and anaerobic	bact keratitis, pseudomonas, corneal ulcers, conjunctivitis	-	-	-	c	okay for kids
levofloxacin	Quixan®	fluoroquin 3rd gen	DNA synth inhib; cidal	0.5% sol 5 mL	q 15 min - q4h	broad +/-	bact keratitis, pseudomonas	-	-	-	c	okay for kids
moxifloxacin	Vigamox®	fluoroquin 4th gen	DNA synth inhib; cidal	0.5% sol 3 mL	q 15 min - q4h	+>>-	bact keratitis, pseudomonas	-	-	-	c	okay for kids
gatifloxacin	Zymar®	fluoroquin 4th gen	DNA synth inhib; cidal	0.3% sol 5 mL	q 15 min - q4h	+>>-	bact keratitis, pseudomonas	-	-	-	c	okay for kids
azithromycin	Azasite®	macrolide	50s PSI; static	1% sol 2.5 mL	q 15 min - q4h	gm - > gm +	chlamydia, trachomatis, KCS*	-	-	-	b	okay for kids

use topicals in office then orals/topicals Rxd to patient

three day rule: no worse in 24 h, better in 48 h, almost resolved in 72 h

*ophthalmology management, December 2008 (reference #5).

18

Ophthalmic Combo Antibiotics & Antibiotics/Steroids

Combo Ophthalmic Antibiotics ^{1,2,3,4}

Trade	Generic Components	Misc
Neosporin® ung	polymixin B, neomycin, bacitracin	
Neosporin® sol	polymixin B, neomycin, gramicidin	
Polysporin® ung	polymixin B, bacitracin	
Polytrim® sol	polymixin b, trimethoprim	good for peds; haemoph, staph

Combo Ophthalmic Antibiotic/Steroids ^{1,2,3,4}

Trade	Generic Components	Form
Cortisporin®	hydrocortisone, neomycin, polymixin B	susp, ung
Poly-pred®	prednisolone, neomycin, polymixin b	susp
Pred-g®	prednisolone, gentamycin	susp
Neodecadron®	dexamethasone, neomycin	sol
Tobradex® susp	dexamethasone, tobramycin	susp, ung
Maxitrol®	dexamethasone, neomycin, polymixin b	susp, ung
Zylet®*	lotoprednol, tobramycin	susp
Ophthocort®	hydrocortisone, chloramphenicol, polymixin b	ung
Pred-g SOP®	prednisolone, gentamicin	ung

*difficult to find

19

Systemic Antibiotics 1,2,3,4,5,7,8

Generic	Trade	Class	Mechanism	Gm + / -	Oc. Dz.	C/I	Caution	S/E	Preg	Misc
cloxacillin	Cloxapen®	PCN	CWS inhib	+	staph & strep, pseudomonas, resist PCNase, int hord, preseptal cell	PCN/Ceph all	Oral contras	GI upset, nephritis, vasculitis, s-j synd, anaphylaxis	b	safe for kids
dicloxacillin	Dynapen®	PCN	CWS inhib	+	staph & strep, pseudomonas, resist PCNase, int hord, preseptal cell	PCN/Ceph all	Oral contras	GI upset, nephritis, vasculitis, s-j synd, anaphylaxis	b	safe for kids
amoxicillin/potassium clavulanate	Augmentin®	PCN	CWS inhib	extended	staph & strep, pseudomonas, resist PCNase, int hord, preseptal cell	PCN/Ceph all	Oral contras	GI upset, nephritis, vasculitis, s-j synd, anaphylaxis	b	safe for kids; take at mealtime
cephalexin	Keflex®	Ceph	Disrupts CW	some + cocci	int hord, preseptal cell	PCN/Ceph all	-	-	b	safe for kids
cefaclor		Ceph	Disrupts CW	some + cocci	int hord, preseptal cell	PCN/Ceph all	-	-	b	safe for kids
cefuroxime		Ceph	Disrupts CW	some + cocci	int hord, preseptal cell	PCN/Ceph all	-	-	b	safe for kids
doxycycline		Tetra	30s PSI; static	+ and -	chlamydia, N. gon, Rickettsiae, spirochete, trachoma, meibomianitis, acne rosacea, lymes, rocky mtn spotted	kids<8, preg, nursing	-	photosens, GI,	d	min effect against staph/strep
tetracycline		Tetra	30s PSI; static	+ and - and some protozoal	chlamydia, N. gon, Rickettsiae, spirochete, trachoma, meibomianitis, acne rosacea, lymes, rocky mtn spotted	kids<8, preg, nursing	-	photosens, GI,	d	min effect against staph/strep

20

Systemic Antibiotics 1,2,3,4,6,7,8

Generic	Trade	Class	Mechanism	Gm +/-	Oc. Dz.	C/I	Caution	S/E	Preg	Misc
erythromycin	E-mycin®	Macrolide	50s PSI; static	->+	staph, strep, H. influ, chlamydia, Neisseria, Treponema, adult inclus. Conjitis, trachoma, int. hord, neonatal chlamydial conjitis	liver dz	-	hepatotox	b	safe for neonates
azithromycin	Zithromax®, Zpack®	Macrolide	50s PSI; static	->+	adult inclus conjitis, trachoma, neonatal clam conjitis, bleph (topical azith aka azasite qhs)	liver dz	-	hepatotox	b	Z packs used a lot for kids
ciprofloxacin		Fluroquin	DNA synth inhib (gyrase & topo IV); cidal	broad; ->+	staph, strep, H. influ, P aeruginosa, moraxella, N. gon, gm - rods, corneal ulcers	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
ofloxacin		Fluroquin	DNA synth inhib (gyrase & topo IV); cidal	broad; ->+	staph, strep, P. aeruginosa, H. influ, N gonorr, gm - rods	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
levofloxacin		Fluroquin	DNA synth inhib (gyrase & topo IV); cidal	broad; ->+	staph, strep, H. influ,	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
gatifloxacin	Tequin®	Fluroquin	DNA synth inhib (gyrase & topo IV); cidal	broad; ->+	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
enoxacin	Pentrex®	Fluroquin	DNA synth inhib; cidal	broad; ->+	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst

21

Systemic Antibiotics ^{1,2,3,4,6,7,8}

Generic	Trade	Class	Mechanism	Gm + / -	Oc. Dz.	C/I	Caution	S/E	Preg	Misc
lomefloxacin	Maxaquin®	Fluroquin	DNA synth inhib; cidal	broad; - > +	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
moxifloxacin	Avelox®	Fluroquin	DNA synth inhib; cidal	broad; - > +	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
norfloxacin	Noroxin®	Fluroquin	DNA synth inhib; cidal	broad; - > +	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
sparfloxacin	Zagam®	Fluroquin	DNA synth inhib; cidal	broad; - > +	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst
trovafloxacin	Trovan®	Fluroquin	DNA synth inhib; cidal	broad; - > +	staph, strep, H. influ	-	concomitant use of antacids	GI, photosens	c	little resistance; may be effective against preseptal cel, int hord, dacryocyst

See next page for dosing of specific ocular condition

22

Dosing of Systemic Antibiotics for Ocular Disease ^{1,2,3,4,6,7,8}

Oc. Dz.	Microbe	Generic	Trade	Dosing	C/Is	Instructions
Internal Hordeolum (PCNase resist)	staphylococcal	dicloxacillin	Dynapen®	adults: 125-250 mg q6h x 1-2 w	PCN all	1 h < or 2 h > meal
				kids (<88#): 12.5 mg/kg/day in divided doses 1-2 w		
Internal Hordeolum	E. coli, Proteus m, H. influ	cephalexin	Keflex®	adults: 250-500 mg q6h 1-2 w	PCN all	-
				doses		
Internal Hordeolum	Chlamydia, Mycoplasma p.	erythromycin	Ery-Tab®	adults: 250 mg qid 1-2 w		take before meals
				kids: 30-50 mg/kg/day in divided doses		
Preseptal Cell.	staph, strep, H. influ	amoxicillin/clavulanate	Augmentin®	250-875 mg q12h or q8h		take @ start of meals
		dicloxacillin	Dynapen®			
		cephalexin	Keflex®			
		cefuroxime	Ceftin®			
		cefaclor	Ceclor®			
Acute Dacryocystitis	staph, strep, H. influ	dicloxacillin	Dynapen®	250 mg q6h		
		cephalexin	Keflex®	adults: 250-500 mg q6h 1-2 w		
		amoxicillin/clavulanate	Augmentin®	kids: 125-250 mg q8h		
Meibomianitis/Acne Rosacea	n/a (decrease fatty acid prod)	tetracycline	Tetracycl®	250-500 mg q6h with taper as improved (> 1m)	kids, preg, nurs; avoid sunlight	1 h < or 2 h > meals
		doxycycline	Vibramycin®	50-100 mg qd or q12h with taper as improved	kids, preg, nurs; avoid sunlight (but better than tetracycline)	
		minocycline	Minocin®	50 mg qd to tid?	pregnancy, conception, SLE, sunlight	
		metronidazole gel	Flagyl®	0.75% gel		
	ukn mechanism					NOT A LABELLED USE

23

Dosing of Systemic Antibiotics for Ocular Disease ^{1,2,3,4,5,7,8}

Oc. Dz.	Microbe	Generic	Trade	Dosing	C/Is	Instructions
Chlamydia/Trachoma		doxycycline	Vibramycin®	100 mg q12h x 3w	kids, preg, nurs	can use conjunctive topical tx
		tetracycline	Tetracycl®	500 mg q8h x 3w	kids, preg, nurs	can use conjunctive topical tx
		erythromycin	Erythrocin®	kids: 500 mg q6h x 3w		can use conjunctive topical tx
		azithromycin	Zpack®	1000 mg single dose (by law)	kids, preg, nurs?	can use conjunctive topical tx
Gonococcal (adult) Conjunctivitis		ceftriaxone	Rocephin®	1000 mg IM single dose, repeat if necessary		

24

Generic to Trade Key of Systemic Medications ¹

GENERIC	TRADE
Abatacept	orencia®
acetaminophen	tylenol ®
acetaminophen-codeine	tylenol #3®
acetazolamide	Diamox®
acetylcysteine	mucomyst®
acyclovir	zovirax®
albuterol	ventolin®
alendronate	fosamax®
allopurinol	zyloprim®
alprazolam	xanax®
amantadine	symmetrel®
amikacin	amikin®
amiodarone	cordarone®
amitriptyline	elavil®
amlodipine	norvasc®
amoxicillin	polymox®
amoxicillin-clavulanate	augmentin®
amphetamine or dextroamphetamine	adderall®/dexedrine®
aripiprazole	abilify®
aspirin (acetyl salicylic acid)	aspirin-various
atenolol	tenormin®
atomoxetine	strattera®
auranofin	ridaura®
azathioprine	imuran®
azithromycin	zithromax®
beclomethasone	beconase®
benazepril	lotensin®
botulinum toxin	botox®
bromocriptine	parlodel®
brompheniramine	dimetane®
bupropion	wellbutrin XL®
buspirone	BuSpar®
captopril	capoten®
carisoprodol	soma®
carvedilol	coreg®
cefdinir	omnicef®
cefpodoxime	vantin®
cefprozil	cefzil®
ceftriaxone	rocephin®
celecoxib	celebrex®
cephalexin	keflex®
cetirizine	zyrtec®
chloramphenicol	chlormycetin® or chloroptic®
chloramphenicol	chloroptic® or chlormycetin®
chloroquine phosphate	aralen®
chlorothiazide	diuril®
chlorpheniramine	chlor-trimeton®
chlorpromazine	thorazine®
chlorpropamide	diabinese®
cholestyramine	questran®
cidofovir	vistide®
cimetidine	tagamet®
ciprofloxacin	ciloxan® or cipro®
ciprofloxacin	cipro® or ciloxan®
citalopram	celexa®
clarithromycin	biaxin®
clindamycin	cleocin®

GENERIC	TRADE
clonazepam	klonopin®
clonidine	catapres®
clopidogrel	plavix®
cocaine	cocaine
codeine	codeine
conjugated estro + progest	prempo®
conjugated estrogens	estrace® or premarin®
conjugated estrogens	premarin® or estrace®
cyclobenzaprine	flexeril®
cyclosporine emulsion	sandimmune®
darifenacin	enablex®
desloratadine	clarinex®
dexametasone	decadron®
dextroamphetamine or amphetamine	adderall®/dexedrine®
diazepam	valium®
diclofenac	voltaren®
dicloxacillin	dynapen®
digoxin	lanoxin®
diltiazem	cardizem®
diphenhydramine	benadryl®
dipyridamole	persantine®
divalproex	depakote®
donepezil	aricept®
doxazosin	cardura®
doxycycline	vibramycin®
duloxetine	cymbalta®
enalapril	vasotec®
enfuvirtide	fuzeon®
escitalopram	lexapro®
esomeprazole	nexium®
enbrel	etanercept®
ethambutol	myambutol®
ezetimibe	zetia®
famciclovir	famvir®
fenofibrate	trikor®
fexofenadine	allegra®
finasteride	proscar®
fluconazole	diflucan®
fluroxetine	prozac®
fluticasone	flonase® or flovent®
fluticasone	flovent® or flonase®
furosemide	lasix®
gabapentin	neurontin®
ganciclovir	cytovene®
gatifloxacin	zymar®
gemfibrozil	lopid®
gentamicin	garamycin®
glemepiride	amaryl®
glipizide	glucotrol®
glyburide	diabeta® or micronase®
glyburide	micronase® or diabeta®
glyburide/metformin	glucovance®
haloperidol	haldol®
hydralazine	apresoline®
hydrochloroquine	plaquenil®
hydrochlorothiazide or triamterene	hydrodiuril® or maxzide®
hydrocodone w/APAP	vicodin®
hydroxyzine	atarax®
iansoprazole	prevacid®

GENERIC	TRADE
ibuprofen	motrin® or advil®
ibuprofen	advil® or motrin®
imipramine	tofranil®
indomethacin	indocin®
insulin glargine	lantus®
insulin lispro	humalog®
insulin NPH	humulin N®
ipratropium	atrovent®
isoniazid	nydrazid®
isosorbide mononitrite	imdur®
isotretinoin	accutane®
itraconazole	sporanox®
ketoconazole	nizoral®
ketorolac	acular® or toradol®
ketorolac	toradol® or acular®
lamotrigine	lamictal®
lebetalol	trandate®
levofloxacin	levaquin®
levothyroxine	synthroid®
lindane	kwell®
lisinopril	prinivil® or zestril®
lisinopril	zestril® or prinivil®
lithium	eskalith®
loratadine	claritin®
lorazepam	ativan®
losartan	cozar®
lovastatin	mevacor® or altoprev®
lovastatin	altoprev® or mevacor®
marijuana	
meclizine	antivert®
medroxy-progesterone	provera®
meloxicam	mobic®
meperidine	demerol®
metaxalone	skelaxin®
metformin	glucophage®
methazolamide	neptazane®
methocarbamol	robaxin®
methotrexate	rheumatrex®
methylphenidate	ritalin®
methylprednisolone	medrol®
metoclopramide	reglan®
metoprolol	lopressor®
metronidazole	flagyl®
minocycline	minocin®
mirtazapine	remeron®
misoprostol	cytotec®
mometasone	nasonex®
montelukast	singulair®
morphine	morphine®
naproxen	aleve®
neostigmine	prostigmin®
nevirapine	viramune®
niacin (vita B3)	niaspan®
nifedipine	procardia®
nitroglycerin	nitro-dur®, nitro-BID®, etc.
nitroglycerin	nitro-BID®, nitro-dur®, etc.
norfloxacin	noroxin®
nortriptyline	pamelor®
nystatin	mycostatin®

GENERIC	TRADE
olanzapine	zyprexa®
omeprazole	prilosec®
oral contraceptives	ortho-novum®, etc
oseltamivir	tamiflu®
oxycodone w/APAP	endocet®
oxycodone	oxycontin®
pantoprazole	protonix®
paroxetine	paxil®
penicillin	V-cillin K®
pepcid	famotidine®
permethrin	nix®
phenelzine	nardil®
phenobarbital	luminal®
phenytoin	dilantin®
physostigmine	eserine®
pioglitazone	actos®
piroxicam	feldene®
potassium chloride	micro-k®
pravastatin	prevachol®
prednisone	deltasone®
promethazine	phenergan®
propranolol	inalderal®
propoxyphene	darvon®
propoxyphene-N/APAP	darvocet-N-100®
pyridostigmine	mestinon®
pyrimethamine	daraprim®
quetiapine	seroquel®
rabeprazole	aciphex®
raloxifene	evista®
ramapril	altace®
ranitidine	zantac®
respiradone	respirdal®
rifampin	rifadin®
risendronate	actonel®
ritonavir	norvir®
rosiglitazone	avandia®
rosuvastatin	crestor®
salmeterol	serevent®
sertraline	zoloft®
sildenafil	viagra®
simvastatin	zocor®
solifenacin	vesicare®
spironolactone	aldactone®
sucralfate	carafate®
sulfadiazine	microsulfan®
sulindac	clinoril®
sumatriptan	imitrex®
tadalafil	cialis®
tamoxifen	nolvadex®
tamsulosin	flomax®
temazepam	restoril®
terazosin	hytrin®
tetracycline	sumycin®
theophylline	theo-dur®
thioridazine	mellaril®
ticlopidine	ticlid®
tobramycin	tobrex®
tolbutamide	orinase®
tolterodine	detrol®

GENERIC	TRADE
topiramate	topamax®
tramadol	ultram®
tramadol HCl w/ APAP	ultracet®
tranlycypromine	parnate®
trazodone	desyre®
triamcinolone	aristocort® or kénelog®
triamterene or hydrochlorothiazide	hydrodiuril® or maxzide®
trimethoprim-sulfamethoxazole	bactrim®
triotopium	spiriva®
valacyclovir	valtrex®
valacyclovir	valtrex®
valsartan	diovan®
vardenafil	levitra®
verapamil	calan® or isoptin®
verapamil	isoptin® or calan®
voriconazole	Vfend®
warfarin	coumadin®
zafirlukast	accolate®
zidovudine	retrovir®
zolpidem	ambien®

Listing of Systemic Medications by Type/Class 2

TYPE/CLASS	TRADE	GENERIC
AB-aminoglycoside	amikin®	amikacin
AB-aminoglycoside	garamycin®	gentamicin
AB-aminoglycoside	tobrex®	tobramicin
AB-antimycobacterial	myambutol®	ethambutol
AB-antimycobacterial	nydrazid®	isoniazid
AB-antimycobacterial	rifadin®	rifampin
AB-cephalosporin, 1st	keflex®	cephalexin
AB-cephalosporin, 2nd	cefzil®	cefprozil
AB-cephalosporin, 3rd	omnicef®	cefdinir
AB-cephalosporin, 3rd	rocephin®	ceftriaxone
AB-cephalosporin, 3rd	vantin®	cefepodoxime
AB-combo	bactrim®	trimethoprim-sulfamethoxazole
AB-fluoroquinolone, 2nd	ciloxan® or cipro®	ciprofloxacin
AB-fluoroquinolone, 2nd	cipro® or ciloxan®	ciprofloxacin
AB-fluoroquinolone, 2nd	noroxin®	norfloxacin
AB-fluoroquinolone, 3rd	levaquin®	levofloxacin
AB-fluoroquinolone, 3rd	zymar®	gatifloxacin
AB-macrolide	biaxin®	clarithromycin
AB-macrolide	zithromax®	azithromycin
AB-other	chlormycetin®/chloroptic®	chloramphenicol
AB-other	chloroptic®/chlormycetin®	chloramphenicol
AB-other	cleocin®	clindamycin
AB-PCN	augmentin®	amoxicillin-clavulanate
AB-PCN	dynapen®	dicloxacillin
AB-PCN	polymox®	amoxicillin
AB-PCN	V-cillin K®	penicillin
AB-sulfonamide	microsulfan®	sulfadiazine
AB-tetracycline	minocin®	minocycline
AB-tetracycline	sumycin®	tetracycline
AB-tetracycline	vibramycin®	doxycycline
acne	accutane®	isotretinoin
analgesic	ultram®	tramadol
analgesic-narcotic	darvocet-N-100®	propoxyphene
analgesic-narcotic	endocet®	oxycodone
analgesic-narcotic	vicodin®	hydrocodone
analgesic-narcotic	ultracet®	tramadol
analgesic-narcotic	codeine	codeine
analgesic-narcotic	morphine	morphine
analgesic-narcotic	tylenol #3®	acetaminophen-codeine
analgesic-neuroleptic	neurontin®	gabapentin
analgesic-opioid	darvon®	propoxyphene
analgesic-opioid	demerol®	meperidine
analgesic-opioid	oxycontin®	oxycodone
anesthesia-indirect sympathomim	cocaine	cocaine
antianxiety	BuSpar®	buspirone
antiarrhythmic	cordarone®	amiodarone
anticoagulant	coumadin®	warfarin
anticonvulsant	luminal®	phenobarbital
antidepressant/antipsychotic	abilify®	aripiprazole
antidepressant-atypical	desyrel®	trazodone
antidepressant-atypical	wellbutrin XL®	bupropion
antidepressant-MAOI	nardil®	phenelzine
antidepressant-MAOI	parnate®	tranylcypromine
antidepressant-norepi reup inhib	strattera®	atomoxetine
antidepressant-norepi/ser	cymbalta®	duloxetine
antidepressant-SSRI	celexa®	citalopram

TYPE/CLASS	TRADE	GENERIC
antidepressant-SSRI	lexapro®	escitalopram
antidepressant-SSRI	paxil®	paroxetine
antidepressant-SSRI	prozac®	fluoxetine
antidepressant-SSRI	zoloft®	sertraline
antidepressant-TCA	elavil®	amitriptyline
antidepressant-TCA	pamelor®	nortriptyline
antidepressant-TCA	tofranil®	imipramine
antiepileptic	depakote®	divalproex
antiepileptic	dilantin®	phenytoin
antiepileptic	lamictal®	lamotrigine
antiepileptic	topamax®	topiramate
antifungal	sporanox®	itraconazole
antifungal	Vfend®	voriconazole
antifungal-azole	diflucan®	fluconazole
antifungal-azole	nizoral®	ketoconazole
antifungal-polyene	mycostatin®	nystatin
antihist-1st	antivert®	meclizine
antihist-1st	atarax®	hydroxyzine
antihist-1st	benadryl®	diphenhydramine
antihist-1st	chlor-trimeton®	chlorpheniramine
antihist-1st	dimetane®	brompheniramine
antihist-1st	phenergan®	promethazine
antihist-2nd	allegra®	fexofenadine
antihist-2nd	clarinex®	desloratadine
antihist-2nd	claritin®	loratadine
antihist-2nd	zyrtec®	cetirizine
antihistamine	famotidine®	pepcid
antihistamine	tagamet®	cimetidine
antihistamine	zantac®	ranitidine
antimicrobial	flagyl®	metronidazole
antiparasitic	kwell®	lindane
antiparasitic	nix®	permethrin
antiparkinsons	parlodol®	bromocriptine
antiplatelet	ticlid®	ticlopidine
antiplatelet	plavix®	clopidogrel
antiplatelet	persantine®	dipyridamole
antiprotozoal	daraprim®	pyrimethamine
antipsychotic	eskalith®	lithium
antipsychotic	haldol®	haloperidol
antipsychotic	aricept®	donepezil
antipsychotic	respirdal®	respiradone
antipsychotic	seroquel®	quetiapine
antipsychotic	thorazine®	chlorpromazine
antipsychotic	zyprexa®	olanzapine
antipsychotic	mellaril®	thioridazine
antispasmodics-overactive bladder	enablex®	darifenacin
antispasmodics-overactive bladder	vesicare®	solifenacin
antiviral	remeron®	mirtazapine
antiviral-AIDS	retrovir®	zidovudine
antiviral-AIDS	viramune®	nevirapine
antiviral-AIDS	fuzeon®	enfuvirtide
antiviral-AIDS	norvir®	ritonavir
antiviral	cytovene®	ganciclovir
antiviral	famvir®	famciclovir
antiviral	valtrex®	valacyclovir
antiviral	valtrex®	valacyclovir
antiviral	vistide®	cidofovir
antiviral	zovirax®	acyclovir

TYPE/CLASS	TRADE	GENERIC
antiviral	symmetrel®	amantadine
antiviral	tamiflu®	oseltamivir
arrythmia	lanoxin®	digoxin
autoimmune	enbrel®	etanercept
autoimmune-antiprotozoal	aralen®	chloroquine phosphate
autoimmune-antiprotozoal	plaquenil®	hydrochloroquine
autoimmune-gold salts	ridaura®	auranofin
BPH	proscar®	finasteride
BPH	cardura®	doxazosin
BPH	flomax®	tamsulosin
BPH	hytrin®	terazosin
chol	questran®	cholestyramine
chol	zetia®	ezetimibe
chol-fibrate	lopid®	gemfibrozil
chol-fibrate	trikor®	fenofibrate
chol-statin	altoprev® or mevacor®	lovastatin
chol-statin	crestor®	rosuvastatin
chol-statin	mevacor® or altoprev®	lovastatin
chol-statin	prevachol®	pravastatin
chol-statin	zocor®	simvastatin
chol-vitamin b3	niaspan®	niacin (vita B3)
CNS stimulant	dexedrine® or adderall®	amphetamine or dextroamphetamine
CNS stimulant	ritalin®	methylphenidate
corticosteroid	aristocort® or kenelog®	triamcinolone
corticosteroid	decadron®	dexametasone
corticosteroid	deltasone®	prednisone
corticosteroid	flonase® or flovent®	fluticasone
corticosteroid	flovent® or flonase®	fluticasone
corticosteroid	medrol®	methylprednisolone
corticosteroid	nasonex®	mometasone
corticosteroid-nasal	beconase®	beclomethasone
diuretic combo	dyazide® and maxzide®	hydrochlorothiazide or triamterene
diuretic-CAI	Diamox®	acetazolamide
diuretic-CAI	neptazane®	methazolamide
diuretic-loop	lasix®	furosemide
diuretic-mineralcorticoid	aldactone®	spironolactone
diuretic-thiazide	diuril®	chlorothiazide
diuretic-thiazide	hydrodiuril®	hydrochlorothiazide
DM-insulin sensitizer	glucovance®	glyburide/metformin
DM-insulin	actos®	pioglitazone
DM-insulin sensitizer	avandia®	rosiglitazone
DM-insulin sensitizer	glucophage®	metformin
DM-insulin	humalog®	insulin lispro
DM-insulin	humulin N®	insulin NPH
DM-insulin	lantus®	insulin glargine
DM-sulfonylurea	orinase®	tolbutamide
DM-sulfonylurea	diabinese®	chlorpropamide
DM-sulfonylurea	amaryl®	glemepiride
DM-sulfonylurea	diabeta® or micronase®	glyburide
DM-sulfonylurea	glucotrol®	glipizide
DM-sulfonylurea	micronase® or diabeta®	glyburide
ED	cialis®	tadalafil
ED	levitra®	vardenafil
ED	viagra®	sildenafil
GI-	reglan®	metoclopramide
GI-gastric mucosa protectant	carafate®	sucralfate
GI-	cytotec®	misoprostol
GI-PPI	aciphex®	rabeprazole

TYPE/CLASS	TRADE	GENERIC
GI-PPI	nexium®	esomeprazole
GI-PPI	prevacid®	iansoprazole
GI-PPI	prilosec®	omeprazole
GI-PPI	protonix®	pantoprazole
gout-	zyloprim®	allopurinol
hormone-estrogen	estrace® or premarin®	conjugated estrogens
hormone-estrogen	premarin® or estrace®	conjugated estrogens
hormone-est + progest	ortho-novum®, etc	oral contraceptives
hormone-est + progest	prempo®	conjugated estro + progest
hormone-progest	provera®	medroxy-progesterone
hormone-	evista®	raloxifene
hormone-	nolvadex®	tamoxifen
hormone-migraine	imitrex®	sumatriptan
hormone-T4 thyroid	synthroid®	levothyroxine
immunosuppressant	imuran®	azathioprine
immunosuppressant	rheumatrex®	methotrexate
immunosuppressant	sandimmune®	cyclosporine emulsion
immunosuppressant-antiRA	orencia®	abatacept
incontinence-	detrol®	tolterodine
lung: bronchodilator	theo-dur®	theophylline
lung: bronchodilator	ventolin®	albuterol
lung: bronchodilator	serevent®	salmeterol
lung: bronchodilator	spiriva®	triotopium
lung-	accolate®	zafirlukast
lung-	singulair®	montelukast
lung-mucolytic	mucomyst®	acetylcysteine
lung-	atrovent®	ipratropium
muscle-	botox®	botulinum toxin
muscle-	prostigmin®	neostigmine
muscle-	eserine®	physostigmine
muscle-	mestinon®	pyridostigmine
NSAID	aspirin-various	aspirin
NSAID	tylenol®	acetaminophen
NSAID	acular® or toradol®	ketorolac
NSAID	advil® or motrin®	ibuprofen
NSAID	aleve®	naproxen
NSAID	clinoril®	sulindac
NSAID	feldene®	piroxicam
NSAID	indocin®	indomethacin
NSAID	mobic®	meloxicam
NSAID	motrin® or advil®	ibuprofen
NSAID	toradol® or acular®	ketorolac
NSAID	voltaren®	diclofenac
NSAID-selective COX 2	celebrex®	celecoxib
osteoporosis-	actonel®	risendronate
osteoporosis-	fosamax®	alendronate
sedation -	ambien®	zolpidem
sedation-	ativan®	lorazepam
sedation-	klonopin®	clonazepam
sedation-	restoril®	temazepam
sedation-	valium®	diazepam
sedation-	xanax®	alprazolam
skeletal muscle relaxant	flexeril®	cyclobenzaprine
skeletal muscle relaxant	robaxin®	methocarbamol
skeletal muscle relaxant	skelaxin®	metaxalone
skeletal muscle relaxant	soma®	carisoprodol
supplement-potassium	micro-k®	potassium chloride
vasodilation-	tenormin®	atenolol

TYPE/CLASS	TRADE	GENERIC
vasodiation-	altace®	ramapril
vasodiation-	capoten®	captopril
vasodiation-	lotensin®	benazepril
vasodiation-	prinivil® or zestril®	lisinopril
vasodiation-	vasotec®	enalapril
vasodiation-	zestril® or prinivil®	lisinopril
vasodiation-	inderal®	propranolol
vasodiation-	lopressor®	metoprolol
vasodiation-	calan® or isoptin®	verapamil
vasodiation-	cardizem®	diltiazem
vasodiation-	isoptin® or calan®	verapamil
vasodiation-	norvasc®	amlodipine
vasodiation-	procardia®	nifedipine
vasodiation-	imdur®	isosorbide mononitrite
vasodiation-	nitro-BID®, nitro-dur®, etc.	nitroglycerin
vasodiation-	nitro-dur®, nitro-BID®, etc.	nitroglycerin
vasodiation-	apresoline®	hydralazine
vasodiation-	coreg®	carvedilol
vasodiation-	trandate®	lebetalol
vasodiation-	catapres®	clonidine
vasodiation-	cozar®	losartan
vasodiation-	diovan®	valsartan
	marijuana	marijuana

Systemic Medications with Ocular Implications by Trade Name ^{2,3,4,8}

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
abilify®	aripiprazole	antidepressant/antipsychotic	ukn	schizophrenia, bipolar, agitation, depression	azole antifungals, clarithromycin, cyclosporin, dexamethasone, erythromycin,	blurred Va	
accolate®	zafirlukast	lung-leukotriene receptor antag	blocks leukotrienes	chronic asthma attacks	cyclosporin	angioedema,	
acutane®	isotretinoin	acne	acne	acne (severe)	avoid tetracyclines, steroids, topical clindamycin	oc inflam, cls intolerance, impaired dark adaptation, pseudotumor cerebri, vasculitis, photophobia	preg cat X; violent behavior
aciphex®	rabeprazole	GI-proton pump inhibitor	reduce HCl secretion thru Na+/H+ ATPase	prevention of NSAID, GI ulcers, GERD, esophagitis	cyclosporine, blood thinners, ketoconazole	stevens-johnson	
actonel®	risendronate	osteoporosis-bisphosphonate	inhibits osteoclasts	osteoporosis	neomycin, polymixin, ocular steroid,	scleritis, iritis, conjunctivitis, ptosis, yellow color va dist, diplopia, photophob, s-j, blindness, ocular vaccinia	
actos®	pioglitazone	DM-insulin sensitizer, TZD--oral	PPAR receptor binder	T2DM	ACE, antihist, some Abs, beta blockers, steroids, decongestants, diuretics	diabetic macular edema	
acular® or toradol®	ketorolac	NSAID-nonselective	decrease PG and thromboxanes	inflammation, pain, fever, dysmenorrhea	preg, anticoag, coags, c steroids, asthma, cardiovasc dz, topical diclofenac, dehydr, HTN, ACE inhbs	brand d/c in US	brand (toradol) d/c in US, preg cat ukn; acular is ophthalmic ketorolac
adderall® or dexedrine®	amphetamine/dextroamphetamine	CNS stimulant	stims CNS	CNS stim, narcolepsy, obesity, ADHD	glaucoma, hyperthyroidism, topical cocaine	visual disturbances, Has, mydriasis	schedule II

35

36

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
advil® or motrin®	ibuprofen	NSAID-nonselective	decrease PG and thromboxanes	inflammation, pain (mild/mod), fever, dysmenorrhea	preg, anticoag, coags, c steroids, asthma, cardiovasc dz, topical diclofenac, dehydr, HTN, ACE inhibs	bleeds, stevens-johnson,	OTC
aldactone®	spironolactone	diuretic-mineralcorticoid receptor antag	Na2+ and H2O excretion	HTN, CHF, edema, hyperaldosterone, hypokalemia,	ACE inhibs, diuretics, cyclosporin,	dry eye, cls intolerance, myopia, jaundice/icterus	
aleve®	naproxen	NSAID-nonselective	decrease PG and thromboxanes	inflam, pain, fever, dysmenorrhea, RA, osteoarth, ank spond	preg, anticoag, coags, c steroids, asthma, cardiovasc dz, topical diclofenac, dehydr, HTN, ACE inhibs	bleeds, nephrotoxicity, hepatotoxicity, stevens-johnson, ecchymosis	preg cat c
allegra®	fexofenadine	antihistamine-2nd gen	blocks histamine	rhinitis, allergies, insomnia, motion sickness, nausea, vomiting, sedation	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blurred vision, diplopia, dry eye, cls intolerance, mydriasis, cycloplegia, increase IOP, nystagmus	
altace®	ramapril	vasodilation-ACE inhibitor	vasodi, Na2+ H2o excret	ACE inhibitor for CHF, HTN, MI, nephropathy	ACE inhibitors, HCTZ, beta blockers, COX 2 inhibitors, cyclosporine, diuretics, pain relievers	stevens-johnson syndrome	
altoprev® or mevacor®	lovastatin	chol-statin, HMG CoA r inhib	decreases TC, LDL and raises HDL	hyperchol, cor art dz, post MI	azole antifungals, clarithromycin, cyclosporin, erythromycin,	lupus like syndrome, stevens-johnson	
amaryl®	glemepiride	DM-sulfonylurea-2nd gen	stims rel of insulin from beta cells	T2DM	beta blockers		PO mode of delivery
ambien®	zolpidem	sedation - hypnotic		insomnia			
amikin®	amikacin	AB-aminoglycoside	protein synthesis inhibitor	Gm - bacterial infxns such as UTIs	antivirals, cyclosporine, myasthenia gravis	neurotoxicity, nephrotoxicity, ototoxicity, superinfection	injection-IM, IV
antivert®	meclizine	antihistamine-1st gen	blocks histamine	rhinitis, allergies, insomnia, motion sick, naus/vom, sedat	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blur, diplopia, dry eye, cls intol, mydriasis, cyclopeg, increase IOP, nystag	

97

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
apresoline®	hydralazine	vasodilation-nitric oxide donor	vasodilator	HTN (mod-severe), CHF, hypertensive crisis	topical diclofenac		
aralen®	chloroquine phosphate	autoimmune-antiprotozoal	interferes with synthesis of RNA and DNA	malaria, RA, autoimmune dzs, amoebal infxns	topical anesthetics, AB's and antifungals, cyclosporin.botox, NSAIDs	maculopapthy, yellow votex keratopathy, diplopia, s-j, photophobia, edema	ophthalmic monitoring of dosage
aricept®	donepezil	antipsychotic-anticholase inhib	blocks breakdown of acetylcholine	for tx of dementia, alzheimer's	ophthalmic alpha 2 ags, cholinergics, cholinesterse inhibits, sympathomim		
aristocort® or kenelog®	triamcinolone	corticosteroid	decr hist release	rhinitis, allergies, inflam, pruritis, dermatitis, eczema, insect bites	ocular viruses, increased IOP, cataracts, local infxn, TB, pregnancy, optic neuritis, vaccinations, CAIs, diuretics, topical diclofenac	IOP spikes, PSC, endophthalmitis, RD, hypopyon, exophthalmos, optic disc vasc disorder, pseudotum cerebri,	
aspirin-various	aspirin (acetylsalacylic acid)	NSAID	COX inhibitor	pain, fever, antiinflam, MI TIA prev, TIA, arthritis, rheumatic fever	cardio, bleeds, child fevers or viral, stomach, nephro and hepatotoxicity, vaccines, CAIs, ACE inhbs, COX 2, diuretics, omega 3	bleeds, ecchymosis, anaphylaxis	preg cat d
atarax®	hydroxyzine	antihistamine-1st gen	blocks histamine	rhinitis, allergies, insomnia, motion sick, naus/vom, sedat	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blur, diplopia, dry eye, cls intol, mydriasis, cyclopeg, increase IOP, nystag	
ativan®	lorazepam	sedation-benzodiazepine	binds to benzodiazpene receptors	anxiety, etoh wdrl, muscle spasm, seizures, panic attacks, insomnia, sedation	myasthenia gravis, narrow angle glaucoma, open angle glaucoma	icterus (jaundice of sclera), diplopia, blurred vision, HA's, dry eye, cls intolerance, mydriasis, cycloplegia, increase IOP, diplopia	
atrovent®	ipratropium	lung-muscarinic antagonist	bronchodi, decr mucous secr	asthma, COPD, bronchospasm	atropine, anticholinergics, cholinergics		

38

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
augmentin®	amoxicillin-clavulanate	AB-PCN	CWS inhibitor	bacterial infections	liver, kidney dysfxn, HIV, seizure, PKU, mono, elderly, oral contras, warfarin, PPIs	stevens-johnson, angioedema, stevens-johnson	PCN/Ceph allergies Rx bactrim or macrolies, preg cat b
avandia®	rosiglitazone	DM-insulin sensitizer, TZD--oral	PPAR receptor binder	T2DM	ACE, antihist, some Abs, beta blockers, steroids, decongestants, diuretics	diabetic macular edema, stevens-johnson	
bactrim®	trimethoprim-sulfamethoxazole	AB-combo	folic acid antag	UTI	near term pregnancy, topical anesthetics, warfarin, ACE inhbs, oral contras	stevens-johnson, SLE,	
beconase®	beclomethasone	corticosteroid-nasal	decr hist release	rhinitis, allergies, inflam, pruritis, dermatitis, eczema, insect bites	glaucoma, cats	vision problems	nasal mode of delivery
benadryl®	diphenhydramine	antihistamine-1st gen	blocks histamine	rhinitis, allergies, insomnia, motion sick, naus/vom, sedat	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blur, diplopia, dry eye, cls intol, mydriasis, cyclopeg, increase IOP, nystag	
biaxin®	clarithromycin	AB-macrolide	protein synthesis inhibitor	chlamydia	phenothiazines, cisapride, pimozide, heart arrhythmias	stevens-johnsons	preg cat B
botox®	botulinum toxin	muscle-acetylcholine release blocker	decreases ACH at NMJ	paresis for strabismus, blepharospasm, cervical dystonia, cosmetic wrinkles	myasthenia gravis, ptosis, motor neuropathy.	ocular vertical deviation, DE, ptosis, visual disturb, cls intol	preg cat C--caution
BuSpar®	buspirone	antianxiety	binds to serotonin and dopamine receptors	anxiety	azole antifungals	dry eye, cls intolerance, mydriasis, cycloplegia, increase IOP, diplopia	
calan® or isoptin®	verapamil	vasodilation-ca2+ chan antag	vasodi, Na2+ H2o excret	angina, HTN, arrhythmias	ophthalmic alpha 2 ags and beta blockers	icterus (jaundice of sclera)	

29

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
capoten®	captopril	vasodilation-ACE inhibitor	vasodi, Na2+ H2o excret	ACE inhibitor for CHF, HTN, MI, nephropathy	ACE inhibitors, HCTZ, beta blockers, COX 2 inhibitors, cyclosporine, diuretics, pain relievers	stevens-johnson syndrome	
carafate®	sucralfate	GI-gastric mucosa protectant	coats ulcer	ulcers, esophagitis	quinolones		
cardizem®	diltiazem	vasodilation-ca2+ chan antag	vasodi, Na2+ H2o excret	angina, HTN, arrhythmias	ophthalmic alpha 2 ags and beta blockers	icterus (jaundice of sclera)	
cardura®	doxazosin	BPH-alpha 1 ag	reduces cxn of prostate and urethra	BPH, HTN,	cataract surgery, sympathomimetics	collagen fibers leading to floppy iris syndrome, progressive miosis	
catapres®	clonidine	vasodilator-alpha 2 ag	decrease NE release	HTN, autism, ADHD,	beta blockers (including ophthalmic)	dry eye	preg cat c
cefzil®	cefprozil	AB-cephalosporin, 2nd gen	CWS inhibitor	Gm - > Gm + for gonorrhea, lyme's dz, pharyngitis, tonsillitis	oral contraceptives, kidney or liver	stevens-johnson syndrome, anapylaxis, renal impairment	preg cat b; PCN/Ceph/Cef all.-- Rx bactrim or macrolides
celebrex®	celecoxib	NSAID-selective COX 2 inhib	decrease PG and thromboxanes	inflam, pain, fever, dysmenorrhea, RA, osteoarth, ank spond	pregnancy, anticoagulants, coagulants, corticosteroids, asthma, cardiovascular dz, blood thinners, smoker, dehydration	bleeds, nephrotoxicity, hepatotoxicity	preg cat c
celexa®	citalopram	antidepressant-SSRI	selectively inhibits serotonin reuptake	depression	diuretics	dry eye, cls intolerance, cycloplegia, increase IOP, diplopia	
chlormycetin® or chloroptic®	chloramphenicol	AB-other	bacteriostatic, 50S inhib protein synth	AB via IV for meningitis, rickettsial	pregnancy, infancy, kidney or liver dysfunction, hematological or bone marrow disorders, ranolozine use	blood dyscrasias, optic neuritis, retrobulbar optic neuritis, optic atrophy	preg cat c; injection-IV

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
chloroptic® or chlormycetin®	chloramphenicol	AB-other	bacteriostatic, 50S inhib protein synth	AB via IV for meningitis, rickettsial	pregnancy, infancy, kidney or liver dysfunction, hematological or bone marrow disorders, ranolazine use	blood dyscrasias, optic neuritis, retrobulbar optic neuritis, optic atrophy	preg cat c; injection-IV
chlor-trimeton®	chlorpheniramine	antihistamine-1st gen	blocks histamine	rhinitis, allergies, insomnia, motion sick, naus/vom, sedat	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blur, diplopia, dry eye, cls intol, mydriasis, cyclopeg, increase IOP, nystag	
cialis®	tadalafil	ED-cGMP type V phosphodiesterase inhibitor	smooth muscle dilation of penis	erectile dysfunction	RP, LOW c/d ratio, deg ret disord, NAAION, ACE inhbs, o. b blockers, diuretics, erythromycin, itraconazole	photophob, NAION, bl-gr color, blur, blue sclera, mydriasis, RD incrIOP, sudden Va loss, stevens-johnson	
ciloxan® or cipro®	ciprofloxacin	AB-fluoroquinolone, 2nd gen	blocks bacterial DNA gyrase	bactericidal corneal ulcers, bacterial conjunctivitis, UTIs	Have cls pts wait 15 minutes after instilling gtt as crystals may develop on cls.	eyelid itching, crystaluria	preg cat c
cipro® or ciloxan®	ciprofloxacin	AB-fluoroquinolone, 2nd gen	blocks bacterial DNA gyrase	bactericidal corneal ulcers, bacterial conjunctivitis, UTIs	Have cls pts wait 15 minutes after instilling gtt as crystals may develop on cls.	eyelid itching, crystaluria	preg cat c
clarinex®	desloratadine	antihistamine-2nd gen	blocks histamine	rhinitis, allergies, insomnia, motoion sickness, nausea, vomiting, sedation	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blurred vision, diplopia, dry eye, cls intolerance, mydriasis, cycloplegia, increase IOP, nystagmus	
claritin®	loratadine	antihistamine-2nd gen	blocks histamine	rhinitis, allergies, insomnia, motoion sickness, nausea, vomiting, sedation	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	Has, blurred vision, diplopia, dry eye, cls intolerance, mydriasis, cycloplegia, increase IOP, nystagmus	
cleocin®	clindamycin	AB-other	50S, inhib protein synth	vaginosis, endocarditis, babesiosis, PID	Caution with botox	stevens-johnson syndrome, jaundice.	preg cat b; injection-IV or IM

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TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
clinoril®	sulindac	NSAID-nonselective	decrease PG and thromboxanes	inflamm, pain, fever, dysmenorrhea, RA, osteoarthritis, ankle spond	preg, anticoag, coags, c steroids, asthma, cardiovasc dz, topical diclofenac, dehydr, HTN, ACE inhibs	bleeds, nephrotoxicity, hepatotoxicity, stevens-johnson, ecchymosis, visual changes	preg cat b
cocaine	cocaine	anesthesia-indirect sympathomimetic	topical anesthesia, epistaxis	topical anesthesia, o. alpha 2 ags and beta blockers, sympathomimetics	cholinesterase deficiency	mydriasis, corneal melt with improper use, vasoconstriction	schedule II
codeine®	codeine	analgesic-narcotic: mild to moderate	binds to opioid receptors	pain reliever-mild to moderate, cough, diarrhea	lung, kidney and liver issues, seizures, sulfite sens, local anesthetics, addison's, ophthalmic beta blockers	pinpoint pupils with overdose	preg cat c; schedule II
cordarone®	amiodarone	antiarrhythmic	prolongs action potential	arrhythmia, cardiomyopathy,	Cl quinolones; Avoid certain AB's and antifungals, claritin, diuretics, beta blockers	neuritis, mimics NAION, pseudotumor cerebri, corneal or lenticular deposits, visual disturbances	PCP adjusting dosage w/deposits? Last line agent due to serious s/e's.
coreg®	carvedilol	vasodilator-alpha 1, beta 1 antag	vasodi, decr HR, incr force of ctn	HTN, CHF	myasthenia gravis, ophthalmic alpha 2 ags and beta blockers,	dry eye, cls intolerance, stevens-johnson, abnormal vision,	
coumadin®	warfarin	anticoagulant	decrease synthesis of vit k clotting factors	clotting disorders-stroke, MI, deep venous thrombosis	recent surgery or trauma, vasculitis,azole antifungals, NSAIDS, some Abs, COX 2 inhibs, PCNs, topical diclofenac,	hemorrhages, vasculitis, ecchymosis,	preg cat x
cozar®	losartan	vasodilator-angiotensin II receptor blocker	vasodil, Na2+ and H2O excr	HTN, CHF, MI, diabetic nephropathy, stroke prophylaxis	pregnancy, ACE inhibitors, diuretics, beta blockers, COX 2	angioedema	preg cat c/d
crestor®	rosuvastatin	chol-statin, HMG CoA r inhib	decreases TC, LDL and raises HDL	hyper chol, tri, and lip, atherosclerosis	dehydration, cyclosporin, azole antifungals, blood thinners	stevens-johnson, jaundice/icterus,	
cymbalta®	duloxetine	antidepressant	inhibs norepi and serotonin reuptake	depression, diabetic neuropathy, anxiety, fibromyalgia	narrow angle, cipro, o. beta blockers, o. diclofenac, NSAIDS, omega 3, diuretics	glaucoma, s-j, blur	

41

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
cytotec®	misoprostol	GI-prostaglandin E1	inhibits gastric acid secr, produces uterine ctwns	prevention of NSAID GI ulcer, constipation, pregnancy termination	diuretics		
cytovene®	ganciclovir	antiviral-DNA synthesis inhibitor	defective nucleotide incorporated into viral DNA	herpes, CMV	hematotoxicity, carcinogenic, aspermatogenesis, cyclosporin	retinal detachment	
daraprim®	pyrimethamine	antiprotozoal	interferes with synth RNA and DNA	malaria, toxoplasmosis, isosporiasis	kidney and liver dz	stevens-johnson	
darvocet-N-100®	propoxyphene-N/APAP	analgesic-narcotic: acetaminophen + opioid	combo, see MOA for individual drugs	pain reliever-mild to mod, fever	lung, kidney and liver issues, seizures, sulfite sens, local anesthetics, addison's, ophthalmic beta blockers	mydriasis, jaundice/icterus, pinpoint pupils with overdose	preg cat c, schedule IV, taper with dependency,
darvon®	propoxyphene	analgesic-opioid	narcotic	pain--mild to moderate	suicidal pts, drug abuse, impaired liver and renal fxn, phenothiazines	visual disturbances	schedule IV
decadron®	dexametasone	corticosteroid	decr hist release	rhinitis, allergies, inflam, pruritis, dermatitis, eczema, insect bites	ocular HSV, increased IOP, cataracts, glaucoma, local infxn, TB	IOP spikes, cataracts (PSC)	
deltasone®	prednisone	corticosteroid	decr hist release	rhinitis, allergies, inflam, pruritis, dermatitis, eczema, insect bites	ocular HSV, increased IOP, cataracts, glaucoma, local infxn, TB	IOP spikes, cataracts (PSC)	
demerol®	meperidine	analgesic-opioid	narcotic	pain--moderate to severe for preoperative sedation, obstetric analgesia,	lung, kidney and liver issues, seizures, sulfite sens, local anesthetics, addison's, ophthalmic beta blockers	visual disturbances	involuntary movements

42

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
depakote®	divalproex	antiepileptic	ukn	epilepsy, bipolar, migraines,	some NSAIDS	dry eye, cls intol, cycloplegia, stevens-johnson, diplop, nystag, jaundice/icterus	
desyre®	trazodone	antidepressant-atypical	inhibits serotonin reuptake	depression, insomnia	azole antifungals, some NSAIDS,	dry eye, cls intolerance, cycloplegia, increase IOP, diplopia	
detro®	tolterodine	incontinence-muscarinic antagonist	relaxes detrusor muscle in bladder	urinary incontinence	AACG, o. cholinergics, o. anticholinergics, o. sympathomimetics,	dry eye, cls intolerance, mydriasis, cycloplegia, o. phenylephrine	
dexedrine® or adderall®	amphetamine/dextroamphetamine	CNS stimulant	ukn	CNS stim, narcolepsy, obesity, ADHD	glaucoma, hyperthyroidism, topical cocaine	visual disturbances, Has, mydriasis	schedule II
diabeta® or micronase®	glyburide	DM-sulfonylurea-2nd gen	stimulates release of insulin from beta cells	T2DM	ACE inhibi, antihist/decon, B block, diuretics, cipro, sympathomims, AB's, steroids	blurred vision	PO mode of delivery
diabinese®	chlorpropamide	DM-sulfonylurea-1st gen--discontinued	stimulates release of insulin from beta cells	T2DM	ACE inhibitors, HCTZ, antihistamines, beta blockers, diuretics, some antiinfectives, sympathomimetics		brand (diabinese) discontinued in US, see generic
Diamox®	acetazolamide	diuretic-CAI	NaHCO3 excretion	oral diuretic for edema, aacg	use this oral diuretic with diabetic pts to tx aacg	dry eye, cls intolerance, myopia	
diflucan®	fluconazole	antifungal-azole	disrupts fungal membrane	fungal infxns, meningitis, tinea	kidney and liver dz	stevens-johnson, jaundice/icterus	
dilantin®	phenytoin	antiepileptic	modulates sodium and calcium channels	epilepsy	topical anesthetics, some antivirals and Abs, steroids	DE, cls intol, cycloplegia, nystag, yellow-blue color va disturb, diplopia, ophthalmoplegia, s-j	
dimetane®	brompheniramine	antihistamine-1st gen	blocks histamine	rhinitis, allergies, insomnia, motion sick, naus/vom, sedat	AACG, increased IOP, hyperthyroid, ophthalmic anticholinergics, cholinergics, and sympathomimetics	cls intol, mydriasis, cyclopeg, increase IOP, nystag	

43

44

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
diovan®	valsartan	vasodilator- angiotensin II receptor blocker	vasodil, Na2+ and H2O excr	HTN, CHF, MI	pregnancy, ACE inhibitors, diuretics, beta blockers, COX 2	angioedema	preg cat c/d
diuril®	chlorothiazide	diuretic-thiazide	Na2+ and H2O excretion	diuretic used to tx edema, HTN, CHF	ACE inhibitors, beta blockers, systemic CAIs, diuretics, topical diclofenac, pain relievers, omega 3	stevens-johnson, HA's, blurred Va, dry eye, cls intolerance, myopia	patients allergic to this drug may be allergic to sulfa drugs and CAIs
dyazide® and maxzide®	triamterene w/HCTZ	diuretic combo- Na2+ block + thiazide	Na2+ and H2O excretion	HTN, CHF, edema	ACE inhbs, cyclosporin, diuretics, topical diclofenac,	dry eye, cls intolerance, myopia	
dynapen®	dicloxacillin	AB-PCN	CWS inhibitor	skin infections, osteomyelitis,	HIV/CMV, warfarin, oral contras, PPIs	seizures	PCN/Ceph allergies Rx bactrim or macrolies, preg cat b
elavil®	amitriptyline	antidepressant- TCA	ukn/inhibits norepi, serotonin reup	depression	systemic CAI's, diabetics, glaucoma Tx, hyperthyroid	dry eye, cls intolerance, cycloplegia, increase IOP, diplopia	
enablex®	darifenacin	antispasmodics-- overactive bladder	antagonizes ACH	overactive bladder	narrow angle, myasthenia gravis, anticholinergic use, o. anticholinergics, o. sympathomimetics, erythromycin	blur, dry eye	
enbrel®	etanercept	autoimmune	reduces inflamm	RA, ank. Spond, psoriasis, JIA	infxn, TB, immunosuppres, hep b react, lupus like synd,	optic neuritis	
endocet®	oxycodone w/APAP	analgesic- narcotic: acetaminophen + opioid	combo, see MOA for individual drugs	pain reliever-mod to severe, fever	lung, kidney and liver issues, seizures, sulfite sens, local anesthetics, addison's, ophthalmic beta blockers	jaundice/icterus, blurred vision, mydriasis, pinpoint pupils with overdose	schedule II; preg cat c; taper with dependency
eserine®	physostigmine	muscle- anticholinesteras e inhibitor--IM and IV	increases ACH at NMJ	urinary retention, myasthenia gravis, anticholinergic toxicity	DM, AACG, o. cholinergics anticholinergics b block alpha 2 ag sympathomims, local anesthetics	cholinergic crisis, bradycardia, respiratory distress, miosis, blur	
eskalith®	lithium	antipsychotic	sodium transport	bipolar, mania, schizoaffective disorder	ACE inhbs, COX 2, diclofenac, CAIs, diuretics,	mydriasis?, nystagmus, pseudotumor cerebri	

45

TRADE	GENERIC	TYPE/CLASS	ACTION	USE	OC IMP--CI/CAUTION	OC IMP--S/E	MISC
estrace® or premarin®	conjugated estrogens	hormone-estrogen	hormone replacement therapy	menopause, osteopor, hypoestrogen, breast & prostate cancer, hypogonad	azole antifungal, corticosteroids, omega 3,	migraine, visual changes	
evista®	raloxifene	hormone-selective estrogen receptor modulator	stimulates estrogen	breast cancer, osteoporosis		blepharitis, conjunctivitis, dry eye, cls intolerance	
famotidine®	pepcid	antihistamine-histamine 2 receptor antag	reduces HCl secretion	GERD, ulcers	antifungals, antivirals, pain relievers, cyclosporin, lidocaine, valium	icterus (jaundice of sclera)	
famvir®	famciclovir	antiviral-DNA synthesis inhibitor	defective nucleotide incorporated into viral DNA	HSV, HZV CMV			
feldene®	piroxicam	NSAID-nonselective	decrease PG and thromboxanes	inflam, pain, fever, dysmenorrhea, RA, osteoarth, ank spond	preg, anticoag, coags, c steroids, asthma, cardiovasc dz, topical diclofenac, dehydr, HTN, ACE inhibs	bleeds, nephrotoxicity, hepatotoxicity, stevens-johnson, ecchymosis	preg cat c
flagyl®	metronidazole	antimicrobial	destroys bacterial DNA & RNA	rosacea, anaer bact infxns, trichomoniasis, amoebiasis, bact vaginosis, giardiasis, PID	carcinogenic risk, cyclosporin, oral contras, Cron's		
flexeril®	cyclobenzaprine	skeletal muscle relaxant	reduces neuronal impulses	muscle relaxant for muscle spasms	incr IOP, narrow angle glauc, hyperthy, antichols, o. chol antags	blurred vision, jaundice, dry eye, cls intolerance	
flomax®	tamsulosin	BPH-alpha 1 ag	reduces cxn of prostate and urethra	BPH		collagen fibers leading to floppy iris syndrome, progressive miosis	