

Supplementary Materials

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Table S1: ICD-9-CM (International classification of diseases, ninth revision, clinical modification) codes and CPT-4 (Current Procedural Terminology, 4th Edition) codes used in the study.

Category	Code Type	Code	Description
All glaucoma (for exclusion when defining controls)	ICD-9-CM Diagnosis	365	glaucoma
Primary open angle glaucoma (for case definition)	ICD-9-CM Diagnosis	365.11	primary open angle glaucoma
	ICD-9-CM Diagnosis	365.12	low tension open-angle glaucoma
Glaucoma procedures (for case definition)	CPT-4	66160	fistulization of sclera for glaucoma sclerectomy with punch or scissors, with iridectomy
	CPT-4	66170	fistulization of sclera for glaucoma trabeculectomy ab externo in absence of previous surgery
	CPT-4	66172	fistulization of sclera for glaucoma trabeculectomy ab externo with scarring from previous ocular surgery or trauma (includes injection of antifibrotic agents)
	CPT-4	66174	transluminal dilation of aqueous outflow canal without retention of device or stent
	CPT-4	66175	transluminal dilation of aqueous outflow canal with retention of device or stent
	CPT-4	66180	aqueous shunt to extraocular reservoir (eg, molteno, schocket, denver-krupin)
	CPT-4	66183	insertion of anterior segment aqueous drainage device, without extraocular reservoir, external approach
	CPT-4	66185	revision of aqueous shunt to extraocular reservoir
	CPT-4	66710	ciliary body destruction cyclophotocoagulation, transscleral
	CPT-4	66711	ciliary body destruction cyclophotocoagulation, endoscopic
	CPT-4	0191T	insertion of anterior segment aqueous drainage device, without extraocular reservoir
	CPT-4	65855	trabeculoplasty by laser surgery, 1 or more sessions (defined treatment series)
	ICD-9-CM Procedure	1261	trephination of sclera with iridectomy
	ICD-9-CM Procedure	1264	trabeculectomy ab externo
ICD-9-CM Procedure	1265	other scleral fistulization with iridectomy	
ICD-9-CM Procedure	1267	insertion of aqueous drainage device	
ICD-9-CM Procedure	1273	cyclophotocoagulation	
Cataract	ICD-9-CM Diagnosis	366	cataract
Cataract surgery	CPT-4	66840	removal of lens material
	CPT-4	66850	removal of lens material phacofragmentation technique (mechanical or ultrasonic) (eg, phacoemulsification), with aspiration
	CPT-4	66920	removal of lens material intracapsular
	CPT-4	66940	removal of lens material extracapsular (other than 66840, 66850, 66852)
	CPT-4	66983	intracapsular cataract extraction with insertion of intraocular lens prosthesis (1 stage procedure)
	CPT-4	66984	extracapsular cataract removal with insertion of intraocular lens prosthesis (1 stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification)

	ICD-9-CM Procedure	132	extracapsular extraction of lens by linear extraction technique
	ICD-9-CM Procedure	133	extracapsular extraction of lens by simple aspiration (and irrigation) technique
	ICD-9-CM Procedure	1341	phacoemulsification and aspiration of cataract
	ICD-9-CM Procedure	1343	mechanical phacofragmentation and other aspiration of cataract
	ICD-9-CM Procedure	1359	other extracapsular extraction of lens
	ICD-9-CM Procedure	1369	other cataract extraction
Other glaucoma-related diagnoses (for exclusion when defining cases & controls)	ICD-9 CM Diagnosis	365.02	anatomical narrow angle borderline glaucoma
	ICD-9 CM Diagnosis	365.06	primary angle closure without glaucoma damage
	ICD-9 CM Diagnosis	365.13	pigmentary open-angle glaucoma
	ICD-9 CM Diagnosis	365.14	glaucoma of childhood
	ICD-9 CM Diagnosis	365.2	primary angle-closure glaucoma
	ICD-9 CM Diagnosis	365.3	corticosteroid-induced glaucoma
	ICD-9 CM Diagnosis	365.4	glaucoma associated with congenital anomalies dystrophies and systemic syndromes
	ICD-9 CM Diagnosis	365.5	glaucoma associated with disorders of the lens
	ICD-9 CM Diagnosis	365.6	glaucoma associated with other ocular disorders
	ICD-9 CM Diagnosis	365.81	hypersecretion glaucoma
	ICD-9 CM Diagnosis	365.82	glaucoma with increased episcleral venous pressure
	ICD-9 CM Diagnosis	365.83	aqueous misdirection
Non-routine cataract surgery (for exclusion when defining controls)	CPT-4	66830	removal of secondary membranous cataract (opacified posterior lens capsule and/or anterior hyaloid) with corneo-scleral section, with or without iridectomy (iridocapsulotomy, iridocapsulectomy)
	CPT-4	66852	removal of lens material pars plana approach, with or without vitrectomy
	CPT-4	66930	removal of lens material intracapsular, for dislocated lens
	CPT-4	66982	extracapsular cataract removal with insertion of intraocular lens prosthesis (1-stage procedure), manual or mechanical technique (eg, irrigation and aspiration or phacoemulsification), complex, requiring devices or techniques not generally used in routine cataract surgery (eg, iris expansion device, suture support for intraocular lens, or primary posterior capsulorrhexis) or performed on patients in the amblyogenic developmental stage
Ophthalmic related conditions (for defining alternative control population)	ICD-9 CM Diagnosis	360-379.9	disorders of the eye and adnexa
	CPT-4	65091-68899	eye and ocular adnexa
	CPT-4	92002-92499	ophthalmology

Table S2: The Uniform System of Classification (USC) codes and generic names used to identify glaucoma medications and other ophthalmic medications at National Drug Code (NDC) level.

Indication	USC_Classification	Generic_Name
Glaucoma medication	61610 - PILOCARPINE	PILOCARPINE NITRATE,PILOCARPINE HCL
	61630 - GLAUCOMA-EPINEPHRINE & DERIVATIVES	EPINEPHRINE,DIPIVEFRIN HCL,EPINEPHRYL BORATE
	61640 - PILOCARPINE COMBINATIONS	PILOCARPINE HCL/EPINEPHRINE BITARTRATE
	61650 - CARBONIC ANHYDRASE INHIBITORS	ACETAZOLAMIDE,METHAZOLAMIDE,DICHLORPHENAMIDE,DORZOLAMIDE HCL,ACETAZOLAMIDE SODIUM,BRINZOLAMIDE
	61660 - OPHTHALMIC BETA-BLOCKERS	TIMOLOL MALEATE,TIMOLOL MALEATE/PF,LEVOBUNOLOL HCL,BETAXOLOL HCL,METIPRANOLOL,CARTEOLOL HCL,TIMOLOL
	61690 - MIOTICS & GLAUCOMA OTHERS	DORZOLAMIDE HCL/TIMOLOL MALEATE,DORZOLAMIDE HCL/TIMOLOL MALEATE/PF,TAFLUPROST/PF,LATANOPROST,BIMATOPROST,BRIMONIDINE TARTRATE,BRIMONIDINE TARTRATE/TIMOLOL MALEATE,ISOSORBIDE,GLYCERIN,TRAVOPROST,TRAVOPROST (BENZALKONIUM),APRACLONIDINE HCL,BRINZOLAMIDE/BRIMONIDINE TARTRATE,UNOPROSTONE ISOPROPYL
Other ophthalmic	61110 - OPHTHALM ANTI-INFECT BROAD/MED SPECTRUM	BACITRACIN,TETRACYCLINE HCL,CHLORTETRACYCLINE HCL,NORFLOXACIN,GENTAMICIN SULFATE,CHLORAMPHENICOL,GATIFLOXACIN,POLYMYXIN B SULFATE/TRIMETHOPRIM,POVIDONE-IODINE,OXYTETRACYCLINE HCL/POLYMYXIN B SULFATE,MOXIFLOXACIN HCL,TOBRAMYCIN,CIPROFLOXACIN HCL,ERYTHROMYCIN BASE,OFLOXACIN,LEVOFLOXACIN,AZITHROMYCIN,BESIFLOXACIN HCL,CYSTEAMINE HCL,TOBRAMYCIN SULFATE
	61120 - OPHTHALMIC SULFONAMIDES AND COMBINATIONS	SULFISOXAZOLE DIOLAMINE,SULFACETAMIDE SODIUM,SULFACETAMIDE SODIUM/PHENYLEPHRINE HCL
	61130 - OPHTHALMIC ANTI-VIRAL	IDOXURIDINE,VIDARABINE,TRIFLURIDINE,GANCICLOVIR,FOMIVIRSEN SODIUM
	61140 - OPHTHALMIC NEO/POLY/BAC COMBINATIONS	NEOMYCIN SULFATE/POLYMYXIN B SULFATE/GRAMICIDIN D,NEOMYCIN SULFATE/POLYMYXIN B SULFATE,NEOMYCIN SULFATE/BACITRACIN/POLYMYXIN B,BACITRACIN/POLYMYXIN B SULFATE,NEOMYCIN SULFATE/BACITRACIN/COLISTIMETHATE SODIUM
	61190 - OPHTHALMIC ANTI-INFECTIVES OTHER	SILVER NITRATE,NATAMYCIN,MERCURIC OXIDEYELLOW
	61410 - OPHTHALMIC GLUCOCORTICOIDS	LOTEPREDNOL ETABONATE
	61411 - OPHTHALMIC CORTICOID PLAIN	DEXAMETHASONE SOD PHOSPHATE,MEDRYSONE,PREDNISOLONE ACETATE,FLUOROMETHOLONE,DEXAMETHASONE,PREDNISOLONE SOD PHOSPHATE,FLUOROMETHOLONE ACETATE,TRIAMCINOLONE ACETONIDE/PF,RIMEXOLONE,DIFLUPREDNATE,LOTEPREDNOL ETABONATE,FLUOCINOLONE ACETONIDE

61412 - OPHTHALMICCORTICOID WITH ANTI-INFECTIVE	NEOMYCIN SULFATE/DEXAMETHASONE SOD PHOSPHATE,NEOMYCIN SULFATE/POLYMYXIN B SULFATE/PREDNISOLONE,GENTAMICIN SULFATE/PREDNISOLONE ACETATE,OXYTETRACYCLINE HCL/HYDROCORTISONE ACETATE,NEOMYCIN SULFATE/POLYMYXIN B SULFATE/HYDROCORTISONE,NEOMYCIN/POLYMYXIN B SULFATE/DEXAMETHASONE,TOBRAMYCIN/DEXAMETHASONE,CHLORAMPHENICOL/POLYMYXIN B SULFATE/HYDROCORTISONE,CHLORAMPHENICOL/HYDROCORTISONE ACETATE,NEOMYCIN SULFATE/BACITRACIN ZINC/POLYMYXIN B/HYDROCORTISONE,TOBRAMYCIN/LOTEPREDNOL ETABONATE,NEOMYCIN SULFATE/HYDROCORTISONE ACETATE
61413 - OPHTHALMIC CORTICOID WITH SULFONAMIDE	SULFACETAMIDE SODIUM/PREDNISOLONE ACETATE,SULFACETAMIDE SODIUM/FLUOROMETHOLONE,SULFACETAMIDE SODIUM/PREDNISOLONE SODIUM PHOSPHATE,SULFACETAMIDE SODIUM/PHENYLEPHRINE HCL/PREDNISOLONE
61420 - OPHTHALMIC NSAIDS	KETOROLAC TROMETHAMINE,KETOROLAC TROMETHAMINE/PF,NEPAFENAC,SUPROFEN,DICLOFENAC SODIUM,BROMFENAC SODIUM,FLURBIPROFEN SODIUM
61490 - OPHTHALMIC ANTI-INFLAMMATORY OTHER	CYCLOSPORINE
61500 - OPHTHALMIC ANTI-ALLERGY	TETRAHYDROZOLINE HCL/ZINC SULFATE,PHENYLEPHRINE HCL/ANTIPYRINE,PHENYLEPHRINE HCL/POLYVINYL ALCOHOL,KETOTIFEN FUMARATE,ALCAFTADINE,CROMOLYN SODIUM,NEDOCROMIL SODIUM,EPINASTINE HCL,AZELASTINE HCL,GLYCERIN,PHENYLEPHRINE HCL,LEVOCABASTINE HCL,NAPHAZOLINE HCL/ANTAZOLINE PHOSPHATE,NAPHAZOLINE HCL,NAPHAZOLINE HCL/ZINC SULFATE,DEXTROSE,NAPHAZOLINE HCL/PHENIRAMINE MALEATE,TETRAHYDROZOLINE HCL,LOPATADINE HCL,EMEDASTINE DIFUMARATE,LODOXAMIDE TROMETHAMINE,SODIUM CHLORIDE,OXYMETAZOLINE HCL,TETRAHYDROZOLINE HCL/POLYETHYLENE GLYCOL,PHENYLEPHRINE HCL/ZINC SULFATE,NAPHAZOLINE HCL/POLYETHYLENE GLYCOL 300,NAPHAZOLINE HCL/HYPROMELLOSE,TETRAHYDROZOLINE HCL/DEXTRAN 70/PEG 400/POVIDONE,NAPHAZOLINE HCL/GLYCERIN,LOTEPREDNOL ETABONATE,TETRAHYDROZOLINE HCL/PEG 400/HYPROMELLOSE/GLYCERIN,BEPOTASTINE BESILATE,TETRAHYDROZOLINE HCL/ZINC SULF/PEG 400/HYPROMELLOSE/GLYCERIN,PEMIROLAST POTASSIUM,NAPHAZOLINE HCL/HYPROMELLOSE/POLYSORBATE 80/ZINC SULFATE,NAPHAZOLINE HCL/ZINC SULFATE/GLYCERIN
61520 - ANTI-ALLERGY OPHTHALMIC. OTC	TETRAHYDROZOLINE HCL/BORIC ACID,TETRAHYDROZOLINE HCL/ZINC SULFATE,PHENYLEPHRINE HCL/ANTIPYRINE
61710 - OPHTHALMIC ANESTHETICS	PROPARACAINE HCL,TETRACAINE HCL,TETRACAINE HCL/PF,LIDOCAINE HCL/PF

61740 - OPTHALMIC IRRIGATING SOLUTION	BORIC ACID,BALANCED SALT IRRIGATION SOLUTION COMBINATION NO.1,BALANCED SALT IRRIG SOLN NO.2,SODIUM/POTASSIUM/SODIUM CHLORIDE,SODIUM/POTASSIUM/CALCIUM/MAGNESIUM, BALANCED SALT SOLN NON-SURG #3,SODIUM BORATE/BORIC ACID/WATER/SODIUM CHLORIDE,SODIUM PHOSM-BASIC-D-BASIC/K PHMBDB/SOD HYDROX/SOD CHL,SODIUM/POTASSIUM/CALCIUM,SODIUM CHLORIDE WASH AND EYE CUP,SODIUM CHLORIDE,BORIC ACID/IRRIG SOLN NON-SURG #1,SODIUM/POTASSIUM/CALCIUM/MAGNESIUM/DEXTR OSE,BALANCED SALT SOLN NON-SURG #6,SODIUM PHOSPHATEMONOBASIC/SODIUM CHLORIDE/EYE CUP,POTASSIUM CHLORIDE/BORIC ACID
61760 - OPTHALMIC ENZYMES	CHYMOTRYPSIN
61790 - OPTHALMIC PREPARATIONS OTHER	HYALURONATE SODIUM,FLUORESCEIN SODIUM/HYALURONATE SODIUM,MISCELLANEOUS MEDICAL SUPPLY,FLUORESCEIN SODIUM,HYPROMELLOSE,TEAR TEST,TYLOXAPOL,HYDROXYETHYLCELLULOSE,EYELID CLEANSER COMBINATION NO.9,BENOXINATE HCL/FLUORESCEIN SODIUM,VERTEPORFIN,EDETATE DISODIUM/POLYETHYLENE GLYCOL,HERBAL DRUGS,ANTISEPTIC SOLUTION,CHONDROITIN SULFATE A SODIUM/HYALURONATE SODIUM,ZINC SULFATE/MERCURIC OXIDEYELLOW/BORIC ACID,EYELID CLEANSER COMBINATION NO.5,EYELID CLEANSER COMBINATION NO.8,EYELID CLEANSER COMBINATION NO.7,EYELID CLEANSER COMBINATION NO.3,HYPOCHLORUS ACID/SODIUM HYPOCHLORITE/SOD CHLOR/ ELEC. WATER,HYPOCHLORUS ACID/NA HYPOCHLOR/HCL/NACL/SOD MAG FLUO/ELEC WAT,PROPARACAINE HCL/FLUORESCEIN SODIUM,LISSAMINE GREEN,BORIC ACID,OCRIPLASMIN/PF,MITOMYCIN,RANIBIZUMAB,EYEL ID CLEANSER COMBINATION NO.6,EYELID CLEANSER COMBINATION NO.4,SODIUM PHOSPHATEMONOBASIC/SODIUM CHLORIDE,HOMEOPATHIC DRUGS,HYPOCHLOROUS ACID/SODIUM CHLORIDE,SOAP,EYELID CLEANSER COMBINATION #1,OFTASCEINE DISODIUM/BENOXINATE HCL,,AFLIBERCEPT,PHENYLEPHRINE HCL/KETOROLAC TROMETHAMINE,PEGAPTANIB SODIUM,TRYPAN BLUE

Table S3: Patient flow for cases and controls

Study Population	Inclusion/exclusion criteria	Sample Size
Cases	Include patients with at least 1 non-rule out diagnosis and procedure for POAG on the same day during the identification period: 1/1/2012-12/31/2013	46,954
	Include patients continuously enrolled in medical and pharmacy benefit in the entire study period: between 5 years prior to index date and 1 year after index date	12,429
	Include patients \geq 45 years old at index date	12,237
	Exclude patients with other types of glaucoma in the entire study period	9,403
	Exclude patients with glaucoma surgery in the 5 years prior to the index date	6,272
	Matching with controls on age, gender, and the geographic region	6,130
Controls	Include patients with at least 1 non-rule out diagnosis and procedure for cataract on the same day during the identification period: 1/1/2012-12/31/2013	453,678
	Include patients continuously enrolled in medical and pharmacy benefit in the entire study period: between 5 years prior to index date and 1 year after index date	114,792
	Include patients \geq 45 years old at index date	113,984
	Exclude patients with other forms of cataract surgery in the entire study period	106,852
	Exclude patients with all types of glaucoma diagnosis codes, or glaucoma surgery procedure codes, or taking glaucoma medication in the entire study period	75,189
	Matching with cases on age, gender, and the geographic region	30,650

Table S4: Patient comorbidity and drug utilization characteristics.

Patient Disease and Drug Utilization	Case		Contrl		Standardized Difference
	N/Mean	Percent/SD	N/Mean	Percent/SD	
Carriers of Elixhauser comorbidity ⁹ (N/Percent)					
1-Congestive Heart Failure	780	12.7%	3,774	12.3%	0.0124
2-Cardiac Arrhythmias	1,685	27.5%	8,492	27.7%	-0.0049
3-Valvular Disease	1,295	21.1%	5,867	19.1%	0.0495
4-Pulmonary Circulation Disorders	228	3.7%	1,266	4.1%	-0.0212
5-Peripheral Vascular Disorders	1,300	21.2%	5,911	19.3%	0.0478
6-Hypertension Uncomplicated	4,588	74.8%	22,022	71.8%	0.0678
7-Hypertension Complicated	815	13.3%	3,358	11.0%	0.0717
8-Paralysis	70	1.1%	363	1.2%	-0.004
9-Other Neurological Disorders	465	7.6%	2,267	7.4%	0.0072
10-Chronic pulmonary disease	1,721	28.1%	8,848	28.9%	-0.0176
11-Diabetes Uncomplicated	2,049	33.4%	9,090	29.7%	0.0812
12-Diabetes Complicated	869	14.2%	3,795	12.4%	0.0529
13-Hypothyroidism	1,270	20.7%	6,048	19.7%	0.0245
14-Renal Failure	624	10.2%	2,790	9.1%	0.0365
15-Liver Disease	487	7.9%	2,228	7.3%	0.0255
16-Peptic Ulcer Disease	128	2.1%	681	2.2%	-0.0092
17-AIDS/HIV	8	0.1%	20	0.1%	0.0209
18-Lymphoma	71	1.2%	506	1.7%	-0.0419
19-Metastatic Cancer	106	1.7%	534	1.7%	-0.001
20-Solid Tumor without Metastasis	981	16.0%	4,801	15.7%	0.0093
21-Reheumatoid Arthritis/Collagne Vascular Diseases	582	9.5%	2,650	8.6%	0.0295
22-Coagulopathy	262	4.3%	1,253	4.1%	0.0093
23-Obesity	489	8.0%	2,512	8.2%	-0.008
24-Weight Loss	316	5.2%	1,577	5.1%	0.0004
25-Fluid and Electrolyte Disorders	862	14.1%	4,360	14.2%	-0.0047
26-Blood Loss Anemia	131	2.1%	596	1.9%	0.0136
27-Deficiency Anemia	567	9.2%	2,752	9.0%	0.0094
28-Alcohol Abuse	74	1.2%	480	1.6%	-0.0307
29-Drug Abuse	67	1.1%	319	1.0%	0.0051
30-Psychoses	152	2.5%	737	2.4%	0.0049
31-Depression	778	12.7%	4,321	14.1%	-0.0413
Total Elixhauser Groups per patient (mean/SD)	4	2.9	4	2.8	0.0554
(median/interquartile range)	3	3	3	3	
# of pharmacy claims (mean/SD)	115	20.5	121	20.6	-0.0688
(median/interquartile range)	92	107	98	111	
# of generic names (mean/SD)	18	11.4	18	11.3	-0.0128
# of generic names (median/interquartile range)	16	14	16	14	
# of NDC (mean/SD)	30	9.2	30	9.2	-0.018
# of NDC (median/interquartile range)	25	25	26	25	
# of USC (mean/SD)	16	95.9	16	102.0	-0.0185
# of USC (median/interquartile range)	14	12	15	12	

Table S5: Results for associations between all USC drug classes and POAG

USC class	Odds ratio (95% CI)	P-value
SSRI (SEL. SEROTONIN REUPTAKE INHIBITOR)	0.70 (0.64 - 0.76)	1.04E-15
BETA BLOCKERS	0.77 (0.72 - 0.83)	2.71E-14
CALCIUM CHANNEL BLOCKERS	1.26 (1.18 - 1.35)	1.78E-11
SEXUAL FUNCTION DISORDERS	1.39 (1.22 - 1.58)	4.93E-07
SNRI (SEROTONIN/NOREPI REUPTAKE INHIBIT)	0.71 (0.61 - 0.82)	2.31E-06
FIBRIC ACID DERIVATIVES	0.74 (0.65 - 0.84)	2.55E-06
ANGIOTENSIN II ANTAGONIST ALONE	1.19 (1.10 - 1.28)	1.78E-05
BENIGN PROSTATE HYPERTROPHY (BPH)	1.24 (1.12 - 1.37)	3.63E-05
ANTICHOLINERGICS BRONCHIAL	0.70 (0.59 - 0.83)	6.36E-05
VITAMIN K ANTAGONISTS	0.80 (0.72 - 0.89)	7.12E-05
DIPEPTIDYL PEPTIDASE-4 INHIBITOR ALONE	1.33 (1.15 - 1.53)	7.25E-05
ANGIOTENSIN II ANTAGONIST WITH CCB	1.52 (1.23 - 1.89)	1.30E-04
VITAMIN D	1.30 (1.14 - 1.49)	1.39E-04
BENZODIAZEPINES	0.82 (0.74 - 0.91)	1.55E-04
ANTICHOLINERGICS BRONCHIAL COMBINATION	0.63 (0.49 - 0.82)	4.58E-04
ANGIOTENSIN II ANTAGONISTWITH DIURETIC	1.17 (1.07 - 1.28)	6.26E-04
ALZHEIMER-TYPE DEMENTIA	1.33 (1.12 - 1.58)	1.32E-03
MORPHINE AND OPIUM NON-INJECTABLE	0.60 (0.44 - 0.82)	1.53E-03
BETA AGONISTS AEROSOLS	0.82 (0.72 - 0.93)	2.18E-03
DIURETICS COMBINATIONS	1.19 (1.06 - 1.33)	2.43E-03
GLINIDES ALONE	1.55 (1.15 - 2.09)	4.21E-03
CENTRALLY ACTING AGENTS ALONE OR COMBOS	1.28 (1.08 - 1.51)	4.36E-03
NEWER GENERATION ANTI-DEPRESSANTS	0.82 (0.71 - 0.94)	5.59E-03
ANTIHYPERTENSIVEOTHER	1.35 (1.09 - 1.67)	5.86E-03
DIURETICS THIAZIDE AND RELATED	1.12 (1.03 - 1.21)	6.94E-03
PRE-X-RAY EVACUANTS	5.12 (1.46 - 17.94)	1.06E-02
AMINOPENICILLINS	1.72 (1.13 - 2.62)	1.10E-02
ANTI-FUNGAL AGENTS MISCELLANEOUS	1.61 (1.12 - 2.34)	1.11E-02
NON-BARBITURATE SEDATIVES OTHER	0.87 (0.78 - 0.97)	1.35E-02
NARCOTIC COUGH/ANTIHISTAMINE	1.59 (1.10 - 2.29)	1.41E-02
EMOLLIENTS AND PROTECTIVES	1.55 (1.08 - 2.22)	1.87E-02
HORMONESANDROGENSTRANSDERMAL	1.34 (1.05 - 1.72)	1.98E-02
CHOLESTEROL REDUCER COMBINATIONS	0.86 (0.75 - 0.98)	2.03E-02
HERPES ANTIVIRALS	1.28 (1.04 - 1.57)	2.11E-02
CEPHALOSPORINS & RELATED	0.60 (0.39 - 0.94)	2.55E-02
SMOKING DETERRENTS	0.67 (0.47 - 0.95)	2.69E-02
BIGUANIDES ALONE	1.09 (1.01 - 1.19)	2.74E-02
PROTON PUMP INHIBITORS	0.92 (0.86 - 0.99)	2.85E-02
ANTIARTHRITICSSYSTEMIC COX-2 INHIBITORS	0.86 (0.75 - 0.98)	2.94E-02
HORMONES GLUCOCORTICIDS PLAINORAL	0.84 (0.72 - 0.98)	2.95E-02
CODEINE AND COMBINATIONS NON-INJECTABLE	0.87 (0.77 - 0.99)	3.02E-02
EXTENDED SPECTRUM MACROLIDES	1.55 (1.04 - 2.33)	3.25E-02
ANTI-FUNGAL AGENTS ALLYLAMINES	1.49 (1.03 - 2.15)	3.29E-02
ANTIDEPRESSANT-TRICYCLICS &TETRACYCLICS	0.85 (0.73 - 0.99)	3.35E-02
HORMONESCORTICIDS		
PLAINDERMATOLOGICAL	1.14 (1.01 - 1.28)	3.38E-02
NON-NARCOTIC ANALGESSALICYLATES/RELATED	1.50 (1.03 - 2.20)	3.66E-02
ADENOSINE RECEPTOR ANTAG ALONE/COMB	0.90 (0.82 - 1.00)	4.26E-02

ANTI-ARRHYTHMIA AGENTS	0.85 (0.72 - 1.00)	4.36E-02
DIRECT RENIN INHIBITORS ALONE	1.35 (1.00 - 1.82)	4.83E-02
ANTI-PARKINSON'S OTHERS	0.82 (0.68 - 1.00)	5.46E-02
HUMAN INSULIN ANALOG COMBINATIONS	1.30 (0.99 - 1.71)	5.87E-02
HUMAN INSULIN ANALOG LONG ACTING	1.13 (0.99 - 1.28)	6.19E-02
SULFONYLUREAS	1.10 (1.00 - 1.20)	6.21E-02
GLITAZONES ALONE	1.12 (0.99 - 1.27)	6.26E-02
GABA (GAMMA-AMINOBUTYRIC ACID) ANALOGS	0.83 (0.68 - 1.01)	6.46E-02
GASTROINTESTINAL STIMULANTS	0.75 (0.55 - 1.02)	6.79E-02
THYROID HORMONE SYNTHETIC	0.93 (0.86 - 1.01)	7.55E-02
ANTIDIARRHEALS WITHOUT ANTI-INFECTIVES	0.67 (0.43 - 1.05)	7.76E-02
PROPOXYPHENES	0.82 (0.66 - 1.03)	8.44E-02
DPP-4 INHIBITOR/BIGUANIDE COMBINATION	1.23 (0.97 - 1.56)	8.67E-02
ANTIARTHRITICS SYSTEMIC PLAIN	1.08 (0.99 - 1.18)	8.76E-02
ANTICOAGULANTS FRACTIONATED HEPARINS	0.17 (0.02 - 1.30)	8.84E-02
ANTISEPTICS STOMATOLOGICAL	1.38 (0.95 - 2.01)	8.84E-02
ACE INHIBITORS OTHER	1.13 (0.98 - 1.31)	9.27E-02
STEROIDSINHALED BRONCHIAL COMBINATION	0.90 (0.80 - 1.02)	9.41E-02
POSITIVE INOTROPIC AGENTS	0.87 (0.74 - 1.03)	1.03E-01
ACNE WITHOUT ANTI-INFECTIVES/ANTISEPTIC	1.55 (0.91 - 2.64)	1.06E-01
CYCLOPLEGICS	2.18 (0.83 - 5.71)	1.13E-01
SULFONAMIDE-TRIMETHOPRIM COMBINATIONS	0.75 (0.52 - 1.07)	1.15E-01
NARCOTIC COUGH/DECONGEST/ANTIHISTAMINE	2.82 (0.76 - 10.53)	1.22E-01
H2 ANTAGONISTS	0.89 (0.76 - 1.03)	1.24E-01
SEROTONIN 5HT-1 RECEPTOR AGONISTS	0.79 (0.59 - 1.07)	1.31E-01
ANTIDOPA PHENOTHIAZINE	0.69 (0.43 - 1.12)	1.32E-01
ANTINEOPLASTIC FOLIC ACID ANALOGS	0.81 (0.62 - 1.07)	1.34E-01
URINARY TRACT ANTISPASMODICS	0.91 (0.80 - 1.03)	1.34E-01
ANTI-ULCERANTS OTHER	0.77 (0.55 - 1.09)	1.42E-01
CORTICOIDS IN COMBINATIONDERMATOLOGICAL	1.51 (0.86 - 2.64)	1.49E-01
NITRITES & NITRATES	0.90 (0.78 - 1.04)	1.49E-01
DIURETICS LOOP	0.93 (0.85 - 1.03)	1.53E-01
SEIZURE DISORDERS	0.93 (0.84 - 1.03)	1.55E-01
ANTI-FUNGAL AGENTS IMIDAZOLES	1.19 (0.94 - 1.51)	1.56E-01
VASCULAR/ANTIHYPERTENSIVE COMBINATION	1.22 (0.92 - 1.60)	1.62E-01
BETA/ALPHA-BETA BLOCKER WITH DIURETICS	0.86 (0.69 - 1.07)	1.71E-01
HMG-COA REDUCTASE INHIBITORS	0.96 (0.90 - 1.02)	1.83E-01
ALPHA BLOCKERS ALONE OR COMBINATIONS	0.91 (0.78 - 1.05)	2.02E-01
MENOPAUSE - ESTROGEN ALONE	0.93 (0.83 - 1.04)	2.16E-01
ANTIHISTAMINES ALONE	1.08 (0.96 - 1.22)	2.18E-01
HEMATINICS OTHERS	0.88 (0.72 - 1.08)	2.25E-01
CRUDE/BULK MEDICINAL	1.23 (0.88 - 1.72)	2.25E-01
NON-NARCOTIC		
COUGH/DECONGEST/ANTIHISTAMINE	5.55 (0.35 - 88.80)	2.26E-01
ACNE WITH ANTI-INFECTIVES/ANTISEPTIC	1.22 (0.88 - 1.69)	2.34E-01
BETA AGONISTS NEBULIZER SOLUTIONS	0.83 (0.62 - 1.13)	2.35E-01
UT ANTI-INFECTIVE/ANALGESIC COMBINATIONS	0.60 (0.26 - 1.40)	2.37E-01
QUINOLONES SYSTEMIC	0.85 (0.65 - 1.11)	2.38E-01
NON-NARCOTIC ANALGESICSSYNTHETIC PATCH	1.19 (0.89 - 1.61)	2.41E-01
ANTIARTHRITICS TOPICAL	1.24 (0.86 - 1.81)	2.51E-01
OTIC ANTI-INFECTIVES WITH GLUCOCORTICOID	1.46 (0.75 - 2.83)	2.63E-01

GI ANTISPASMODICS BELLADONNA	0.81 (0.56 - 1.17)	2.65E-01
DIRECT THROMBIN INHIBITORS	0.86 (0.65 - 1.13)	2.75E-01
ANTIARTHRITICS GOUT SPECIFIC	0.93 (0.82 - 1.06)	2.75E-01
ACE INHIBITORS ALONE	0.97 (0.91 - 1.03)	2.86E-01
LEUKOTRIENE AGENTS	0.93 (0.80 - 1.07)	2.95E-01
ANTI-FUNGAL AGENTS TRIAZOLES	0.78 (0.48 - 1.25)	3.00E-01
CHOLESTEROL ABSORPTION INHIBITORS	0.93 (0.82 - 1.07)	3.14E-01
ANTI-FUNGAL AGENTS POLYENES	1.22 (0.82 - 1.81)	3.28E-01
ANESTHETICS LOCAL AND TOPICAL OTHER	1.33 (0.74 - 2.39)	3.33E-01
ANTI-HISTAMINE	1.19 (0.84 - 1.68)	3.34E-01
NON-NARCOTIC COUGH ALONE	1.31 (0.74 - 2.33)	3.48E-01
ANTIHYPERLIPIDEMIC AGENTS OTHER	0.94 (0.81 - 1.08)	3.50E-01
PENICILLIN NATURAL	0.38 (0.05 - 3.21)	3.74E-01
HORMONES PROGESTOGENORAL	0.87 (0.63 - 1.19)	3.77E-01
STEROIDS INHALED BRONCHIAL	0.91 (0.75 - 1.12)	3.78E-01
NARCOTIC COUGH COMB WITHOUT EXPECT OTHER	0.52 (0.12 - 2.24)	3.82E-01
FLUORIDE SUPPLEMENTS	1.17 (0.81 - 1.71)	3.97E-01
BILE ACID SEQUESTRANTS	1.10 (0.88 - 1.36)	4.05E-01
NARCOTIC COUGH/EXPECTORANT	1.43 (0.62 - 3.33)	4.06E-01
CALCITONINS	1.13 (0.80 - 1.59)	4.79E-01
GI ANTISPASMODICS SYNTHETICS	1.12 (0.82 - 1.51)	4.81E-01
ANTI-ANXIETY OTHERS	0.92 (0.73 - 1.17)	5.05E-01
NON-NARCOTIC ANALGESICS SYNTH NON-INJECT	0.84 (0.50 - 1.42)	5.21E-01
MACROLIDES AND RELATED OTHERS	0.68 (0.20 - 2.26)	5.26E-01
HYPEROSMOLAR LAXATIVES	0.91 (0.68 - 1.22)	5.33E-01
NON-DRUG PRODUCTS	0.96 (0.84 - 1.09)	5.42E-01
OTIC ANTI-INFECTIVES PLAIN	1.98 (0.20 - 19.35)	5.55E-01
ANTI-PSYCHOTICS OTHERS	0.94 (0.75 - 1.17)	5.61E-01
ANTI-CHOLINERGICS NASAL PLAIN	1.12 (0.75 - 1.68)	5.70E-01
NON-NARCOTIC ANALGESICS COMBINATIONS	0.85 (0.49 - 1.48)	5.72E-01
TRICHOMONACIDES/ANTIBACTERIALS	0.74 (0.25 - 2.17)	5.78E-01
ERYTHROMYCIN	1.35 (0.44 - 4.11)	5.99E-01
BETA-LACTAMS INCREASED ACTIVITY	1.16 (0.66 - 2.03)	6.00E-01
ANTIARTHRITICS SYSTEMIC W/GI PROTECTANT	0.90 (0.62 - 1.32)	6.00E-01
CARDIAC AGENTS OTHERS	0.91 (0.64 - 1.29)	6.02E-01
ANTI-PARKINSON'S LEVODOPA	0.93 (0.69 - 1.24)	6.07E-01
HUMAN GLP-1 ANALOGS	0.94 (0.74 - 1.20)	6.09E-01
STEROIDS INHALED NASAL	0.98 (0.89 - 1.07)	6.14E-01
PYRIMIDINE ANALOGS	1.17 (0.62 - 2.19)	6.32E-01
TETRACYCLINE AND CONGENERS	0.95 (0.77 - 1.18)	6.36E-01
POTASSIUM CHLORIDE SUPPLEMENT	0.98 (0.88 - 1.08)	6.44E-01
BIGUANIDES/SULFONYLUREA COMBINATION	1.06 (0.83 - 1.36)	6.48E-01
HUMAN INSULIN ANALOG FAST ACTING	1.04 (0.88 - 1.23)	6.61E-01
BONE DENSITY REGULATORS OTHER	1.05 (0.85 - 1.28)	6.65E-01
HEMORRHOIDAL PREPS WITH CORTICOIDS	1.09 (0.72 - 1.64)	6.97E-01
AROMATASE INHIBITORS	0.95 (0.74 - 1.23)	7.02E-01
BISPHOSPHONATES	1.02 (0.93 - 1.12)	7.05E-01
URINARY TRACT ANTI-INFECTIVE OTHER	1.05 (0.79 - 1.40)	7.23E-01
ALPHA-BETA BLOCKERS	0.98 (0.87 - 1.10)	7.32E-01
GASTROINTESTINAL ANTI-INFLAMMATORY	1.04 (0.80 - 1.36)	7.50E-01

ANTI-FUNGAL AGENTS COMBINATIONS	0.96 (0.71 - 1.29)	7.75E-01
ANTICHOLINERGIC OTHER	1.14 (0.43 - 3.01)	7.86E-01
EXPECTORANTS/DECONGESTANTS	1.16 (0.39 - 3.42)	7.90E-01
ANTIHISTAMINES/DECONGESTANTS	1.04 (0.75 - 1.45)	7.96E-01
ANTINEOPLASTIC PROGESTINS	0.93 (0.55 - 1.59)	7.99E-01
TRIAZOLES (VAGINAL ONLY)	0.76 (0.09 - 6.25)	8.01E-01
ANTIMALARIALS	0.97 (0.73 - 1.28)	8.20E-01
HEMOSTATIC MODIFIERS OTHERS	1.03 (0.77 - 1.38)	8.24E-01
DERMATOLOGICAL PREPARATIONS OTHER	0.96 (0.66 - 1.41)	8.34E-01
HORMONES GLUCOCORTICIDS PLAIN OTHER	0.88 (0.26 - 3.00)	8.36E-01
NARCOTICS ANALGESICSYNTHETICNON-INJECT	0.99 (0.86 - 1.13)	8.49E-01
GLITAZONE/BIGUANIDE COMBINATION	1.02 (0.76 - 1.37)	8.87E-01
VITAMIN B-12 PREPARATIONS	0.98 (0.68 - 1.40)	9.00E-01
DIURETICS POTASSIUM SPARING	0.99 (0.82 - 1.19)	9.16E-01
MUSCLE RELAXANTSNON-SURG W/O ANALGESIC	0.99 (0.87 - 1.14)	9.34E-01
ANTINAUSEANT 5HT3 ANTAGONISTS	1.04 (0.43 - 2.49)	9.34E-01
MISCELLANEOUS DRUGS OTHER	0.99 (0.66 - 1.47)	9.45E-01
ACE INHIBITORS WITH DIURETICS	1.00 (0.89 - 1.12)	9.57E-01
MENOPAUSE - ESTROGEN WITH PROGESTIN	0.99 (0.76 - 1.30)	9.65E-01
DERM ANTI-INFECTIVENON-SYSTEMICTOPICAL	1.00 (0.76 - 1.32)	9.88E-01
ANALEPTICS	1.00 (0.75 - 1.34)	9.96E-01

Table S6: Results for associations between all individual generic drugs and POAG

Generic drug name	Odds ratio (95% CI)	P-value
AMLODIPINE BESYLATE	1.27 (1.18 - 1.37)	5.92E-10
CITALOPRAM HYDROBROMIDE	0.66 (0.57 - 0.77)	1.18E-07
ESOMEPRAZOLE MAGNESIUM	0.81 (0.73 - 0.89)	1.59E-05
TAMSULOSIN HCL	1.29 (1.15 - 1.44)	1.93E-05
TADALAFIL	1.57 (1.27 - 1.95)	2.58E-05
LORAZEPAM	0.68 (0.56 - 0.82)	4.30E-05
METOPROLOL SUCCINATE	0.84 (0.77 - 0.91)	4.42E-05
TIOTROPIUM BROMIDE	0.69 (0.57 - 0.82)	5.81E-05
WARFARIN SODIUM	0.80 (0.72 - 0.89)	7.12E-05
ATENOLOL	0.81 (0.72 - 0.90)	7.98E-05
FENOFIBRATE NANOCRYSTALLIZED	0.72 (0.61 - 0.85)	8.46E-05
SILDENAFIL CITRATE	1.37 (1.17 - 1.62)	1.47E-04
SITAGLIPTIN PHOSPHATE	1.32 (1.13 - 1.53)	3.10E-04
AMLODIPINE BESYLATE/VALSARTAN	1.62 (1.24 - 2.11)	3.84E-04
PROPRANOLOL HCL	0.60 (0.46 - 0.80)	4.30E-04
IPRATROPIUM BROMIDE/ALBUTEROL SULFATE	0.63 (0.49 - 0.82)	4.58E-04
DULOXETINE HCL	0.71 (0.59 - 0.86)	5.32E-04
ERGOCALCIFEROL (VITAMIN D2)	1.29 (1.12 - 1.50)	5.65E-04
FLUOXETINE HCL	0.72 (0.60 - 0.87)	7.17E-04
LANCETS	1.33 (1.13 - 1.57)	7.83E-04
HYDRALAZINE HCL	1.45 (1.17 - 1.81)	7.98E-04
FENOFIBRATE	0.63 (0.47 - 0.83)	1.22E-03
ESCITALOPRAM OXALATE	0.75 (0.63 - 0.90)	1.98E-03
FENTANYL	0.46 (0.28 - 0.75)	2.04E-03
OLMESARTAN MEDOXOMIL/HYDROCHLOROTHIAZIDE	1.33 (1.10 - 1.60)	2.82E-03
AZELASTINE HCL	1.43 (1.13 - 1.80)	3.10E-03
VENLAFAXINE HCL	0.73 (0.59 - 0.90)	3.25E-03
NIFEDIPINE	1.32 (1.09 - 1.59)	4.17E-03
OLMESARTAN MEDOXOMIL	1.28 (1.07 - 1.52)	5.61E-03
ALBUTEROL SULFATE	0.83 (0.73 - 0.95)	5.61E-03
DONEPEZIL HCL	1.33 (1.08 - 1.64)	6.20E-03
NAFTIFINE HCL	3.19 (1.39 - 7.33)	6.30E-03
SERTRALINE HCL	0.81 (0.70 - 0.94)	6.32E-03
BUPROPION HCL	0.78 (0.65 - 0.93)	6.68E-03
CICLOPIROX	1.78 (1.17 - 2.70)	7.32E-03
TERAZOSIN HCL	0.73 (0.57 - 0.92)	7.39E-03
CHLORTHALIDONE	1.50 (1.11 - 2.04)	8.25E-03
EZETIMIBE/SIMVASTATIN	0.83 (0.73 - 0.96)	9.54E-03
MEMANTINE HCL	1.40 (1.08 - 1.82)	1.24E-02
PAROXETINE HCL	0.76 (0.62 - 0.94)	1.26E-02
AMIODARONE HCL	0.74 (0.58 - 0.94)	1.32E-02
INSULIN ASPART PROTAMINE HUMAN/INSULIN ASPART	1.51 (1.08 - 2.12)	1.54E-02
CLONIDINE HCL	1.25 (1.04 - 1.50)	1.62E-02
PROMETHAZINE HCL/CODEINE	2.10 (1.15 - 3.84)	1.63E-02
CETIRIZINE HCL	0.64 (0.45 - 0.93)	1.76E-02
METOPROLOL TARTRATE	0.89 (0.80 - 0.98)	1.90E-02
ROPINIROLE HCL	0.72 (0.54 - 0.95)	1.90E-02

CLARITHROMYCIN	2.40 (1.15 - 4.99)	1.92E-02
RAMIPRIL	0.82 (0.69 - 0.97)	1.95E-02
OXYCODONE HCL/ACETAMINOPHEN	0.71 (0.54 - 0.95)	1.96E-02
LOSARTAN POTASSIUM	1.14 (1.02 - 1.26)	2.10E-02
LOVASTATIN	0.83 (0.71 - 0.97)	2.32E-02
FINASTERIDE	1.21 (1.03 - 1.43)	2.39E-02
RISEDRONATE SODIUM	1.23 (1.03 - 1.46)	2.45E-02
FAMCICLOVIR	2.65 (1.13 - 6.21)	2.54E-02
METFORMIN HCL	1.09 (1.01 - 1.19)	2.74E-02
VARENICLINE TARTRATE	0.66 (0.45 - 0.96)	2.87E-02
CELECOXIB	0.86 (0.75 - 0.98)	2.94E-02
BUDESONIDE/FORMOTEROL FUMARATE	0.75 (0.57 - 0.97)	2.97E-02
PIOGLITAZONE HCL	1.15 (1.01 - 1.31)	2.97E-02
DEXAMETHASONE	0.32 (0.12 - 0.90)	3.01E-02
CIPROFLOXACIN HCL/DEXAMETHASONE	4.12 (1.10 - 15.38)	3.51E-02
AMOXICILLIN	1.62 (1.03 - 2.53)	3.55E-02
QUINAPRIL HCL	1.24 (1.01 - 1.53)	4.31E-02
FLUTICASONE FUROATE	1.55 (1.01 - 2.39)	4.62E-02
ALISKIREN HEMIFUMARATE	1.35 (1.00 - 1.82)	4.83E-02
ATORVASTATIN CALCIUM	0.93 (0.86 - 1.00)	4.85E-02
GEMFIBROZIL	0.77 (0.59 - 1.00)	5.35E-02
BUSPIRONE HCL	0.69 (0.47 - 1.01)	5.49E-02
TESTOSTERONE	1.27 (0.99 - 1.61)	5.56E-02
ALLOPURINOL	0.87 (0.75 - 1.00)	5.61E-02
HYDROMORPHONE HCL	0.26 (0.06 - 1.08)	6.37E-02
VALSARTAN/HYDROCHLOROTHIAZIDE	1.14 (0.99 - 1.31)	6.41E-02
PREGABALIN	0.83 (0.68 - 1.01)	6.69E-02
AMITRIPTYLINE HCL	0.81 (0.65 - 1.02)	6.78E-02
METOCLOPRAMIDE HCL	0.75 (0.55 - 1.02)	6.79E-02
HYOSCYAMINE SULFATE	0.66 (0.42 - 1.03)	6.81E-02
TRIAMTERENE/HYDROCHLOROTHIAZIDE	1.12 (0.99 - 1.26)	6.85E-02
HYDROCODONE POLISTIREX/CHLORPHENIRAMINE POLISTIREX	1.53 (0.96 - 2.44)	7.58E-02
CLOPIDOGREL BISULFATE	0.91 (0.83 - 1.01)	7.63E-02
LEVOTHYROXINE SODIUM	0.93 (0.86 - 1.01)	7.70E-02
ZOLPIDEM TARTRATE	0.89 (0.79 - 1.01)	7.71E-02
HYDROCODONE BITARTRATE/ACETAMINOPHEN	0.89 (0.79 - 1.01)	7.72E-02
HYDROCHLOROTHIAZIDE	1.08 (0.99 - 1.17)	7.78E-02
TOPIRAMATE	0.73 (0.51 - 1.04)	8.02E-02
PREDNISONE	0.86 (0.73 - 1.02)	8.04E-02
ACYCLOVIR	1.31 (0.97 - 1.78)	8.04E-02
GLIMEPIRIDE	1.14 (0.98 - 1.32)	8.20E-02
ACETAMINOPHEN WITH CODEINE PHOSPHATE	1.34 (0.96 - 1.86)	8.35E-02
AMLODIPINE BESYLATE/BENAZEPRIL HCL	1.14 (0.98 - 1.32)	8.63E-02
NEBIVOLOL HCL	1.20 (0.97 - 1.49)	8.65E-02
PRAMIPEXOLE DI-HCL	0.76 (0.56 - 1.04)	9.08E-02
ENALAPRIL MALEATE	0.85 (0.71 - 1.03)	9.21E-02
INSULIN GLARGINEHUMAN RECOMBINANT ANALOG	1.13 (0.98 - 1.30)	9.25E-02
FUROSEMIDE	0.92 (0.83 - 1.01)	9.51E-02
NIACIN	0.86 (0.71 - 1.03)	9.74E-02
DIGOXIN	0.87 (0.74 - 1.03)	1.03E-01

DESONIDE	1.43 (0.92 - 2.23)	1.11E-01
SULFAMETHOXAZOLE/TRIMETHOPRIM	0.75 (0.52 - 1.07)	1.15E-01
IBUPROFEN	1.17 (0.96 - 1.43)	1.17E-01
CHLORHEXIDINE GLUCONATE	1.34 (0.92 - 1.96)	1.25E-01
VALSARTAN	1.10 (0.97 - 1.25)	1.26E-01
VALACYCLOVIR HCL	1.26 (0.93 - 1.71)	1.29E-01
METHOTREXATE SODIUM	0.82 (0.62 - 1.07)	1.41E-01
PROPOXYPHENE NAPSYLATE/ACETAMINOPHEN	0.85 (0.68 - 1.06)	1.41E-01
ETODOLAC	0.73 (0.48 - 1.11)	1.45E-01
IRBESARTAN	1.16 (0.95 - 1.42)	1.51E-01
BLOOD SUGAR DIAGNOSTIC DRUM-TYPE	1.29 (0.91 - 1.83)	1.52E-01
TIZANIDINE HCL	0.74 (0.48 - 1.12)	1.54E-01
RANITIDINE HCL	0.87 (0.72 - 1.06)	1.60E-01
VERAPAMIL HCL	1.14 (0.95 - 1.38)	1.60E-01
AMLODIPINE BESYLATE/ATORVASTATIN CALCIUM	1.22 (0.92 - 1.60)	1.62E-01
DIPHENOXYLATE HCL/ATROPINE SULFATE	0.71 (0.45 - 1.14)	1.62E-01
PEN NEEDLE DIABETIC	1.11 (0.96 - 1.29)	1.67E-01
ALPRAZOLAM	0.91 (0.80 - 1.04)	1.68E-01
FEXOFENADINE HCL	1.12 (0.95 - 1.32)	1.77E-01
GLIPIZIDE	1.10 (0.96 - 1.26)	1.83E-01
CARVEDILOL PHOSPHATE	1.22 (0.91 - 1.63)	1.84E-01
AZITHROMYCIN	1.42 (0.85 - 2.38)	1.84E-01
LOSARTAN POTASSIUM/HYDROCHLOROTHIAZIDE	1.10 (0.96 - 1.27)	1.85E-01
OXYBUTYNIN CHLORIDE	0.87 (0.70 - 1.08)	1.98E-01
LIDOCAINE/PRILOCAINE	1.68 (0.76 - 3.72)	1.99E-01
LIDOCAINE	1.22 (0.90 - 1.67)	2.00E-01
LANSOPRAZOLE	0.89 (0.74 - 1.07)	2.02E-01
CARISOPRODOL	0.76 (0.50 - 1.16)	2.06E-01
SUCRALFATE	0.79 (0.56 - 1.14)	2.07E-01
TOLTERODINE TARTRATE	0.88 (0.72 - 1.07)	2.07E-01
CLINDAMYCIN PHOSPHATE	1.46 (0.81 - 2.65)	2.09E-01
MOMETASONE FUROATE	0.90 (0.75 - 1.06)	2.10E-01
ISOSORBIDE MONONITRATE	0.90 (0.75 - 1.07)	2.14E-01
EXENATIDE	0.83 (0.61 - 1.12)	2.15E-01
MESALAMINE	1.23 (0.89 - 1.71)	2.15E-01
NORTRIPTYLINE HCL	0.77 (0.51 - 1.16)	2.17E-01
DICLOFENAC SODIUM	1.12 (0.93 - 1.36)	2.22E-01
NYSTATIN/TRIAMCINOLONE ACETONIDE	0.64 (0.32 - 1.31)	2.23E-01
BACLOFEN	0.73 (0.43 - 1.23)	2.32E-01
PANTOPRAZOLE SODIUM	1.09 (0.94 - 1.27)	2.33E-01
TRAZODONE HCL	0.89 (0.73 - 1.08)	2.49E-01
DOXYCYCLINE MONOHYDRATE	0.68 (0.35 - 1.32)	2.56E-01
DICYCLOMINE HCL	1.19 (0.88 - 1.62)	2.65E-01
FLUTICASONE PROPIONATE/SALMETEROL XINAFOATE	0.93 (0.81 - 1.06)	2.67E-01
ALBUTEROL	0.76 (0.46 - 1.24)	2.70E-01
SODIUM FLUORIDE	1.24 (0.85 - 1.81)	2.73E-01
HYDROCORTISONE ACETATE	1.41 (0.76 - 2.61)	2.73E-01
DABIGATRAN ETEXILATE MESYLATE	0.86 (0.65 - 1.13)	2.75E-01
COLESEVELAM HCL	1.16 (0.89 - 1.52)	2.82E-01
HYDROCORTISONE VALERATE	1.74 (0.63 - 4.79)	2.86E-01

CLOBETASOL PROPIONATE	0.86 (0.66 - 1.13)	2.89E-01
PHENAZOPYRIDINE HCL	0.46 (0.11 - 1.97)	2.98E-01
NAPROXEN	1.11 (0.91 - 1.35)	3.01E-01
LEVOCETIRIZINE DIHYDROCHLORIDE	1.25 (0.82 - 1.92)	3.02E-01
TEMAZEPAM	0.87 (0.68 - 1.13)	3.04E-01
GUAIFENESIN/CODEINE PHOSPHATE	1.56 (0.67 - 3.66)	3.07E-01
CARVEDILOL	0.94 (0.82 - 1.06)	3.07E-01
TELMISARTAN	1.15 (0.88 - 1.52)	3.10E-01
PEG 3350/SODIUM SULFATE/SOD CHLORIDE/KCL/ASCORBATE SOD/VIT C	4.26 (0.26 - 69.89)	3.10E-01
BLOOD-GLUCOSE METER	0.61 (0.24 - 1.58)	3.11E-01
EZETIMIBE	0.93 (0.82 - 1.07)	3.14E-01
POLYETHYLENE GLYCOL 3350	0.83 (0.58 - 1.20)	3.26E-01
MELOXICAM	0.94 (0.82 - 1.07)	3.31E-01
FLUOROURACIL	1.37 (0.72 - 2.60)	3.31E-01
ECONAZOLE NITRATE	1.37 (0.72 - 2.60)	3.31E-01
CIPROFLOXACIN HCL	0.82 (0.54 - 1.23)	3.32E-01
MECLIZINE HCL	1.19 (0.84 - 1.68)	3.34E-01
MIRTAZAPINE	0.87 (0.65 - 1.16)	3.36E-01
NYSTATIN	1.21 (0.81 - 1.79)	3.47E-01
BENZONATATE	1.31 (0.74 - 2.33)	3.48E-01
MONTELUKAST SODIUM	0.93 (0.81 - 1.08)	3.48E-01
NAPROXEN SODIUM	0.71 (0.35 - 1.45)	3.51E-01
LISINOPRIL	0.97 (0.90 - 1.04)	3.51E-01
SYRINGE WITH NEEDLEDISPOSABLEINSULIN 1 ML	0.88 (0.67 - 1.15)	3.57E-01
DEXLANSOPRAZOLE	1.20 (0.82 - 1.75)	3.58E-01
SCOPOLAMINE	1.84 (0.50 - 6.80)	3.58E-01
FLUCONAZOLE	0.79 (0.47 - 1.32)	3.64E-01
PENICILLIN V POTASSIUM	0.38 (0.05 - 3.20)	3.74E-01
SILVER SULFADIAZINE	0.52 (0.12 - 2.23)	3.78E-01
KETOCONAZOLE	1.14 (0.85 - 1.51)	3.79E-01
FEXOFENADINE HCL/PSEUDOEPHEDRINE HCL	1.20 (0.80 - 1.81)	3.81E-01
HYDROCODONE BITARTRATE/HOMATROPINE METHYLBROMIDE	0.52 (0.12 - 2.24)	3.82E-01
EPINEPHRINE	1.45 (0.63 - 3.31)	3.84E-01
BISOPROLOL FUMARATE/HYDROCHLOROTHIAZIDE	0.88 (0.66 - 1.17)	3.86E-01
QUETIAPINE FUMARATE	0.85 (0.59 - 1.23)	3.92E-01
FLUOCINONIDE	0.84 (0.56 - 1.26)	3.93E-01
DILTIAZEM HCL	1.06 (0.93 - 1.20)	3.98E-01
KETOROLAC TROMETHAMINE	2.02 (0.39 - 10.48)	4.02E-01
FAMOTIDINE	0.89 (0.68 - 1.17)	4.06E-01
TERBINAFINE HCL	1.20 (0.78 - 1.85)	4.08E-01
SITAGLIPTIN PHOSPHATE/METFORMIN HCL	1.11 (0.86 - 1.44)	4.14E-01
INSULIN DETEMIR	1.12 (0.85 - 1.47)	4.20E-01
INDOMETHACIN	1.18 (0.79 - 1.76)	4.20E-01
ESTROGENS CONJUGATED	0.94 (0.79 - 1.10)	4.29E-01
MINOCYCLINE HCL	0.82 (0.50 - 1.34)	4.30E-01
LISINOPRIL/HYDROCHLOROTHIAZIDE	0.95 (0.84 - 1.08)	4.40E-01
TRAMADOL HCL/ACETAMINOPHEN	1.15 (0.80 - 1.64)	4.48E-01
DES Loratadine	1.14 (0.81 - 1.61)	4.52E-01
DICLOFENAC EPOLAMINE	1.33 (0.64 - 2.77)	4.52E-01
FOLIC ACID	0.91 (0.72 - 1.16)	4.59E-01

IMIQUIMOD	0.68 (0.24 - 1.93)	4.63E-01
BUMETANIDE	1.12 (0.83 - 1.52)	4.64E-01
BENAZEPRIL HCL	1.09 (0.87 - 1.36)	4.71E-01
CEPHALEXIN	0.82 (0.49 - 1.39)	4.71E-01
CALCITONINSALMONSYNTHETIC	1.13 (0.80 - 1.59)	4.79E-01
NABUMETONE	0.91 (0.69 - 1.19)	4.84E-01
UREA	1.28 (0.64 - 2.56)	4.85E-01
DICLOFENAC SODIUM/MISOPROSTOL	0.87 (0.58 - 1.30)	4.93E-01
NITROGLYCERIN	0.93 (0.75 - 1.15)	4.98E-01
SIMVASTATIN	1.02 (0.96 - 1.09)	5.02E-01
ESTRADIOL	0.95 (0.82 - 1.10)	5.06E-01
INSULIN LISPRO	0.92 (0.71 - 1.18)	5.16E-01
CLOTTRIMAZOLE	1.35 (0.55 - 3.30)	5.17E-01
GLYBURIDE/METFORMIN HCL	1.09 (0.84 - 1.40)	5.20E-01
CLONAZEPAM	0.94 (0.78 - 1.14)	5.24E-01
COLCHICINE	1.09 (0.84 - 1.41)	5.26E-01
GLYBURIDE	1.06 (0.88 - 1.29)	5.27E-01
METHOCARBAMOL	1.14 (0.76 - 1.71)	5.31E-01
ROSUVASTATIN CALCIUM	0.97 (0.87 - 1.08)	5.33E-01
PROCHLORPERAZINE MALEATE	0.74 (0.28 - 1.94)	5.40E-01
HYDROXYZINE HCL	1.11 (0.80 - 1.53)	5.41E-01
BUDESONIDE	1.09 (0.83 - 1.42)	5.42E-01
AMMONIUM LACTATE	1.20 (0.67 - 2.14)	5.45E-01
CARBIDOPA/LEVODOPA	0.91 (0.67 - 1.23)	5.51E-01
IRBESARTAN/HYDROCHLOROTHIAZIDE	0.92 (0.70 - 1.21)	5.59E-01
INSULIN ASPART	1.07 (0.85 - 1.34)	5.70E-01
OMEGA-3 ACID ETHYL ESTERS	1.06 (0.87 - 1.29)	5.79E-01
CLINDAMYCIN HCL	0.71 (0.21 - 2.38)	5.80E-01
METRONIDAZOLE	0.91 (0.66 - 1.26)	5.83E-01
FLUOCINOLONE ACETONIDE	0.75 (0.26 - 2.16)	5.99E-01
AMOXICILLIN/POTASSIUM CLAVULANATE	1.16 (0.66 - 2.04)	5.99E-01
CYCLOBENZAPRINE HCL	1.05 (0.87 - 1.27)	6.00E-01
POTASSIUM CHLORIDE	0.98 (0.88 - 1.08)	6.27E-01
ERYTHROMYCIN BASE	0.61 (0.08 - 4.89)	6.39E-01
VARDENAFIL HCL	1.08 (0.78 - 1.50)	6.52E-01
DUTASTERIDE	1.05 (0.86 - 1.27)	6.53E-01
BUTALBITAL/ACETAMINOPHEN/CAFFEINE	0.89 (0.53 - 1.50)	6.58E-01
DESOXIMETASONE	1.13 (0.66 - 1.93)	6.63E-01
TETRACYCLINE HCL	1.13 (0.65 - 1.95)	6.65E-01
METHYLPREDNISOLONE	0.87 (0.44 - 1.71)	6.77E-01
RALOXIFENE HCL	1.04 (0.85 - 1.28)	6.98E-01
MOXIFLOXACIN HCL	0.77 (0.21 - 2.84)	6.99E-01
DOXYCYCLINE HYCLATE	1.05 (0.81 - 1.38)	7.01E-01
DARIFENACIN HYDROBROMIDE	0.94 (0.67 - 1.32)	7.07E-01
CICLOPIROX OLAMINE	1.16 (0.53 - 2.54)	7.09E-01
ALENDRONATE SODIUM	0.98 (0.87 - 1.10)	7.15E-01
NITROFURANTOIN MACROCRYSTAL	1.08 (0.73 - 1.59)	7.15E-01
GABAPENTIN	0.98 (0.86 - 1.11)	7.27E-01
ONDANSETRON HCL	1.18 (0.45 - 3.12)	7.36E-01
ESZOPICLONE	0.95 (0.70 - 1.30)	7.53E-01

CALCITRIOL	1.06 (0.75 - 1.48)	7.53E-01
BETAMETHASONE DIPROPIONATE/PROPYLENE GLYCOL	1.10 (0.61 - 1.99)	7.57E-01
OXYCODONE HCL	0.95 (0.69 - 1.33)	7.77E-01
SOLIFENACIN SUCCINATE	0.97 (0.77 - 1.21)	7.78E-01
LIDOCAINE HCL	1.17 (0.39 - 3.50)	7.79E-01
MEGESTROL ACETATE	0.93 (0.55 - 1.59)	7.99E-01
TERCONAZOLE	0.76 (0.09 - 6.25)	8.01E-01
MUPIROCIN	1.09 (0.56 - 2.11)	8.08E-01
OMEPRAZOLE	1.01 (0.92 - 1.11)	8.10E-01
FLUTICASONE PROPIONATE	0.99 (0.88 - 1.10)	8.21E-01
LACTULOSE	0.94 (0.56 - 1.59)	8.23E-01
ROSIGLITAZONE MALEATE	0.97 (0.73 - 1.29)	8.26E-01
LEVOFLOXACIN	0.94 (0.55 - 1.61)	8.28E-01
BETAMETHASONE VALERATE	1.07 (0.57 - 2.00)	8.33E-01
HYDROCODONE/IBUPROFEN	0.91 (0.33 - 2.48)	8.52E-01
ONDANSETRON	1.22 (0.14 - 10.59)	8.60E-01
RABEPRAZOLE SODIUM	1.02 (0.78 - 1.34)	8.71E-01
DIAZEPAM	1.02 (0.80 - 1.30)	8.82E-01
PROMETHAZINE HCL	0.97 (0.61 - 1.54)	8.89E-01
CLOTIMAZOLE/BETAMETHASONE DIPROPIONATE	1.02 (0.73 - 1.45)	8.90E-01
LEVALBUTEROL TARTRATE	1.03 (0.64 - 1.66)	8.92E-01
HYDROCORTISONE	1.03 (0.69 - 1.54)	8.98E-01
BETAMETHASONE DIPROPIONATE	0.96 (0.54 - 1.71)	8.98E-01
CYANOCOBALAMIN (VITAMIN B-12)	0.98 (0.68 - 1.40)	9.01E-01
CILOSTAZOL	0.98 (0.70 - 1.38)	9.04E-01
TRIAMCINOLONE ACETONIDE	0.99 (0.82 - 1.20)	9.07E-01
NITROFURANTOIN MONOHYDRATE/MACROCRYSTALS	1.03 (0.66 - 1.60)	9.09E-01
SYRINGE WITH NEEDLE/INSULIN DISPOSABLE 0.5 ML	0.99 (0.76 - 1.28)	9.11E-01
TACROLIMUS	0.97 (0.52 - 1.81)	9.17E-01
TRAMADOL HCL	0.99 (0.85 - 1.15)	9.19E-01
TORSEMIDE	1.02 (0.74 - 1.38)	9.23E-01
HYDROXYCHLOROQUINE SULFATE	0.99 (0.74 - 1.32)	9.36E-01
IPRATROPIUM BROMIDE	1.01 (0.75 - 1.37)	9.36E-01
PRAVASTATIN SODIUM	1.00 (0.90 - 1.11)	9.41E-01
MUPIROCIN CALCIUM	0.92 (0.11 - 7.61)	9.42E-01
NEOMYCIN SULFATE/POLYMYXIN B SULFATE/HYDROCORTISONE	0.96 (0.28 - 3.27)	9.47E-01
DOXAZOSIN MESYLATE	1.00 (0.82 - 1.23)	9.62E-01
ALFUZOSIN HCL	1.01 (0.74 - 1.38)	9.67E-01
SPIRONOLACTONE	1.00 (0.83 - 1.20)	9.72E-01
CEFADROXIL	1.02 (0.12 - 8.76)	9.84E-01
HYDROXYZINE PAMOATE	1.01 (0.52 - 1.96)	9.85E-01
CHOLESTYRAMINE (WITH SUGAR)	1.00 (0.56 - 1.78)	9.88E-01
IBANDRONATE SODIUM	1.00 (0.84 - 1.20)	9.97E-01
METAXALONE	1.00 (0.68 - 1.47)	9.98E-01
HYDROCORTISONE ACETATE/PRAMOXINE HCL	1.00 (0.47 - 2.14)	9.98E-01

Table S7: Results for multi-drug model association with POAG including all listed drug classes as well as hypertension as a comorbidity and adjusted for age, sex, geographic region of residence, employment status, insurance plan type, and the total number of drugs prescribed for each individual. *P*-values significant at Bonferroni-corrected threshold of 2.3×10^{-5} are in bold.

	OR (95% CI)	<i>P</i>-value
Calcium channel blockers	1.23 (1.14 - 1.33)	2.65E-08
Beta-blockers	0.73 (0.67 - 0.79)	6.77E-19
Fibric acid derivatives	0.75 (0.65 - 0.86)	3.17E-05
Angiotensin II antagonists	1.15 (1.06 - 1.24)	1.10E-03
Hypertension as a comorbidity	1.21 (1.12 - 1.31)	3.75E-07

Table S8: Results from sensitivity analyses with general ophthalmic controls (43,883 controls were matched to 6,269 cases) for drug classes and individual drugs significant in primary analyses. *P*-values significant at the Bonferroni-corrected threshold of 2.3×10^{-5} are in bold.

	Odds ratio (95% CI)	<i>P</i>-value
USC drug class		
SSRI - Selective Serotonin Reuptake Inhibitors	0.64 (0.58 - 0.69)	6.15E-24
Beta-blockers	0.77 (0.72 - 0.82)	9.30E-15
Calcium channel blockers	1.19 (1.12 - 1.28)	2.08E-07
Sexual function disorders medication	1.22 (1.07 - 1.38)	0.002
SNRI - Serotonin/Norepinephrine Reuptake Inhibitors	0.64 (0.55 - 0.74)	8.61E-10
Fibric acid derivatives	0.69 (0.60 - 0.78)	3.38E-09
Angiotensin II antagonists	1.01 (0.93 - 1.09)	0.84
Generic drug name		
Amlodipine	1.18 (1.10 - 1.27)	1.29E-05
Citalopram	0.66 (0.57 - 0.77)	7.28E-08
Esomeprazole	0.72 (0.65 - 0.79)	2.40E-12
Tamsulosin	0.93 (0.83 - 1.04)	0.23