Delegation Protocol Number: 182

Delegation Protocol Title:
Medication Therapeutic Interchange - Adult - Ambulatory

Delegation Protocol Applies To:
☒ Wisconsin ☒ Northern Illinois
UW Health Primary Care Clinics and UW Health retail pharmacies

Target Patient Population:
Adult patients with an order for a medication or prescribed product/supply approved for therapeutic interchange.

Delegation Protocol Champion(s):
Andrea Giamalva, MD - Department of Family Medicine, Northern Illinois
Joseph Kimbell, DO - Department of Family Medicine, Northern Illinois
Kirsten Abramson, MD - Department of Family Medicine and Community Health
Jeffrey Huebner, MD - Department of Family Medicine and Community Health

Delegation Protocol Reviewers:
Luiza Brenny, PharmD - Pharmacy
Julie Cable, PharmD - Pharmacy
Lisa Dyer, PharmD - Pharmacy, Northern Illinois
Michael Ellerbroek, PharmD - Pharmacy, Northern Illinois
Kristina Heimerl, PharmD - Pharmacy
Ty Ho, PharmD - Pharmacy
Ammie Hodges, PharmD - Pharmacy, Northern Illinois
Trisha Ludwig, PharmD - Pharmacy
Kayla McGowan, PharmD - Pharmacy
Erin Robinson, PharmD - Drug Policy Program
Caroline Van Horn, PharmD - Pharmacy
April Weaver, PharmD - Pharmacy

Responsible Department:
Pharmacy

Purpose Statement:
To delegate authority from the prescribing provider to a pharmacist to execute an approved therapeutic medication, supply, or dosage form interchange with the goal of providing uninterrupted, affordable patient care while considering the hepatic and/or renal function of the patient when warranted.

Who May Carry Out This Protocol:
1. UW Health pharmacists practicing as part of the health care team in UW Health clinics.
2. UW Health pharmacists practicing at a UW Health retail pharmacy location.
3. Licensed trainee pharmacists (i.e., pharmacy resident) practicing as part of the health care team in UW Health clinics or in a UW Health retail pharmacy location.

Guidelines for Implementation:

1. This protocol is initiated with an active prescription order for a medication or supply listed in Appendix 1 written within the last 12 months by a UW Health provider.
2. The pharmacist will assess for therapeutic or supply interchange under any one or more of the following circumstances:
   - 2.1. The medication, supply, or dosage form ordered by the provider is not covered under the patient's prescription drug coverage plan;
   - 2.2. Alternative medication, supply, or dosage form is more affordable for the patient;
   - 2.3. Switching to a therapeutic alternative would minimize or eliminate possible drug interactions or adverse effects; or
   - 2.4. There is an existing or impending drug shortage or recall for the prescribed medication or supply.
3. Only medications or supplies included in Appendix 1 will qualify for therapeutic interchange by the pharmacist.
   - 3.1. Biologics with FDA-approved biosimilars are not listed individually within Appendix 1; rather, they are addressed as a group under the "Biosimilars" category.
   - 3.2. Products with multiple injection device options (i.e., the same medication available in prefilled syringes, auto-injector pen devices, and/or vials plus syringes) are <u>not</u> listed individually within Appendix 1; rather, they are addressed as a group under the "Products with Multiple Injection Device Options" category.
   - 3.3. A thorough chart review and/or discussion with the patient or his/her representative will occur to review drug allergies and previous therapeutic failures and to evaluate hepatic and/or renal function if warranted based on Appendix 1.
   - 3.4. The pharmacist will notify patient or representative of proposed therapeutic interchange and provide details on alternative if the patient is transitioning from one existing therapy to another therapeutically equivalent medication or supply.
4. When the order written by the provider qualifies for therapeutic interchange, the pharmacist will:
   - 4.1. Order the therapeutically equivalent medication or supply with an equivalent quantity and number of refills;
     - 4.1.1. When interchanging injectable products with non-equivalent volumes (e.g., pre-filled syringes to vials), the pharmacist will round to the nearest available volume that fulfills the intended days' supply.
   - 4.2. Indicate which medication is being replaced in notes to pharmacy;
   - 4.3. Discontinue the prescription that the therapeutic alternative is replacing from the medication list; and
   - 4.4. Document a progress note in the electronic medical record that details the therapeutic interchange that was made, and any recommended follow-up.
5. The pharmacist will consult the prescribing provider in any of the following situations:
   - 5.1. The patient has experienced an adverse reaction to a previous medication in the same therapeutic class;
   - 5.2. The patient requires a medication or supply substitution outside of the parameters specified in this protocol;
   - 5.3. The patient requires a dose outside of the parameters specified in this protocol; or
   - 5.4. If additional clinical assessment of the therapeutic interchange is warranted

Order Mode:

Protocol/Policy, Without Cosign

References:

1. U.S. Food & Drug Administration. Purple Book database of licensed biological products. https://purplebooksearch.fda.gov/advanced-search

Collateral Documents/Tools:

1. Hypertension (HTN): Diagnosis and Management - Adult - Ambulatory Clinical Practice Guideline

Approved By:

UWHC Pharmacy and Therapeutics Committee: March 2024
UWHC Medical Board: April 2024
UW Health Chief Clinical Officer: April 2024
UW Health N. Illinois Medical Executive Committee: April 2024
UW Health N. Illinois Chief Medical Officer: April 2024

Appendix 1: Therapeutic Interchange Medications or Supplies

Biologics (Excluding Biosimilars)

Biologic therapeutic interchanges approved by P&T Committee (excluding biosimilars) will be listed individually within this section of the appendix.

Insulin

Category	Interchangeable Products
Rapid acting[a,c]	Insulin aspart (Novolog) Insulin lispro (Humalog) Insulin glulisine (Apidra)
Short acting[a,c]	Regular Insulin (Novolin R, Humulin R)
Intermediate acting[a,c]	Insulin isophane NPH (Novolin N, Humulin N)
Long acting[a,c]	Basaglar (glargine U-100) Lantus (glargine U-100) Levemir (detemir U-100)[b] Tresiba (degludec U-100)[b]

[a] Directions for insulin use will remain the same

[b] Interchange will only be performed for new initiations of long-acting insulin detemir or insulin degludec; for patients already established on a long-acting insulin regimen, interchange will not be performed without first contacting provider

[c] Biosimilar insulin (e.g., glargine-yfgn (Semglee)) interchanges are allowed as addressed in the Biosimilar section below

Biosimilars

Biosimilar interchanges will not be listed individually within this appendix. The FDA Purple Book is the authoritative source for identifying biologics with FDA-approved biosimilars. For all biologics with FDA-approved biosimilars, unless the provider indicates "do not substitute" (or similar language) within the order, the pharmacist may interchange orders to an FDA-approved biosimilar based on insurance coverage, affordability, or an existing/impending drug shortage. For patients already established on biologic therapy, the pharmacist will notify and educate the patient on the biosimilar. Directions for use will remain the same. If the biosimilar is not preservative free, the pharmacist will review with patient and interchange only if the patient is agreeable. The pharmacist will document the interchange (including the reason) in the patient's electronic health record.

Products with Multiple Injection Device Options

Products with multiple injection device options are not listed individually within this appendix. If the prescribed medication or supply is an injectable product with multiple injection device options, unless the provider indicates "do not substitute" (or similar language) within the order, the pharmacist may interchange between pre-filled syringes, auto-injector pen devices, and vials plus syringes based on insurance coverage, affordability, patient preference, or existing/impending drug shortage. Instructions for dose and frequency will remain the same. For patients already established on therapy, the pharmacist will notify and educate the patient on the device change. If the interchangeable injectable product is not preservative free, the pharmacist will review with the patient and interchange only if the patient is agreeable. The pharmacist will document the interchange (including the reason) in the patient's electronic health record.

Angiotensin Converting Enzyme Inhibitors (ACE-I)

Drug	Approximate Dose Equivalent				
Benazepril	5 mg daily	10 mg daily divided twice daily	20 mg daily or divided twice daily	40 mg daily or divided twice daily	80 mg daily
Captopril	12.5 mg three times daily	25 mg twice daily or three times daily	50 mg twice daily or three times daily	100 mg twice daily	200 mg twice daily
Enalapril	2.5-5 mg daily	10 mg daily or divided twice daily	20 mg daily or divided twice daily	40 mg daily or divided twice daily	N/A
Fosinopril	N/A	10 mg daily or divided twice daily	20 mg daily or divided twice daily	40 mg daily or divided twice daily	80 mg daily or divided twice daily
Lisinopril	5 mg daily	10 mg daily	20 mg daily	40 mg daily	80 mg daily
Quinapril	5 mg daily	10 mg daily	20 mg daily	40 mg daily	80 mg daily
Ramipril	1.25 mg daily	2.5 mg daily or divided twice daily	5 mg daily or divided twice daily	10 mg daily or divided twice daily	20 mg daily or divided twice daily

[a] Need for renal dosing based on patient's kidney function and/or concomitant use of diuretics will be assessed by the pharmacist prior to initiating a therapeutic interchange.

[b] Accepted renally dosed regimens will be selected based upon Lexicomp

Angiotensin Receptor Blockers (ARB)

Drug	Approximate Dose Equivalent			
Candesartan	4 mg daily	8 mg daily or divided twice daily	16 mg daily or divided twice daily	32 mg daily or divided twice daily
Irbesartan	N/A	75 mg daily	150 mg daily	300 mg daily
Losartan	25 mg daily	50 mg daily or divided twice daily	100 mg daily or divided twice daily	N/A
Olmesartan	N/A	10 mg daily	20 mg daily	40 mg daily
Telmisartan	20 mg daily	40 mg daily	80 mg daily	N/A
Valsartan	40 mg daily or divided twice daily	80 mg daily or divided twice daily	160 mg daily or divided twice daily	320 mg daily or divided twice daily

Antibiotics

Drug	Drug Equivalent
Doxycycline Hyclate	Doxycycline Monohydrate

Anticholinergic bladder agents

Drug		Approximate Dose Equivalent
Tolterodine	1 mg twice daily (IR) 2 mg daily (LA)	2 mg twice daily (IR) 4mg daily (LA)
Oxybutynin	5 mg twice daily or three times daily (IR) 5-10 mg daily (XL)	5 mg four times daily (IR) 15-30 mg daily (XL)
Darifenacin ER	7.5 mg daily	15 mg daily
Trospium	20 mg daily (IR)	20 mg twice daily (IR) 60 mg daily (XR)
Solifenacin	5 mg daily	10 mg daily
Fesoterodine ER	4 mg daily	8 mg daily

[a] Need for adjusted dosing based on patient's kidney function, hepatic function and/or concomitant use of potent CYP3A4 inhibitors (e.g., ketoconazole, clarithromycin, ritonavir) will be assessed by the pharmacist prior to initiating a therapeutic interchange.

[b] Accepted renal or hepatic dosed regimens will be selected based upon Lexicomp

Antihistamines

Drug	Dose Equivalent
Loratadine	10 mg daily or divided twice daily
Cetirizine	5-10 mg daily
Desloratadine	5 mg daily
Fexofenadine	60 mg twice daily or 180 mg daily
Levocetirizine	2.5-5 mg daily

[a] Need for renal dosing based on patient's kidney function will be assessed by the pharmacist prior to initiating a therapeutic interchange.

[b] Accepted renally dosed regimens will be selected based upon Lexicomp

Beta-blockers

Drug	Approximate Dose Equivalent		
Atenolol[A]	25 mg daily	50 mg daily	100 mg daily
Bisoprolol	2.5-5 mg daily	10 mg daily	20 mg daily
Metoprolol tartrate	25 mg twice daily	50 mg twice daily	100 mg twice daily
Metoprolol succinate	50 mg daily	100 mg daily	200 mg daily

[A] Due to atenolol renal clearance, if CrCL <30 mL/min, must contact provider to discuss interchange

Biguanides - Metformin

Metformin Extended Release (ER) tablet dose and regimen	Equivalent Metformin Immediate Release (IR) tablet strength and regimen	
	Tablet Strength	Directions for Use
500 mg ER daily	500 mg	Take ½ tablet (250 mg) 2 times daily with food
750 mg ER daily	500 mg	Take ½ tablet (250 mg) 3 times daily with food
1000 mg ER daily	500 mg	Take 1 tablet (500 mg) 2 times daily with food
1500 mg ER daily	500 mg	Take 1 tablet (500 mg) 3 times daily with food
2000 mg ER daily	1000 mg	Take 1 tablet (1000 mg) 2 times daily with food

Diabetic Testing Supplies (includes meter, lancets, and testing strips)

Brand Name		
Accu-Chek	WaveSense	Genesis
FreeStyle	Glucocard	iHealth
OneTouch	Solus	Element
Breeze	CVS or Walgreens	InTouch
True	Advocate	Nova Max
Contour	MyGlucoHealth	EasyMax
ReliOn	Fifty50	Fortis Care
Gmate	For a	Embrace
Prodigy	iBGStar	

Disease Modifying Antirheumatic Drug (DMARD)[a,b,c]

Drug	Interchangeable Products
Methotrexate	50 mg/2ml vial 50 mg/2ml PF vial 250mg/10 ml vial 250 mg/10 PF vial

[a] Dose will remain the same.

[b] Pharmacists may interchange new prescriptions unless the provider indicates “do not substitute” or similar language in the order. For patients already established on therapy, the pharmacist will notify and educate the patient on the product change.

[c] If product changes from preservative to preservative-free or vice versa, pharmacist will review with patient and interchange only if patient agreeable.

Inhaled Combination Long-Acting Beta-Agonist (LABA)/Inhaled Corticosteroids

Drug	Low	Medium	High
Fluticasone propionate/salmeterol HFA (Advair HFA)	100-250 mcg	>250-500 mcg	>500 mcg
45/21 mcg inhalation	2 inhalations twice daily		
115/21 mcg inhalation		2 inhalations twice daily	
230/21 mcg inhalation			2 inhalations twice daily
Fluticasone propionate/salmeterol DPI (Advair Diskus, Wixela Inhub)	100-250 mcg	>250-500 mcg	>500 mcg
100/50 mcg inhalation	1 inhalation twice daily		
250/50 mcg inhalation		1 inhalation twice daily	
500/50 mcg inhalation			1 inhalation twice daily
Fluticasone propionate/salmeterol DPI (AirDuo Respiclick)[A]	100-250 mcg	>250-500 mcg	>500 mcg
113/14 mcg inhalation	1 inhalation twice daily		
232/14 mcg inhalation		1 inhalation twice daily	
Budesonide/formoterol HFA (Symbicort HFA)	200-400 mcg	>400-800 mcg	>800 mcg
80/4.5 mcg inhalation	2 inhalations twice daily		
160/4.5 mcg inhalation		2 inhalations twice daily	
Fluticasone furoate/vilanterol DPI (Breo Ellipta)	N/A[B]	100 mcg	200 mcg
100/25 mcg inhalation		1 inhalation once daily	
200/25 mcg inhalation			1 inhalation once daily
Mometasone furoate/formoterol HFA (Dulera HFA)	110-200 mcg	200-400 mcg	>400 mcg
100/5 mcg inhalation	N/A[C]	2 inhalations twice daily	
200/5 mcg inhalation			2 inhalations twice daily

[A] 55/14 mcg inhaler is not included in this protocol; must contact provider to discuss interchange

[B] GINA 2020 Guidelines indicate 100 mcg fluticasone furoate is low to medium intensity; must contact provider to discuss interchange for 100 mcg as low intensity

[C] Must contact provider to discuss interchange

Inhaled Combination Long-Acting Muscarinic Antagonist (LAMA)/ Beta-Agonist (LABA)

Drug	COPD dose
Aclidinium-bromide formoterol fumarate (Duaklir Pressair) 400-12 mcg/inhalation	1 inhalation twice daily
Glycopyrrolate-formoterol fumarate (Bevespi Aerosphere) 9-4.8 mcg/inhalation	2 inhalations twice daily
Glycopyrrolate-indacaterol (Utibron Neohaler) 27.5-15.6 mcg/capsule	1 capsule inhaled twice daily
Umeclidinium-vilanterol (Anoro Ellipta) 62.5-25 mcg/inhalation	1 inhalation once daily
Tiotropium-olodaterol (Stiolto Respimat) 2.5-2.5 mcg/inhalation	2 inhalations once daily

Inhaled Combination Long-Acting Beta-Agonist (LABA)

Drug	COPD dose
Indacaterol (Arcapta Neohaler) 75 mcg/capsule	1 capsule inhaled once daily
Olodaterol (Striverdi Respimat) 2.5 mcg/inhalation	2 inhalations once daily
Salmeterol (Serevent Diskus) 50 mcg/inhalation	1 inhalation twice daily

Inhaled Combination Long-Acting Muscarinic Antagonist (LAMA)

Drug	COPD dose
Aclidinium bromide (Tudorza Pressair) 400 mcg/inhalation	1 inhalation twice daily
Glycopyrrolate bromide (Seebri Neohaler) 15.6 mcg/capsule	1 capsule inhaled twice daily
Tiotropium (Spiriva HandiHaler; Spiriva Respimat) 18 mcg/capsule 2.5 mcg/inhalation	1 capsule inhaled once daily (Handihaler) 2 inhalations once daily (Respimat)
Umeclidinium (Incruse Ellipta) 62.5 mcg/inhalation	1 inhalation once daily

Inhaled Corticosteroids - Total daily inhaled corticosteroid dose

Drug	Low	Medium	High
Beclomethasone dipropionate HFA (QVAR RediHaler)	100-200 mcg	>200-400 mcg	>400 mcg
Budesonide DPI (Pulmicort Flexhaler)	200-400 mcg	>400-800 mcg	>800 mcg
Ciclesonide HFA (Alvesco)	80-160 mcg	>160-320 mcg	>320 mcg
Fluticasone furoate DPI (Arnuity Ellipta)	N/A[A]	100 mcg	200 mcg
Fluticasone propionate HFA (Flovent)	100-250 mcg	>250-500 mcg	>500 mcg
Fluticasone propionate DPI (Flovent Diskus)	100-250 mcg	>250-500 mcg	>500 mcg
Mometasone furoate (Asmanex)	200-400 mcg		>400 mcg

[A] GINA 2020 Guidelines indicate 100 mcg fluticasone furoate is low to medium intensity; must contact provider to discuss interchange for 100 mcg as low intensity.

Inhaled Combination Long-Acting Muscarinic Antagonist (LAMA), Long-Acting Beta-Agonist (LABA)/Inhaled Corticosteroid - Total daily inhaled corticosteroid dose

Drug	COPD Dose[A]
Fluticasone furoate-umeclidinium-vilanterol DPI (Trelegy Ellipta) 100/62.5/25 mcg inhalation	1 inhalation once daily
Budesonide-glycopyrrolate-formoterol HFA (Breztri Aerosphere) 160/9/4.8mcg inhalation	2 inhalations twice daily

[A] May be interchanged for Chronic Obstructive Pulmonary Disease (COPD) indication only.

Inhaled Short-acting Beta Agonist

Drug	Brand Equivalents
Albuterol	ProAir HFA ProAir Digihaler ProAir Respiclick Proventil HFA Ventolin HFA

Glucagon-Like Peptide-1 (GLP-1) Receptor Agonists and Glucose-Dependent Insulinotropic Polypeptide/Glucagon-Like Peptide-1 (GIP/GLP-1) Receptor Agonists[A,B,C]

Agent	Frequency/ Route	Approximate equivalent dose						
Liraglutide (Victoza)	Daily SQ	0.6mg	1.2mg	1.8mg				
Dulaglutide (Trulicity)	Weekly SQ		0.75mg	1.5mg	3mg	4.5mg		
Exenatide ER (Bydureon)	Weekly SQ			2mg				
Semaglutide (Ozempic)	Weekly SQ		0.25mg	0.5mg	1mg		2mg	
Tirzepatide (Mounjaro)	Weekly SQ	2.5mg		5mg	7.5mg	10mg	12.5mg	15mg
Semaglutide (Rybelsus)	Daily PO	3mg	7mg	14mg				

[A] Patient's past medical history should be assessed for cardiovascular disease as not all agents have been shown to reduce major adverse cardiovascular events.

[B] If the equivalent dose of the preferred agent is blank in the above chart, choose the dose that is one step lower of the preferred agent. If the patient had nausea, vomiting, diarrhea when starting/titrating current medication, interchange to dose that is one step lower of the new agent.

[C] Prescriber should be notified of all interchanges in this class due to potential need for closer blood sugar monitoring and/or follow up titration

Dipeptidyl Peptidase IV Inhibitors (DDP-IVi)[A,B,C]

Drug	Approximate Dose Equivalent	Note
Alogliptin (Nesina)	25 mg daily	Starting dose for alogliptin, saxagliptin, and sitagliptin is based on renal function
Linagliptin (Tradjenta)	5 mg daily	
Saxagliptin (Onglyza)	5 mg daily	
Sitagliptin (Januvia)	100 mg daily	
Combination Agents		
Alogliptin/pioglitazone (Oseni) **Alogliptin/metformin (Kazano)** **Empagliflozin/linagliptin (Glyxambi)** **Linagliptin/metformin (Jentadueto & Jentadueto XR)** **Empagliflozin/linagliptin/metformin (Trijardy XR)** **Saxagliptin/metformin (Kombiglyze XR)** **Dapagliflozin/saxagliptin (Qtern)** **Dapagliflozin/saxagliptin/metformin (Qternmet XR)** **Sitagliptin/metformin (Janumet & Janumet XR)** **Ertugliflozin/sitagliptin (Steglujan)**		Combination agents may be interchanged based on a total daily dose of DPP-IVi provided the dose of metformin, pioglitazone, empagliflozin, and/or ertugliflozin remains the same

[A] Consult provider for doses other than those listed in this table.

[B] Pharmacist will assess renal function-based dose adjustment prior to initiating therapeutic interchange

[C] Accepted renally dosed regimens will be selected based upon Lexicomp

Sodium Glucose Cotransporter-2 Inhibitors (SGLT2i)[A,B,C]

Drug	Approximate Dose Equivalent	
Indication	**Type 2 Diabetes Mellitus**	
Canagliflozin (Invokana)	100 mg once daily	300 mg once daily
Dapagliflozin (Farxiga)	5 mg once daily	10 mg once daily
Empagliflozin (Jardiance)	10 mg once daily	25 mg once daily
Ertugliflozin (Steglatro)	5 mg once daily	15 mg once daily
Indication	**Heart Failure with Reduced or Preserved Ejection Fraction**	
Dapagliflozin (Farxiga)	10 mg once daily	
Empagliflozin (Jardiance)	10 mg once daily	
Indication	**Chronic Kidney Disease**	
Dapagliflozin (Farxiga)	10 mg once daily	
Empagliflozin (Jardiance)	10 mg once daily	
Combination Agents		
Canagliflozin/metformin (Invokamet & Invokamet XR) **Dapagliflozin/metformin (Xigduo XR)** **Empagliflozin/metformin (Synjardy & Synjardy XR)** **Ertugliflozin/metformin (Segluromet)** **Empagliflozin/linagliptin/metformin (Trijardy XR)** **Empagliflozin/linagliptin (Glyxambi)** **Dapagliflozin/saxagliptin (Qtern)** **Dapagliflozin/saxagliptin/metformin (Qternmet XR)** **Ertugliflozin/sitagliptin (Steglujan)**		Combination agents may be interchanged based on a total daily dose of an SGLT2i according to the dosing chart outlined above considering dose of metformin, saxagliptin, linagliptin, and sitagliptin remains the same

[A] Patient's past medical history should be assessed for cardiovascular disease as not all agents have been shown to reduce major adverse cardiovascular events. In patients with concomitant Type 2 Diabetes, Heart Failure, and chronic kidney disease, therapeutic interchange for Type 2 Diabetes will drive dose selection. This protocol is terminated, and provider consultation is warranted when interchanging for doses other that those listed for corresponding indications or an indication for specific agent is not listed in this table.

[B] Pharmacist will assess renal function-based dose adjustment prior to initiating therapeutic interchange

[C] Accepted renally dosed regimens will be selected based upon Lexicomp

Intranasal Corticosteroids

Drug
Ciclesonide
Flunisolide
Fluticasone propionate
Fluticasone furoate
Beclomethasone
Budesonide
Mometasone
Triamcinolone

Intranasal Antihistamines

Drug
Azelastine 137 mcg/spray
Azelastine 0.1% or 0.15% spray
Olopatadine 0.6% spray

Nebulized Electrolyte[a,b]

Drug	Interchangeable Products
Sodium chloride nebulized solution	3% 3.5%

[a] Instructions will remain the same

[b] Pharmacists may interchange new prescriptions unless the provider indicates "do not substitute" or similar language in the order. For patients already established on therapy, the pharmacist will notify and educate the patient on the product change.

Ophthalmic Antihistamines

Drug	Dose Equivalent
Ketotifen fumarate 0.025%	1 drop in each affected eye every 8 to 12 hours
Olopatadine 0.1%	1 drop in each affected eye twice daily
Olopatadine 0.2%	1 drop in each affected eye daily

Phosphodiesterase-5 Enzyme (PDE-5) Inhibitors

Drug[a]	Dose Equivalent		
Avanafil	50 mg daily	100 mg daily	200 mg daily
Sildenafil	20 to 25 mg daily	40 to 50 mg daily	100 mg daily
Tadalafil	5 mg daily	10 mg daily	20 mg daily
Vardenafil	5 mg daily	10 mg daily	20 mg daily

[a] Pharmacist will make a therapeutic interchange only if patient is using for treatment of erectile dysfunction

[b] Need for adjusted dosing based on patient's kidney function, hepatic function and/or concomitant use of potent CYP3A4 inhibitors (e.g., ketoconazole, clarithromycin, ritonavir), moderate CYP3A4 inhibitors (fluconazole, verapamil, diltiazem), or alpha-blockers will be assessed by the pharmacist prior to initiating a therapeutic interchange

[c] Accepted renal or hepatic dosed regimens will be selected based upon Lexicomp

Proton Pump Inhibitors (PPI) for GERD

Drug	Daily Dose Equivalent	
Dexlansoprazole	30 mg daily	60 mg daily or 30 mg twice daily
Esomeprazole	20 mg daily	40 mg daily or 20 mg twice daily
Lansoprazole	15 mg daily	30 mg daily or 15 mg twice daily
Omeprazole	20 mg daily	40 mg daily or 20 mg twice daily
Pantoprazole[a]	20 mg to 40 mg daily	40 mg twice daily
Rabeprazole	20 mg daily	20 mg twice daily

[a] If patient on clopidogrel (Plavix), pantoprazole will be designated PPI

Triptans

Drug	Dose Equivalent			Daily Maximum
Sumatriptan	25 mg per dose	50 mg per dose	100 mg per dose	200 mg
Almotriptan	6.25 mg per dose	12.5 mg per dose	N/A	25 mg
Eletriptan	20 mg per dose	40 mg per dose	N/A	80 mg
Frovatriptan	2.5 mg per dose	2.5 mg per dose	N/A	7.5 mg
Naratriptan	1 mg per dose	2.5 mg per dose	N/A	5 mg
Rizatriptan	5 mg per dose	10 mg per dose	N/A	30 mg
Zolmitriptan	1.25 mg per dose	2.5 mg per dose	5 mg per dose	10 mg

[a] Need for adjusted dosing based on patient's kidney function, hepatic function and/or concomitant use of potent CYP3A4 inhibitors (e.g., ketoconazole, clarithromycin, ritonavir) will be assessed by the pharmacist prior to initiating a therapeutic interchange.

[b] Accepted renal or hepatic dosed regimens will be selected based upon Lexicomp

[c] The pharmacist will adjust the prescription to reflect appropriate timing of second dose based on Lexicomp if dose is equivalent but frequency between a repeat dose is different between medications

Topical Corticosteroids

Pharmacist will make a therapeutic interchange in the same potency group and will switch vehicle only with patient approval.

Super-high potency (Group 1)

Drug	Vehicle type/form	Available Strengths
Betamethasone dipropionate, augmented	• Ointment, optimized • Lotion • Gel	0.05%
Clobetasol propionate	• Ointment • Cream • Cream, emollient base • Gel • Lotion • Foam aerosol • Foam aerosol (scalp) • Shampoo • Solution (scalp) • Spray aerosol	0.05%

Fluocinonide	• Cream	0.1%
Flurandrenolide	• Tape (roll)	4 mcg/cm^2
Halobetasol propionate	• Ointment • Cream • Lotion	0.05%

High Potency (Group 2)

Drug	Vehicle type/form	Available Strengths
Betamethasone dipropionate	• Ointment • Cream, augmented formulation (AF)	0.05%
Desoximetasone	• Ointment • Cream	0.25%
	• Gel	0.05%
Diflorasone diacetate	• Cream, emollient	0.05%
Fluocinonide	• Ointment • Gel • Cream anhydrous • Solution	0.05%
Halcinonide	• Ointment • Cream	0.1%

High Potency (Group 3)

Drug	Vehicle type/form	Available Strengths
Betamethasone dipropionate	• Cream, hydrophilic emollient	0.05%
Betamethasone valerate	• Ointment	0.1%
	• Foam	0.12%
Desoximetasone	• Cream	0.05%
Fluocinonide	• Cream aqueous emollient	0.05%
Fluticasone propionate	• Ointment	0.005%
Mometasone furoate	• Ointment	0.1%
Triamcinolone acetonide	• Ointment • Cream	0.5%

Medium Potency (Group 4)

Drug	Vehicle type/form	Available Strengths
Betamethasone dipropionate	• Spray	0.05%
Clocortolone pivalate	• Cream	0.1%
Flurandrenolide	• Ointment	0.05%
Hydrocortisone valerate	• Ointment	0.2%
Mometasone furoate	• Cream • Lotion • Solution	0.1%
Triamcinolone acetonide	• Cream • Ointment	0.1%
	• Aerosol Spray	0.2 mg per 2 second spray

Lower-mid Potency (Group 5)

Drug	Vehicle type/form	Available Strengths
Betamethasone dipropionate	• Lotion	0.05%
Betamethasone valerate	• Cream	0.1%
Desonide	• Ointment • Gel	0.05%
Flurandrenolide	• Cream • Lotion	0.05%
Fluticasone propionate	• Cream • Lotion	0.05%
Hydrocortisone butyrate	• Ointment • Cream • Lotion, spray • Lotion • Solution	0.1%
Hydrocortisone probutate	• Cream	0.1%
Hydrocortisone valerate	• Cream	0.2%
Prednicarbate	• Cream, emollient • Ointment	0.1%
Triamcinolone acetonide	• Lotion	0.1%
	• Ointment	0.025%

Low Potency (Group 6)

Drug	Vehicle type/form	Available Strengths
Alclometasone dipropionate	• Ointment • Cream	0.05%
Betamethasone valerate	• Lotion	0.1%
Desonide	• Cream • Lotion • Foam	0.05%
Fluocinolone acetonide	• Cream • Solution • Shampoo • Oil (scalp) • Oil (body)	0.01%
Triamcinolone acetonide	• Cream • Lotion	0.025%

Least Potent (Group 7)

Drug	Vehicle type/form	Available Strengths
Hydrocortisone (base, ≥2%)	• Ointment • Cream	2.5%
	• Lotion	2.5% or 2%
	• Solution	2.5%
Hydrocortisone (base, <2%)	• Ointment • Cream	1% or 0.5%
	• Lotion • Spray • Solution	1%

Hydrocortisone acetate with pramoxine 1% combination	• Ointment • Cream • Lotion	2.5% or 1%
	• Aerosol foam	1%

Topical Lidocaine

Drug	Dosage form alternatives
Lidocaine 5% Patch	Lidocaine 4% cream[a] Lidocaine 4% patch[a] Lidocaine 5% ointment

[a] Available OTC