

ANTIHYPERTENSIVES			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Angiotensin Converting Enzyme (ACE) Inhibitors	Benazepril / amlodipine (Lotrel®) Benazepril (Lotensin®) Benazepril / HCTZ (Lotensin HCT®) Captopril (Capoten®) Captopril / HCTZ (Capozide®) Enalapril (Vasotec®) Enalapril / HCTZ (Vaseretic®) Fosinopril (Monopril®) Fosinopril / HCTZ (Monopril HCT®) Lisinopril (Prinivil®, Zestril®) Lisinopril / HCTZ (Prinzide® or Zestoretic®) Moexipril (Univasc®) Moexipril / HCTZ (Uniretic®) Perindopril (Aceon®) Quinapril (Accupril®) Quinapril / HCTZ (Accuretic®) Ramipril (Altace®) Trandolapril (Mavik®) Trandolapril/verapamil (Tarka®)	HOLD Day of Surgery (Do NOT hold day of surgery for cataract patients)	Potential Hypotension intra-op risk
Angiotensin Receptor Blockers (ARB)	Azilsartan (Edarbi®) Candesartan (Atacand®) Candesartan/HCTZ (Atacand HCT®) Eprosartan (Teveten®) Eprosartan/HCTZ (Teveten HCT®) Irbesartan (Avapro®) Irbesartan / HCTZ (Avalide®) Losartan (Cozaar®) Losartan / HCTZ (Hyzaar®) Olmesartan (Benicar®) Olmesartan / HCTZ (Benicar HCT®) Telmisartan (Micardis®) Telmisartan/HCTZ (Micardis HCT®) Valsartan (Diovan®) Valsartan / HCTZ (Diovan HCT®)	HOLD Day of Surgery (Do NOT hold day of surgery for cataract patients)	Potential Hypotension intra-op risk
Beta Blockers	Acebutolol (Sectral) Atenolol (Tenormin) Betaxolol (Kerlone) Bisoprolol (Zebeta) Carvedilol (Coreg) Labetalol (Trandate®) Metoprolol (Lopressor, Toprol XL) Nadolol (Corgard) Nebivolol (Bystolic) Penbutolol (Levatol) Pindolol (Visken) Propranolol (Inderal) Sotalol (Betapace)	Do NOT hold prior to surgery	Withdrawal/rebound effects if held

ANTIHYPERTENSIVES (Cont.)			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Calcium Channel Blockers	Amlodipine (Norvasc®) Amlodipine/Atorvastatin (Caduet®) Clevipidine (Cleviprex®) Diltiazem (Cardizem®) Felodipine (Plendil®) Isradipine (Dynacirc®) Nicardipine (Cardene®) Nifedipine (Procardia®, Adalat®) Nimodipine (Nimotop®) Verapamil (Calan®, Covera-HS®, Verelan®)	Do NOT hold prior to surgery	
Alpha2 Agonists	Clonidine (Catapres®)	Do NOT hold prior to surgery	Withdrawal/ rebound effects if held
Antidysrhythmics	Amiodarone (Pacerone®, Cordarone®) Dofetilide (Tikosyn®) Digoxin (Lanoxin®) Disopyramide (Norpac®) Flecainide (Tambocor)	Do NOT hold prior to surgery	
Diuretics	Acetazolamide (Diamox®) Amiloride Amiloride/Hydrochlorothiazide Moduretic®) Bendroflumethiazide Bumetanide (Bumex®) Chlorothiazide (Diuril®) Chlorthalidone (Thalitone®) Eplerenone (Inspra®) Ethacrynic acid (Edecrin®) Furosemide (Lasix®) Hydrochlorothiazide(Microzide®, Esidrix®) Indapamide (Lozol®) Metolazone (Zaroxolyn®) Methazolamide Methyclothiazide Metolazone (Zaroxolyn®) Spironolactone (Aldactone®) Spironolactone/Hydrochlorothiazide (Aldactazide®) Torsemide (Demadex®) Triamterene (Dyrenium®) Triamterene / HCTZ (Dyazide®, Maxzide®)	HOLD day of surgery	Increases the risk of hypokalemia / hypovolemia
Lipid-Lowering Agents/ Statins	Atorvastatin (Lipitor) Ezetimibe (Zetia®) Fluvastatin (Lescol) Lovastatin (Mevacor) Pitavastatin (Livalo) Pravastatin (Pravachol) Rosuvastatin (Crestor) Simvastatin (Zocor)	Do NOT hold prior to surgery	

RESPIRATORY MEDICATIONS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Bronchodilators	Albuterol (ProAir®, Proventil®, Ventolin®) Albuterol/Ipratropium (Duoneb®, Combivent®) Formoterol/Budesonide (Symbicort®) Formoterol/Mometasone (Dulera®) Ipratropium (Atrovent®) Levalbuterol (Xopenex®) Salmeterol (Serevent®) Salmeterol/Fluticasone (Advair®)	Use on day of surgery and bring inhaler on surgery day	
Inhaled Steroids	Beclomethasone (QVAR®) Budesonide (Pulmicort®) Ciclesonide (Alvesco®) Flunisolide (AeroBid®) Fluticasone (Flovent®) Fluticasone furoate (Arnuity Ellipta®) Mometasone (Asmanex®) Salmeterol/Fluticasone (Advair®, Wixela®) Triamcinolone (Asmacort®) Vilanterol/Fluticasone Furoate (Breo Ellipta®)	Use on day of surgery	
ANTICOAGULANTS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Direct Thrombin Inhibitors	Dabigatran (Pradaxa®) Vorapaxar (Zontivity®)	Do not discontinue without consulting prescribing physician	Increased risk of bleeding complications. No spinal or epidural within seven days of last dose.
Factor XA Inhibitor	Apixaban (Eliquis®) Betrixaban (Bevyxxa®) Edoxaban (Savaysa®) Fondaparinux (Arixtra®) Rivaroxaban (Xarelto®)	Do not discontinue without consulting prescribing physician	Increased risk of bleeding complications.
Heparin SQ	Heparin SQ	At least 4 hours prior to surgery	Increased risk of bleeding complications.
Low molecular weight heparin	Dalteparin (Fragmin®) Enoxaparin (Lovenox®)	24 hrs prior to surgery if on full anticoagulant dose (1 mg/kg), 12 hrs prior to surgery if on DVT prophylaxis dose (0.5 mg/kg)	Increased risk of bleeding; No spinal or epidural within 12 hrs of prophylaxis dose (0.5 mg/kg) and 24 hrs of therapeutic dose (1 mg/kg)

ANTICOAGULANTS (Cont.)			
DRUGS CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Warfarin	Warfarin (Coumadin®)	Do not discontinue without consulting prescribing physician	Increased bleeding risk.
Aspirin (and Aspirin- containing drugs)	Aspirin Aspirin/acetaminophen/caffeine (Excedrin®) Aspirin/butalbital/caffeine (Fiorinal®) Aspirin/carisoprodol (Soma Compound®) Aspirin/carisoprodol/codeine (Soma compound w/ codeine®) Aspirin/dipyridamole (Aggrenox®) Aspirin/orphenadrine/caffeine (Norgesic®) Aspirin/oxycodone (Percodan®)	If no history of CAD or stroke: Discontinue 5-10 days prior to surgery, especially for ophthalmologic and neurosurgical procedures. Patients with hx of CAD or stroke: Continue Aspirin, including day of surgery if at all possible. Need to consult with surgeon if neuro/ spine/ ophthalmologic surgeon.	Increased risk of bleeding complications
Anti-Platelet Drugs	Clopidogrel (Plavix®) Prasugrel (Effient®) Ticagrelor (Brilinta®) Ticlopidine (Ticlid®) Vorapaxar (Zontivity®) Cilostazol (Pletal®) Dipyridamole (Persantine®) Dipyridamole/Aspirin (Aggrenox®)	Do NOT discontinue without explicit instructions from prescribing physician! Must be documented by prescribing physician on form N-372 (Request for Preoperative Cardiac Evaluation) HOLD 4 days preop HOLD 2 days preop HOLD 7 days preop	Increased risk of bleeding complications

NSAIDs			
DRUGS CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Short-acting NSAIDs	Diclofenac (Cataflam®, Voltaren®) Etodolac (Lodine®) Fenoprofen (Nalfon®) Flurbiprofen (Ansaid®) Ibuprofen (Advil®, Motrin®) Ibuprofen/Hydrocodone (Vicoprofen®) Ibuprofen/Oxycodone (Combunox®) Indomethacin (Indocin®) ketoprofen (Orudis KT®, Oruvail®) ketorolac (Toradol®) Meclofenamate (Meclomen®) Mefenamic Acid (Ponstel®) Tolmetin (Tolectin®)	HOLD day prior to surgery	Increased risk for bleeding and renal complications
Long-acting NSAIDs	Diflunisal (Dolobid®) Etodolac (Lodine XL®) Meloxicam (Mobic®) Nabumetone (Relafen®) Naproxen (Aleve®, Anaprox®, Naprosyn®) Oxaprozin (Daypro®) Piroxicam (Feldene®) Sulindac (Clinoril®)	At least 3 days prior to surgery	Increased risk for renal, thrombo-embolic complications
Cox-2 Inhibitors	Celecoxib (Celebrex®) Nabumetone (Relafen)	At least 3 days prior to surgery	Increased risk for renal, thrombo-embolic Complications
OPIOID PAIN MEDICATIONS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Long-Acting Opioids	Fentanyl Patch (Duragesic®) Hydromorphone SR (Exalgo®) Methadone (Dolophine®) Morphine SR (MS Contin®, Kadian®, Avinza®) Morphine SR/Naltrexone (Embeda®) Oxycodone SR (Oxycontin®) Oxymorphone (Opana ER®)	Do NOT hold prior to surgery	Discontinuation may result in opioid withdrawal and difficulty with postoperative pain control.

OPIOID PAIN MEDICATIONS (Cont.)			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Short-Acting Opioids	Hydrocodone Hydrocodone/Acetaminophen (Hycet®, Lorcet®, Lortab®, Norco®, Vicodin®, Zydone®) Hydrocodone/Ibuprofen (Vicoprofen®) Hydromorphone (Dilaudid®) Hydromorphone ER (Exalgo®) Morphine Oxycodone (Roxicodone®) Oxycodone/Acetaminophen (Percocet®, Endocet®, Roxicet®) Oxycodone/Aspirin (Percodan®, Endodan®) Propoxyphene/Acetaminophen (Darvocet®) Propoxyphene/Aspirin (Darvon®) Tapentadol (Nucynta)	Do NOT hold prior to surgery Switch patient from Aspirin and Ibuprofen containing drugs one week pre-op.	Discontinuation may result in opioid withdrawal and difficulty with postoperative pain control.
Opioid Agonist/Antagonists	Buprenorphine/Naloxone (Suboxone®) Buprenorphine patch (Butrans®) Naltrexone (Vivitrol, ReVia, Depade)	Buprenorphine can be continued as prescribed including day of surgery and bring daily dose to hospital for post-op. Naltrexone should be transitioned to alternative medication 1-2 weeks prior to elective surgery by the prescribing physician. If transition cannot occur, continue on DOS	May cause difficulty with postoperative pain control, high opioid requirements.
PAIN MEDICATIONS MISC.			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Topical local Anesthetic	Lidocaine patch	Continue	
Skeletal Muscle Relaxant	Baclofen (Lioresal®) Carisoprodol (Soma®) Cyclobenzaprine (Flexeril®) Diazepam (Valium®) Methocarbamol (Robaxin®)	Continue	

STEROID AND IMMUNE MEDICATIONS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Steroids	Prednisone Methylprednisolone (Medrol®)	Do NOT hold prior to surgery	Adrenal insufficiency
THYROID MEDICATIONS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Thyroid hormone	Levothyroxine (Synthroid®, Levoxyl®) Liothyronine (Cytomel®) Dessicated thyroid (Armour Thyroid®)	Do NOT hold prior to surgery	
DIABETES MEDICATIONS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Short-Acting Insulin	Regular Insulin (Humulin, Novolin) Insulin Aspart (Novolog) Insulin Glulisine (Apidra) Insulin Lispro (Humalog)	Hold day of surgery – unless otherwise specified by prescriber	
Intermediate- Acting Insulin	Insulin NPH (Humulin N, Novolin N) Humulin 70/30 Humalog 50/50 Humalog 75/25 Novolin 70/30 Novolog 70/30	Take ½ dose of intermediate acting night prior – unless otherwise specified by prescriber	
Long-Acting Insulin	Insulin Glargine (Lantus, Toujeo) Insulin Detemir (Levimir) Insulin Degludec (Tresiba)	Take ½ dose of long acting night prior – unless otherwise specified by prescriber	
Non-Insulin Injections	Linagliptin (Tradjenta) Pramlintide (Symlin®)	Per regimen unless otherwise specified by prescriber	
GLP-1 Receptor Agonists	Dulaglutide (Trulicity) Exenatide ER (Bydureon BCise) Exenatide IR (Byetta) Liraglutide (Saxenda, Victoza) Semaglutide (Ozempic, Rybelsus Wegovy) Tirzepatide (Mounjaro) Lixisenatide/Insulin Glargine (Soliqua)** Liraglutide/Insulin Degludec (Xultophy)** ** ½ dose night before (if taken in PM) ** ½ dose day of (if taken in AM)	Hold 1-2 weeks prior to surgery. *if dosed daily—hold day before and day of procedure.	Due to long half-life, GLP-1 receptor agonists delay gastric emptying, potentially increasing gastric volumes even after appropriate NPO time of >8 hours. This side effect raises concerns regarding risk of aspiration during anesthesia induction.

DIABETES MEDICATIONS (Cont.)			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Oral Diabetic Drugs	Alogliptin (Nesina®) Alogliptin/Pioglitazone (Oseni®) Acarbose (Glucobay®) Glimepride (Amaryl®) Glyburide (Diabeta®) Linagliptin (Tradjenta®) Metformin Pioglitazone (Actos®) Rosiglitazone (Avandia®) Saxagliptin/Metformin ER (Kombiglyze XR®) Sitagliptin (Januvia®) Sitagliptin/Metformin ER (Janumet®) Sitagliptin/Ertugliflozin (Steglujan®)	Hold PM dose night before surgery and also hold day of surgery – unless otherwise specified by prescriber	
SGLT-2 Inhibitors	Bexagliflozin (Brenzavvy®) Canagliflozin/Metformin (Invokamet®) Dapagliflozin/Metformin (Xigduo®) Empagliflozin/Linagliptin (Synjardy®) Ertrugliflozin (Steglatro®) Dapagliflozin (Farxiga®)* Empagliflozin (Jardiance®)* Canagliflozin (Invokana®)	Hold PM dose night before surgery & also hold day of surgery – unless otherwise specified by prescriber *Same instructions if taken for Cardiac condition *Same instructions if taken for End Stage Kidney disease	Risk for low blood glucose under general anesthesia
CNS AGENTS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Benzodiazepines	Alprazolam (Xanax®) Chlordiazepoxide (Librium®) Diazepam (Valium®)	Do NOT hold prior to surgery	Risk of withdrawal if stopped abruptly; potential for additive effects
Antidepressants - Monoamine Oxidase (MAO) Inhibitors	Isocarboxazid (Marplan®) Phenelzine (Nardil®) Tranylcypromine (Parnate®) Rasagiline (Azilect®) Selegiline patch (Emsam®)	Taper off 2 weeks prior to surgery if possible. Consult with prescribing provider for taper. OK to continue Discontinue at least 10 days prior to surgery if possible. Consult with prescribing provider for taper.	Drug interactions (e.g., ephedrine, meperidine, methadone, tramadol), which could cause a hypertensive crisis.

CNS AGENTS (Cont.)			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Antidepressants – SSRIs and SNRIs	Citalopram (Celexa®) Duloxetine (Cymbalta®) Escitalopram (Lexapro®) Fluoxetine (Prozac®) Fluvoxamine (Luvox®) Paroxetine (Paxil®) Sertraline (Zoloft®) Strattera (Atomoxetine®) Desvenlafaxine (Pristiq, Khedezla)	Do NOT hold prior to surgery	Risk of withdrawal if stopped abruptly
Antidepressants - Other	Amitriptyline (Elavil®) Bupropion (Wellbutrin®) Desipramine (Norpramin®) Doxepin (Sinequan®) Imipramine (Tofranil®) Mirtazapine (Remeron®) Nefazodone (Serzone®) Nortriptyline (Pamelor®) Trazodone (Desyrel®)	Do NOT hold prior to surgery	Risk of withdrawal if stopped abruptly
Lithium	Lithium (Eskalith®, Lithonate®)	Do NOT hold prior to surgery	
Acetyl- cholinesterase Inhibitors (for Alzheimer's)	Donazepil (Aricept®) Galantamine (Razadyne®) Memantine (Namenda®) Rivastigmine (Exelon®) Tacrine (Cognex®)	Do NOT hold prior to surgery	
Anticonvulsants	Carbamazepine (Tegretol®) Clonazepam (Klonopin®) Felbamate (Felbatol®) Gabapentin (Neurontin®) Levetiracetam (Keppra®) Lamotrigine (Lamictal®) Oxcarbazepine (Trileptal®) Phenytoin (Dilantin®) Pregabalin (Lyrica®) Primidone (Mysoline®) Tiagabine (Gabitril®) Topiramate (Topamax®) Valproic Acid (Depakote®) Zonisamide (Zonegran®)	Do NOT hold prior to surgery	

CNS AGENTS (Cont.)			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
ADHD Drugs (Stimulants)	Dextroamphetamine (Adderall®) Lisdexamfetamine (Vyvanse®) Dexmethylphenidate (Focalin®) Methylphenidate (Ritalin®, Metadate®, Concerta®, Daytrana patch®)	Do NOT hold prior to surgery	No documented interaction with anesthesia medications
ADHD Drugs (non- stimulant)	Guanfacine (Intuniv®)	Do NOT hold prior to surgery	Risk of rebound hypertension if withheld.
Sleep Aids	Zolpidem (Ambien®) Eszopiclone (Lunesta®)	May take night before surgery	
Restless legs	Ropinirole (Requip) Pramipexole (Mirapex)	Continue	
REFLUX MEDICATIONS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Proton Pump Inhibitors	Esomeprazole (Nexium®) Lansoprazole (Prevacid®) Omeprazole (Prilosec®) Pantoprazole (Protonix®) Rabeprazole (Aciphex®)	Do NOT hold prior to surgery	Reflux prevention
Histamine H2 blockers	Cimetidine (Tagamet®) Famotidine (Pepcid®) Nizatidine (Axid®) Ranitidine (Zantac®)	Do NOT hold prior to surgery	Reflux prevention
Particulate Antacids	Gaviscon® Maalox®	HOLD day of surgery	Risk of particulate aspiration
OTHER DRUGS			
DRUG CLASS	DRUGS IN CLASS	WHEN TO HOLD	REASON
Appetite Suppressant (Diet Drug)	Phentermine (Adipex®, Lomaira®) Phentermine / Topiramate (Qsymia®) Benzphetamine (Didrex, Regimex) Diethylpropion Methamphetamine (Desoxyn) Phendimetrazine (Bontril PDM) Bupropion/naltrexone (Contrave®)	Discontinue at least 7 days pre-op Discontinue at least 48 hours pre-op	Risk of hypotension that is unresponsive to treatment. May cause difficulty with postoperative pain control.
Other Medical patches	Estrogen patch Nicotine patch	Continue	
Herbal Supplements	See List	Discontinue at least one week pre-op	Risk of bleeding, blood pressure problems, slow awakening from anesthesia, etc.

Herbals and Dietary Supplements with the Potential to Increase Bleeding

Agrimony Andrographis Angelica Anise Arnica Asafoetida Aspen Bilberry Black Haw Bladder Wrack (Fucus) Bogbean Boldo Borage Bromelain Buchu Burdock Capsicum Carrageenan Celery Chamomile (German and Roman) Chinese prickly ash Cinchona Clove Cod liver oil Coltsfoot Danshen Deertongue DHA (docosahexaenoic acid) Dong quai EPA (eicosapentaenoic acid) Epimedium Evening primrose oil Evodia	Fenugreek Feverfew Fish oil Flaxseed Forskolin Forsythia Garlic Gamma linolenic acid German Sarsaparilla Ginger Ginkgo Biloba Ginseng (Panax, Siberian) Green tea Guggul Holy basil Honeysuckle Horse Chestnut Horseradish Inositol Nicotinate Japanese apricot Jiaogulan Krill Oil Kudzu Licorice Meadowsweet Melatonin Methoxylated flavones Nattokinase Onion Palm oil Pantethine Passion Flower Pau d'Arco	Peony Policosanol Poplar Prickly Ash (Northern) Quassia Red Clover Resveratrol Safflower Saw palmetto Sea buckthorn Selenium Senega Serrapeptase Swallowroot Sweet Clover Sweet Vernal grass Sweet Woodruff Tamarind Tiratricol Tonka Beans Turmeric Vanadium Vinpocetine Vitamin E Wild Carrot Wild Lettuce Willow Bark Wintergreen Yarrow
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It is recommended that patients discontinue herbal supplements at least one week prior to surgery.