

Medication Instructions for Patients Having Surgery at PAMC

You have been scheduled for a surgery/procedure at Providence Alaska Medical Center. Please read the following instructions carefully, regarding the management of your medications before surgery. Unless otherwise indicated, these instructions take precedence over any instructions from your surgeon’s office.

Please feel free to contact Pre-Admission Testing at 212-6013 anytime from 8 AM – 6PM Monday thru Friday with questions or concerns.

DO NOT TAKE ACE-inhibitors (ending in “-pril”) or **angiotensin receptor blockers** (ending in “-sartan”) on the day of surgery. This includes any combination drug that includes one of these medications. Some examples follow (with both generic and brand names).

<u>ACE-Inhibitors</u>	<u>Angiotensin Receptor Blockers</u>
Lisinopril (Zestril, Novatec, Prinivil)	Losartan (Cozaar)
Enalapril (Vasotec)	Valsartan (Diovan)
Ramipril (Altace)	Olmesartan (Benicar)
Benazepril (Lotensin)	Irbesartan (Avapro)
Quinapril (Accupril)	Telmisartan (Micardis)
Candesartan (Atacand)	

DO NOT TAKE the following Diuretics on the day of surgery:

- Hydrochlorothiazide (Microzide, HCTZ)
- Chlorthalidone (Hygroton, Thalitone)
- Metolazone (Zaroxolyn)
- Furosemide (Lasix)
- Torsemide (Demadex)
- Bumetanide (Bumex)
- Spironolactone (CaroSpir, Aldactone)

CONTINUE all other blood pressure medications on the day of surgery (as regularly scheduled, with a sip of water), unless otherwise instructed by your cardiologist or cardiac surgeon.

CONTINUE all inhalers on the day of surgery (as regularly scheduled).

CONTINUE all pain medication on day of surgery (as regularly scheduled).

CONTINUE all Thyroid hormones on day of surgery (as regularly scheduled) unless otherwise instructed.

CONTINUE all Anti-seizure medication on day of surgery (as regularly scheduled) unless otherwise instructed.

CONTINUE all Birth control/hormone replacements on day of surgery (as regularly scheduled) unless otherwise instructed.

CONTINUE all Anti-depressant medication on day of surgery (as regularly scheduled) unless otherwise instructed

STOP/CONTINUE your insulin or oral diabetes medication as directed by the **instruction on the Table 1 below**.

STOP all herbal supplements 7 days before surgery, if possible. Failure to follow these instructions (or discuss alternative plan with doctor) may result in surgery being delayed or cancelled. See Table 2 below.

CPAP/BiPAP: If you use CPAP or BiPAP at home please bring your own machine and mask (clean and in working order) on the day of your surgery.

Anticoagulants & Anti-platelet Agents

Anticoagulants are blood-thinners are medications like Heparin, Enoxaparin (Lovenox), Warfarin (Coumadin), Rivaroxaban (Xarelto), Apixaban (Eliquis), and Dabigatran (Pradaxa), among others. Anti-platelet agents include Aspirin, Clopidogrel (Plavix), Prasugrel (Effient), Ticlid (ticlopidine) and Pletal (cilostazol) used to treat peripheral vascular disease, and others. *The continuation or discontinuation of these medications is to be determined by your surgeon, who should be in communication with your prescribing doctor (e.g. cardiologist, neurologist).*

STOP all prescription amphetamines 7 days before surgery, if possible. These include drugs such as phentermine, amphetamine, ephedrine/ephedra, and dextroamphetamine (among others). If taken for weight loss, they should be stopped 7 days before surgery. If taken for a psychiatric or neurologic condition (e.g. narcolepsy), they may be continued. *If prescription amphetamines will not be stopped 7 days before surgery, please continue taking them up to and including the day of surgery.* Failure to follow these instructions can lead to life-threatening problems with anesthesia on the day of surgery.

-BEWARE OF THE FOLLOWING DRUGS:

- Buprenorphine** (Subutex, Suboxone, Sublocade, Zubsolv, Bunavail)
- **Naltrexone** (Revia, Contrave, Vivitrol)
- Any drug containing either of these two.**

Buprenorphine will make most other opioids ineffective during and after surgery. **We strongly recommend that, 5-7 days before your surgery, you transition from buprenorphine to another long-acting opioid.** This plan must be made with the prescriber of your buprenorphine (e.g. chronic pain doctor). Under the supervision of your prescriber, you may transition back to the buprenorphine several days or weeks after surgery, depending on the type of surgery. If you remain on buprenorphine until your surgery, the only opioid that can be used to treat pain after surgery will be more buprenorphine, which has quite limited benefit when compared to other opioids. It should be noted that surgeries that do not involve significant pain afterward can be done while you are taking buprenorphine on board--this can be discussed with your surgeon.

Naltrexone completely blocks the opioid receptor for at least 48 hours, blocking the effects of any opioids. **Oral naltrexone (Revia, Contrave) must be stopped 48 hours prior surgery. Vivitrol is a long-acting injectable version of naltrexone- if you are getting Vivitrol injections every month, ideally surgery should be scheduled for one month after your last injection.**

Pre-operative instructions for Insulin & Diabetes Medication

Drug Type	Examples	Day Before Surgery	Day of Surgery
Insulin Pump	n/a	No change	Use “sick day” or “sleep” basal rate if possible. Otherwise, no change.
Long-acting insulins	Glargine (Lantus) Detemir (Levemir) Degludec (Tresiba)	No change (50% of evening dose <i>if</i> patient has history of nocturnal or morning hypoglycemia, <i>or</i> has a pre-operative bowel prep)	50% of morning dose Review ASU guidelines for this may be 70%-80% usual dose
Intermediate- acting insulins	NPH (Novolin N, Humulin N-NF) Zinc insulin (Lente) Extended zinc insulin (Ultralente)	No change in daytime dose; 50% of evening dose	50% of morning dose
Fixed combination insulins	70% NPH/30% Regular 50% NPH/50% Regular	No change	50% of morning dose (check blood sugar before coming to hospital or if symptoms of hypoglycemia)
Short- & rapid- acting insulins	Regular (Novolin R, Humulin R) Lispro (Humalog) Aspart (Novolog)	No change	Hold dose
Non-insulin injectables	Exenatide (Byetta) Pramlintide (Symlin)	No change	Hold dose

Oral diabetes drugs	Metformin (Glucophage) Glipizide (Glucotrol) Pioglitazone (Actos) Sitagliptin (Januvia) Saxagliptin (Onglyza) Linagliptin (Tradjenta) Rosiglitazone (Avandia) Alogliptin (Nesina) ** Also see below	No change (Exception: In patients with chronic kidney disease <i>or</i> receiving IV contrast dye, <i>metformin</i> should be stopped 24 hours before surgery)	Hold dose
SGLT2 Inhibitors	Canaglifozin (Invokana) Dapaglifozin (Farxiga) Empaglifozin (Jardiance) Ertuglifozin (Stelagro)	Hold 3 days before surgery for diabetes management	Hold dose
Glucagon -like-peptide-1 (GLP-1) agonists are a new class of drugs approved for treatment of type 2 diabetes, cardiovascular disease, and obesity associated with excess caloric intake.	Ozempic (semaglutide) Trulicity (dulaglutide) Victoza (liraglutide) Byetta Bydureon Saxenda Tanzeum Adlyxin Rybelsus Wegovy	Hold GLP-1 agonists one week prior to surgery for patients who take the medication weekly. Hold GLP-1 agonists on the day of surgery for patients who take the drug daily.	Hold dose

Pre-operative instructions for Herbal Supplements

Some supplements increase the risk of perioperative complications. Below is a table listing the most commonly used substances.

All herbal supplements should be stopped seven days prior to surgery if possible. Please check with your surgeon to determine whether or not you should discontinue your herbal supplements.

Supplement	Potential Effects & Perioperative Concerns
Garlic	Bleeding
Ginger	Bleeding
Ginkgo	Bleeding
Ginseng	Bleeding, Hypoglycemia
St. John's Wort (hypericin)	Prolonged sedation, Hemodynamic instability, Serotonin Syndrome
5-HTP	Serotonin Syndrome

Kava*	Prolonged sedation
Valerian Root*	Prolonged sedation
Echinacea	Immune system effects, Hepatic dysfunction
Ephedra (Ma Huang)**	Tachycardia, hypertension, vasospasm

The following supplements may also (to a lesser extent) lead to bleeding, and should be stopped seven (7) days prior to surgery:

Fish Oil/Omega-3 Fatty Acids

Vitamin E

Glucosamine

Dong Quai

Feverfew

Goldenseal

Bromelain

Grape Seed Extract

Saw Palmetto

Flax Seed Oil

Horse Chestnut

Dandelion Root

Chamomile

Bilberry