

**Blood Thinners Guidance:**

<b>High Risk Procedures</b>			
<b>Procedure</b>	<b>Medications</b>	<b>Hold For</b>	<b>Resume</b>
Dorsal Root Ganglion Permanent Implant	Abciximab (Repro)	2-5 days	8-12 hour
Dorsal Root Ganglion trial	Apixaban (Eliquis)	3 days	24 hour
Intrathecal Catheter Replacement	Argatroban/Bivalrudin/Desirudin	unknown	unknown
Intrathecal Pump Permanent	Aspirin (any dose)	6 days or more	24 hour
Kyphoplasty	Celecoxib (Celebrex)	None	None
SCS Permanent Implant	Cilostazol (Pletal)	2 days	24 hour
SCS Revision with Lead change	Colpidogrel (Plavix)	5-7 days	12-24 hour
SCS Trial	Coumadin (Warfarin)	5 days INR<=1.2	24 hour
Vertiflex/Superion Indirect Decompression	Dabigatran (Pradaxa)	4 days (5-6 if impaired renal fxn)	24 hour
Vertebroplasty	Diclofenac (Voltaren)	1 day	24 hour
	Dipyridamole (Persantine)	2 days	24 hour
	Edoxaban (Savaysa)	3 days	24 hour
	Eptifibatide (Integrilin)	8-24 hours	8-12 hours
	Etodolac (Lodine)	2 days	24 hour
	Fish Oil	6 days	24 hour
	Garlic	7 days	24 hour
	Fondaparinux (Arixtra)	4 days	24 hour
	Heparin SQ	24 hours	6-8 hour
	Ibuprofen (Advil, Motrin)	1 day	24 hour
	Indomethacin (Indocin)	2 day	24 hour
	IV Heparin Infusion	6 hours	24 hour
	Ketorolac (Toradol)	1 day	24 hour
	LMWH (Lovenox)	12-24 hours	8-12 hour
	Meloxicam (Mobic)	4 day	24 hour
	Nabumetone (Relafen)	6 days	24 hour
	Naproxen (Aleve)	4 days	24 hour
	Oxaprozin (Daypro)	10 days	24 hour
	Piroxicam (Feldene)	10 days	24 hour
	Prasugrel (Effient)	7-10 days	24 hour
	Rivaroxaban (Xarelto)	3 days	24 hour
	Ticlopidine (Ticlid)	5 days	24 hour
	Tirofiban (Aggrastat)	8-24 hours	8-12 hour
	Ticagrelor (Brilinta)	5 days	24 hour
<b>Intermediate Risk Procedures</b>			
<b>Procedure</b>	<b>Medications</b>	<b>Hold for</b>	<b>Resume</b>
Caudal Epidural	Abciximab (Repro)	2-5 days	8-12 hour
Celiac Plexus Block	Apixaban (Eliquis)	3 days	24 hour
Cervical Interlaminar Epidural	Argatroban/Bivalrudin/Desirudin	unknown	unknown
Cervical MBB/RFA	Aspirin (any dose)	none	none
Ganglion impar Nerve Block/RFA	Cilostazol (Pletal)	48 hrs	6 hrs
Hypogastric Plexus Block	Colpidogrel (Plavix)	5-7 days	12-24 hour
Intercostal Nerve Block	Coumadin (Warfarin)	5 days INR<=1.2	24 hour
Lumbar Interlaminar Epidural	Dabigatran (Pradaxa)	4 days (5-6 if impaired renal fxn)	24 hour
Lumbar Sympathetic block	Diclofenac (Voltaren)	None	None
Lumbar Transforaminal Epidural Injection	Dipyridamole (Persantine)	None	None
Paravertebral Nerve Block	Edoxaban (Savaysa)	3 days	24 hour
Sphenopalatine Ganglion Block	Eptifibatide (Integrilin)	8-24 hours	8-12 hours

Splanchnic Sympathetic Block	Etodolac (Lodine)	None	None
Stellate Sympathetic Nerve Block	Fondaparinux (Arixtra)	4 days	24 hour
Superior Hypogastric Plexus Nerve Block	Heparin SQ	6 hours	6-8 hour
Thoracic Interlaminar Epidural	Ibuprofen (Advil, Motrin)	None	None
Transforminal Epidural (any level)	Indomethacin (Indocin)	None	None
Trigeminal Nerve Block	IV Heparin Infusion	6 hours	24 hour
Intrathecal Pump Trial	Ketorolac (Toradol)	None	None
Discogram (any level)	LMWH (Lovenox)	12-24 hours	12-24 hour
	Meloxicam (Mobic)	None	None
	Nabumetone (Relafen)	None	None
	Naproxen (Aleve)	None	None
	Oxaprozin (Daypro)	None	None
	Piroxicam (Feldene)	None	None
	Prasugrel (Effient)	7-10 days	12-24 hour
	Rivaroxaban (Xarelto)	3 days	24 hour
	Ticlopidine (Ticlid)	5 days	24 hour
	Tirofiban (Aggrastat)	8-24 hours	8-12 hour
	Ticagrelor (Brilinta)	5 days	24 hour
Low Risk Procedures			
Procedure	Medications	Hold for	Resume
Acromioclavicular (AC) Joint Injection	Abciximab (ReoPro)	2-5 days	8-12 hour
Anserine Bursa Injection	Apixaban (Eliquis)	Risk Assess	24 hr if held
Botox Injection	Argatroban/Bivalrudin/Desirudin	unknown	unknown
Bursa Injection (all)	Aspirin (any dose)	none	none
Cluneal Nerve Block/RFA	Cilostazol (Pletal)	none	none
Coccygeal Injection	Colpidogrel (Plavix)	none	none
Genicular Nerve Block/RFA	Coumadin (Warfarin)	none	none
Glenohumeral (Shoulder) Injection	Dabigatran (Pradaxa)	Risk assess	24 hr if held
Greater/Lesser Occipital Nerve Block	Diclofenac (Voltaren)	none	none
Hip (Acetabulofemoral) Joint Injection	Dipyridamole (Persantine)	none	none
Hip Femoral/obturator block/RFA	Edoxaban (Savaysa)	Risk Assess	24 hr if held
Infraserratus Bursa Injection	Eptifibatide (Integrilin)	8-24 hours	8-12 hour
Iliohypogastric Nerve Block	Etodolac (Lodine)	none	none
Ilioinguinal Nerve Block	Fondaparinux (Arixtra)	Risk Assess	6 hr if held
Ischial Bursa Injection	Heparin SQ	6 hours	2 hour
Knee Joint Injection	Ibuprofen (Advil, Motrin)	none	none
Lateral Branch Sacral MBB/RFA	Indomethacin (Indocin)	none	none
Lateral Femoral Cutaneous Nerve Block	IV Heparin Infusion	6 hours	2 hour
Lumbar MBB/RFA	Ketorolac (Toradol)	none	none
Occipital Nerve Block	LMWH (Lovenox)	24 hour	4 hour
Peripheral Joint Injection	Meloxicam	none	none
Piriformis Injection	Nabumetone (Relafen)	none	none
Pudendal Nerve Block	Naproxen (Aleve)	none	none
Sacroiliac Joint Injection	Oxaprozin (Daypro)	none	none
Scar Neuroma Injection	Piroxicam (Feldene)	none	none
SupraScapular Nerve Block/RFA	Prasugrel (Effient)	Risk assess (but most don't stop)	24 hr if held
Thoracic MBB/RFA	Rivaroxaban (Xarelto)	Risk Assess	24 hr if held
Trigger Point Injection	Ticlopidine (Ticlid)	Risk assess (but most don't stop)	24 hr if held
Transverse Abdominis Plane Blocks (TAP Block)	Tirofiban (Aggrastat)	8-24 hours	8-12 hour

Trochanteric Bursa Injection	Ticagrelor (Brilinta)	Risk assess (but most don't stop)	24 hr if held
Pocket Revision			
Intrathecal Pump Replacement (not catheter)			
Implantable Pulse Generator Replacement			
Peripheral nerve stimulator Trial			
Peripheral Nerve Stimulator Implant			
Genitofemoral Nerve Block/RFA			
Peripheral Nerve Block			

\*\*\*NOTE: If a patient has any of the following they get bumped up a risk category (e.g. from low risk to moderate, or moderate to high):

- Old age (not defined by guidelines - use judgement), history of bleeding tendency, concurrent use of other anticoagulants/antiplatelets, liver cirrhosis, advanced liver disease, advanced renal disease  
THIS DOES NOT APPLY TO NSAIDS (REMAIN AT SAME CATEGORY FOR NSAIDS)
- Plavix: 5 day hold recommended for patients at high risk of thromboembolic event. Restart 75mg dose 12 hours after procedure. Wait 24 hours for loading dose
- NSAIDs: Only need to be stopped for high risk procedures. NOTE: Celebrex never has to be held
- Lovenox: Hold 12 hours for prophylactic dose, 24 hours for therapeutic dose
- Fish Oil: Hold 6 days for high risk procedures
- Garlic supplements: Hold 7 days for high risk procedures. Avoid high intake in foods

**Aspirin guidance:**

- Stopping Aspirin is NOT essential for low and moderate risk procedures and is a shared risk assessment
- For high risk procedures, Aspirin should be stopped for 6 days if used for primary prophylaxis
- For high risk procedures, if used for secondary prophylaxis a risk assessment should occur
- For low and moderate risk procedures for Aspirin: Hold 6 days for primary prophylaxis, 4 days for secondary prophylaxis
- Primary prophylaxis is defined as using Aspirin to prevent the first occurrence of a cardiovascular event (e.g. there is no established cardiovascular disease that the patient is taking it for)
- Secondary prophylaxis is defined as using Aspirin to prevent recurrence of disease in the presence of overt cardiovascular disease or conditions