Periprocedural Management of Antithrombotic Therapy – Adult - Inpatient/Ambulatory Consensus Care Guideline

Appendix B. Considerations for Antiplatelet Bridging With Cangrelor

National Guidelines[4]	
CHEST Guidelines 2022: Perioperative Management of Antithrombotic Therapy	Guidance Statement 39: *"In patients with coronary stents who require interruption of antiplatelet drugs for an elective surgery/procedure, **we suggest against routine bridging therapy** with a glycoprotein IIb-IIIa inhibitor, cangrelor, or LMWH over routine use of bridging therapy (Conditional recommendation, low certainty of evidence)* *Guideline implementation considerations:* • *A bridging approach may be considered in selected high-risk patients, for example in those with a recent (within 3 months) coronary stent in a critical location."*
Cangrelor Drug Information	
Mechanism of Action	Cangrelor is a reversible ultra-shorting-acting direct $P2Y_{12}$ inhibitor
Time to Peak	Within 2 minutes
Half-Life of Elimination	~ 3 to 6 minutes

Bridging Therapy Dose (Off-Label Use)[4,8,9]

- Routine use not suggested
- Consult UW Health Interventional Cardiology prior to initiating cangrelor as bridging therapy
- UW Health restricts cangrelor use to high-risk patients with cardiac stents placed in the previous 6 to 12 months who require surgical intervention with interruption in thienopyridine therapy
- Continue low dose ASA throughout
- **Prior to the procedure**:
  - Start cangrelor 48 to 72 hours after oral P2Y12 inhibitor discontinuation¥
  - Dose = 0.75 mg/kg/minute IV continuous infusion
  - STOP cangrelor 1 to 3 hours prior to the procedure¥
- **1 to 6 hours after the procedure, when adequate hemostasis is achieved**:
  - **Can the patient take oral medications**?
    - **If Yes** → restart oral $P2Y_{12}$ inhibitor including an oral loading dose
      - Clopidogrel preferred over prasugrel or ticagrelor due to lower bleeding risk
    - **If No** → restart cangrelor infusion and continue for a minimum of 48 hours and maximum of 7 days total
      - When able to tolerate oral medications, STOP cangrelor <u>immediately prior</u> to restarting oral $P2Y_{12}$ inhibitor including an oral loading dose
        - Clopidogrel preferred over prasugrel or ticagrelor due to lower bleeding risk

¥ UW Health-specific recommendation, based on institutional standards and/or expert opinion of guideline workgroup members

References:

4. Douketis JD, Spyropoulos AC, Murad MH, et al. Perioperative Management of Antithrombotic Therapy: An American College of Chest Physicians Clinical Practice Guideline. Chest. 2022;doi:10.1016/j.chest.2022.07.025
8. Rossini R, Masiero G, Fruttero C, et al. Antiplatelet Therapy with Cangrelor in Patients Undergoing Surgery after Coronary Stent Implantation: A Real-World Bridging Protocol Experience. TH Open. 2020;04(04):e437-e445. doi:10.1055/s-0040-1721504
9. Angiolillo DJ, Rollini F, Storey RF, et al. International Expert Consensus on Switching Platelet P2Y ₁₂ Receptor–Inhibiting Therapies. Circulation. 2017;136(20):1955-1975. doi:10.1161/circulationaha.117.031164