Rapid Resource

Anticoagulation FORUM | ANTICOAGULATION Centers of Excellence

Antithrombotic Management Following Peripheral Arterial Disease (PAD) Revascularization

excellence.acforum.org

Background

Peripheral Arterial Disease (PAD): An atherosclerotic disease process causing partial or complete obstruction of the lower extremity peripheral arteries, leading to ischemic symptoms and damage ranging from intermittent claudication to rest pain and/or tissue loss.

Dual Antiplatelet Therapy (DAPT): The use of P2Y12 inhibitor (e.g., clopidogrel, ticagrelor, etc.) and aspirin.

Dual Pathway Inhibition (DPI): Aspirin is a COX-1 inhibitor which blocks platelet activation via TXA-2. Rivaroxaban is a factor Xa inhibitor which blocks platelet activation by inhibition of thrombin formation. The rationale behind dual pathway inhibition is to block two different mechanisms for platelet activation to further reduce thrombotic risk.

Recent clinical trial data (VOYAGER PAD) following revascularization for PAD found lower rates of acute limb and other serious cardiovascular events with minimal increased major bleeding risk in patients who received dual pathway inhibition as compared to aspirin monotherapy.

BOTTOM LINE

DO	DON'T	CONSIDER	CAUTION
• Assess for treatment-dose DOAC indications and use highest indicated DOAC dose • For patients receiving rivaroxaban plus aspirin, define the maximal length of time for clopidogrel use (usually ≤30 days) • Assess at least annually for rivaroxaban + aspirin appropriateness	• Do not replace rivaroxaban 2.5mg twice daily with any other DOAC or dose (e.g., don't confuse with apixaban 2.5mg) • Do not use rivaroxaban 2.5mg twice daily without concurrent aspirin 81mg daily • Do not use rivaroxaban plus aspirin with stronger P2Y12 inhibitors (e.g., prasugrel)	• Can the patient afford rivaroxaban? • Is the patient willing to take 2 medications (rivaroxaban plus aspirin)? • Did you prescribe other guideline-based therapies (e.g., statin, anti-hypertensives, tobacco cessation)?	• Concurrent use of NSAIDs (including over-the-counter) can increase bleeding risk • Heavy alcohol use can increase bleeding risk • The use of "triple therapy" (aspirin + clopidogrel + rivaroxaban) can increase bleeding risk

Clinical Guidance Algorithm for Dual Pathway Inhibition (DPI) in Patients with Recent Revascularization for PAD

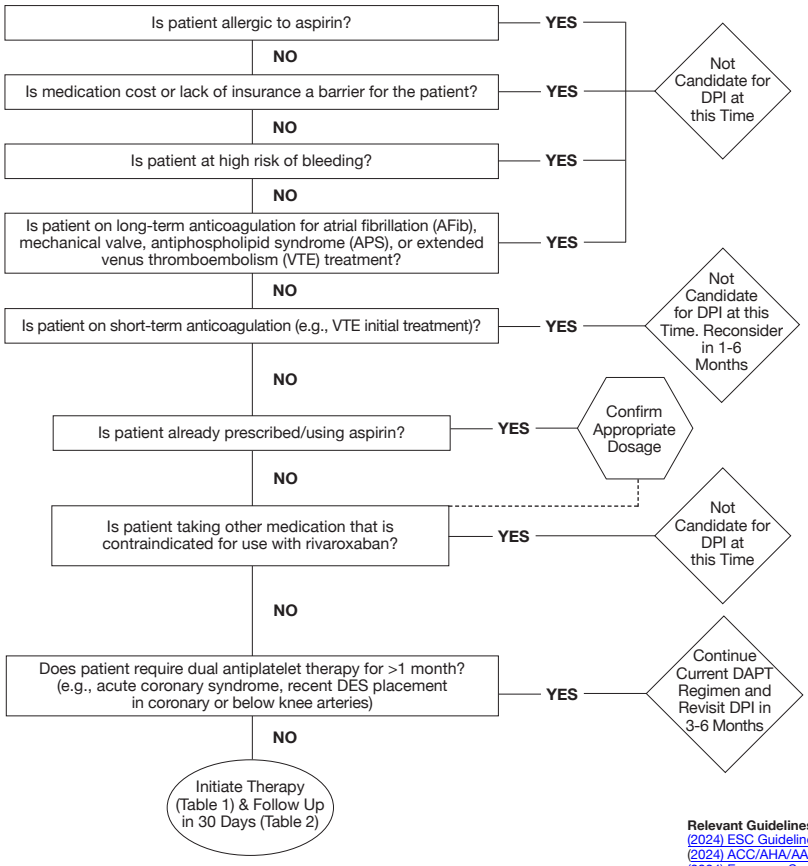

TABLE 1: Initiate Therapy

*Refer to clinical guidance algorithm (left) to assess patient candidacy for treatment

Prescribe rivaroxaban 2.5mg twice daily for chronic use (e.g., 30-day supply with refills)
Prescribe/order aspirin 81mg daily for chronic use
Verify that all P2Y12 prescriptions have been discontinued at pharmacy and that no more than 30 days of clopidogrel 75mg daily is being used (no refills)
Order/confirm 30-day follow-up appointment with interventionalist or surgeon and multidisciplinary team

TABLE 2: 30-Day Follow-Up

Complete 30-day follow-up appointment with interventionalist or surgeon and multidisciplinary team
Inquire regarding any new Rx/OTC medications that may interact or increase patient risk for bleeding/thrombosis
Address other modifiable PAD/CVD risk factors (smoking, lipids, diabetes, exercise)
Reassess if appropriate to discontinue P2Y12 inhibitor (e.g., clopidogrel)
Confirm continued refills/adherence to rivaroxaban and aspirin

Bleeding Risk Factors to Consider

Concurrent NSAID or other antiplatelet agents
Uncontrolled hypertension
Heavy alcohol use
Acute liver or renal failure
Recent trauma or surgery

In partnership with:

American College of Cardiology — Advancing Heart Care Worldwide | ashp | Society for Vascular Medicine

Relevant Guidelines:
(2024) ESC Guidelines: Management of Peripheral Arterial and Aortic Diseases
(2024) ACC/AHA/AACVPR/APMA/ABC/SCAI/SVM/SVN/SVS/SIR/VESS Guideline for the Management of Lower Extremity Peripheral Artery Disease
(2024) European Society for Vascular Surgery (ESVS) Clinical Practice Guidelines on the Management of Asymptomatic Lower Limb Peripheral Arterial Disease and Intermittent Claudication

References: 1. Bonaca MP, et al. N Engl J Med. 2020 May 21;382(21):1994-2004. PMID: 32222135. 2. Gerhard-Herman MD, et al. Circulation. 2017 Mar 21;135(12):e726-e779. PMID: 27840333. 3. Aboyans V, et al. Eur Heart J. 2021 Jul 19:ehab390. PMID: 34279602.

Faculty: Geoffrey Barnes, MD, MSc; Sahil Parikh, MD; Diane Wirth, ANP, CACP
2025 Update Faculty: Taylor Robichaux, PharmD, BCPS, CACP
This content was developed independently by the Anticoagulation Forum. Support for this initial project in 2021 provided by Janssen Pharmaceuticals.

Created: 11/21 **Updated:** 08/25
Next Review: 08/26