

Risk-concordant Framework for Bleed Avoidance Strategies in PCI

This figure provides a framework for risk-concordant use of Bleed Avoidance Strategies (BAS), based on risk levels defined by the CathPCI Bleeding Risk Calculator App logic.



*The efficacy of bivalirudin with radial PCI is debatable, and the efficacy of closure devices in femoral PCI is debatable, but they may

be considered if bleeding risk is moderate to high.

**For STEMI cases, follow the high risk path.

Resources:

- Amin AP, Miller S, Rahn B et al. Reversing the "Risk-Treatment Paradox" of Bleeding in Patients Undergoing Percutaneous Coronary Intervention: Risk-Concordant Use of Bleeding Avoidance Strategies Is Associated With Reduced Bleeding and Lower Costs. J Am Heart Assoc 2018;7:e008551.
- Rao SV, McCoy LA, Spertus JA et al. An updated bleeding model to predict the risk of post-procedure bleeding among patients undergoing percutaneous coronary intervention: a report using an expanded bleeding definition from the National Cardiovascular Data Registry CathPCI Registry. JACC Cardiovasc Interv 2013;6:897-904.
- 3. Ibanez B, James S, Agewall S et al. 2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with STsegment elevation. Rev Esp Cardiol (Engl Ed) 2017;70:1082.
- 4. Neumann FJ, Sousa-Uva M, Ahlsson A et al. 2018 ESC/EACTS Guidelines on myocardial revascularization. Eur Heart J 2018.
- Secemsky EA, Kirtane A, Bangalore S et al. Practice Patterns and In-Hospital Outcomes Associated With Bivalirudin Use Among Patients With Non-ST-Segment-Elevation Myocardial Infarction Undergoing Percutaneous Coronary Intervention in the United States. Circ Cardiovasc Qual Outcomes 2017;10.
- Secemsky EA, Kirtane A, Bangalore S et al. Use and Effectiveness of Bivalirudin Versus Unfractionated Heparin for Percutaneous Coronary Intervention Among Patients With ST-Segment Elevation Myocardial Infarction in the United States. JACC Cardiovasc Interv 2016;9:2376-2386.
- 7. Tavris DR, Wang Y, Jacobs S et al. Bleeding and vascular complications at the femoral access site following percutaneous coronary intervention (PCI): an evaluation of hemostasis strategies. J Invasive Cardiol 2012;24:328-34.