

UPDATED APPROPRIATE USE CRITERIA FOR CORONARY REVASCULARIZATION ADDRESS NEW SCIENCE AND CLOSE GAPS IN IMPLEMENTATION

The ACC on Jan. 30 released the first focused update to its Appropriate Use Criteria (AUC) for Coronary Revascularization. The original criteria were published in 2009.

According to the update authors, “the increasing prevalence of coronary artery disease (CAD), continued advances in surgical and percutaneous techniques for revascularization and concomitant medical therapy for CAD, and the costs of revascularization have resulted in heightened interest regarding the appropriate use of coronary revascularization.” As a result, the focused update takes into account new clinical trial results, as well as gaps noted during the last two years of implementation, to help ensure the most appropriate use of revascularization procedures.

In particular, the updated criteria address the following two areas:

- 1) Re-evaluation of the indications for the treatment of multivessel CAD with symptoms by PCI and CABG as a result of data from the SYNTAX trial, which came out after the original AUC were published; and
- 2) Specific indications that represent gaps identified when mapping the 2009 AUC to the CathPCI Registry®.

As a result of the SYNTAX trial, the writing group and technical panel for the focused update felt some quantification of CAD burden, either by description or by SYNTAX score, could be helpful to clinicians. In the updated AUC, CABG is rated as appropriate in all of the new clinical scenarios developed, whereas PCI is rated as appropriate only in patients with 2-vessel CAD with involvement of the proximal LAD and in patients with 3-vessel disease with a low CAD burden. PCI for 3-vessel disease with a high CAD burden, however, was given a rating of uncertain. In addition, PCI for isolated left main stenosis is now graded as uncertain, as are scenarios with 3-vessel CAD with intermediate to high CAD burden and left main stenosis and additional CAD with low CAD burden. PCI is considered inappropriate for left main stenosis and additional CAD with intermediate to high CAD burden.





The original AUC for Coronary Revascularization only had one clinical scenario for UA/NSTEMI and high-risk features, and this scenario was rated appropriate. However, the updated criteria now include two additional scenarios for patients with UA/NSTEMI and low- or intermediate-risk features as determined by the TIMI score. Revascularization in patients with low-risk scores was rated uncertain, with the caveat that data on clinical benefit are limited. For patients with intermediate-risk scores, revascularization was rated appropriate. Also in the original document, the clinical scenario of an asymptomatic patient without prior bypass surgery and with 1- or 2-vessel disease not involving the proximal LAD in

**WITH
REVASCULARIZATION
COMING UNDER
INCREASING SCRUTINY
BY PATIENTS, PAYERS
AND LAWMAKERS,
PHYSICIANS AND
SURGEONS SHOULD
CONSIDER THEIR
SPECIFIC CLINICAL
CIRCUMSTANCES
WITHIN THE CONTEXT
OF THESE CRITERIA.**

whom no noninvasive testing had been performed was not evaluated because the scenario was deemed to be uncommon. However, in order to facilitate future mapping of the AUC to the CathPCI Registry, this scenario was rated inappropriate.

Like previous AUC, the scope of indications is purposely broad and intended to represent the most common patient scenarios for which, in this case, coronary revascularization is considered. As a result, the clinical scenarios presented and scored were developed to represent common situations encountered in everyday practice and include information on symptom status, extent of medical therapy, risk level

as assessed by noninvasive testing and coronary anatomy. They are not inclusive of every possible clinical situation.

That being said, the updated criteria are the system and method that cardiologists and cardiac surgeons should use when considering coronary revascularization, says **Manesh Patel, MD, FACC**, author of the updated AUC and John Bush Simpson Assistant Professor of Cardiology at Duke University, assistant director of the Duke Cardiac Catheterization Laboratory and director of Duke Catheterization Lab Research. "With revascularization coming under increasing scrutiny by patients, payers and lawmakers, physicians and surgeons should consider their specific clinical circumstances within the context of these criteria."

In addition, Patel suggests that patients should review the criteria to better understand whether the expected benefits, in terms of survival or health outcomes, exceed the expected negative consequences of the procedure.

Read the full, updated criteria at CardioSource.org.