



## Five Things Physicians and Patients Should Question

1

### Don't perform stress cardiovascular magnetic resonance (CMR) in the initial evaluation of chest pain patients with low pretest probability of coronary artery disease.

There are lower cost stress tests available for the initial evaluation of low-risk chest pain patients, particularly when they have a normal electrocardiogram and can exercise. Stress CMR can be valuable in evaluating intermediate-risk patients with abnormal electrocardiograms or who cannot exercise, or when initial test results are equivocal.

2

### Don't perform stress CMR as a pre-operative assessment in patients scheduled to undergo low-risk, non-cardiac surgery.

Stress testing has not been shown to be useful in patients undergoing low-risk surgery. Therefore, stress CMR in these patients will not improve outcomes and will increase cost.

3

### Don't perform stress CMR in patients with acute chest pain and high probability of coronary artery disease.

Stress testing can increase risk and delay therapy in patients with acute chest pain and markers of high risk, such as ST segment elevation and/or positive cardiac enzymes. After initial evaluation and therapy, non-stress CMR may aid in diagnosing ischemic or non-ischemic myocardial injury.

4

### Don't perform coronary CMR in symptomatic patients with a history of coronary stents.

Coronary stents cause artifacts on CMR that preclude accurate evaluation. Therefore, coronary CMR in these patients will not be diagnostic.

5

### Don't perform coronary CMR in the initial evaluation of asymptomatic patients.

Coronary CMR has not been well established for the evaluation of coronary atherosclerosis. Coronary CMR is primarily indicated for detecting and characterizing anomalous coronary arteries.

# How This List Was Created

The Society for Cardiovascular Magnetic Resonance (SCMR) has developed the following list of tests involving cardiovascular magnetic resonance imaging (CMR) thought to be overused or misused. This list was developed by a subcommittee of the SCMR and reviewed and approved by the SCMR Board of Trustees. The list was based primarily on appropriateness guidelines for CMR, published by both the American College of Cardiology and the American College of Radiology, with the goal of limiting the inappropriate use of expensive imaging testing in low-risk patients or where it is unlikely to add to clinical management.

SCMR's disclosure and conflict of interest policy can be found at [www.scmr.org](http://www.scmr.org).

## Sources

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### About the Society for Cardiovascular Magnetic Resonance

Founded in 1994, the Society for Cardiovascular Magnetic Resonance (SCMR) is a professional association whose vision is to be the leading international representative and advocate for all physicians, scientists and technologists working in cardiovascular magnetic resonance imaging (CMR) to improve patient outcomes through excellence in education, training, standards, research and development. SCMR's membership includes professionals from around the globe.

Among the primary activities of SCMR are its annual scientific sessions and other courses, the open access online *Journal of Cardiovascular Magnetic Resonance* ([www.jcmr-online.com](http://www.jcmr-online.com)) and the Society website ([www.scmr.org](http://www.scmr.org)).



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