

# Myocardial Perfusion Imaging

## Clinical Guideline Tip Sheet

This tip sheet is intended to further assist you with the clarification of the Evolent (formerly National Imaging Associates, Inc.) clinical guidelines. It is for informational purposes only and is **not** intended as a substitute for the clinical guidelines that must be utilized when reviewing cases for medical necessity and clinical appropriateness.

### Overview

**Stress echocardiography should be considered rather than myocardial performance index (MPI) unless one of the following scenarios are present:**

- Left bundle branch block
- Persistent atrial fibrillation
- Status post (S/P) permanent pacemaker or implantable cardioverter defibrillator (ICD)
- S/P prior cardiac surgery (e.g., coronary artery bypass grafting [CABG], valve replacement)
- Documented wall motion abnormality on previous study (e.g., left heart catheterization [LHC], transthoracic echocardiogram [TTE])
- Prior technically limited TTE, as documented in the formal TTE report
- High pre-test probability (Diamond-Forrester table)
- **Clearly documented** inability to ambulate on treadmill due to neurologic, orthopedic or pulmonary issues
- Documented inability to achieve target heart rate on prior exercise stress test
- Any organ or stem cell transplantation (can be performed annually until transplant performed)
- Post cardiac transplant: annual surveillance for transplant vasculopathy (if LHC is not planned)
- **Initiation** of class I-C antiarrhythmic agent (flecainide, propafenone) in intermediate or high global-risk patients. Follow-up surveillance testing in asymptomatic patients on I-C medications can be done yearly
- Poorly controlled hypertension (systolic blood pressure (SBP) greater than 180, diastolic blood pressure (DBP) greater than 120)
- Unevaluated pathological Q waves (defined below) in two contiguous leads:

- o Greater than 40 ms (1 mm) wide
  - o Greater than 2 mm deep
  - o Greater than 25% of depth of QRS complex
- Prior left main stent
- Unevaluated **significant** ST segment or T-wave abnormalities suggestive of ischemia (ST depression 1 mm or more, T wave inversion at least 2.5 mm **excluding V1 and V2**)
- Newly diagnosed systolic heart failure EF less than 50% **with symptoms or signs of ischemia** (unless cardiac catheterization is planned)
- High-risk occupation every two years (if required by ordering agency for job requirement)
- Sustained ventricular tachycardia (VT) greater than 100 bpm, ventricular fibrillation (VF) or exercise-induced VT (if LHC is not planned)