

# Myocardial Perfusion Imaging

## Clinical Guideline Tip Sheet

*This tip sheet is intended to further assist you with the clarification of the National Imaging Associates, Inc. (NIA) 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 MPI UNLESS one of the following scenarios are present:**

- Left bundle branch block
- Persistent atrial fibrillation
- S/P permanent pacemaker or ICD (implantable cardioverter defibrillator)
- S/P prior cardiac surgery (e.g., CABG, valve replacement)
- Documented wall motion abnormality on previous study (e.g., LHC, TTE)
- Prior technically limited TTE (transthoracic echocardiogram), 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 HTN (SBP >180, DBP >120)

- Unevaluated pathological Q waves (defined below) in two contiguous leads:
  - o > 40 ms (1 mm) wide
  - o > 2 mm deep
  - o > 25% of depth of QRS complex
- Prior left main stent
- Unevaluated **significant** ST or T wave abnormalities suggestive of ischemia (ST depression 1mm or more, T wave inversion at least 2.5mm *excluding V1 and V2*)
- Newly diagnosed systolic heart failure EF <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)>100 bpm, ventricular fibrillation (VF), or exercise-induced VT (if LHC is not planned)