

An ECG (heart rate) line is visible in the background, rendered in a light blue color against a dark blue background. The line shows several distinct peaks and troughs, characteristic of a heart's electrical activity.

ICD

KEY QUESTIONS AND DECISION VARIABLES FOR APPROPRIATE IMPLANTATION OF A CARDIAC DEFIBRILLATOR

1. Are risk factors present that would raise the patient's risk for sudden cardiac death?

- Prior ventricular fibrillation or sustained ventricular tachycardia
- Syncope
- Recent MI
- Left ventricular ejection fraction
- Cardiomyopathy
- Heart failure NYHA Functional Classification
- Genetic conditions
- Family history of sudden cardiac death
- Timing of events and procedures related to VT or VF (e.g. is the cause reversible?)

2. Are there comorbidities or other conditions that would modify the decision to implant?

- Life expectancy less than 1 year
- Cognitive impairment
- Class IV heart failure and not a candidate for transplant
- Inability to manage compliance and follow-up care

TOP REASONS FOR WHICH IMPLANTATION OF A CARDIAC DEFIBRILLATOR IS RARELY APPROPRIATE

- 1. Single or recurrent VF or polymorphic VT with acute MI (<48 hours)**
 - LVEF >35%
 - Revascularization complete
- 2. Post-acute MI (≤ 40 days) and LVEF $\leq 40\%$ without inducible VT**
 - No NSVT
 - Revascularized after Acute MI
 - No pacing indication or pre-existing chronic cardiomyopathy
- 3. Unexplained syncope**
 - Normal ECG with no structural heart disease or genetic reason
- 4. Unexplained syncope with CAD but no MI**
 - LVEF $\geq 50\%$ and no inducible VT
- 5. Life expectancy less than 1 year**

Visit **ACC.org/FOCUS** for more AUC resources.



AMERICAN
COLLEGE of
CARDIOLOGY