

2005 Heart Failure Guidelines Recommendations for Device Therapy and Ejection Fraction (EF) Measurement.¹



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Class I Recommendations for ICD Therapy

1. An implantable cardioverter defibrillator is recommended as secondary prevention to prolong survival in patients with

- current or prior symptoms of HF and reduced LVEF *who have*
- a history of cardiac arrest, ventricular fibrillation, or hemodynamically destabilizing ventricular tachycardia

(Level of Evidence: A)

2. Implantable cardioverter defibrillator therapy is recommended for primary prevention to reduce total mortality by a reduction in sudden cardiac death in patients with

- ischemic heart disease *who are*
- at least 40 days post-MI
- have an LVEF less than or equal to 30%
- with NYHA Functional Class II or III symptoms
- while undergoing chronic optimal medical therapy
- and have reasonable expectation of survival with a good functional status for more than 1 year

(Level of Evidence: A)

3. Implantable cardioverter defibrillator therapy is recommended for primary prevention to reduce total mortality by a reduction in sudden cardiac death in patients with

- nonischemic cardiomyopathy *who have*
- an LVEF less than or equal to 30%
- with NYHA Functional Class II or III symptoms
- while undergoing chronic optimal medical therapy
- and who have reasonable expectation of survival with a good functional status for more than 1 year

(Level of Evidence: B)

Class IIa Recommendations for ICD Therapy

1. Placement of an implantable cardioverter defibrillator is reasonable in patients with

- **LVEF of 30% to 35%** of any origin
- with **NYHA Functional Class II or III** symptoms *who are*
- taking chronic **optimal medical therapy**
- who have reasonable **expectation of survival** with good functional status of more than 1 year

(Level of Evidence: B)

2. Placement of an ICD is reasonable in patients with

- **ischemic cardiomyopathy** *who are*
- at least **40 days post-MI**
- have an **LVEF of 30% or less**
- are **NYHA Functional Class I**
- on chronic **optimal medical therapy**
- **and** have reasonable **expectation of survival** with a good functional status for more than 1 year

(Level of Evidence: B)

Class IIb Recommendation for ICD Therapy

Placement of an ICD might be considered in patients

- **without HF** *who have*
- **nonischemic cardiomyopathy**
- and an **LVEF less than or equal to 30%**
- who are in **NYHA Functional Class I**
- with chronic **optimal medical therapy**
- **and** have a reasonable **expectation of survival** with good functional status for more than 1 year

(Level of Evidence: C)

* ACC/AHA Heart Failure Guidelines Recommendations assume patients meet all requirements listed in the bullets, unless specified otherwise by "or".

Class I Recommendation for CRT Therapy

Patients with

- LVEF less than or equal to 35%
- sinus rhythm
- and NYHA Functional Class III or Ambulatory Class IV symptoms
- despite recommended, optimal medical therapy
- and who have cardiac dyssynchrony, which is currently defined as a QRS duration greater than 120 ms

Should receive cardiac resynchronization therapy unless contraindicated

(Level of Evidence: A)

Class I Recommendations for EF Measurement

1. Two-dimensional echocardiography with Doppler should be performed

- during initial evaluation of patients presenting with HF
- to assess LVEF, LV size, wall thickness, and valve function

Radionuclide ventriculography can be performed

- to assess LVEF and volumes

(Level of Evidence: C)

2. Healthcare providers should perform a noninvasive evaluation of LV function (i.e., LVEF) in patients with

- a strong family history of cardiomyopathy
- or in those receiving cardiotoxic interventions

(Level of Evidence: C)

Class IIa Recommendation for EF Measurement

Repeat measurement of EF and the severity of structural remodeling can provide useful information in patients with HF

- who have had a change in clinical status
- or who have experienced or recovered from a clinical event
- or received treatment that might have had a significant effect on cardiac function

(Level of Evidence: C)

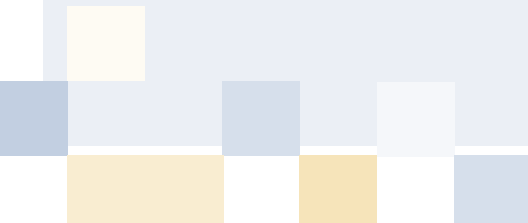
New ACC/AHA Guidelines published online on August 15, 2005, recommend device therapy for indicated heart failure patients.¹

Classification of Recommendations

- Class I** Conditions for which there is evidence and/or general agreement that a given procedure or treatment is beneficial, useful, and effective.
- Class II** Conditions for which there is conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of a procedure or treatment.
- Class IIa:** Weight of evidence/opinion is in favor of usefulness/efficacy.
- Class IIb:** Usefulness/efficacy is less well established by evidence/opinion.
- Class III** Conditions for which there is evidence and/or general agreement that a procedure/treatment is not useful/effective and in some cases may be harmful.

Level of Evidence

- Level A** Data derived from multiple randomized clinical trials or meta-analyses.
- Level B** Data derived from a single randomized trial, or nonrandomized studies.
- Level C** Only consensus opinion of experts, case studies, or standard-of-care.





Reference

¹ ACC/AHA 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult (www.acc.org <<http://www.acc.org>> and www.americanheart.org <<http://www.americanheart.org>>). Copyright 2005 The American College of Cardiology Foundation and American Heart Association, Inc. Permission granted for limited use. Further reproduction is not permitted without permission of the ACC/AHA.

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