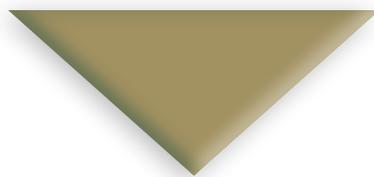


A stylized world map in shades of blue is positioned at the top left. Below it, a series of vertical blue bars of varying heights are set against a background of blue arches that recede into the distance.

# ESSENTIAL MESSAGES FROM ESC GUIDELINES

Committee for Practice Guidelines

To improve the quality of clinical practice and patient care in Europe



## **Cardiac Pacing**

**GUIDELINES FOR CARDIAC PACING AND  
CARDIAC RESYNCHRONIZATION THERAPY**

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# ESC ESSENTIAL MESSAGES

## 2013 ESC GUIDELINES ON CARDIAC PACING AND CARDIAC RESYNCHRONIZATION THERAPY

The Task Force on cardiac pacing and resynchronization therapy  
of the European Society of Cardiology (ESC).

Developed in collaboration with the European Heart Rhythm Association (EHRA).

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The background features a stylized world map in shades of blue and white, overlaid on a series of vertical arches that create a sense of depth and structure. The map shows the continents in a light blue color against a darker blue background.

# ESSENTIAL MESSAGES FROM 2013 ESC GUIDELINES ON CARDIAC PACING AND CARDIAC RESYNCHRONIZATION THERAPY

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# Take home messages

1. The document outlines an innovative classification of bradyarrhythmias by mechanism. There are three main groups: persistent bradycardia, intermittent bradycardia with electrocardiographic documentation, and suspected intermittent bradycardia (not yet documented). Recommendations are provided for the three categories. Until now, guidelines and text books have classified bradyarrhythmias according to their aetiology, for example sinus node dysfunction, myocardial infarction, or bundle branch block. Classification of bradyarrhythmias according to mechanism (i.e., the clinical presentation) is more useful for selecting patients for permanent cardiac pacing therapy than their aetiology.
2. The strength of indications for CRT focuses mainly on the presence or absence of left bundle branch block. Unique recommendations are given for NYHA class II and III patients. A spectrum of response to CRT, as with most other treatments, is recognized: the beneficial effects of CRT may be greater in females, patients with non-ischaemic cardiomyopathy and patients with QRS duration >150 ms (the longer the QRS duration, the greater the benefit). Different recommendations are given for patients with atrial fibrillation. These patients are subdivided into patients with an indication for CRT and patients with an indication for AV junction ablation.
3. Different recommendations are given for an upgrade or “de novo” implantation of CRT in patients with a brady indication for pacing.
4. Clinical guidance to the choice between CRT-P or CRT-D in primary prevention is provided.
5. In the decision process for indication for pacing/CRT and for the choice of the best modality attention should be paid to a careful evaluation of the risk of complications. In general the risk of complications is higher when implanting more complex devices and for re-intervention and upgrades.

## Major gaps in evidence

1. Too few LoE A (brady pacing).
2. Too many LoE C (brady pacing).
3. Need of RCTs for CRT subgroups (e.g., RBBB, NYHA I, QRS duration, etc).
4. Need of RCTs for CRT in AF patients.
5. Need of RCTs for CRT optimization.
6. Need of RCTs for specific conditions (e.g., pacing in children, alternative sites, etc).



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The following material was adapted from the 2013 ESC Guidelines on Cardiac Pacing and Cardiac Resynchronization Therapy (European Heart Journal 2013; 34:2281-2329 - doi:10.1093/eurheartj/eh1150).

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