

Supplementary Table S1. Indications for Cardiac Resynchronization Therapy in the major international guidelines.

Guidelines	Class/LOE	Inclusion Criteria
ESC 2007	I/A	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - LV dilation* - QRS \geq120 ms - SR
	I/B	*LV dilation (different criteria in clinical trials: LVEDD $>$ 55 mm or $>$ 30 mm/m ² or $>$ 30 mm/m (height))
	IIa/C	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - LV dilation - Indication for permanent pacing

	IIa/C	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF $\leq 35\%$ - LV dilation - Permanent AF and indication for AV ablation
ESC 2010	I/A	<ul style="list-style-type: none"> - NYHA class III-IV** despite OMT - LVEF $\leq 35\%$ - QRS ≥ 120 ms - SR
	I/A	<ul style="list-style-type: none"> - NYHA class II despite OMT - LVEF $\leq 35\%$ - QRS ≥ 150 ms - SR

	IIa/B	<ul style="list-style-type: none"> - NYHA class III-IV* despite OMT - LVEF \leq35% - QRS \geq130 ms - Pacemaker dependency induced by AV nodal ablation
	IIa/C	<ul style="list-style-type: none"> - NYHA class III-IV* despite OMT - LVEF \leq35% - QRS \geq130 ms - Slow ventricular rate and frequent pacing
ACC/AHA/HRS 2012/2013	I/A (B for NYHA class II)	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF \leq35% - QRS \geq150 ms - LBBB - SR

	IIa/B	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF $\leq 35\%$ - QRS 120-149 ms - LBBB - SR
	IIa/A	<ul style="list-style-type: none"> - NYHA class III-IV** despite OMT - LVEF $\leq 35\%$ - QRS ≥ 150 ms - Non-LBBB - SR
	IIa/B	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF $\leq 35\%$ - LBBB QRS ≥ 120 ms lub non-LBBB QRS ≥ 150 ms - Permanent AF and indication for AV ablation

	IIb/C	<ul style="list-style-type: none">- NYHA class I despite OMT- LVEF \leq30%, ischemic etiology- QRS \geq150 ms- LBBB- SR
	IIb/B	<ul style="list-style-type: none">- NYHA class III-IV** despite OMT- LVEF \leq35%- QRS 120-149 ms- Non-LBBB- SR
	IIb/B	<ul style="list-style-type: none">- NYHA class II despite OMT- LVEF \leq35%- QRS \geq150 ms- Non-LBBB- SR

Guidelines	Class/LOE	Inclusion Criteria
ESC 2013	I/A	<ul style="list-style-type: none"> - NYHA class III-IV** despite OMT - LVEF \leq35% - QRS >150 ms - LBBB - SR
	I/B	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF \leq35% - QRS 120-150 ms - LBBB - SR
	Iia/B	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF \leq35% - QRS >150 ms - non-LBBB - SR

	IIIb/B	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF ≤35% - QRS 120-150 ms - non-LBBB - SR
	IIa/B	<ul style="list-style-type: none"> - NYHA class III-IV* despite OMT - LVEF ≤35% - QRS ≥120 ms - Permanent AF and indication for AV ablation
ESC 2015	I/A	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF ≤35% - QRS >150 ms - LBBB - SR

	I/B	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - QRS 120-150 ms - LBBB - SR
	IIa/B	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - QRS >150 ms - non-LBBB - SR
	IIb/B	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - QRS 120-150 ms - non-LBBB - SR

	IIa/B	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - QRS \geq120 ms - non-LBBB - Permanent AF and indication for AV ablation
ESC 2016	I/A	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS \geq150 ms - LBBB - SR
	I/B	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS 130-149 ms - LBBB - SR

	IIa/B	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS \geq150 ms - non-LBBB - SR
	IIIb/B	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS 130-149 ms - non-LBBB - SR
	IIa/B	<ul style="list-style-type: none"> - NYHA class III-IV despite OMT - LVEF \leq35% - QRS \geq130 ms - non-LBBB - Permanent AF and indication for AV ablation

ESC 2021	I/A	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS \geq150 ms - LBBB - SR
	IIa/B	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS 130-149 ms - LBBB - SR
	IIa/B	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS \geq150 ms - non-LBBB - SR

	IIIb/B	<ul style="list-style-type: none"> - NYHA class II-IV despite OMT - LVEF \leq35% - QRS 130-149 ms - non-LBBB - SR
	IIa/C	<ul style="list-style-type: none"> - Persistent or permanent AF - NYHA class III-IV - LVEF \leq35% - QRS \geq130 ms - Strategy to ensure biventricular capture in place
AHA/ACC/HFSA 2022	I/B-R	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF \leq35% - QRS \geq150 ms - LBBB - SR

	IIa/B-R	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF \leq35% - QRS \geq150 ms - non-LBBB - SR
	IIa/B-NR	<ul style="list-style-type: none"> - NYHA class II-IV** despite OMT - LVEF \leq35% - QRS 120-149 ms - LBBB - SR
	IIIb/B-NR	<ul style="list-style-type: none"> - NYHA class III-IV** despite OMT - LVEF \leq35% - QRS 120-149 ms - non-LBBB - SR

	IIb/B-NR	<ul style="list-style-type: none"> - NYHA class I despite OMT - Ischemic cause of HF - LBBB - QRS ≥ 150 ms - SR
	IIa/B-NR	<ul style="list-style-type: none"> - AF - LVEF $\leq 35\%$ - Patient requires ventricular pacing or otherwise meets the CRT criteria - AV nodal ablation or pharmacological rate control will allow near 100% ventricular pacing with CRT

**(NYHA class IV patients should be ambulatory = No admissions for HF during the last month and a reasonable expectation of survival >6 months)

The meaning of colors:

Green = class I of recommendation (indicated/ recommended)

Yellow = class IIa of recommendation (should be considered)

Orange = class IIb of recommendation (may be considered)

Red = class III of recommendation (contraindicated/ not recommended)

AF – atrial fibrillation; ACC – American College of Cardiology; AHA – American Heart Association; AV – atrioventricular; CRT – cardiac resynchronization therapy; LVEF – left ventricular ejection fraction; ESC – European Society of Cardiology; HF – heart failure; HFS – Heart Failure Society of America; HRS – Heart Rhythm Society; LBBB – left bundle branch block; LOE – level of evidence; NYHA – New York Heart Association; OMT – optimal medical treatment; RV – right ventricle; SR – sinus rhythm