# 2021 CARDIAC PACING AND HEART FAILURE ESC GUIDELINES



# **2021 ESC GUIDELINES**

# **SUMMARY MAIN TOPICS**

#### Leadless pacing - New

- No venous access or high risk for pocket infection: Class Ila
- · Alternative to VVI or VDD pacing: Class IIb

#### Pacing, ReactivATP - New

· Atrial ATP in SND with brady-tachy syndrome: Class Ilb

#### His bundle pacing - New

- · Unsuccessful CRT: Class Ila
- Implant RV backup lead in specific situations: Class Ila
- In pace-and-ablate indication: Class IIb
- Instead RV pacing in AVB with EF>40% and expected Vpacing >20%: Class IIb

#### **ICD** therapy

• Primary prevention ICD in non-ischemic cardiomyopathy: Class Ila (was I)

#### **Cardiac Resynchronization Therapy**

- HF with EF≤35%, QRS 130-149ms, LBBB: Class IIa (was I)
- EF<40%, high degree AV block: Class I (was IIa)
- Upgrade of PM/ICD in HF with EF≤35%: Class IIa (was I)
- CRT-D in CRT candidates: Class Ila (new)
- AVN ablation: HFrEF: Class I (was IIa), HFmrEF: Class IIa (new), HFpEF: Class IIb (new)

#### **TYRX - New**

Pacemaker reintervention: Class IIb

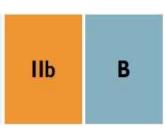
## **Patient Management**

- Remote monitoring to reduce in-office follow-ups if pt. has difficulty to attend in- office visit: Class I (new)
- Remote monitoring in recalled devices: Class I (new)
- Extend in-office follow-up of VVI/DDD PM to up to 24 months with remote monitoring: Class IIa (new)
- MRI in MRI conditional device: Class I (was IIa)
- MRI in non-MRI conditional device if no alternative imaging: Class IIa (was IIb)

# **2021 ESC GUIDELINES**

## **TYRX**

In patients undergoing a reintervention CIED procedure, the use of an antibiotic-eluting envelope may be considered. 685,688



Considering cost-effectiveness aspects, the use of an antibiotic envelope may be considered in pacemaker patients at high risk for CIED infections. Risk factors to be considered in this context are end-stage renal disease, chronic obstructive pulmonary disease, diabetes mellitus, and device replacement, revision, or upgrade procedures.<sup>638</sup>

## EHRA CONSENSUS STATEMENT

Antibiotic envelope in high-risk situations is recommended <sup>a</sup> Recommended/indicated or Scientific evidence that a			Consensus statement related to a treatment or procedure	References	Scientific evidence coding	Statement class	Consensus statement
least one randomized to	that a treatment or proce and effective. Requires a nized trial, or is supporte- nal studies and authors'	dure is beneficial and least one randomized large observational st			R	~	