

# SYNCHROMAX

## Why is Synchromax different to anything known?

- Pacemakers have been implanted in right ventricle since they were born, because the ventricular trabeculae allowed fixation of traditional leads.
- In recent years, several papers are making reference to the deleterious effect of right ventricular pacing. This complication is even more severe in patients with heart failure. Non-physiological pacing causes left bundle branch block, which can trigger or worsen cardiac function in certain patients.
- It is logical and natural to pace from the septum, following Mother Nature. This was only possible with the appearance of the screw-in leads.
- Many implanting physicians, however, still believe that it is difficult to find the optimal physiological pacing site. This is partially true if we cannot assess cardiac asynchrony in an immediate non-invasive way during the implant.

**Synchromax<sup>®</sup>**  
is a simple,  
use-friendly tool  
for guiding lead  
placement.

	SYNCHRONOUS	INTERMEDIATE		DYSSYNCHRONOUS	
INDEX	0 - 0,4	0,41 - 0,7		0,71 - 1	
INTRINSIC RHYTHM	1 NARROW QRS 	3 NORMAL +/-RBBB 	9 LAHB +/- RBBB 	6 LBBB 	10 LAHB +/- RBBB 
CONVENTIONAL CRT		4 CRT OPTIMIZED 		7 CRT NOT OPTIMIZED 	
PACEMAKER	2 SEPTAL STIMULATION 	5 APEX RV 		8 APEX RV 	

↶ Different tipe of curves.

- *So far, almost nobody had paid attention to electrical interventricular asynchrony. Echocardiography was needed to do so, but this is operator-dependent and time-consuming method.*
- *The Synchromax revolution consists of using the standard surface electrocardiographic signal, the most usual tool among cardiologists. By means of a dedicated algorithm and signal processing, Synchromax can noninvasively produce a proprietary Electrical Synchrony Index and a set of Synchrony Curves. The Index was correlated with echo and with intracardiac transducers.*
- *Synchromax can be used before the implant of a resynchronizer to determine if the patient will be a responder or not, during the implant (para-Hisian or ventricular) to locate the optimal pacing site in terms of synchrony, and during the follow-up of implantable devices for a fast precise optimization of the programmable parameters.*



**Synchromax<sup>®</sup>**  
makes finding  
optimal para-Hisian  
pacing a simple task.

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