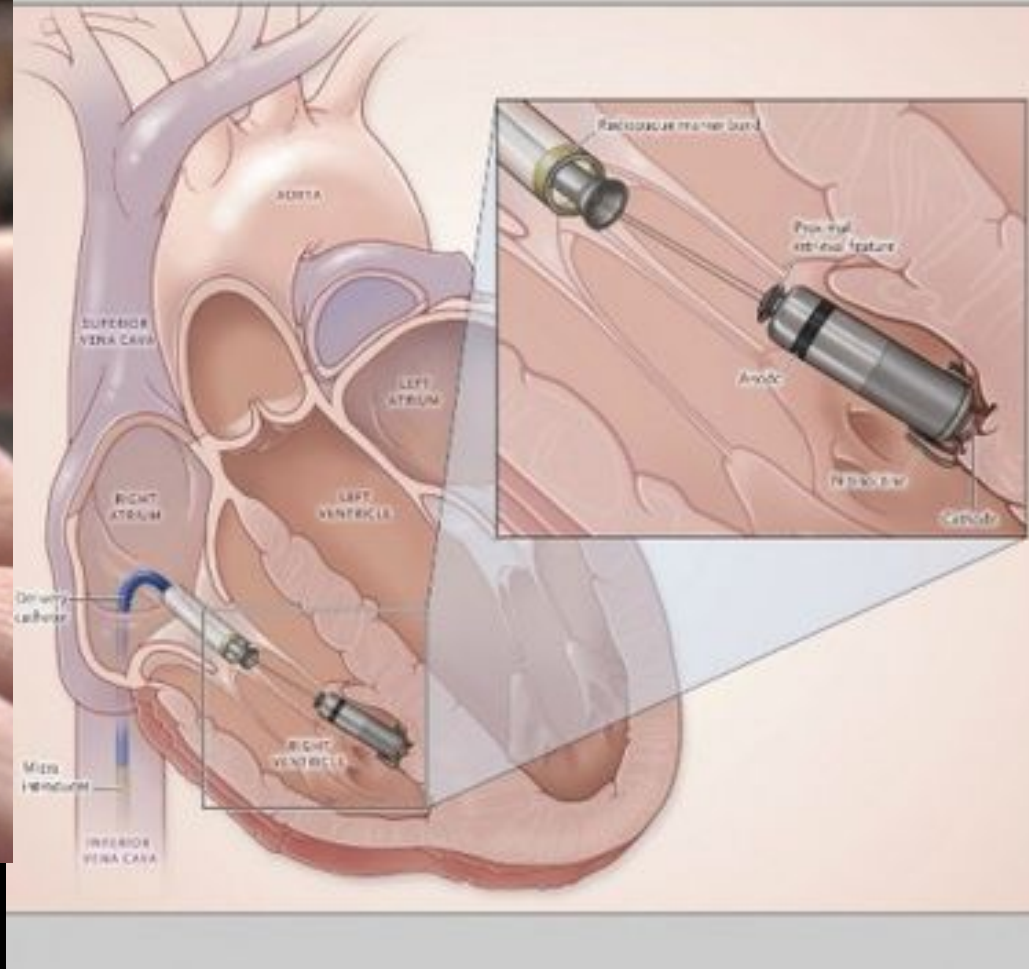


Nouveautés en stimulation et défibrillation intra-cardiaque



Philippe Ricard
Centre du coeur
Clinique Saint George
Nice

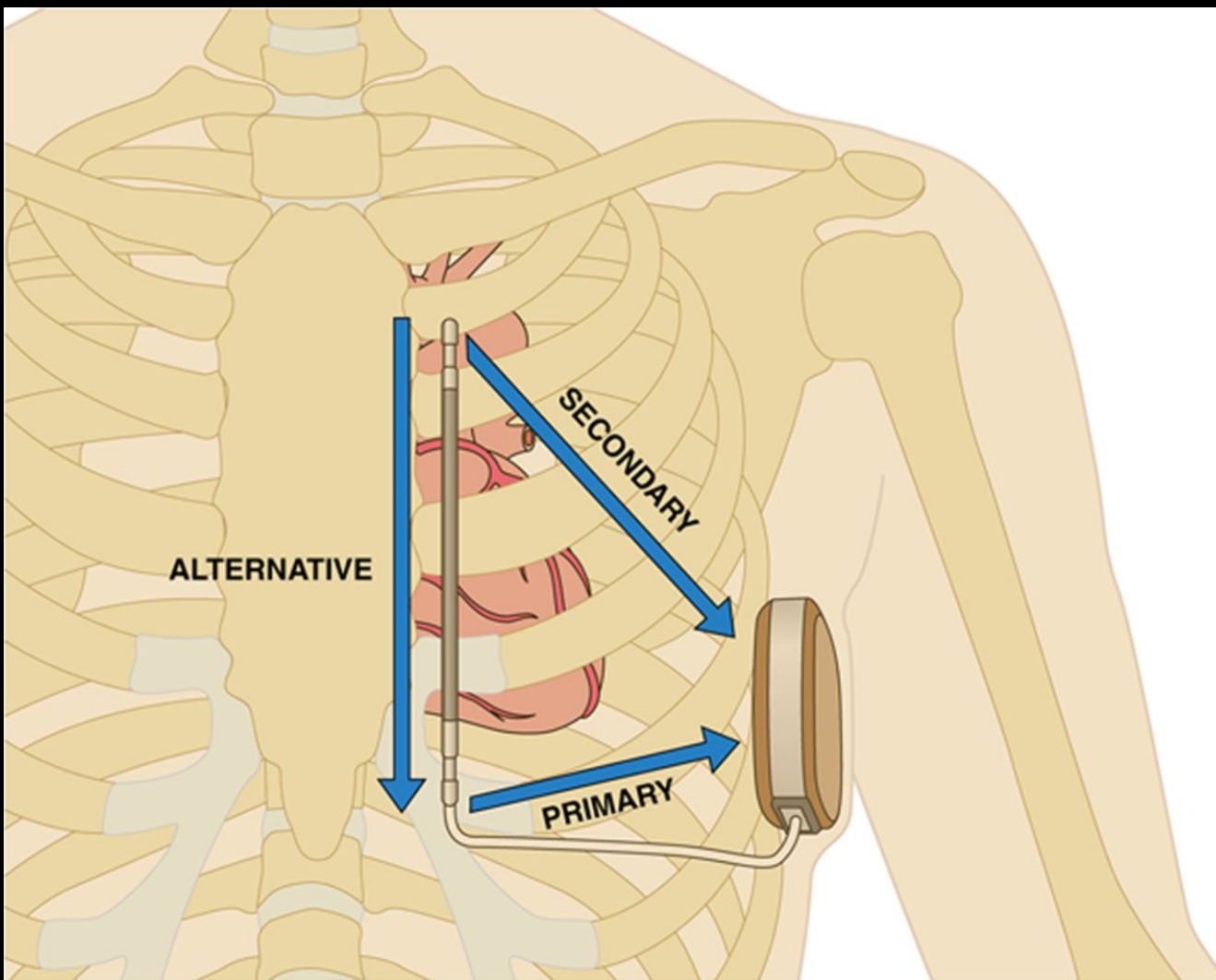
Le stimulateur sans sonde (Medtronic Micra)



VVIR, 1.75g, 0.8cc

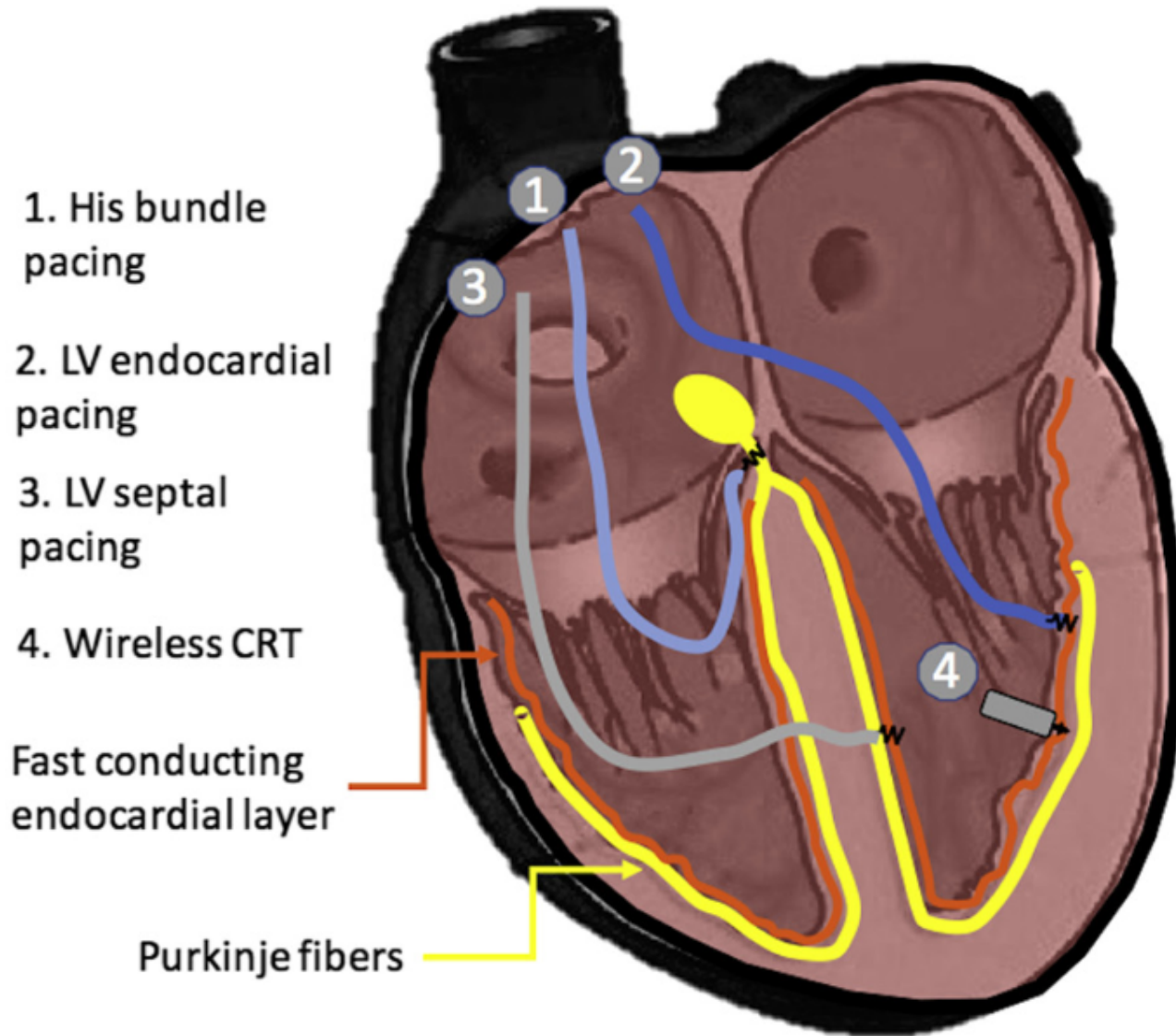
Défibrillateur sous cutané

(Boston Scientific Emblem)

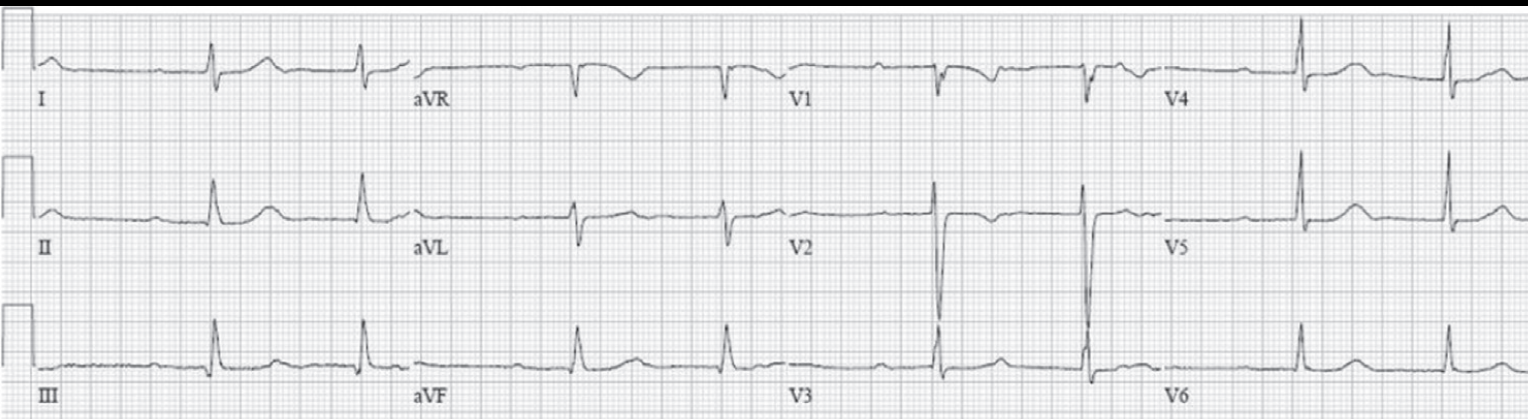


- Pas d'accès vasculaire
- 2 électrodes de détection
- 3 électrogrammes
- Screening ECG avant l'implantation
- Electrode de choc: 8 cm
- Choc max: 80 J
- Boitier: 59.5 cc
- **Pas de stimulation endocavitaire**
- Peu de paramètres programmables <10
- 2 zones de Détection (discrimination TSV)
- Compatible IRM

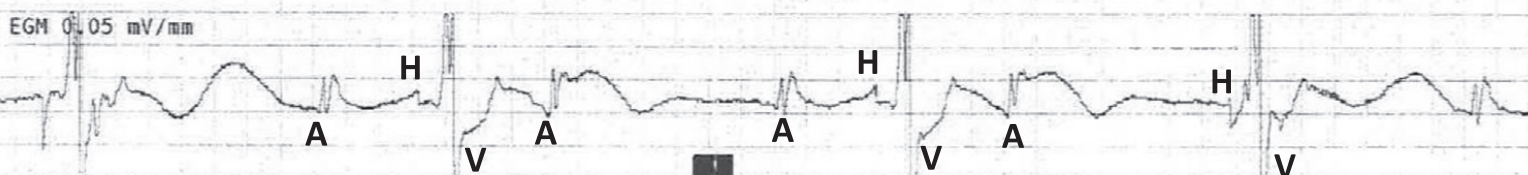
Les nouvelles perspectives dans la stimulation cardiaque



Stimulation du faisceau de His (1)



ECG
spontané



EGM durant
implantation



ECG
stimulation
du His

Stimulation du faisceau de His (2)

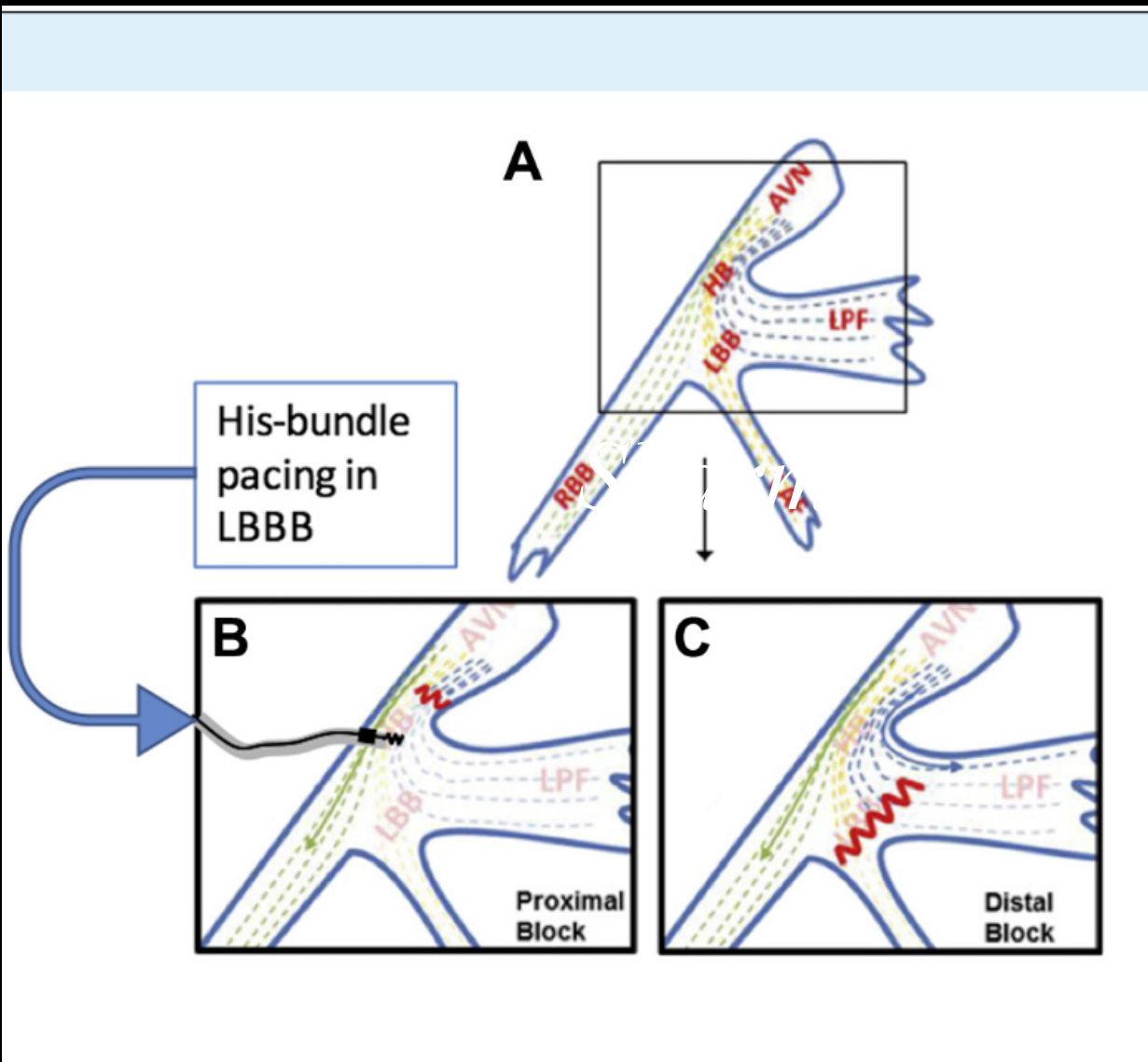
Table 2 Procedural outcomes

Parameter	His-bundle pacing	RV pacing	<i>P</i>
No. of patients	75	98	
Dual-chamber implants	65 (87)	81 (83)	NS
Baseline QRS duration (ms)	109 ± 26	102 ± 24	NS
Paced QRS duration (ms)	124 ± 22	168 ± 21	.001
Fluoroscopy duration			NS
Mean (min)	12.7 ± 8	10 ± 14	
Median (min)	9.1	6.4	
Procedure duration			<.01
Mean (min)	79 ± 25	64 ± 25	
Median (min)	75	58	

Patients with >40% ventricular pacing

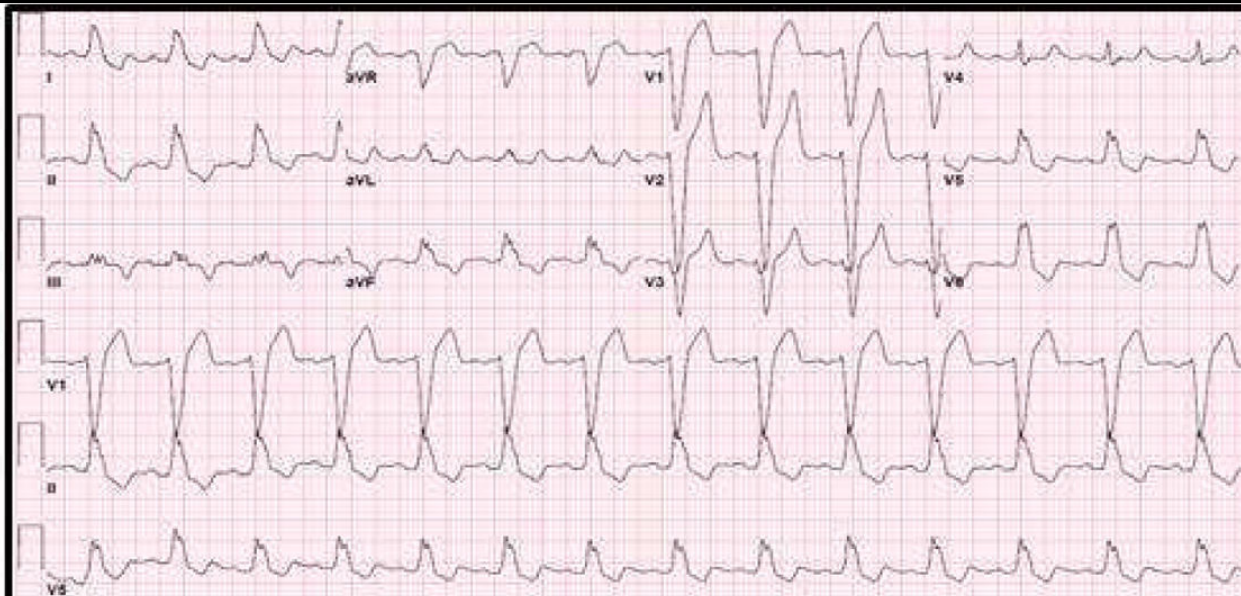
Total no. of patients	47 (63)	60 (62)	
HFH	1 (2)	9 (15)	.02
Mortality	6 (13)	11 (18)	.45
AF	1 (2)	2 (3.3)	1.00

Stimulation du faisceau de His pour la resynchronisation

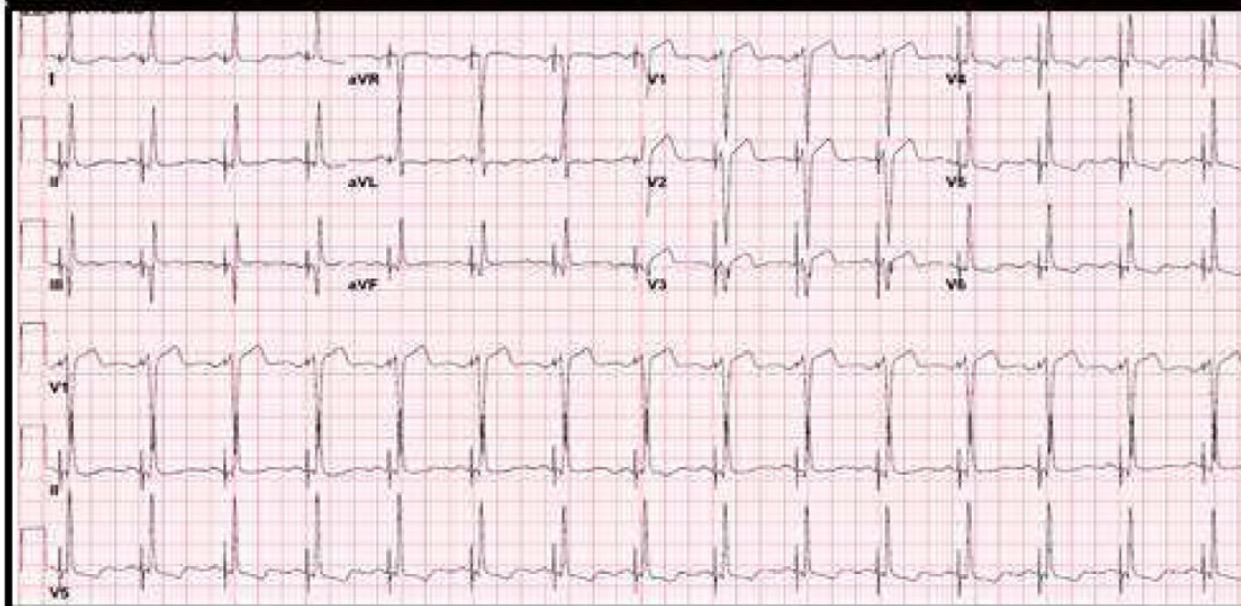


Stimulation du faisceau de His pour la resynchronisation

B



BASELINE

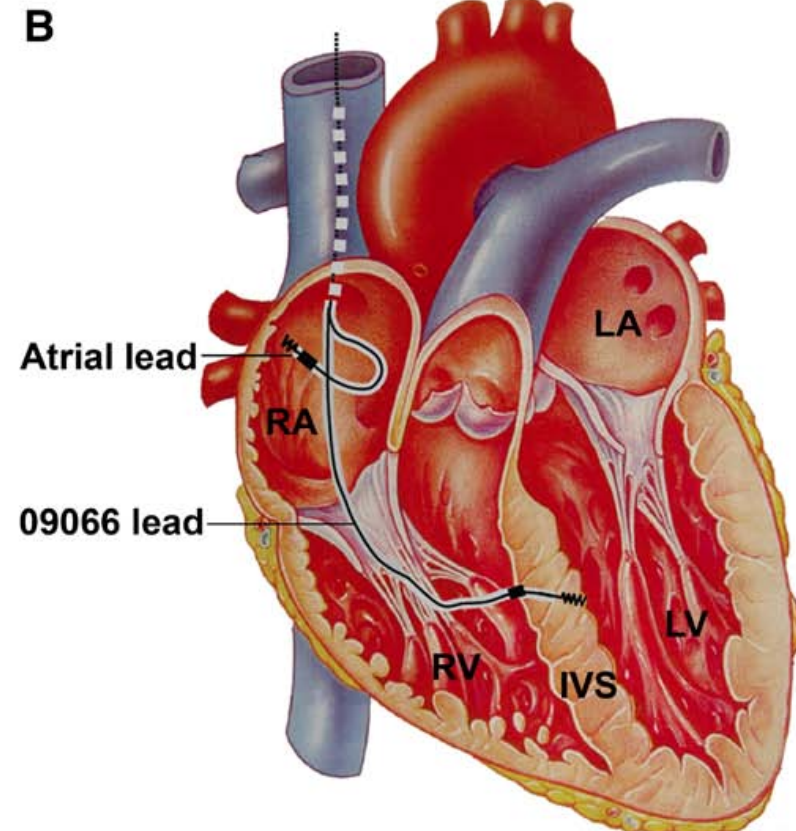
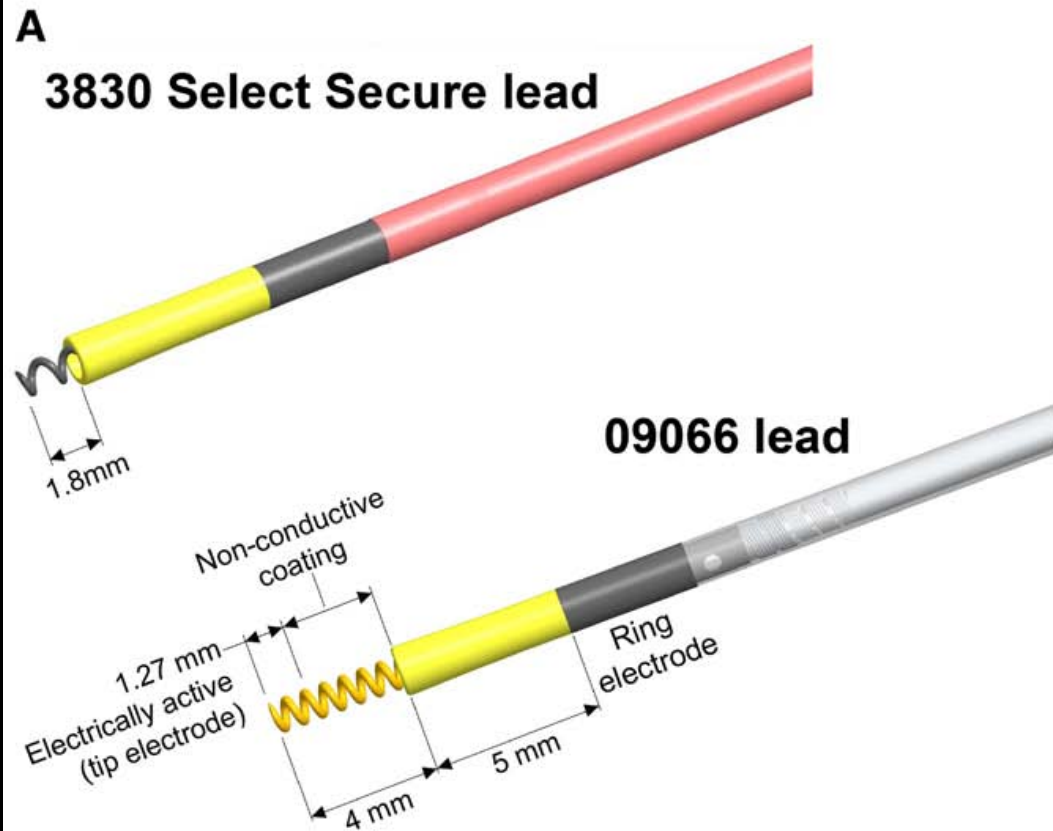


HBP

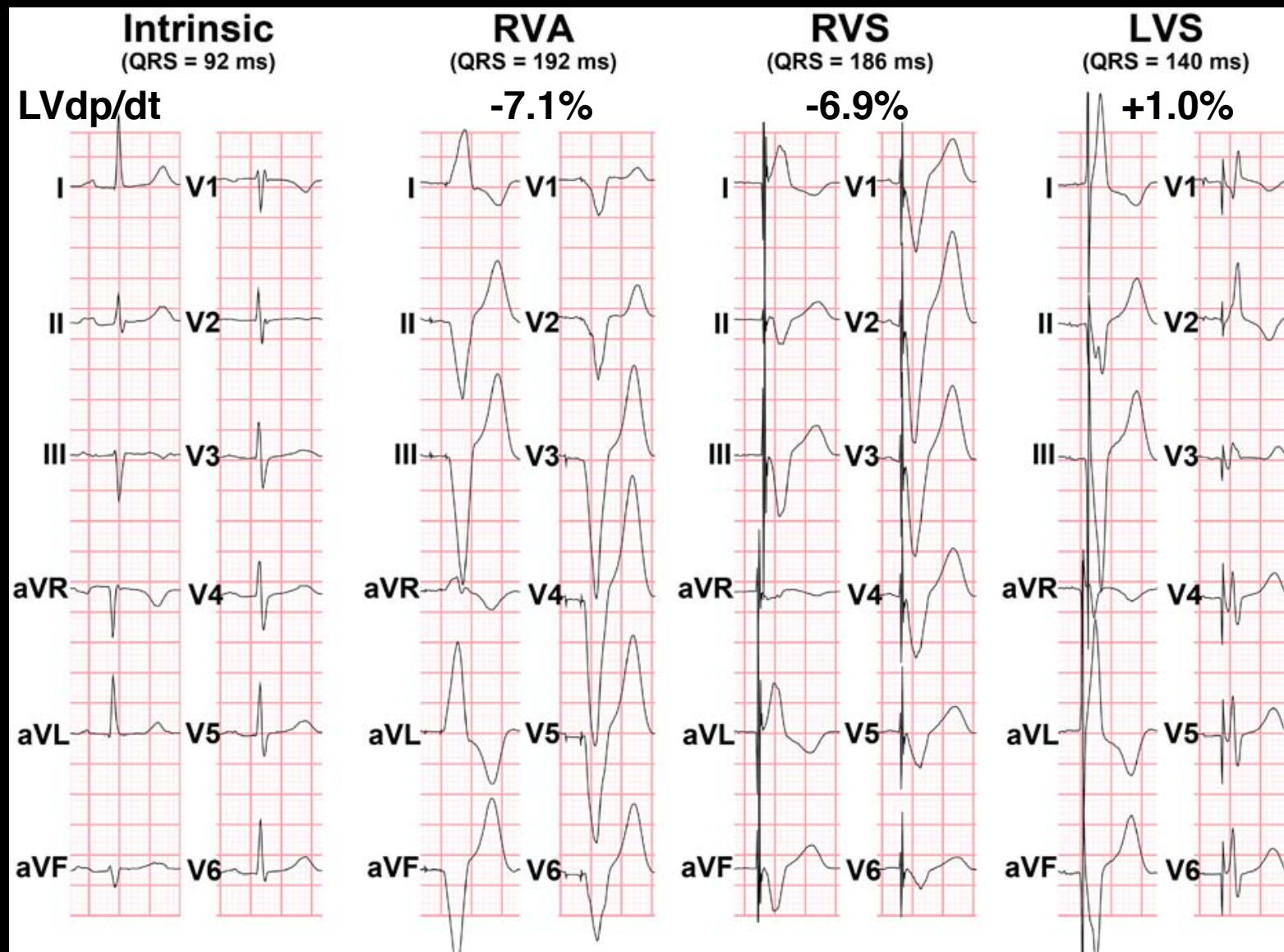
N = 29

Raccourcissement du QRS:
83%

Stimulation septale VG au travers du septum (1)



Stimulation septale VG au travers du septum (2)

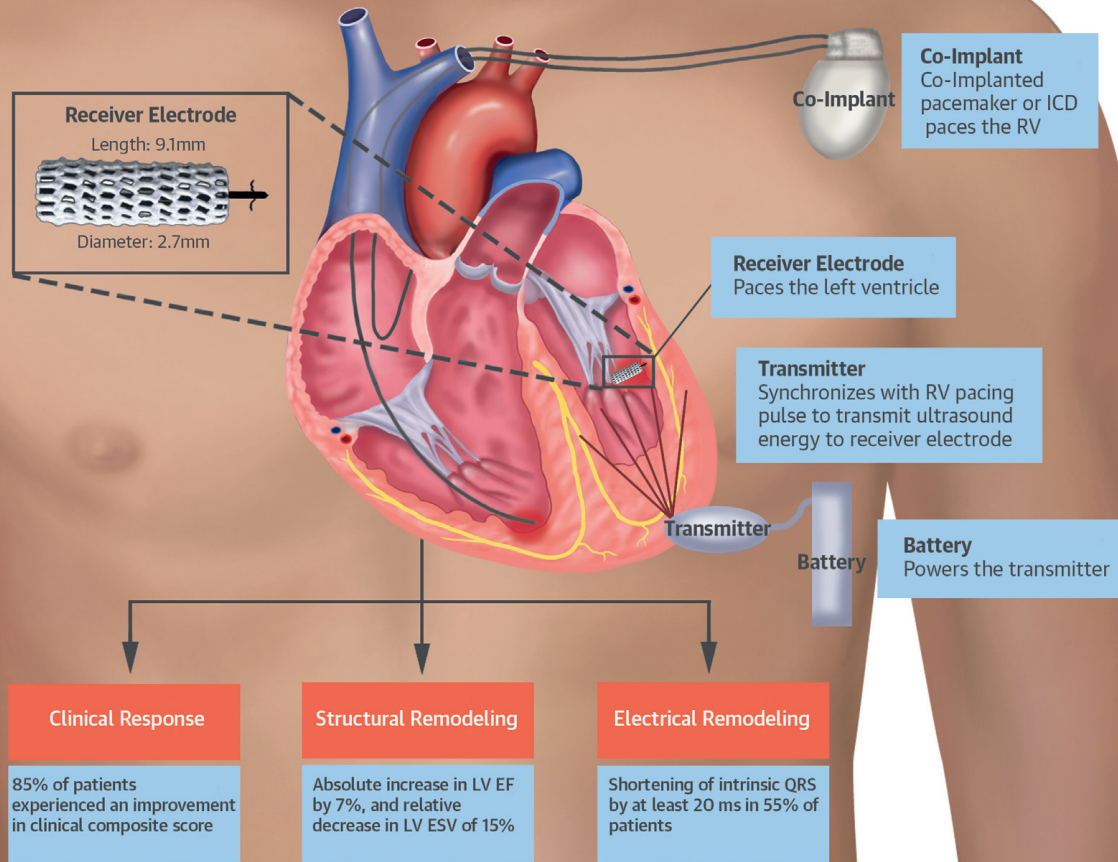


La resynchronisation avec une électrode VG endocardiaque sans sonde.

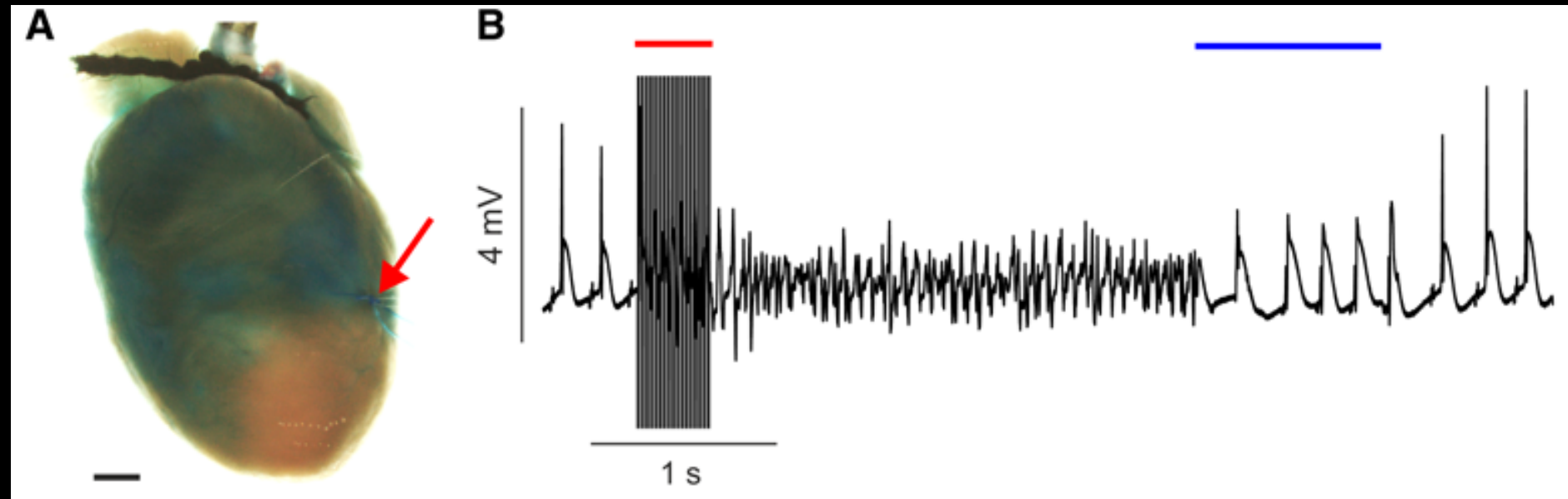
(The WISE system)

N= 35

Succès: n=34
(97%)



La défibrillation optogénétique: arrêter une TV par la lumière



Souris transgéniques ou infectées dont le cœur exprime un canal ionique sensible à la lumière (ChR2)