Supplementary material

Stec S, Jankowska-Polańska B, et al. Rationale and Design of SAN.OK Randomized Clinical Trial and Registry: Comparison of the Effects of Evidence-Based Pacemaker Therapy And Cardioneuroablation in Sinus Node Dysfunction

Table S1. Study sites of SAN.OK Trial and Registry.

- Department of Electrophysiology, Cardioneuroablation, Catheter Ablation and Cardiac Stimulation, Subcarpathian Center for Cardiovascular Intervention, Sanok, Poland
- 2. Department of Cardiology, Invasive Electrophysiology Laboratory, Center for Heart Diseases, Wroclaw Medical University, Wroclaw, Poland
- 3. Medical Center, Sabamed, Rzeszow, Poland
- 4. III Department of Interventional Cardiology, Angiology and Electrocardiology, Cardiovascular Center, American Heart of Poland, Dabrowa Gornicza, Poland

Table S2. Schedule of enrolment, interventions, and assessments of SAN.OK Study and Registry in group A and CA (protocol version 05).

	V 0	V 1	V 2	V 3	V 4	V 5	V 6	V 7	
TIMEPOINT	OUTPTATIENT	HOSPITAL		OUTATIENT					
	Screening	H1	H2	1 Month	3 Month	6 Month	9 Month	12 Month	
Eligibility screen	Х								
Informed consent	Х								
Pregnancy test	X*	X*		X*	X*	X*	X*	X*	
History and physical examination	Х	Х		Х	Х	Х	Х	Х	
Echocardiography (TTE)	Х		Х		Х	х		Х	
24 hour Holter ECG	X		Х		Х	Х		Х	
Holter ABPM	Х		Х		Х	х		Х	
Exercise Tolerance Test	Х		Х		Х	х		х	
Autonomic tests (Valsalva, carotid massage, FBT, HUT, atropine challenge)	Х					х		х	
Randomization		X ¹							
PM implantation		Х							
PM interrogation			Х	Х	Х	Х	Х	Х	
Questionnaires (bradycardia, QOL, fatigue, depression/ anxiety, sleep)	Х				х	х		х	
Interdisciplinary consultations		Х							
Review of adverse events		Х	Х	Х	Х	Х	Х	Х	

¹ Only group A

^{*} Test carried out on patients in childbearing age

** VAS - Visual Analog Scale, QOL - quality of life, MFIS - Modified Fatigue Impact Scale, HADS-M - Modified Hospital

Anxiety and Depression Scale, ESS - Epworth Sleep Scale, AIS-8 - Athens Insomnia Scale-8

Abbreviations: TEE- Transthoracic Echocardiography, ABPM - Ambulatory Blood Pressure Monitoring, FBT - Forced

Breathing Test, HUT - Head-Up Tilt, HI-1- admission to the hospital, HI-2- discharge form hospital

Table S3. Schedule of enrolment, interventions, and assessments of SAN.OK Study and Registry in group B and CB (protocol version 05).

	V 0	V 1	V 2	V 3	V 4	V 5	V 6	V 7
TIME POINT	OUTPATIENT	HOSP I		HOSP II	OUTPATIENT			L
	Screening	HI-1	HI-2	1 Month	3 Month	6 Month	9 Month	12 Month
Eligibility screen	X							
Informed consent	Х							
Pregnancy test	X*	X*		X*	Х*	X*	X*	X*
History (bradycardia symptoms) and physical examination	Х	х		Х	х	х	х	Х
Echocardiography (TTE)	Х		Х	Х	Х	Х	Х	х
Holter ABPM	Х		Х	Х	Х	Х		Х
Exercise Tolerance Test	х				Х	Х		Х
Autonomic tests (Valsalva, carotid massage, FBT, HUT, atropine challenge)	Х					Х		Х
Randomization		X ¹						
ILR implantation and remote monitoring		Х	Х	Х	Х	Х	Х	Х
EPS				Х				
CNA				Х				
ECVNS				х				
Questionnaires: bradycardia - VAS, QOL, fatigue (MFIS) depression/anxiety (HADS-M), sleep (ESS, AIS-8)	Х				х	х		х
Interdisciplinary consultations		Х						
Reassessment of indications for PM implantation					Х	х	х	Х
Review of adverse events				Х	Х	Х	Х	Х

¹ Only group B

Abbreviations: TEE- Transthoracic Echocardiography, ABPM – Ambulatory Blood Pressure Monitoring, FBT – Forced Breathing Test, HUT – Head-Up Tilt

^{*} Test carried out on patients in childbearing age

^{**} VAS - Visual Analog Scale, QOL - quality of life, MFIS - Modified Fatigue Impact Scale, HADS-M - Modified Hospital Anxiety and Depression Scale, ESS - Epworth Sleep Scale, AIS-8 - Athens Insomnia Scale-8

Table S4. Secondary endpoints of SAN.OK Trial and Registry.

- Occurrence of major adverse cardiac events (peri-procedural and long-term complications): death, stroke, myocardial infarction, pericardial effusion requiring drainage, AV block, venous thrombosis, infection, hemorrhage, hematoma, fistula, pseudoaneurysm, surgical intervention
- Frequency of post-ablation inducibility of sinus arrest and/or AV block in pre- and postprocedural extracardiac vagal nerve stimulation (ECVNS)
- Assessment of long-term efficacy and safety of the treatment strategy
- Assessment of the effect of CNA on bradycardia symptoms, QOL, fatigue, depression /anxiety and sleep disorders based on standardized questionnaires at 0, 3, 6, 12 months
- Assessment of the non-invasive autonomic tests before and after the procedure in the period of 12 months
- Assessment of the frequency of bruxism and its resolution after treatment of bradycardia at 0, 6 and 12 months
- Assessment of incidence of sleep apnea and its resolution after treatment of bradycardia at 0, 6, 12 months
- Assessment of the decision to choose the treatment strategy