Dual chamber and atrial tachyarrhythmias adverse events study

Submission date	Recruitment status No longer recruiting	Prospectively registered	
13/12/2003		[X] Protocol	
Registration date	Overall study status Completed	Statistical analysis plan	
16/01/2004		[X] Results	
Last Edited	Condition category	[] Individual participant data	
21/03/2016	Circulatory System		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

ClinicalTrials.gov (NCT) NCT00157820

Protocol serial number DATAS

Study information

Scientific Title

Dual chamber and Atrial Tachyarrhythmias Adverse events Study

Acronym

DATAS

Study objectives

To analyse the ability of dual chamber implantable cardioverter defibrillator (DC ICD) (dual chamber [DDED] defibrillator) to reduce clinically significant adverse events compared with single chamber implantable cardioverter defibrillator (SC ICD) in a non-selected population with conventional indications for implantable cardioverter defibrillator (ICD) implantation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Documented approval of the investigational plan by the Institutional Review Board (IRB) or Ethics Committee (EC) affiliated with the study centre is required for starting the study.

Study design

Randomised controlled trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Tachyarrythmias, automatic implantable cardioverter defibrilator (ICD)

Interventions

Interventions:

Analyse the ability of DDED to reduce clinically significant adverse events as compared to SC ICD (VVEV) in a non selected population with conventional indication of ICD implantation.

Three arms: two of them (SC simulated and DC true) cross-over, and the third (SC true) parallels the other two. A 1-month wash out period after the cross-over is included to avoid influence of the remodeling associated with pacing mode.

Patients will be followed-up at 1, 4, 8, 9, 13 and 17 months. At enrolment, 8 and 17 months, the quality of life questionnaires, a 6-minute walk test and echo parameters will be recorded, as well as reevaluation of the cardiovascular history.

Intervention Type

Device

Primary outcome(s)

To determine whether use of DDED ICD results in a significant decrease in the number of clinically significant adverse events (CSAE) as follows:

- 1. All-cause mortality
- 2. Invasive intervention, hospitalisation (greater than 24 hours) or prolongation of hospitalisation due to cardiovascular cause

- 3. Inappropriate shocks (two or more episodes with inappropriate shocks)
- 4. Sustained symptomatic atrial tachyarrhythmias that:
- 4.1. Require urgent termination, or
- 4.2. Last more than 48 hours leading to therapeutic intervention

Key secondary outcome(s))

- 1. Number of each of the components of the CSAE
- 2. Arrhythmia related:
- 2.1. Atrial tachyarrhythmia
- 2.2. Frequency and burden
- 2.3. Ventricular tachyarrhythmia frequency and burden number of appropriate shocks
- 2.4. Number of inappropriate shocks
- 2.5. Need for reprogramming
- 2.6. Need for medication/radiofrequency ablation (RFA) for arrhythmia control
- 2.7. Pacemaker syndrome
- 2.8. Development of dual chamber pacing indication
- 3. Cardiovascular related:
- 3.1. New York Heart Association (NYHA) functional class
- 3.2. Exercise capacity
- 3.3. Left ventricular ejection fraction (LVEF)
- 3.4. Reduction of medication (diuretics)
- 4. Quality of life:
- 4.1. Evaluated by the 36-item Short Form Health Survey (SF-36)
- 4.2. Minnesota living test, with heart failure and Symptom Checklist instruments

Completion date

01/04/2005

Eligibility

Key inclusion criteria

Meet Class I implantation criteria for single chamber implantable cardioverter defibrillator according to guidelines

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Not Specified

Key exclusion criteria

- 1. Permanent atrial fibrillation
- 2. Non structural heart disease
- 3. Patient meets implantation criteria for dual-chamber pacing (symptomatic sinus node disease,

all 2nd atrioventricular (AV) block [except asymptomatic Mobitz I] and all 3rd degree AV block)

- 4. Previous system implanted (ICD or pacemaker)
- 5. Mechanical right heart valve
- 6. Medical conditions that would preclude the testing required by the protocol, or limit study participation
- 7. Unwilling or unable to cooperate or give written informed consent, or the patient is a minor and legal guardians refuse to give informed consent
- 8. Inaccessible for follow-up at the study centre
- 9. Biventricular stimulation or re-synchronisation
- 10. Enrolled or planning to enrol in other clinical trials during the clinical study

Date of first enrolment

01/11/2000

Date of final enrolment 01/04/2005

Locations

Countries of recruitment

United Kingdom

Germany

Israel

Italy

Portugal

Spain

Study participating centre Av. Tres Cruces s/n Valencia Spain 46014

Sponsor information

Organisation

Medtronic Inc. (USA)

ROR

https://ror.org/00grd1h17

Funder(s)

Funder type

Industry

Funder Name

Medtronic

Alternative Name(s)

Medtronic Inc.

Funding Body Type

Private sector organisation

Funding Body Subtype

For-profit companies (industry)

Location

United States of America

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	Results	01/05/2008	Yes	No
<u>Protocol article</u>	Protocol	01/03/2004	Yes	No
Basic results			No	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes