

ENGINEERED FOR MRI: OUR CARE OF YOUR PATIENT NEEDS

- Designed for safe and effective scanning during an MRI procedure at 1.5 T
- Test of the MRI configuration before final programming
- Automatic deactivation of the MRI operating mode by a programmable timer
- Head and extremities scan (thorax excluded)



MRI Modality Configuration

MRI Modality

ON

Function Test

START

at previous Follow-Up

OFF

Maximum Time at End of MRI Scan

36

 hours

	MRI Modality	Permanent
Mode	VOO	DDD
Basic Rate	90 min ⁻¹	60 min ⁻¹
Ventricular Pulse Amplitude	5 V	5 V
Ventricular Pulse Width	0.98 ms	0.43 ms
Ventricular Pacing Polarity	Bipolar	Unipolar

ATTENTION
Before the patient leaves the Hospital, it is mandatory to perform a Follow-Up which includes Pacing Threshold Analysis, Sensing Test, Battery and Leads Measurements. It is also suggested to calibrate again TVI and enable related functions and diagnostics.

BACK

i MRI Modality will start at end of Follow-Up

A COMPLETE MR-CONDITIONAL SYSTEM



EOS MRI is approved for conditional MR application if connected with **400J MRI** and **400 MRI**, atrial and ventricular bipolar leads.

[Compatible with any IS-1 lead for non-MR use]

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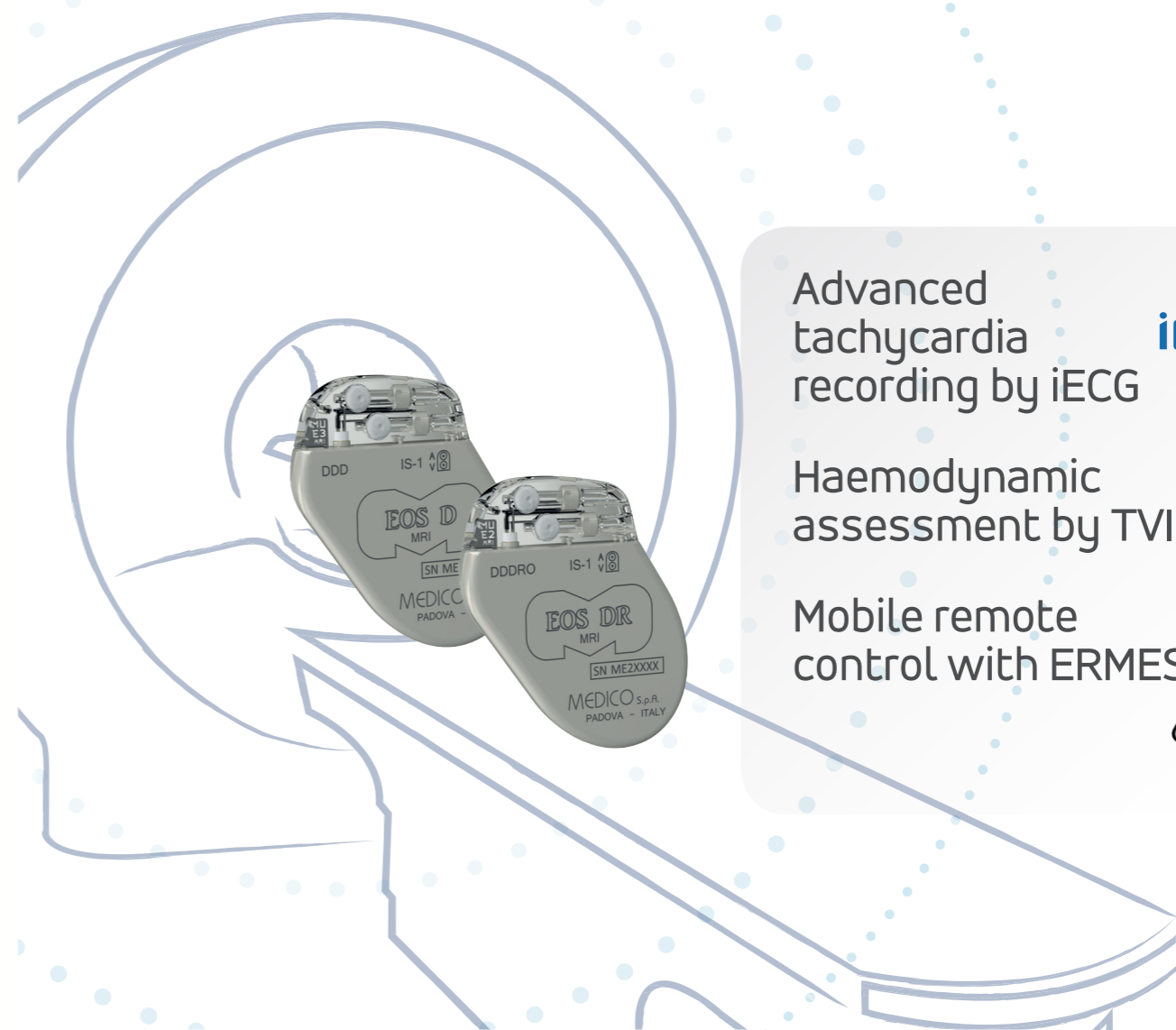
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EOS D/DR MRI



Advanced tachycardia recording by iECG



Haemodynamic assessment by TVI



Mobile remote control with ERMES

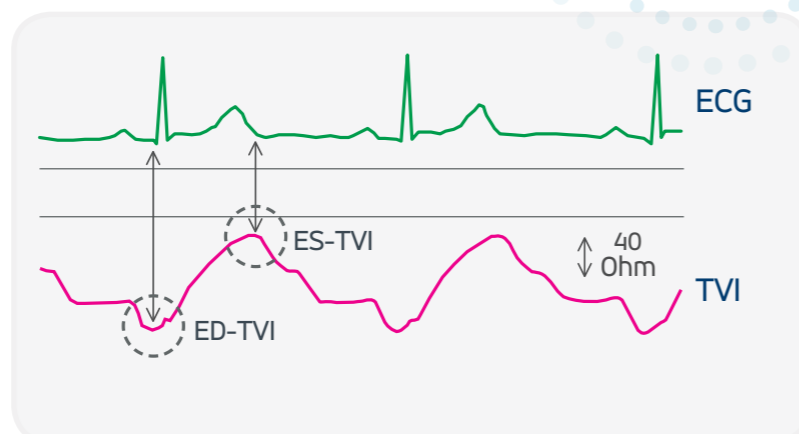


THE NEW MR CONDITIONAL DUAL CHAMBER PACING SYSTEM by MEDICO

with **400J MRI** and **400 MRI** atrial and ventricular leads

FLUCTUATION IN TRANSVALVULAR IMPEDANCE (TVI) DETECTED AT EVERY BEAT

- ▶ Reflects structural and volumetric changes during a cardiac cycle
- ▶ Is correlated with cardiac haemodynamics
- ▶ Confirms the ejection at every beat and assesses the stability of ventricular mechanics in tachycardia
- ▶ Is suitable for long-term monitoring of cardiac performance



EJECTION CHECK AFTER VENTRICULAR PACING

PROTECTION

NO expected TVI increase after a pacing pulse:
Loss of ventricular capture

- pulse energy immediately **increased** to the maximum value
- pacing **energy scan** started

TVI-based surveillance monitors every paced cycle, increasing the pulse energy if ventricular stimulation fails.

EJECTION CHECK AFTER VENTRICULAR SENSING

SAFETY

NO expected TVI increase after a series of 3 ventricular sensing events:
Sensing is deemed unreliable

- **Security pacing:** V-triggered and inhibited pacing are alternated at every beat

TVI-based surveillance monitors every sensed cycle, providing safety pacing if ventricular sensing is not reliable.

VENTRICULAR PACING REDUCTION

AV PROMOTION

...▶ **ADI** pacing mode

Intrinsic AV conduction

**V
P
R**

A-V block or slow conduction or **insufficient TVI excursion**

DDD pacing mode ◀...

TVI-based surveillance monitors every sensed cycle, ensuring that the appropriate stroke volume is achieved.

AN EXCLUSIVE ADVANCED APPROACH TO DETECT THE ELECTRIC ACTIVITY OF THE HEART WITH PACING ELECTRODES

The signal provides information **comparable to the surface ECG**

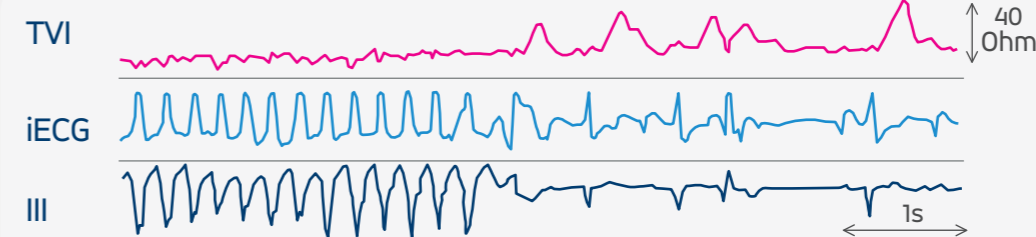
- ▶ Displayed during **pacing threshold** analysis for capture check.
- ▶ **Acquired automatically** during high-rate episodes to **discriminate supraventricular and ventricular arrhythmias**.



Sinus rhythm (left hand) and AVRT (right).

The morphology of the iECG ventricular complex is unchanged in SVTs.

TVI fluctuation shows reduced amplitude, but is regularly present at every beat.



Non-tolerated, spontaneously terminated VT.

TVI fluctuation is abolished in the absence of ejection and detected again as soon as sinus rhythm is reestablished.

The morphology of the iECG ventricular complex is radically changed in VTs.

REMOTE CONTROL WITH ERMES COMMUNICATION TOOL

ERMES remote controller keeps patient and physician in touch by:

- Performing fast or complete follow-up checks anywhere and anytime
- Detecting possible technical or clinical alerts
- Creating a report, including iECG and TVI tracings recorded in tachycardia or upon request
- Forwarding the report to the specified address

- ▶ Simple and user-friendly
- ▶ Reduced size and full portability
- ▶ Low energy communication with strong PM battery saving

