

# S-ICD best practices

## 1. Course Factsheet

<b>Course title</b>	Mastering S-ICD best practices		
<b>Academic Institution</b>	ERIS Institute	<b>Partner company</b>	TBD
<b>Dates</b>	27 – 29 May 2026	<b>Duration</b>	22 hours (In 3 days)
<b>Venue / Modality</b>	Toulouse (Clinique Pasteur)		
<b>Course director</b>	Serge Boveda		
<b>Overall learning goals</b>	<ul style="list-style-type: none"> <li>• Ensure good understanding of the entire workflow from screening to implant,</li> <li>• Grasp the foundations of screening and patient selection,</li> <li>• Demonstrate proficiency in implant techniques,</li> <li>• Adopt best practices,</li> <li>• Conduct effective follow-up management, while engaging in hands-on practice sessions.</li> </ul>		
<b>Certified competencies</b>	<ul style="list-style-type: none"> <li>• Describe the complete clinical workflow from patient screening to post-implant follow-up.</li> <li>• Explain the principles of patient screening and selection, incorporating recent clinical data.</li> <li>• Demonstrate correct implant techniques through hands-on practice under supervision.</li> <li>• Apply best practices in procedural planning, execution, and complication management.</li> <li>• Evaluate patient outcomes and manage follow-up care effectively.</li> </ul>		
<b>Material provided</b>	<ul style="list-style-type: none"> <li>• Digital manual,</li> <li>• OR checklist,</li> <li>• Access to ERIS INSTITUTE Academy and Manufacturer e-learning system</li> </ul>		
<b>Assessment</b>	<ul style="list-style-type: none"> <li>• Daily quiz</li> <li>• Final practical exam (certification model TBD)</li> </ul>		
<b>Credits / certificate</b>	ERIS Institute + University		
<b>Faculties</b> (5 Faculties in total)	Serge Boveda (Clinique Pasteur), Jenny Chuen (Nottingham City Hospital), Eloi Marijon (HEGP Paris), Pawel Syska (National Institute of Cardiology Warsaw) Mark La Meir (Vrije Universiteit Brussel) Stéphane Combes		
<b>Course coordination</b>	Email		

## 2. Detailed Programme

### Mandatory e-learning (before the in-person Course) TBD

#### Day 1 – Theory & Technology Basics

Time	Session	Speaker
08:45 – 09:00	Welcome and agenda overview	Serge Boveda
09:00 – 09:45	S-ICD journey - An evidence-based approach to elucidate patient indications	Serge Boveda
09:45 – 10:15	Introduction to Modular CRM (mCRM™) – What & why?	Eloi Marijon
10:15 – 11:15	Streamline S-ICD Screening towards optimal system performance.	Jenny Chuen and BSC staff member
BREAK		
11:30 – 12:30	Scenario based discussion: Patient Identification, Screening Outcomes & Decision-Making	Jenny Chuen/Eloi Marijon
LUNCH BREAK		
13:30 – 14:30	Ideal Implant Set-Up & Step-by-Step Walkthrough	Serge Boveda
14:30 – 15:00	PRAETORIAN Score & device placement: aligning practice with clinical evidence	Eloi Marijon
BREAK		
15:15 – 15:45	Device Replacement: What to Consider	Jenny Chuen

15:45 – 16:45	Scenario based discussion: optimal S-ICD Implant and Replacement	Jenny Chuen/Eloi Marijon
16:45 – 17:00	Q&A & Closure	All

### Learning Objectives:

- Identify appropriate patient profiles for S-ICD therapy in accordance with current ESC guidelines and clinical evidence, enabling informed, data-driven treatment decisions.
- Gain insight into the Modular CRM (mCRM™) System and its clinical relevance to tailor therapy to the individual patient's needs, enabling timely, personalized treatment planning.
- Apply a structured screening approach, including signal optimization and pathology-specific considerations.
- Master the screening-to-implant workflow, ensuring smooth coordination and adherence to clinical protocols.
- Respond effectively to failed screenings, using recommended troubleshooting and escalation steps.
- Apply theoretical knowledge to real-world case studies to enhance clinical decision-making—taking screening one step further by critically analysing outcomes and applying advanced actions accordingly.
- Gain insight into the anatomy & X-ray landmarks for S-ICD Implant & system placement
- Analyze and discuss the S-ICD Implant Procedure step-by-step (including mark-up, patient preparation, arm positioning and draping).
- Promote multidisciplinary preparedness by confidently guiding allied health professionals on the key differences between S-ICD and transvenous device setups
- Accurately calculate PRAETORIAN Score and Incorporate it into a DFT protocol for improved patient outcomes.
- Identify key aspects for an S-ICD system de-novo and replacement (pre, during and after implant) to ensure best patient outcome.
- Analyze post-implant scenarios and build expertise on how to identify and approach suboptimal placements.

## Day 2 – Supervised Simulation (on-site, rotating groups)

Time	Session	Speaker
08:30 – 09:00	Welcome and recap	Serge Boveda
09:00 – 09:45	Anaesthesia and Pain Control options when Implanting S-ICDs	Jenny Cheun
09:45 – 11:30	Hands-on Practice: S-ICD implant best practices from A to Z (3 groups)	Jenny Cheun, Mark La Meir, Serge Boveda and 2 BSC staff members
BREAK		
11:45 – 12:45	Tips & tricks on how to approach challenging cases	Mark La Meir, Jenny Chuen
LUNCH BREAK		
13:45 – 14:45	Post-Implant Management: Monitoring and Follow-up	Jenny Chuen and BSC staff member
14:45 – 16:30	Case-Based Learning: S-ICD follow-up in Practice with eLAB*	Jenny Chuen and BSC staff member
16:30 – 17:00	Wrap-up & Q&A	All

### Learning Objectives:

- Identify and evaluate anaesthetic and pain management strategies tailored to S-ICD implantation.
- Understand the procedural considerations and patient-specific factors influencing anaesthesia choice to ensure optimal comfort and safety during and post implantation.
- Apply S-ICD Implant Best practices, through hands-on practice with a dummy under expert guidance.
- Recognize and manage implant challenges in patients with high/low BMI, anatomical variances, or air entrapment.
- Apply a structured troubleshooting approach using best practices for failed or high DFTs
- Understand post-implant workflows for S-ICD patients, including wound care, device interrogation and complication monitoring.

- Apply structured follow-up strategies to assess device performance, patient recovery, and therapy effectiveness.
- Recognize key indicators for reprogramming or escalation, using clinical data and patient feedback to guide decisions.
- Confidently engage in S-ICD Follow-up cases discussion through remote simulations (using eLAB).
- Understand how real-life usage of the S-ICD predicts battery longevity.

### Day 3 – Clinical Immersion: real-life conditions & live cases observation

Participants remain in the same three groups of three. For each of the three S-ICD implantation cases, one group attends the procedure in the Lab CPT, while the other two groups observe in the retransmission room with live faculty commentary and interaction. Groups rotate so everyone experiences at least one case in the lab.

#### Operators:

Faculties for Day 3: the course director and faculty (Pawel and Mark for interaction with Serge in the retransmission room) + Staff from CP (Stéphane Combes) (EP Lab). 4 Faculties (Pawel, Mark, Stéphane and Serge).

Time	Group 1	Group 2	Group 3	Patient / Notes
08:30 – 09:00	Welcome & Objectives Overview			Plenary introduction
09:00 – 10:30	Lab CPT	Retransmission room	Retransmission room	S-ICD Implantation Case 1
10:30 – 11:00	Debrief and Break			
11:00 – 12:30	Retransmission room	Lab CPT	Retransmission room	S-ICD Implantation Case 2
12:30 – 13:30	Debrief and Lunch Break			
13:30 – 14:00	How to Prevent and Manage Complications			Plenary

14:00 – 15:30	Retransmission room	Retransmission room	Lab CPT	S-ICD Implantation Case 3
15:30 – 17:00	Group Exercise: Building a Screening, Implant & FUP Best Practices Checklist (Each group tackles one topic and presents back).			Breakout workshop
17:00 – 17:15	Wrap-Up & Feedback & Evaluation			Course Director

### Learning Objectives:

- Observe live S-ICD implantations and analyse procedural steps in real time.
- Engage in group discussion to reflect on clinical decision-making and procedural nuances.
- Participate in a collaborative debrief to consolidate learnings from different cases.
- Compare procedural approaches and discuss variations if exist.
- Strengthen procedural confidence by understanding how to anticipate, prevent, and manage intraoperative and postoperative issues effectively.
- Synthesize learnings from the day into actionable best practices.

### 3. Participants

**Total: 9** (3 groups of 3)

**Selection:** CV submission and final validation by the ERIS Board

#### Requirements

Electrophysiologists based at an S-ICD implant centre or preparing to initiate S-ICD procedures, with no or limited experience (defined as five or fewer implants performed in the past two years).