Hospital _____ ☐☐☐

Name	_____	ID	_____
First name	_____	Date of birth	_____
Address	_____	Sex	○ m ○ f
	_____	Phone	_____
Country	_____		

Inclusion criteria

☐ Planned extraction procedure for at least one transvenous lead with dwell duration >=12 months or use of dedicated extraction tools (locking stylet, sheath, snare etc)

Existing device prior to extraction

Date of last device operation _____ Overall number of prior device operations ____

Type of currently implanted device ○ PM ○ ICD Number of currently implanted intravasc. leads ____

☐ Active RA lead ☐ Active RV lead ☐ Active CS lead

☐ Active conduction system lead ☐ Active epicardial lead (s)

☐ Prior device upgrade

Underlying rhythm >=40/min ○ yes ○ no

Prior to extraction

Clinical characteristics

Height _____cm Weight _____ kg

☐ Atrial Fibrillation

Chronic renal insufficiency (GFR < 60 ml/min.) ○ none ○ yes ○ hemodialysis

Comorbidities

☐ COPD ☐ Hypertension ☐ Diabetes ☐ Prior cardiac surgery ☐ Venous occlusion

CMP ⌊__⌋⌊__⌋ CMP other details (if 99 = other) _____

Echocardiography

LVEF _____ %

☐ Vegetation

Tricuspid valve insufficiency ○ none ○ mild ○ moderate ○ severe

Medication

Antiaggregation ○ none ○ single ○ dual

Anticoagulation ○ none ○ NOAC interrupted >48h ○ NOAC continued
○ VKA interrupted ○ VKA continued

☐ Heparin bridging

Lead extraction general information

Date of intervention _____

Indication for lead extraction ⌊__⌋⌊__⌋ Indication other details (if 99 = other) _____

Setting ○ EP lab ○ Hybrid OR ○ OR

Anesthesia ○ conscious sedation ○ intubation

TEE ○ none ○ in room ○ in situ

Cardiac surgeon ○ none ○ informed & stand-by ○ in the OR
○ planned as hybrid procedure

Heart lung machine ○ none ○ informed & stand-by ○ in the OR

Bridge occlusion balloon ○ none ○ prep kit ○ balloon in situ ○ balloon deployed

Additional intervention during lead extraction ⌊__⌋⌊__⌋

Additional intervention other details (if 99 = other) _____

Re-implantation system ○ none ○ temporary ○ perm. transvenous ○ perm. non-transvenous
○ permanent leadless ○ perm. epicardial

Re-implantation device ○ none ○ temporary ○ PM ○ ICD ○ S-ICD ○ EV-ICD ○ leadless

Re-implantation electrodes ○ none ○ temporary ○ VVI ○ DDD ○ CRT ○ leadless ○ CSP

Use of antibiotic envelope ○ no ○ yes

Operator 1 _____ Operator 2 _____

Total procedure time _____ min Total fluoro time _____ min Total fluoro dose _____ cGy x cm^2

Details on leads targeted for extraction

Number of leads targeted for extraction _____

	Lead 1	Lead 2	Lead 3	Lead 4	Lead 5
Date of implant	_____	_____	_____	_____	_____
Serial number	_____	_____	_____	_____	_____
Manufacturer	_____	_____	_____	_____	_____
Model	_____	_____	_____	_____	_____
Fixation	○ active ○ passive	○ active ○ passive	○ active ○ passive	○ active ○ passive	○ active ○ passive
Location of fixation	○ RA ○ RV ○ CS ○ Cond. system ○ Leadless	○ RA ○ RV ○ CS ○ Cond. system ○ Leadless	○ RA ○ RV ○ CS ○ Cond. system ○ Leadless	○ RA ○ RV ○ CS ○ Cond. System ○ Leadless	○ RA ○ RV ○ CS ○ Cond. system ○ Leadless
Lead access	○ left ○ right	○ left ○ right	○ left ○ right	○ left ○ right	○ left ○ right
Type	○ pace/sense ○ single-coil ○ dual-coil	○ pace/sense ○ single-coil ○ dual-coil	○ pace/sense ○ single-coil ○ dual-coil	○ pace/sense ○ single-coil ○ dual-coil	○ pace/sense ○ single-coil ○ dual-coil
Simple traction	☐	☐	☐	☐	☐
Locking stylet	☐	☐	☐	☐	☐
Teflon sheath	☐	☐	☐	☐	☐
Laser sheath	☐	☐	☐	☐	☐
Mech. rot. sheath (Select the last sheath used for successful extraction)	○ no ○ Philipps TightRail ○ Cook evolution	○ no ○ Philipps TightRail ○ Cook evolution	○ no ○ Philipps TightRail ○ Cook evolution	○ no ○ Philipps TightRail ○ Cook evolution	○ no ○ Philipps TightRail ○ Cook evolution
Femoral snaring	○ No ○ Needle's Eye ○ Goose neck ○ EN snare	○ No ○ Needle's Eye ○ Goose neck ○ EN snare	○ No ○ Needle's Eye ○ Goose neck ○ EN snare	○ No ○ Needle's Eye ○ Goose neck ○ EN snare	○ No ○ Needle's Eye ○ Goose neck ○ EN snare
Result	○ compl. success ○ clinical success ○ failure	○ compl. success ○ clinical success ○ failure	○ compl. success ○ clinical success ○ failure	○ compl. success ○ clinical success ○ failure	○ compl. success ○ clinical success ○ failure
Approach	○ superior ○ inferior ○ both	○ superior ○ inferior ○ both	○ superior ○ inferior ○ both	○ superior ○ inferior ○ both	○ superior ○ inferior ○ both

Complications until discharge

Total duration of hospital stay at the extraction center _____ days

Death	○ no ○ unrelated to extraction		○ complication of the lead extraction procedure ○ due to the disease which indicated extraction	
SVC laceration	○ no	○ yes		
Hemato-/Pneumothorax	○ no		○ interventional drainage	○ surgical drainage
Cardiac tamponade	○ no		○ interventional drainage	○ surgical drainage
Lead issue	○ none	○ dislocation	○ perforation	○ electrical

☐ none
☐ Unplanned conversion to cardiac surgery
☐ New severe tricuspid insufficiency
☐ Pulmonary embolism
☐ Anesthesia complication
☐ Pocket hematoma (req. intervention)
☐ Cardiac decompensation
☐ Stroke
☐ HLM in use
☐ Groin complication (req. intervention)
☐ Newly elevated hemidiaphragm
☐ New diagnosis of thrombosis
☐ Transfusion of >=2 packed red blood cells
☐ SIRS
☐ other: _____

_____

30 days outcome

Total duration of hospital stay all institutions together _____ days

Complications occuring between discharge from extraction center to day 30

☐ none ☐ Death ☐ Pulmonary embolism ☐ Stroke ☐ Cardiac decompensation

☐ other: _____

Lead issue ○ none ○ dislocation ○ perforation ○ electrical

Code List

Clinical characteristics prior to extraction

CMP
01 = none
02 = ICM
03 = DCM
04 = valvular
05 = primary electrical disease
06 = GUCH
99 = other

Lead extraction general information

Indication for lead extraction
01 = CIED-related endocarditis without pocket infection
02 = isolated pocket infection
03 = pocket infection with bacteraemia
04 = occult bacteraemia with probable CIED infection
05 = lead dysfunction
06 = upgrade
07 = vascular occlusion
08 = pain
99 = other

Additional intervention during lead extraction
01 = none
02 = PFO occlusion
03 = ASD occlusion
04 = transvenous vegetation aspiration
05 = PTA
06 = direct re-implant of new device
99 = other