

The TEE Collaborative Registry Database Participant Agreement

By agreeing to participate in the TEE Collaborative Registry Database, each Participating Institution agrees to all terms regarding the submission, use and disclosure, and protection of data outlined in Introduction to the TEE Collaborative Registry Database.

We also reserve the right to market your entity as a Participating Institution in the TEE Collaborative Registry Database, which may include the use of logos and images associated with your entity.

This Participant Agreement will remain in effect only for as long as the TEE Collaborative Registry Database continues to operate. If the Database ceases to operate, Participating Institutions will be notified and given a time frame with which to download the data they have stored in TEE Collaborative Registry. Notwithstanding the forgoing, in the case that it becomes necessary, we reserve the right to discontinue our relationship with any Participating Institution with which we are partnered. The data that has already been entered by that Participating Institution will remain in the TEE Collaborative Registry Database subject to all ongoing privacy and security measures.

We may amend or modify the terms of this Participation Agreement at any time and such amendments or modifications shall be effective immediately upon notice to the affected parties.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the last written date below.

Institution Name	
Date:	Name and Title
FOR THE TEE COLLABORATIVE REGISTRY DATABASE TEAM:	
Date:	Name and Title

FOR: PARTICIPATING INSTITUTION:

REDUCTION TE FOULABORATIVE TE FOULABORATIVE

EXHIBIT A

REPORTABLE DATA ELEMENTS

Clinician operator information

Level of operator performing TEE (Attending, Fellow, Resident, Other) Specialty of operator performing TEE (EM, Intensive Care, Cardiology, Anesthesiology) Clinical unit (ED, ICU, OR, Ward, Prehospital, Other).

Patient information

Date of birth

Gender

Race

Weight

BMI

Medical history:

Coronary artery disease (CAD), congestive heart failure (CHF), chronic kidney disease (CKD), diabetes mellitus (DM), hypertension (HTN), previous STEMI (pSTEMI), ventricular assist device (VAD), and implantable cardioverter defibrillator (ICD)

General procedure information

Procedure date / time

Procedure duration (estimated duration of total procedure in mins)

Pre-procedure interventions

Endotracheal intubation

Sedation

Muscle relaxation

Nasogastric or orogastric tube placement

Probe insertion:

Technique used

no laryngoscope used for insertion direct laryngoscopy used for insertion video laryngoscopy used for insertion

Number of attempts including successful insertion attempt

Immediate complications detected during probe insertion

Pharvngeal bleed

Endotracheal tube dislodgement during TEE insertion Endotracheal tube cuff rupture during TEE insertion

Complications related to TEE

Diagnosis of esophageal perforation made after TEE



Diagnosis of oropharyngeal injury made after TEE Diagnosis of gastrointestinal bleed made after TEE

TEE indication (will determine form for subsequent sections)

Intra-arrest evaluation in OHCA

Post-arrest evaluation in OHCA

Intra-arrest evaluation in IHCA

Post-arrest evaluation in IHCA

Initial evaluation of undifferentiated shock or acute hemodynamic decompensation

Hemodynamic monitoring in critically-ill patient

Procedural guidance



Indication-specific variables

Intra-Arrest Evaluation of Out-of-Hospital Cardiac Arrest

Prehospital process

Arrest location
Witnessed
Bystander CPR
Exact time of arrest
Approximate time of arrest
Exact downtime
Approximate downtime

First documented pulseless cardiac rhythm

Asystole

PEA

VF

VT

Unknown

EMS level

BLS

ALS

Prehospital interventions

Chest compressions

Defibrillation

Airway procedures

Valve-Mask Ventilation

Supraglottic airway device placed

Endotracheal intubation in the field

Drug administration

Epinephrine administration

Route (IV, IO)

Total number of doses given

Time of doses

Other Drug Interventions

Intravenous fluids

Antiarrhythmic Medications

Vasopressors (epinephrine infusion)

Atropine

Others

CPR quality parameters

End-Tidal CO2 (Values / Times)

Systolic blood pressure (Values / Times)

Diastolic blood pressure (Values / Times)

CC depth

CC rate

RESUSCITATIVE TEE COLLABORATIVE

CC fraction

ED process

Time of ED arrival

First ED documented pulseless cardiac rhythm

Asystole

PEA

VF

VT

Unknown

Emergency Department interventions

Chest compressions

Defibrillation

Airway procedures

Valve-Mask Ventilation

Supraglottic airway device placed

Endotracheal intubation

Drug administration

Epinephrine administration

Route (IV, IO)

Total number of doses given

Time of doses

Other Drug Interventions

Intravenous fluids

Antiarrhythmic Medications

Vasopressors (epinephrine infusion)

Atropine

Others

CPR quality parameters

End-Tidal CO2 (Value / Times)

Systolic blood pressure (Values / Times)

Diastolic blood pressure (Values / Times)

CC depth

CC rate

CC fraction

TEE data

Windows obtained

- o Mid-esophageal four chamber view
- Mid-esophageal long axis view (three chamber view)
- Mid-esophageal bicaval view



- o Transgastric midpapillary muscle short axis view
- o Mid-esophageal two chamber view
- o Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- o Mid-esophageal descending aorta short axis view
- Mid-esophageal descending aorta long axis view
- Transgastric midpapillary muscle long axis view
- Transgastric deep five chamber view
- o Other (Describe)

Type of CPR during TEE (Manual / Mechanical)

Initial Area of Maximal Compression (AMC) in ME LAX view

Left ventricle

LVOT

Aortic root

Unable to determine

Other

End-Tidal CO2 at the time of initial AMC assessment (Value)

DBP at the time of initial AMC assessment (Value)

AMC changed under TEE guidance (Y/N)

Time of AMC change (if previous answer yes) (Time)

End-Tidal CO2 at the time of initial AMC assessment (Time/Value)

DBP at the time of initial AMC assessment (Time/Value)

Operator-identified TEE findings

Cardiac tamponade

RV dilation

Pseudo PEA

Hypovolemia

Fine ventricular fibrillation

Intra-cardiac thrombus

Aortic dissection

Etiology of arrest established based on TEE findings?

Outcomes

ROSC (Y/N)

Survived ED admission (Y/N)

Survived Hospital discharge (Y/N)

Date/Time of Discharge/Death

Do Not Attempt Resuscitation Order During this Admission (Date/Time)

Life Support Withdrawn

Discharge Destination

Adult Cerebral Performance Category (CPC) at Discharge

Adult Modified Rankin Score (mRS) at Discharge



Post-Arrest Evaluation of Out-of-Hospital Cardiac Arrest

Prehospital process

Arrest location

```
Witnessed
Bystander CPR
Exact time of arrest
Approximate time of arrest
Exact downtime
Approximate downtime
First documented pulseless cardiac rhythm
       Asystole
       PEA
       VF
       VT
       Unknown
EMS level
       BLS
       ALS
Prehospital interventions
       Chest compressions
       Defibrillation
       Airway procedures
               Valve-Mask Ventilation
               Supraglottic airway device placed
               Endotracheal intubation in the field
       Drug administration
               Epinephrine administration
                      Route (IV, IO)
```

CPR quality parameters

End-Tidal CO2 (Values / Times)
Systolic blood pressure (Values / Times)

Total number of doses given

Antiarrhythmic Medications

Vasopressors (epinephrine infusion)

Time of doses Other Drug Interventions

Atropine Others

Intravenous fluids



Diastolic blood pressure (Values / Times)

CC depth

CC rate

CC fraction

ED process

First documented pulseless cardiac rhythm (during arrest)

Asystole

PEA

VF

VT

Unknown / Not available

Presenting rhythm post ROSC

Sinus tachycardia

Sinus bradycardia

Normal sinus rhythm

Atrial fibrillation

Atrial flutter

Junctional Rhythm

Ventricular tachycardia

Other

Unknown / Not available

Vital signs at time of TEE

Blood pressure

MAP

Heart rate

Pulse oximetry

Critical Care Variables

Ventilation settings at time of TEE

Ventilation mode

FiO2

RR

Tidal volume

PEEP

Drugs at the time of TEE

Sedation (Y/N)

Muscle relaxation (Y/N)

Vasopressor infusions

Epinephrine (Y/N)

Epinephrine (Dosing)

Norepinephrine (Y/N)

Norepinephrine (Dosing)

Vasopressin (Y/N)

Vasopressin (Dosing)



Dobutamine (Y/N)
Dobutamine (Dosing)
Other (Specify)

Targeted Temperature Management initiated at the time of TEE (Y/N)

TEE data

Windows obtained

- o Mid-esophageal four chamber view
- Mid-esophageal long axis view (three chamber view)
- Mid-esophageal bicaval view
- o Transgastric midpapillary muscle short axis view
- Mid-esophageal two chamber view
- Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- o Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- Mid-esophageal descending aorta short axis view
- Mid-esophageal descending aorta long axis view
- o Transgastric midpapillary muscle long axis view
- o Transgastric deep five chamber view
- o Other (Describe)

Operator-identified TEE findings

Cardiac tamponade

Echocardiographic signs suggesting acute right ventricular failure

Echocardiographic signs suggesting pulmonary embolism

Intra-cardiac LV thrombus

Intra-cardiac RV thrombus

Global LV systolic dysfunction

Echocardiographic signs suggesting hypovolemia

Aortic dissection

None

Type A

Type B

Wall motion abnormalities

None

LAD (Anterior, Septal)

RCA (Inferior)

Circumflex (Lateral)

LV rupture

SVC diameter respirophasic variation (%)

Acute severe valvular pathology

Etiology of arrest established based on TEE findings?

Change in management based on TEE findings

No change in management based on TEE findings

Patient was taken to the cardiac catheterization lab

Patient was taken to the operating room



Decision to give intravenous fluids
Decision to stop intravenous fluids administration
Patient was started on vasopressors for hemodynamic support
Decision to initiate mechanical circulatory support
Other intervention

Change in management based on TEE findings

No change in management based on TEE findings
Patient was taken to the cardiac catheterization lab
Pericardiocentesis was performed
Decision to give intravenous fluids
Decision to stop intravenous fluids administration
Patient was started on vasopressors for hemodynamic support

Decision to initiate mechanical circulatory support

Outcomes

Survived ICU admission (Y/N)
Survived Hospital discharge (Y/N)
Date/Time of Discharge/Death
Do Not Attempt Resuscitation Order During this Admission (Date/Time)
Life Support Withdrawn
Discharge Destination
Adult Cerebral Performance Category (CPC) at Discharge
Adult Modified Rankin Score (mRS) at Discharge

Intra-Arrest Evaluation of In-Hospital-Cardiac Arrest

In-Hospital Arrest Process

Arrest location (Emergency Department, Hospital Ward, Intensive Care Unit, Operating Room, Other)
Witnessed
Bystander CPR
Exact time of arrest
Approximate time of arrest
First documented pulseless cardiac rhythm

Asystole
PEA
VF
VT
Unknown

In-hospital arrest interventions

Chest compressions Defibrillation Airway procedures

Valve-Mask Ventilation



Supraglottic airway device placed Endotracheal intubation in the field

Drug administration

Epinephrine administration

Route (IV, IO)

Total number of doses given

Time of doses

Other Drug Interventions

Intravenous fluids

Antiarrhythmic Medications

Vasopressors (epinephrine infusion)

Atropine

Others

CPR quality parameters

End-Tidal CO2 (Values / Times)

Systolic blood pressure (Values / Times)

Diastolic blood pressure (Values / Times)

CC depth

CC rate

CC fraction

TEE data

Windows obtained

- Mid-esophageal four chamber view
- o Mid-esophageal long axis view (three chamber view)
- Mid-esophageal bicaval view
- o Transgastric midpapillary muscle short axis view
- o Mid-esophageal two chamber view
- Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- o Mid-esophageal descending aorta short axis view
- Mid-esophageal descending aorta long axis view
- o Transgastric midpapillary muscle long axis view
- Transgastric deep five chamber view
- o Other (Describe)

Type of CPR during TEE (Manual / Mechanical)

Initial Area of Maximal Compression (AMC) in ME LAX view

Left ventricle

LVOT

Aortic root

Unable to determine

Other

End-Tidal CO2 at the time of initial AMC assessment (Value)



DBP at the time of initial AMC assessment (Value)
AMC changed under TEE guidance (Y/N)
Time of AMC change (if previous answer yes) (Time)
End-Tidal CO2 at the time of initial AMC assessment (Time/Value)
DBP at the time of initial AMC assessment (Time/Value)

Operator-identified TEE findings

Cardiac tamponade
RV dilation
Pseudo PEA
Hypovolemia
Fine ventricular fibrillation
Intra-cardiac thrombus
Aortic dissection
Etiology of arrest established based on TEE findings

Outcomes

ROSC (Y/N)
Survived Hospital discharge (Y/N)
Date/Time of Discharge/Death
Do Not Attempt Resuscitation Order During this Admission (Date/Time)
Life Support Withdrawn
Discharge Destination
Adult Cerebral Performance Category (CPC) at Discharge
Adult Modified Rankin Score (mRS) at Discharge

Post-Arrest Evaluation of In-Hospital Cardiac Arrest

First documented pulseless cardiac rhythm (during arrest)
Asystole

PEA VF VT

Unknown / Not available

Hospital interventions

Chest compressions
Defibrillation
Airway procedures

Valve-Mask Ventilation Supraglottic airway device placed

Endotracheal intubation

Drug administration

Epinephrine administration Route (IV, IO) Total number of doses given



```
Time of doses
Other Drug Interventions
Intravenous fluids
Antiarrhythmic Medications
Vasopressors (epinephrine infusion)
Atropine
Others
```

Presenting rhythm post ROSC

Sinus tachycardia
Sinus bradycardia
Normal sinus rhythm
Atrial fibrillation
Atrial flutter
Junctional Rhythm
Ventricular tachycardia
Other

Unknown / Not available

Vital signs at time of TEE

Blood pressure

MAP Heart rate Pulse oximetry

Critical Care Variables

```
Ventilation settings at time of TEE
```

Ventilation mode

FiO2

RR

Tidal volume

PEEP

Drugs at the time of TEE

Sedation (Y/N)

Muscle relaxation (Y/N)

Vasopressor infusions

Epinephrine (Y/N)

Epinephrine (Dosing)

Norepinephrine (Y/N)

Norepinephrine (Dosing)

Vasopressin (Y/N)

Vasopressin (Dosing)

Dobutamine (Y/N)

Dobutamine (Dosing)

Other (Specify)

Targeted Temperature Management initiated at the time of TEE (Y/N)

TEE data



Windows obtained

- o Mid-esophageal four chamber view
- o Mid-esophageal long axis view (three chamber view)
- Mid-esophageal bicaval view
- o Transgastric midpapillary muscle short axis view
- Mid-esophageal two chamber view
- o Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- Mid-esophageal descending aorta short axis view
- Mid-esophageal descending aorta long axis view
- Transgastric midpapillary muscle long axis view
- o Transgastric deep five chamber view
- o Other (Describe)

Operator-identified TEE findings

Cardiac tamponade

Echocardiographic signs suggesting acute right ventricular failure

Echocardiographic signs suggesting pulmonary embolism

Intra-cardiac LV thrombus

Intra-cardiac RV thrombus

Global LV systolic dysfunction

Echocardiographic signs suggesting hypovolemia

Aortic dissection

None

Type A

Type B

Wall motion abnormalities

None

LAD (Anterior, Septal)

RCA (Inferior)

Circumflex (Lateral)

LV rupture

SVC diameter respirophasic variation (%)

Acute severe valvular pathology

Valvular assessment not performed

No evidence of severe pathology

Aortic regurgitation

Mitral insufficiency

Tricuspid regurgitation

Etiology of arrest established based on TEE findings?

Change in management based on TEE findings

No change in management based on TEE findings

Patient was taken to the cardiac catheterization lab

Patient was taken to the operating room

Pericardiocentesis was performed

Decision to give intravenous fluids



Decision to stop intravenous fluids administration Patient was started on vasopressors for hemodynamic support Decision to initiate mechanical circulatory support Other intervention

Outcomes

Survived ICU admission (Y/N)
Survived Hospital discharge (Y/N)
Date/Time of Discharge/Death
Do Not Attempt Resuscitation Order During this Admission (Date/Time)
Life Support Withdrawn
Discharge Destination
Adult Cerebral Performance Category (CPC) at Discharge
Adult Modified Rankin Score (mRS) at Discharge

Initial evaluation of undifferentiated shock or acute hemodynamic decompensation

Cardiac rhythm at the time of TEE

Sinus tachycardia
Sinus bradycardia
Normal sinus rhythm
Atrial fibrillation
Atrial flutter
Junctional Rhythm

Ventricular tachycardia

Other

Unknown / Not available

Vital signs at time of TEE

Blood pressure

MAP

Heart rate

Pulse oximetry

Critical Care Variables

Ventilation settings at time of TEE

Ventilation mode

FiO2

RR

Tidal volume

PEEP

Drugs at the time of TEE

Sedation (Y/N)

Muscle relaxation (Y/N)

Vasopressor infusions

Epinephrine (Y/N)

Epinephrine (Dosing)



Norepinephrine (Y/N)
Norepinephrine (Dosing)
Vasopressin (Y/N)
Vasopressin (Dosing)
Dobutamine (Y/N)
Dobutamine (Dosing)
Other (Specify)

TEE data

Windows obtained

- Mid-esophageal four chamber view
- o Mid-esophageal long axis view (three chamber view)
- Mid-esophageal bicaval view
- o Transgastric midpapillary muscle short axis view
- Mid-esophageal two chamber view
- o Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- o Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- Mid-esophageal descending aorta short axis view
- o Mid-esophageal descending aorta long axis view
- o Transgastric midpapillary muscle long axis view
- o Transgastric deep five chamber view
- o Other (Describe)

Operator-identified TEE findings

Pericardium:

Pericardial effusion present (Y/N) Echocardiographic signs of tamponade (Y/N) Not evaluated

Left ventricle:

Presence of global LV systolic dysfunction (Y/N) Estimated EF (%)
Not evaluated

Cardiac output:

LVOT diameter (CM) LVOT VTI (CM) HR Not evaluated

Unable to determine

Right ventricle:

Presence of RV dysfunction (Y/N) TAPSE (mm) FAC (%) Not evaluated



Unable to determine

SVC:

Size end of diastole (mm) Respirophasic variation < 36% diameter variation > 36% diameter variation Not evaluated Unable to determine

Transesophageal Lung Ultrasound (TELUS):

A-line pattern bilaterally B-Line pattern bilaterally Right pleural effusion present Left pleural effusion present Not evaluated

Operator's impression:

Echocardiographic signs suggesting acute right ventricular failure Echocardiographic signs suggesting pulmonary embolism

Intra-cardiac LV thrombus
Intra-cardiac RV thrombus
Global LV systolic dysfunction

Echocardiographic signs suggesting hypovolemia

Aortic dissection

None Type A Type B

Wall motion abnormalities

None

LAD (Anterior, Septal)

RCA (Inferior)

Circumflex (Lateral)

LV rupture

Acute severe valvular pathology

Valvular assessment not performed No evidence of severe pathology

Aortic regurgitation Mitral insufficiency Tricuspid regurgitation

Etiology of shock / hemodynamic decompensation established based on TEE findings?

Change in management based on TEE findings

No change in management based on TEE findings Patient was taken to the cardiac catheterization lab Patient was taken to the operating room Pericardiocentesis was performed

Decision to give intravenous fluids Decision to stop intravenous fluids administration

Patient was started on vasopressors for hemodynamic support



Decision to initiate mechanical circulatory support Other intervention (Describe)

Hemodynamic monitoring in critically-ill patient

Cardiac rhythm at the time of TEE

Sinus tachycardia

Sinus bradycardia

Normal sinus rhythm

Atrial fibrillation

Atrial flutter

Junctional Rhythm

Ventricular tachycardia

Other

Unknown / Not available

Vital signs at time of TEE

Blood pressure

MAP

Heart rate

Pulse oximetry

Critical Care Variables

Ventilation settings at time of TEE

Ventilation mode

FiO2

RR

Tidal volume

PEEP

Drugs at the time of TEE

Sedation (Y/N)

Muscle relaxation (Y/N)

Vasopressor infusions

Epinephrine (Y/N)

Epinephrine (Dosing)

Norepinephrine (Y/N)

Norepinephrine (Dosing)

Vasopressin (Y/N)

Vasopressin (Dosing)

Dobutamine (Y/N)

Dobutamine (Dosing)

Other (Specify)

TEE data

Windows obtained

- o Mid-esophageal four chamber view
- o Mid-esophageal long axis view (three chamber view)
- Mid-esophageal bicaval view



- o Transgastric midpapillary muscle short axis view
- o Mid-esophageal two chamber view
- o Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- o Mid-esophageal descending aorta short axis view
- Mid-esophageal descending aorta long axis view
- o Transgastric midpapillary muscle long axis view
- Transgastric deep five chamber view
- o Other (Describe)

Operator-identified TEE findings

Pericardium:

Pericardial effusion present (Y/N)

Echocardiographic signs of tamponade (Y/N)

Not evaluated

Left ventricle:

Presence of global LV systolic dysfunction (Y/N)

Estimated EF (%)

Not evaluated

Cardiac output:

LVOT diameter (CM)

LVOT VTI (CM)

HR

Not evaluated

Unable to determine

Right ventricle:

Presence of RV dysfunction (Y/N)

TAPSE (mm)

FAC (%)

Not evaluated

Unable to determine

SVC:

Size end of diastole (mm)

Respirophasic variation

< 36% diameter variation

> 36% diameter variation

Not evaluated

Unable to determine

Transesophageal Lung Ultrasound (TELUS):

A-line pattern bilaterally

B-Line pattern bilaterally

Right pleural effusion present



Left pleural effusion present Not evaluated

Operator's impression:

Echocardiographic signs suggesting acute right ventricular failure

Echocardiographic signs suggesting pulmonary embolism

Intra-cardiac LV thrombus

Intra-cardiac RV thrombus

Global LV systolic dysfunction

Echocardiographic signs suggesting hypovolemia

Aortic dissection

None

Type A

Type B

Wall motion abnormalities

None

LAD (Anterior, Septal)

RCA (Inferior)

Circumflex (Lateral)

LV rupture

Acute severe valvular pathology

Valvular assessment not performed

No evidence of severe pathology

Aortic regurgitation

Mitral insufficiency

Tricuspid regurgitation

Etiology of shock / hemodynamic decompensation established based on TEE findings?

Change in management based on TEE findings

No change in management based on TEE findings

Patient was taken to the cardiac catheterization lab

Patient was taken to the operating room

Pericardiocentesis was performed

Decision to give intravenous fluids

Decision to stop intravenous fluids administration

Patient was started on vasopressors for hemodynamic support

Decision to initiate mechanical circulatory support

Other intervention (Describe)

Procedural guidance

Procedure guided with TEE

Intravenous pacemaker

Veno-arterial (VA) ECMO

Veno-venous (VV) ECMO

Impella pump placement

Intra-aortic balloon pump (IABP) pump placement



TEE data

Windows obtained

- Mid-esophageal four chamber view
- o Mid-esophageal long axis view (three chamber view)
- o Mid-esophageal bicaval view
- o Transgastric midpapillary muscle short axis view
- o Mid-esophageal two chamber view
- o Mid-esophageal aortic valve short axis view
- o Upper esophageal ascending aorta view short axis (main PA view)
- Upper esophageal ascending aorta view long axis
- o Mid-esophageal right ventricular inflow-outflow view
- Mid-esophageal descending aorta short axis view
- o Mid-esophageal descending aorta long axis view
- o Transgastric midpapillary muscle long axis view
- o Transgastric deep five chamber view
- o Other (Describe)

Notes from procedure (free text)

Briefly describe how TEE was used to guide procedure