

Implant Date

Durable Implantable VAD Support

Device type

- ☐ LVAD
- ☐ RVAD
- ☐ Both (LVAD + RVAD in the same OR visit)
- ☐ Total Artificial Heart

Approach to insertion

- ☐ Full Sternotomy
- ☐ Right thoracotomy only
- ☐ Percutaneous
- ☐ Left subcostal
- ☐ Right subcostal
- ☐ Left Thoracotomy only
- ☐ Bilateral Thoracotomy
- ☐ Axillary (cut down)
- ☐ Left Thoracotomy plus Mini Sternotomy
- ☐ Left Thoracotomy to Right Mini Sternotomy
- ☐ Unknown
- ☐ Other, specify

LVAD device brand

- ☐ HeartMate IP
- ☐ HeartMate VE
- ☐ Novacor PC
- ☐ Novacor PCq
- ☐ HeartMate XVE
- ☐ Thoratec IVAD
- ☐ Medtronic HVAD
- ☐ Berlin Heart EXCOR (paracorporeal)
- ☐ Micromed DeBakey VAD - Child
- ☐ Thoratec PVAD
- ☐ HeartMate II LVAS
- ☐ HeartMate III
- ☐ Abiomed BVS 5000
- ☐ Abiomed AB5000
- ☐ TandemHeart
- ☐ Thoratec Centrimag (Levitronix)
- ☐ Sorin Revolution
- ☐ Abiomed Impella CP
- ☐ Abiomed Impella 2.5
- ☐ Abiomed Impella 5.0
- ☐ Abiomed Impella RP

Temporary: Other, specify:

LVAD: Serial Number

ST: ☐ Unknown

LVAD: cannulae location-inflow

- ☐ Left ventricle, Apex
- ☐ Left ventricle, Diaphragmatic surface
- ☐ Left atrium, Interatrial groove
- ☐ Left atrium, Left atrial appendage
- ☐ Left Atrium, Dome Left Atrium
- ☐ Unknown
- ☐ Other, specify

LVAD: cannulae location-outflow

- ☐ Ascending aorta
- ☐ Descending thoracic aorta
- ☐ Abdominal aorta
- ☐ Left subclavian artery
- ☐ Right subclavian artery
- ☐ Unknown
- ☐ Other, Specify

RVAD device brand

- ☐ Thoratec IVAD
- ☐ Medtronic HVAD
- ☐ Berlin Heart EXCOR (paracorporeal)
- ☐ Thoratec PVAD
- ☐ HeartMate III
- ☐ Abiomed BVS 5000
- ☐ Biomedicus
- ☐ Abiomed AB5000
- ☐ TandemHeart
- ☐ Thoratec Centrimag (Levitronix)
- ☐ Sorin Revolution
- ☐ Abiomed Impella CP
- ☐ Abiomed Impella 2.5
- ☐ Abiomed Impella 5.0
- ☐ Abiomed Impella RP

RVAD, Temporary: Other, specify:

RVAD: Approach to insertion

- ☐ Full Sternotomy
- ☐ Right thoracotomy only
- ☐ Percutaneous
- ☐ Left subcostal
- ☐ Right subcostal
- ☐ Left Thoracotomy only
- ☐ Bilateral Thoracotomy
- ☐ Axillary (cut down)
- ☐ Left Thoracotomy plus Mini Sternotomy
- ☐ Left Thoracotomy to Right Mini Sternotomy

- ☐ Unknown
☐ Other, specify

RVAD: Serial Number

ST: ☐ Unknown

RVAD: cannulae location-inflow

- ☐ Right atrium
☐ Right ventricle
☐ Left Atrium (option for adult congenital cases)
☐ Left Ventricle (option for adult congenital cases)
☐ Unknown
☐ Other, Specify

RVAD: cannulae location-outflow

- ☐ MPA (main pulmonary artery)
☐ LPA (left pulmonary artery)
☐ RPA (right pulmonary artery)
☐ Aorta
☐ Conduit
☐ Unknown
☐ Other, Specify

TAH device brand

- ☐ SynCardia TAH - 50cc
☐ SynCardia TAH - 70cc
☐ AbioCor TAH
☐ Other, Specify

TAH: Serial Number

ST: ☐ Unknown

Anticipated need for RVAD

- ☐ Planned (decision for insertion made prior to surgical incision)
☐ Unplanned (unanticipated complication)
☐ Unknown

Associated findings

Surgical observations or Intraoperative TEE

- ☐ PFO / ASD
☐ Aortic Insufficiency
☐ Mitral insufficiency
☐ Tricuspid Insufficiency
☐ None

Aortic Insufficiency

- ☐ Mild
☐ Moderate
☐ Severe

Mitral Insufficiency

- ☐ Mild
☐ Moderate

☐ Severe

Tricuspid Insufficiency

- ☐ Mild
☐ Moderate
☐ Severe

Is the VAD implant occurring in the setting of a failed cardiac operation (same operation or hospitalization)?

- ☐ Yes
☐ No

If yes, select an indication

- ☐ Failure to wean from Cardio Pulmonary Bypass
☐ Persistent heart failure following cardiac surgery (same hospitalization)
Enter cardiac operation:
☐ None

Concomitant surgery

Planned or accompanying LVAD procedure

- ☐ None
☐ ASD closure
☐ PFO closure
☐ CABG
☐ VSD closure
☐ Congenital cardiac surgery, other
☐ Aortic Valve Procedure
☐ Aortic Valve Surgery - Replacement - Biological
☐ Aortic Valve Surgery - Replacement - Mechanical
☐ Mitral Valve Surgery - Repair
☐ Mitral Valve Surgery - Replacement - Biological
☐ Mitral Valve Surgery - Replacement - Mechanical
☐ Tricuspid Valve Surgery - Repair - DeVega
☐ Tricuspid Valve Surgery - Repair - Ring
☐ Tricuspid Valve Surgery - Repair - Other
☐ Tricuspid Valve Surgery - Replacement - Biological
☐ Tricuspid Valve Surgery - Replacement - Mechanical
☐ Tricuspid Valve Surgery - Excision
☐ Pulmonary Valve Surgery - Repair
☐ Pulmonary Valve Surgery - Replacement - Biological
☐ Pulmonary Valve Surgery - Replacement - Mechanical
☐ Left ventricular aneurysmectomy
☐ Other, specify

☐ Arrhythmia surgery (ablation)
☐ Ligation of left atrial appendage
☐ Temporary MCS Removal
☐ Extracorporeal membrane oxygenation (ECMO)

Indication for CABG

- ☐ Planned (decision for CABG made prior to skin incision)
☐ Unplanned (unanticipated complication)
☐ Unknown

Territories revascularized

- ☐ RCA
☐ LAD
☐ Circumflex
☐ Unknown

Aortic Valve Procedure

- ☐ Full (annular patch or complete leaflet closure)
☐ Partial leaflet closure (Park Stitch or plication leaflet tips only)
☐ Unknown

Mitral Valve Repair

Select all that apply

- ☐ Annuloplasty
☐ Alfieri stitch

☐ Unknown

Annuloplasty

- ☐ Complete ring
☐ Partial band
☐ Unknown

Annuloplasty - Size

mm

ST: ☐ Unknown

Arrhythmia surgery (ablation)

- ☐ Ventricular
☐ Atrial
☐ Unknown

Atrial

Select all that apply

- ☐ Left-sided
☐ Right-sided
☐ Unknown

Left-sided

Select one

- ☐ Pulmonary vein isolation only
☐ Complete left sided lesion set (Maze procedure)
☐ Unknown

Ligation of left atrial appendage

Select one

- ☐ Surgical device (e.g., AtriClip)
☐ Oversew and or staple
☐ Excision
☐ Unknown

Temporary MCS Removal

Select all that apply

- ☐ ECMO decannulation
☐ IABP
☐ RVAD, Temporary
☐ LVAD, Temporary
☐ Other, specify

Temporary RVAD Brand

Select one

- ☐ Abiomed BVS 5000
☐ Biomedicus
☐ Abiomed AB5000
☐ TandemHeart
☐ Thoratec Centrimag (Levitronix)
☐ Sorin Revolution
☐ Abiomed Impella CP
☐ Abiomed Impella 2.5
☐ Abiomed Impella 5.0
☐ Abiomed Impella RP
☐ Temporary: Other, Specify

Temporary LVAD Brand

Select one

- ☐ Abiomed BVS 5000
☐ Abiomed AB5000
☐ TandemHeart
☐ Thoratec Centrimag (Levitronix)
☐ Sorin Revolution
☐ Abiomed Impella CP
☐ Abiomed Impella 2.5
☐ Abiomed Impella 5.0

- ☐ Abiomed Impella RP
- ☐ Temporary: Other, Specify

Extracorporeal membrane oxygenation

- ☐ Veno-venous (VV) ECMO
- ☐ Veno-arterial (VA) ECMO
- ☐ Unknown

Outflow

- ☐ Femoral artery
- ☐ Ascending aorta
- ☐ Descending thoracic aorta
- ☐ MPA (main pulmonary artery)
- ☐ LPA (left pulmonary artery)
- ☐ RPA (right pulmonary artery)
- ☐ Conduit
- ☐ Left subclavian artery
- ☐ Right subclavian artery
- ☐ Unknown
- ☐ Other, Specify

Inflow

- ☐ Femoral vein
- ☐ Left atrium, Left atrial appendage
- ☐ Left atrium, Interatrial groove
- ☐ Left ventricle, Apex
- ☐ Left ventricle, Diaphragmatic surface
- ☐ Left atrium, Dome left atrium
- ☐ Right atrium
- ☐ Right ventricle
- ☐ Unknown
- ☐ Other, Specify

Additional Operative Details

Was left ventricular thrombus present at operation?

If you select Yes, you are confirming that the left ventricular thrombus was removed.

- ☐ Yes
- ☐ No
- ☐ Unknown

Was left atrial appendage clot present at operation?

- ☐ Yes
- ☐ No
- ☐ Unknown

Was the left atrial appendage clot removed?

- ☐ Yes
- ☐ No
- ☐ Unknown

Was palpable atherosclerotic plaque or calcified plaque present in the ascending aorta or aortic arch at operation?

- ☐ Yes
- ☐ No
- ☐ Unknown
- ☐ Did not evaluate

Did the presence of palpable atherosclerotic plaque or calcified plaque change operative plans?

- ☐ Yes
- ☐ No
- ☐ Unknown

Was a patent foramen ovale present at operation?

- ☐ Yes
☐ No
☐ Unknown

Was the patent foramen ovale closed?

- ☐ Yes
☐ No
☐ Unknown

Were traction/stabilization sutures utilized to optimize (inlet cannula) LVAD pump position?

- ☐ Yes
☐ No
☐ Unknown

Which deairing techniques were utilized at device implantation?

Select all that apply

- ☐ None
☐ Use of CO2 to flood the operative field
☐ Needle evacuation of air from the outflow graft
☐ Aortic root vent
☐ Left ventricular vent (Right superior pulmonary vein)
☐ Unknown
☐ Other, specify

Was the LVAD procedure complicated by vasoplegia (MAP <60 mmHg requiring > 1 vasopressor to treat or unexpected ECMO) during or following cardiopulmonary bypass in the operating room?

- ☐ Yes
☐ No
☐ Unknown
☐ Not Applicable

Signature _____

Date _____