

## Rehospitalization

Was there an occurrence of rehospitalization?\*

YES    NO

Date of admission:*	mm/dd/yyyy	ST=
Discharge associated with this hospitalization/explant/transplant*	mm/dd/yyyy	ST=
Reason for admission (check all that apply):*	<input type="checkbox"/> Cardiac Arrhythmia <input type="checkbox"/> Bleeding <input type="checkbox"/> Cardiac Tamponade <input type="checkbox"/> Hematoma <input type="checkbox"/> Hemolysis <input type="checkbox"/> Hepatic Dysfunction <input type="checkbox"/> Hypertension <input type="checkbox"/> Infection <input type="checkbox"/> GI Disorder <input type="checkbox"/> Pulmonary Disorder <input type="checkbox"/> Limb vascular complication <input type="checkbox"/> Pulmonary Embolism/Hemorrhage <input type="checkbox"/> Planned Procedure, specify <input type="checkbox"/> Device Malfunction <input type="checkbox"/> Myocardial Infarction <input type="checkbox"/> Neurological Dysfunction <input type="checkbox"/> Psychiatric Episode <input type="checkbox"/> Renal Dysfunction <input type="checkbox"/> Right Heart Failure <input type="checkbox"/> Non-CNS Thromboembolic (TE) Event <input type="checkbox"/> Wound Complication <input type="checkbox"/> Unknown <input type="checkbox"/> Other, specify	
Procedure:*		
Specify:*		

Rehospitalization intervention:\*

Type of surgical procedure:*		
Type of cardiac procedure:*		
Other procedure:*		
Specify:*		
Enter CVP:*	mm/Hg	ST=
Enter PA systolic pressure:*	mm/Hg	ST=
Enter PA diastolic pressure:*	mm/Hg	ST=
Enter PCW pressure:*	mm/Hg	ST=
Enter cardiac output:*	L/min	ST=

## Adverse Events Appendix A: Adverse Event Definitions

Was there a major infection?\*

YES    NO    UNK

Date of onset:*	ST=		
Is this infection:*	Newly Diagnosed	Ongoing	
Location of patient:*	In hospital	Out of hospital	Unknown

Location of infection:  
(check all that apply)\*

- Pump / related - Drive Line
- Pump / related - Pump Pocket
- Pump / related - Pump Interior
- Positive Blood cultures
- Line Sepsis
- Pulmonary
- Urinary Tract
- Mediastinum
- Peripheral Wound
- GI
- Unknown
- Other, specify

Specify:\*

Type of infection:\*

Causative or contributing factors to the infection AE:  
(check all that apply)\*

- Patient condition
- Patient non-compliance with Medications
- Patient non-compliance with Device Maintenance
- Patient non-compliance with Followup Visits
- Device related
- Complexities of Medical Management
- Unknown

Version 2.3

Intervention:\*

Infection contribute to Death:\*

YES    NO    UNK

Was there a neurological dysfunction?\*

YES    NO    UNK

Was there a device malfunction?\*

YES    NO    UNK

Device type:\*

Date of onset:\*

mm/dd/yyyy

ST=

Location of patient:\*

In hospital    Out of hospital    Unknown

Major pump unit involved (check all that apply):\*

- Blood Pump
- Drive Unit Failure
- External Control System Failure
- Device Thrombosis

Blood Pump Specify:\*

Drive Unit Failure Specify:\*

External Control System Failure Specify:\*

Device Thrombosis Specify:\*

Specific component affected (check all that apply):\*

- External Battery Malfunction
- Internal Battery Malfunction
- External Controller Malfunction
- Internal Controller Malfunction
- Driveline Malfunction
- Inflow Graft Malfunction/Malposition
- Outflow Graft Malfunction/Malposition
- Pump Drive Unit Malfunction
- TET System Malfunction
- Inflow Valve
- Outflow Valve
- Volume Compensator Malfunction
- Other Component Malfunction, specify

External Battery Specify:\*

Internal Battery Specify:\*

	External Controller Specify:*
	Internal Controller Specify:*
	Driveline Specify:*
	Inflow Graft Specify:*
	Outflow Graft Specify:*
	Pump Drive Unit Specify:*
	TET System Specify:*
	Inflow Valve Specify:*
	Outflow Valve Specify:*
	Volume Compensator Specify:*
	Other, specify:*
Causative or contributing factors to the Device Malfunction (check all that apply):*	Patient noncompliance in device maintenance and protection Patient error in caring for system Inadequate instructions from caregivers No specific contributing cause identified
Device malfunction intervention (check all that apply):*	Replacement of Internal Battery Replacement of External Battery Replacement of External Controller Replacement of Internal Controller Replacement of Driveline Replacement of Inflow Graft Replacement of Outflow Graft Replacement of Pump Replacement of TET System Replacement of Pump Valve Replacement of Volume Compensator Replacement of Other Component, specify Switch from Vented Electric to Pneumatic-mode Other Interventions, specify None Unknown
	Specify component:*
	Other, specify:*
Surgical procedure required:*	YES    NO    UNK
Device explanted:*	YES    NO    UNK
Device malfunction adverse event cause patient's death:*	YES    NO    UNK

**Was there a Major Bleeding Event?:\***

YES    NO    UNK

 Date of bleeding episode onset:\*
 mm/dd/yyyy ST=

 Check all conditions resulting from this bleeding episode:\*
 

- Episode resulted in Death
- Episode resulted in re-operation
- Episode resulted in rehospitalization
- Episode resulted in transfusion

 Date of transfusion:\*
 mm/dd/yyyy ST=

Approximate # of units p.c. received:\*

 Location of patient:\*
 

- In hospital
- Out of hospital
- Unknown

 Drug intervention:\*
 

- YES
- NO
- UNK

 Source/cause/location of bleeding
 

- Mediastinal

(check all that apply):\*

- Pump pocket
- Thoracic plural space
- Intra abdominal
- Respiratory
- Retroperitoneal
- Device anastomosis
- Outflow or inflow conduit
- Aortic or venous cannulation sites
- Chest wall
- Urinary tract
- Upper gastrointestinal
- Lower gastrointestinal

Causative or contributing factors to this Bleeding episode (check all that apply):\*

- Poor compliance with monitoring anticoagulation therapy
- Documented history of lesion or condition in the organ site of bleeding that could potentiate a bleeding episode
- Elevated preoperative INR or platelet count less than 60,000
- Management: Over anticoagulation
- Complexities of Medical Management
- Procedural related to implant procedure
- Procedural related to any re-operative procedure
- Procedural related to any diagnostic procedure (e.g. bronchoscopy, endoscopy, or transesophageal echo)
- Unknown

Name of condition:\*

Enter the following lab values which fall closest to the bleeding episode:

INR: \* ST= Test date: \* mm/dd/yyyy ST=

PTT: \* seconds ST= Test date: \* mm/dd/yyyy ST=

pH: \* ST= Test date: \* mm/dd/yyyy ST=

Anticoagulant therapy at time of event (check all that apply):\*

- Warfarin
- Heparin
- Lovenox
- Aspirin
- Dipyridamole
- Clopidogrel (plavix)
- Argatroban
- Bivalirudin
- Fondaparinux
- Hirudin
- Lepirudin
- Ximelagatran
- None
- Other

Specify: \*

Were there any other adverse events?\*

YES NO

ex: cardiac arrhythmia, pericardial fluid, hemolysis, hepatic dysfunction, hypertension, MI, psychiatric episode, renal dysfunction, respiratory failure, RHF, thromboembolism, wound dehiscence, other serious adverse event

## Adverse Event Reminders

## Appendix A: Adverse Event Definitions

## Cardiac Arrhythmia

Did a documented arrhythmia result in clinical compromise since last INTERMACS report/last followup?:\*

Event Date: \* mm/dd/yyyy ST=

Type of cardiac arrhythmia: \*

## Pericardial Fluid Collection

Did a pericardial effusion that required drainage occur since last INTERMACS report/last followup?:\*

Event date.: \* mm/dd/yyyy ST=

Signs of tamponade: \* YES NO UNK

Method of drainage: \* Surgical Intervention Cath Unknown

## Hemolysis

Did clinical signs associated with hemolysis (plasma-free hemoglobin PFHgb > 40 mg/dl) occur after the first 72 hours post-implant and since last INTERMACS report/last followup?:\*

Plasma-free hemoglobin measurement: \* mg/dL ST=

Hematocrit measurement: \* % ST=

Cause of Hemolysis: \*

Other, specify: \*

## Hepatic Dysfunction

Did Clinical evidence of liver dysfunction since last INTERMACS report/last followup occur beyond 14 days post implant?:\*

Total bilirubin measurement: \* mg/dL ST=

SGOT/AST measurement: \* u/L ST=

SGPT/ALT measurement: \* u/L ST=

## Hypertension

Did onset bp >= 140mm Hg YES NO UNK

systolic or 90mm Hg diastolic  
(Pediatric patient: > 95th percentile, see definition) occur since last INTERMACS report/last followup?:\*

Systolic bp: \* mm Hg ST=

Diastolic bp: \* mm Hg ST=

#### Myocardial Infarction

Did a myocardial infarction occur since last INTERMACS report/last followup/admission?:\*

Date of event: \* mm/dd/yyyy ST=

#### Psychiatric Episode

Did a disturbance in thinking, emotion or behavior that required intervention occur in patient since last INTERMACS report/last followup?:\*

#### Renal Dysfunction

Did renal dysfunction (by definition) occur since last INTERMACS report/last followup?:\*

Event date.:\* mm/dd/yyyy ST=

Dialysis duration: \* weeks ST=

Peak creatinine measurement: \* mg/dL ST=

#### Respiratory Failure

Did an impairment of respiratory function requiring intubation or mechanical ventilation occur since last INTERMACS report/last followup?:\*

Date of event: \* mm/dd/yyyy ST=

Intubation duration: \* days ST=

Was a tracheotomy performed?:\*

#### Right Heart Failure

Did symptoms or signs of right heart failure occur requiring RVAD implantation or inotropic therapy at least 14 days post implant and since last update?:\*

Event date.:\* mm/dd/yyyy ST=

Check all signs/symptoms that apply:\*

CVP > 18 mmHg

CI < 2.0 L/min/M2

Ascites  
Peripheral Edema

### Arterial Non-CNS Thromboembolism

Did an acute perfusion deficit in any non-cerebrovascular organ system occur since last INTERMACS report/last followup?\*

Date: \* mm/dd/yyyy ST=

Location: \*

Other acute perfusion deficit: \*

Confirmation source: \*

Anticoagulant therapy at time of event - check all that apply - :\*

Warfarin  
Heparin  
Lovenox  
Aspirin  
Dipyridamole  
Clopidogrel (plavix)  
Argatroban  
Bivalirudin  
Fondaparinux  
Hirudin  
Lepirudin  
Ximelagatran  
None  
Other

Specify: \*

### Venous Thromboembolism Event

Evidence of Venous Thromboembolic event since last INTERMACS report/last followup - check all that apply - :\*

Deep Vein thrombosis  
Pulmonary Embolism  
Other, specify  
Unknown  
None

Specify event: \*

Enter deep vein thrombosis date: \* mm/dd/yyyy ST=

Enter pulmonary embolism date: \* mm/dd/yyyy ST=

Enter other date: \* mm/dd/yyyy ST=

Anticoagulant therapy at time of event - check all that apply - :\*

Warfarin  
Heparin  
Lovenox  
Aspirin  
Dipyridamole  
Clopidogrel (plavix)  
Argatroban  
Bivalirudin  
Fondaparinux  
Hirudin

Lepirudin

Ximelagatran

None

Other

Specify:<sup>\*</sup>

**Wound Dehiscence**

Did a disruption of the apposed  
surfaces of surgical incision  
require surgical repair since last  
INTERMACS report/last followup?<sup>\*</sup>

YES    NO    UNK

Date:<sup>\*</sup>

mm/dd/yyyy ST=

**Other**

Did an Other Major Serious  
Adverse Event occur since last  
INTERMACS report/last followup?  
:<sup>\*</sup>

YES    NO    UNK

Other Major Serious Adverse  
Event since last INTERMACS  
report/last followup:

## Death

<b>Is the patient deceased?*</b>	YES	NO
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Death date: \* mm/dd/yyyy ST=

Was device functioning normally?: \* YES NO UNK

Was there an operation associated with device malfunction?: \* YES NO UNK

Post mortem device explant?: \* YES NO UNK

Did device go to manufacturer?: \* YES NO UNK

Location of death: \* In hospital Out of hospital Unknown

Timing of death: \* Expected Unexpected Unknown

Autopsy: \* YES NO UNK

Primary cause of death: \*

Cancer: \*

Other, specify: \*

Other cancer: \*

Secondary cause of death: \*

Cancer: \*

Other, specify: \*

Other cancer: \*

Secondary cause of death: \*

Cancer: \*

Other, specify: \*

Other cancer: \*

## Explant

<b>Was the device explanted/patient transplanted?*</b>	YES	NO
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Device explanted: \*

ST=

Explant date: \*

Explant reason: \*

Other, specify: \*

Transplant date: \*

ST=

Waitlist ID: \*