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# STS Intermacs

## Quarterly Quality Assurance Report (2021 Q2) - All Patients

### HOSPX - DEMO SITE REPORT

*Implant and event dates: January 1, 2020 to June 30, 2021*

09/30/2021

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HOSPX - DEMO SITE REPORT**

## **About This Report**

The “Recent” version of the Quality Assurance report focuses on a contemporary cohort of patients. This report includes patients whose initial VAD was implanted within the previous 6 quarters.

The “All Patients” version of the report includes all patients enrolled at your center whose first device was implanted within the report coverage window.

## **Confidential**

This report is intended only for STS Intermacs personnel at the hospital named on the cover of this report. Distribution of the report to other personnel within the hospital is left to the discretion of the STS Intermacs site administrator and physician representative. The STS Intermacs data in this report may not be distributed to anyone outside of your hospital. STS Intermacs has a separate mechanism for the creation and distribution of STS Intermacs aggregate data.

## **Disclaimer**

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**This quarterly report includes clinical information from 82 patients receiving implants between January 1, 2020 and June 30, 2021 at HOSPX - DEMO SITE REPORT.**

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Topics in **grey** are not part of this report, but will become part of future reports.

## **I. Introduction and Methods**

### **I.A. Purpose of this Report**

As specified by the STS InterMACS Leadership, the primary goals of the registry are:

- Facilitate the refinement of patient selection to maximize outcomes with current and new device options.
- Identify predictors of good outcomes as well as risk factors for adverse events after device implantation.
- Develop consensus best practice guidelines to improve clinical management by reducing short and long term complications of MCS therapy.
- Guide clinical application and evolution of next generation devices.
- Utilize Registry information to guide improvements in technology, particularly as next generation devices evolve.

Consistent with these goals, we have greatly expanded our site reports to move towards these goals at the hospital and patient level. Specifically, these reports will provide information in the following areas:

- Statistical Summaries and Benchmarks for Quality Assurance
- Patient Level Data
- Registry Compliance
- Data Quality Queries

## **I.B. Source of Data and Limitations**

The data in this report are based on all data entered into the STS Intermacs web-based data application through June 30, 2021. Patient enrollment in STS Intermacs began on June 23, 2006 and retrospective entry of patients with implants after March 1, 2006 was allowed. Your institution may have joined STS Intermacs at a later date and therefore your patient enrollment may have begun at a later date. This report is restricted to your patients who were implanted after your enrollment date and received a primary implant.

STS Intermacs is a registry that strives to meet the data quality standards of a prospective clinical trial. STS Intermacs is an on-going registry and therefore data quality efforts will always have an associated lag time.

As you review the data from your hospital that are contained in this report, you may find some information that appears incorrect or inconsistent. Please remember that this report is a direct function of the data that has been entered at your hospital. Therefore, please check any data issues with your online submitted data. The only caveat to this is that any corrections that you have made to your data since June 30, 2021 will not appear in this report. They will appear in the next quarterly report.

A registry that collects data on mechanical circulatory assist devices is necessarily complex. This complexity is the result of the support that the device provides (left ventricular support, right ventricular support, biventricular support, total heart support) and the potential for multiple exchanges within a patient. The major outcomes are just as complex because the standard outcome of death must be considered in the presence of transplantation and explant due to recovery of the heart. We have organized this report so that the pre-implant data represents all prospective device implants of LVAD, BiVAD or TAH. This is based on the organization of the STS Intermacs web-based data entry and will allow a complete picture of the patients and devices entered for your hospital.

## **I.C. Statistical Summaries and Benchmarks for Quality Assurance**

A primary purpose of this report is to provide statistical summaries of patients enrolled at the local hospital and to provide side-by-side comparisons of the hospital data with the data from the entire STS InterMACS Registry. Therefore these reports will provide the data information component of quality assurance where the hospital can compare both their patient mix with a national standard and will also be able to compare their outcomes after device implant with national results.

STS InterMACS is a valuable source of benchmarking according to what is occurring across the country in the MCSD community. This benchmark is not intended to imply good practice or bad practice but rather allows the hospital to compare the characteristics of their implanted patients with the patients from a national database.

## **I.D. Registry Compliance**

Each hospital is evaluated for compliance and data entry.

## **I.E. Future Reports**

As previously stated, this report is a major step in greatly expanded quarterly reports from STS InterMACS. We will continue expansion of this report which will be the results of our pre-specified plans and feedback from the MCSD community.

Some of our specific plans include statistical summaries according to primary and secondary implants and also according to adult and pediatric patients. We also plan to add a section that summarizes the results of the initial screening log. This will include a frequency of the reasons for failing to obtain informed consent and a comparison to the national experience.

## **I.F. Report Coverage - Inclusion / Exclusion Criteria**

Starting 2020 Q4 the INTERMACS reports have been restructured to provide information from ALL patients enrolled in INTERMACS. To organize the information a series of reports is provided to compare patient characteristics and outcomes of different kinds of patients at your site with the aggregate INTERMACS cohort. The following report versions are created:

- Cumulative - All Patients
- Cumulative - Primary Patients
- Cumulative – Prior VAD Patients
- Recent - All Patients
- Recent - Primary Patients
- Recent – Prior VAD Patients

The CUMULATIVE report versions includes patients enrolled throughout the entire registry and is intended to provide a comprehensive set of long term outcomes. The RECENT report is limited to patients enrolled within the last rolling 6 quarters and provides information on contemporary patients.

The versions of the reports generated for ALL PATIENTS include all patients implanted within the report coverage dates. The PRIMARY PATIENTS versions are limited to patients that do not have a history of prior VAD reported on the pre-implant form of their first INTERMACS enrolled implant. The PRIOR VAD PATIENTS reports are limited to patients in which a prior VAD is indicated on their first enrolled pre-implant form.

There are a few administrative scenarios in which patients are excluded from the CUMULATIVE – ALL PATIENTS Report in order facilitate accurate comparisons to the aggregate INTERMACS data. The following patients are removed from all analyses:

- Retrospective Patients – the patient’s initial implant date is prior to your site’s activation in INTERMACS
- Implant, Pre-Implant, or Patient form not validated – patients missing a fully submitted implant, pre-implant, or patient form are not included because key data elements used in the reporting may be missing.
- Patient Implant Date Outside of Report Coverage Patients implanted prior to the start of data collection June 23, 2006 or after the report coverage stop date December 31, 2020 are not include in the report.
- Pediatric Patients (Age <19 years at implant

Patients that meet these exclusion criteria are listed in “Exhibit 49: Patients Implanted at your Center but Excluded from the Cumulative - All Patient Report

The accompanying Data Quality Report lists all patients enrolled in STS Intermacs at your site.

Transfer patients and their subsequent experience are analyzed in the report for the site that implanted the patients first device enrolled in INTERMACS.



## **II. Statistical Summaries and Benchmarks for Quality Assurance**

The first part of this section contains summary statistics of patients implanted (and enrolled in STS Intermacs) at your hospital. As a benchmark, the corresponding summary statistics for the entire Intermacs Registry are also provided. For explanations and/or definitions of the data elements go to the STS Intermacs User's Guide [www.intermacs.org](http://www.intermacs.org) and select 'Intermacs Appendices', Appendix M/User's Guide'.

The summary statistics for continuous variables includes N (the number of patients with data), MEAN (the average value), STD (standard deviation), MIN (the smallest value), and MAX (the largest value).

***Exhibit 1: Device Counts for Patients in this Report***

The following tables list the number of implants received by patients meeting the inclusion criteria for this report. Subsequent exhibits are based on a patient level analysis. Characteristics are reported at the time of first implant. Unless noted otherwise, outcomes and follow-up include all information reported to INTERMACS for the patient.

NOTE: For most patients a second device indicates a device exchange. However, this count also includes the patients who receive a subsequent RVAD.

**GROUP=HOSPX-9999**

Device	IMPLANT DATE PERIOD						TOTAL
	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	
	n	n	n	n	n	n	
Primary Device	23	10	10	14	13	12	82
2nd Device	1	1	0	0	0	0	2
3rd Device	0	0	0	0	0	0	0
4th Device	0	0	0	0	0	0	0
5th Device	0	0	0	0	0	0	0

**GROUP=STS Intermacs**

Device	IMPLANT DATE PERIOD						TOTAL
	2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	
	n	n	n	n	n	n	
Primary Device	834	614	759	627	669	614	4117
2nd Device	40	25	22	18	27	21	153
3rd Device	4	1	1	3	3	0	12
4th Device	0	0	0	0	0	0	0
5th Device	0	0	0	0	0	0	0

COVERAGE: January 1, 2020 - June 30, 2021

SITE: HOSPX - DEMO SITE REPORT

## II.A. Pre-Implant Summaries - Demographics

## Exhibit 2: Age Group

The following tables summarize age groups at your site and STS InterMACS over time.

AGE GROUP (yr)	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
19-39	2	8.6 %	2	20.0 %	1	10.0 %	2	14.2 %	2	15.3 %	1	8.3 %	10	12.1 %
40-59	8	34.7 %	3	30.0 %	4	40.0 %	6	42.8 %	7	53.8 %	6	50.0 %	34	41.4 %
60-79	13	56.5 %	5	50.0 %	5	50.0 %	6	42.8 %	4	30.7 %	5	41.6 %	38	46.3 %
80+	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	14	100.0 %	13	100.0 %	12	100.0 %	82	100.0 %

AGE GROUP (yr)	STS InterMACS													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
19-39	90	10.7 %	74	12.0 %	105	13.8 %	76	12.1 %	85	12.7 %	78	12.7 %	508	12.3 %
40-59	334	40.0 %	258	42.0 %	292	38.4 %	244	38.9 %	271	40.5 %	238	38.7 %	1637	39.7 %
60-79	405	48.5 %	281	45.7 %	361	47.5 %	303	48.3 %	309	46.1 %	296	48.2 %	1955	47.4 %
80+	5	0.5 %	1	0.1 %	1	0.1 %	4	0.6 %	4	0.5 %	2	0.3 %	17	0.4 %
TOTAL	834	100.0 %	614	100.0 %	759	100.0 %	627	100.0 %	669	100.0 %	614	100.0 %	4117	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Demographics****Exhibit 3: Gender**

The following tables summarize gender at your site and STS Intermacs over time.

GENDER	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	3	13.0 %	1	10.0 %	2	20.0 %	5	35.7 %	2	15.3 %	2	16.6 %	15	18.2 %
Male	20	86.9 %	9	90.0 %	8	80.0 %	9	64.2 %	11	84.6 %	10	83.3 %	67	81.7 %
Unspecified	.	.	.	.	.	.	.	.	.	.	.	.	.	.
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	14	100.0 %	13	100.0 %	12	100.0 %	82	100.0 %

GENDER	STS Intermacs													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Female	187	22.4 %	147	23.9 %	173	22.7 %	137	21.8 %	161	24.0 %	162	26.3 %	967	23.4 %
Male	647	77.5 %	467	76.0 %	585	77.0 %	490	78.1 %	507	75.7 %	452	73.6 %	3148	76.4 %
Unspecified	.	.	.	.	1	0.1 %	.	.	1	0.1 %	.	.	2	0.0 %
TOTAL	834	100.0 %	614	100.0 %	759	100.0 %	627	100.0 %	669	100.0 %	614	100.0 %	4117	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Demographics**

**Exhibit 4: Race**

The following tables summarize race at your site and STS InterMACS over time. The coordinator may check all that apply.

RACE	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
African American	10	43.4 %	4	40.0 %	5	50.0 %	5	35.7 %	3	23.0 %	7	58.3 %	34	41.4 %
Other, Unknown, Undisclosed	5	21.7 %	1	10.0 %	3	30.0 %	4	28.5 %	6	46.1 %	.	.	19	23.1 %
White	8	34.7 %	5	50.0 %	2	20.0 %	5	35.7 %	4	30.7 %	5	41.6 %	29	35.3 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	14	100.0 %	13	100.0 %	12	100.0 %	82	100.0 %

RACE	STS InterMACs													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
African American	252	30.2 %	174	28.3 %	240	31.6 %	197	31.4 %	197	29.4 %	186	30.2 %	1246	30.2 %
Other, Unknown, Undisclosed	72	8.6 %	57	9.2 %	69	9.0 %	72	11.4 %	84	12.5 %	72	11.7 %	426	10.3 %
White	510	61.1 %	383	62.3 %	450	59.2 %	358	57.0 %	388	57.9 %	356	57.9 %	2445	59.3 %
TOTAL	834	100.0 %	614	100.0 %	759	100.0 %	627	100.0 %	669	100.0 %	614	100.0 %	4117	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Demographics****Exhibit 5: Hispanic Ethnicity**

The following tables summarize Hispanic ethnicity at your site and STS InterMACS over time.

HISPANIC ETHNICITY	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Non-Hispanic	18	78.2 %	10	100.0 %	5	50.0 %	10	71.4 %	7	53.8 %	12	100.0 %	62	75.6 %
Unknown	4	17.3 %	.	.	2	20.0 %	3	21.4 %	2	15.3 %	.	.	11	13.4 %
Hispanic	1	4.3 %	.	.	3	30.0 %	1	7.1 %	4	30.7 %	.	.	9	10.9 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	14	100.0 %	13	100.0 %	12	100.0 %	82	100.0 %

HISPANIC ETHNICITY	STS InterMACS													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Non-Hispanic	753	90.2 %	558	90.8 %	684	90.1 %	551	87.8 %	593	88.6 %	548	89.2 %	3687	89.5 %
Unknown	32	3.8 %	20	3.2 %	24	3.1 %	31	4.9 %	16	2.3 %	22	3.5 %	145	3.5 %
Hispanic	49	5.8 %	36	5.8 %	51	6.7 %	45	7.1 %	60	8.9 %	44	7.1 %	285	6.9 %
TOTAL	834	100.0 %	614	100.0 %	759	100.0 %	627	100.0 %	669	100.0 %	614	100.0 %	4117	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 6. BSA**

The following tables summarize body surface area (BSA) at your site and STS Intermacs over time. BSA is a variable that is calculated based on the patient's height and weight. The Boyd calculation is used in this analysis.

**GROUP=HOSPX-9999**

PRE-IMPLANT BSA		2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
	<b>N</b>	23	10	10	14	13	12	82
	<b>Mean</b>	2.10	2.14	2.02	2.00	1.93	2.06	2.05
	<b>Std</b>	0.37	0.34	0.30	0.33	0.34	0.28	0.33
	<b>Min</b>	1.28	1.75	1.57	1.62	1.31	1.48	1.28
	<b>Max</b>	2.92	2.93	2.48	2.73	2.60	2.49	2.93

**GROUP=STS Intermacs**

PRE-IMPLANT BSA		2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
	<b>N</b>	833	611	758	626	669	614	4111
	<b>Mean</b>	2.10	2.08	2.10	2.09	2.08	2.12	2.09
	<b>Std</b>	0.32	0.32	0.33	0.32	0.32	0.32	0.32
	<b>Min</b>	0.96	1.03	0.50	0.77	0.98	1.16	0.50
	<b>Max</b>	3.33	3.31	3.23	3.39	2.95	3.38	3.39

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 7. Device Strategy**

The following tables summarize pre-implant device strategy at your site and STS Intermacs over time.

PRE-IMPLANT DEVICE STRATEGY	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
BTT - Listed	1	4.3 %	.	.	.	.	.	.	1	7.6 %	1	8.3 %	3	3.6 %
BTT - Likely	2	8.6 %	.	.	1	10.0 %	2	14.2 %	.	.	.	.	5	6.0 %
BTT - Moderate	1	4.3 %	3	30.0 %	.	.	2	14.2 %	.	.	.	.	6	7.3 %
BTT - Unlikely	.	.	1	10.0 %	.	.	.	.	.	.	.	.	1	1.2 %
Destination Therapy	19	82.6 %	6	60.0 %	9	90.0 %	10	71.4 %	11	84.6 %	11	91.6 %	66	80.4 %
Bridge to Recovery	.	.	.	.	.	.	.	.	1	7.6 %	.	.	1	1.2 %
Rescue Therapy	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Other	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<b>TOTAL</b>	<b>23</b>	<b>100.0 %</b>	<b>10</b>	<b>100.0 %</b>	<b>10</b>	<b>100.0 %</b>	<b>14</b>	<b>100.0 %</b>	<b>13</b>	<b>100.0 %</b>	<b>12</b>	<b>100.0 %</b>	<b>82</b>	<b>100.0 %</b>

PRE-IMPLANT DEVICE STRATEGY	STS Intermacs													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
BTT - Listed	49	5.8 %	45	7.3 %	51	6.7 %	36	5.7 %	41	6.1 %	32	5.2 %	254	6.1 %
BTT - Likely	49	5.8 %	39	6.3 %	45	5.9 %	28	4.4 %	31	4.6 %	24	3.9 %	216	5.2 %
BTT - Moderate	62	7.4 %	48	7.8 %	49	6.4 %	61	9.7 %	49	7.3 %	45	7.3 %	314	7.6 %
BTT - Unlikely	20	2.3 %	13	2.1 %	12	1.5 %	11	1.7 %	12	1.7 %	7	1.1 %	75	1.8 %
Destination Therapy	635	76.1 %	454	73.9 %	587	77.3 %	480	76.5 %	523	78.1 %	481	78.3 %	3160	76.7 %
Bridge to Recovery	6	0.7 %	2	0.3 %	2	0.2 %	.	.	3	0.4 %	1	0.1 %	14	0.3 %
Rescue Therapy	1	0.1 %	2	0.3 %	2	0.2 %	2	0.3 %	3	0.4 %	4	0.6 %	14	0.3 %
Other	12	1.4 %	11	1.7 %	11	1.4 %	9	1.4 %	7	1.0 %	20	3.2 %	70	1.7 %
<b>TOTAL</b>	<b>834</b>	<b>100.0 %</b>	<b>614</b>	<b>100.0 %</b>	<b>759</b>	<b>100.0 %</b>	<b>627</b>	<b>100.0 %</b>	<b>669</b>	<b>100.0 %</b>	<b>614</b>	<b>100.0 %</b>	<b>4117</b>	<b>100.0 %</b>



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Clinical Characteristics**

**Exhibit 8. Patient Profile Levels**

The following tables summarize pre-implant STS InterMACS patient profile levels at your site and STS InterMACS over time.

PRE-IMPLANT PATIENT PROFILE	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 Critical Cardiogenic Shock	1	4.3 %	1	10.0 %	.	.	1	7.1 %	.	.	.	.	3	3.6 %
2 Progressive Decline	3	13.0 %	3	30.0 %	4	40.0 %	6	42.8 %	4	30.7 %	3	25.0 %	23	28.0 %
3 Stable but Inotrope Dependent	18	78.2 %	5	50.0 %	5	50.0 %	6	42.8 %	8	61.5 %	7	58.3 %	49	59.7 %
4 Resting Symptoms	1	4.3 %	1	10.0 %	.	.	.	.	1	7.6 %	2	16.6 %	5	6.0 %
5 Exertion Intolerant	.	.	.	.	.	.	.	.	.	.	.	.	.	.
6 Exertion Limited	.	.	.	.	.	.	.	.	.	.	.	.	.	.
7 Advanced NYHA Class 3	.	.	.	.	1	10.0 %	1	7.1 %	.	.	.	.	2	2.4 %
<b>TOTAL</b>	23	100.0 %	10	100.0 %	10	100.0 %	14	100.0 %	13	100.0 %	12	100.0 %	82	100.0 %

PRE-IMPLANT PATIENT PROFILE	STS InterMACS													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
1 Critical Cardiogenic Shock	132	15.8 %	116	18.8 %	120	15.8 %	88	14.0 %	117	17.4 %	101	16.4 %	674	16.3 %
2 Progressive Decline	271	32.4 %	208	33.8 %	239	31.4 %	202	32.2 %	226	33.7 %	189	30.7 %	1335	32.4 %
3 Stable but Inotrope Dependent	341	40.8 %	217	35.3 %	310	40.8 %	237	37.7 %	226	33.7 %	235	38.2 %	1566	38.0 %
4 Resting Symptoms	79	9.4 %	62	10.0 %	78	10.2 %	86	13.7 %	82	12.2 %	73	11.8 %	460	11.1 %
5 Exertion Intolerant	4	0.4 %	6	0.9 %	9	1.1 %	8	1.2 %	9	1.3 %	9	1.4 %	45	1.0 %
6 Exertion Limited	3	0.3 %	1	0.1 %	1	0.1 %	4	0.6 %	1	0.1 %	1	0.1 %	11	0.2 %
7 Advanced NYHA Class 3	4	0.4 %	4	0.6 %	2	0.2 %	2	0.3 %	8	1.1 %	6	0.9 %	26	0.6 %
<b>TOTAL</b>	834	100.0 %	614	100.0 %	759	100.0 %	627	100.0 %	669	100.0 %	614	100.0 %	4117	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Clinical Characteristics**

**Exhibit 9a. Medications - IV Inotropes Within 48 Hours of Implant**

The following tables summarize IV inotrope therapy within 48 hours prior to implant at your site and STS InterMACs over time.

IV INOTROPES	HOSPX-9999																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Dobutamine	19	12	63.2%	10	4	40.0%	8	3	37.5%	12	3	25.0%	11	6	54.5%	10	5	50.0%
Dopamine	19	0	0.0%	10	0	0.0%	8	0	0.0%	12	0	0.0%	11	0	0.0%	10	0	0.0%
Milrinone	19	10	52.6%	10	9	90.0%	8	8	100.0%	12	9	75.0%	11	7	63.6%	10	10	100.0%
Levosimendan	19	1	5.3%	10	0	0.0%	8	0	0.0%	12	0	0.0%	11	0	0.0%	10	0	0.0%
Epinephrine	19	0	0.0%	10	0	0.0%	8	0	0.0%	12	2	16.7%	11	1	9.1%	10	1	10.0%
Norepinephrine	19	2	10.5%	10	0	0.0%	8	0	0.0%	12	1	8.3%	11	0	0.0%	10	1	10.0%
Isoproterenol	19	0	0.0%	10	0	0.0%	8	0	0.0%	12	0	0.0%	11	0	0.0%	10	0	0.0%
Other Specify	19	0	0.0%	10	1	10.0%	8	0	0.0%	12	1	8.3%	11	0	0.0%	10	0	0.0%
Unknown	19	2	10.5%	10	0	0.0%	8	0	0.0%	12	0	0.0%	11	0	0.0%	10	0	0.0%

IV INOTROPES	STS InterMACs																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Dobutamine	706	260	36.8%	521	195	37.4%	642	227	35.4%	499	204	40.9%	541	214	39.6%	496	181	36.5%
Dopamine	706	28	4.0%	521	20	3.8%	642	18	2.8%	499	22	4.4%	541	17	3.1%	496	30	6.0%
Milrinone	706	534	75.6%	521	397	76.2%	642	493	76.8%	499	369	73.9%	541	401	74.1%	496	365	73.6%
Levosimendan	706	1	0.1%	521	0	0.0%	642	0	0.0%	499	1	0.2%	541	2	0.4%	496	0	0.0%
Epinephrine	706	71	10.1%	521	46	8.8%	642	42	6.5%	499	47	9.4%	541	61	11.3%	496	52	10.5%
Norepinephrine	706	72	10.2%	521	38	7.3%	642	44	6.9%	499	26	5.2%	541	49	9.1%	496	43	8.7%
Isoproterenol	706	2	0.3%	521	0	0.0%	642	0	0.0%	499	0	0.0%	541	0	0.0%	496	0	0.0%
Other Specify	706	9	1.3%	521	4	0.8%	642	4	0.6%	499	2	0.4%	541	2	0.4%	496	5	1.0%
Unknown	706	2	0.3%	521	0	0.0%	642	0	0.0%	499	1	0.2%	541	1	0.2%	496	3	0.6%

IV INOTROPES	HOSPX-9999			STS InterMACs		
	N	Yes	%	N	Yes	%
Dobutamine	70	33	47.1%	3405	1281	37.6%
Dopamine	70	0	0.0%	3405	135	4.0%
Milrinone	70	53	75.7%	3405	2559	75.2%
Levosimendan	70	1	1.4%	3405	4	0.1%
Epinephrine	70	4	5.7%	3405	319	9.4%
Norepinephrine	70	4	5.7%	3405	272	8.0%
Isoproterenol	70	0	0.0%	3405	2	0.1%

(Continued)

**COVERAGE: January 1, 2020 - June 30, 2021**

***SITE: HOSPX - DEMO SITE REPORT***

***II.A. Pre-Implant Summaries - Clinical Characteristics***

***Exhibit 9a. Medications - IV Inotropes Within 48 Hours of Implant***

IV INOTROPES	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
Other Specify	70	2	2.9%	3405	26	0.8%
Unknown	70	2	2.9%	3405	7	0.2%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 9b. Medications - History and Current Use**

The following tables compare the history and current use of specific medications prior to implant at your site and STS InterMACS.

ACE INHIBITORS	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	6	10.3	245	8.0
Known previous use (within past year)	11	19.0	639	20.7
No	24	41.4	1876	60.9
Unknown	17	29.3	321	10.4
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

ALDOSTERONE ANTAGONIST	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	20	34.5	1039	33.7
Known previous use (within past year)	19	32.8	743	24.1
No	10	17.2	1099	35.7
Unknown	9	15.5	200	6.5
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

ALLOPURINOL*	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	8	13.8	362	11.7
Known previous use (within past year)	3	5.2	160	5.2
No	28	48.3	2244	72.8
Unknown	19	32.8	315	10.2
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

AMIODARONE	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	18	31.0	1179	38.3
Known previous use (within past year)	7	12.1	274	8.9
No	24	41.4	1431	46.4
Unknown	9	15.5	197	6.4
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

**II.A. Pre-Implant Summaries - Clinical Characteristics**

**Exhibit 9b. Medications - History and Current Use**

ANGIOTENSIN RECEPTOR BLOCKER	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	3	5.2	418	13.6
Known previous use (within past year)	15	25.9	799	25.9
No	23	39.7	1585	51.4
Unknown	17	29.3	279	9.1
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

ANTIPLATELET THERAPY DRUG	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	29	50.0	1680	54.5
Known previous use (within past year)	13	22.4	524	17.0
No	11	19.0	740	24.0
Unknown	5	8.6	137	4.4
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

BETA BLOCKERS	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	19	32.8	1040	33.8
Known previous use (within past year)	24	41.4	1227	39.8
No	10	17.2	672	21.8
Unknown	5	8.6	142	4.6
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

WARFARIN (COUMADIN)	HOSPX-9999		STS InterMACS	
	N	%	N	%
Currently using	2	3.4	258	8.4
Known previous use (within past year)	4	6.9	373	12.1
No	40	69.0	2179	70.7
Unknown	12	20.7	271	8.8
<b>TOTAL</b>	<b>58</b>	<b>100</b>	<b>3081</b>	<b>100</b>

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 9b. Medications - History and Current Use**

NESIRITIDE	HOSPX-9999		STS InterMACS	
	N	%	N	%
No	40	90.9	2241	93.7
Unknown	4	9.1	147	6.1
Yes	.	.	4	0.2
TOTAL	44	100	2392	100

NITRIC OXIDE	HOSPX-9999		STS InterMACS	
	N	%	N	%
No	48	82.8	2714	88.1
Unknown	7	12.1	179	5.8
Yes	3	5.2	188	6.1
TOTAL	58	100	3081	100

LOOP DIURETICS	HOSPX-9999		STS InterMACS	
	N	%	N	%
No	7	12.1	467	15.2
Unknown	7	12.1	44	1.4
Yes	44	75.9	2570	83.4
TOTAL	58	100	3081	100

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 9b. Medications - History and Current Use**

PRE-IMPLANT LOOP DIURETIC TYPE*	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
Furosemide	42	22	52.38%	2516	1195	47.50%
Torsemide	42	14	33.33%	2516	722	28.70%
Bumetanide	42	6	14.29%	2516	632	25.12%
Other	42	0	0.00%	2516	5	0.20%

CARDIAC RESYNCHRONIZATION THERAPY (CRT)*	HOSPX-9999		STS InterMACS	
	N	%	N	%
No	20	45.5	1611	67.7
Unknown	7	15.9	111	4.7
Yes	17	38.6	657	27.6
TOTAL	44	100	2379	100

METALZONE / THIAZIDE*	HOSPX-9999		STS InterMACS	
	N	%	N	%
No	36	62.1	2519	81.8
Unknown	19	32.8	152	4.9
Yes	3	5.2	410	13.3
TOTAL	58	100	3081	100

METALZONE / THIAZIDE - FREQUENCY*	HOSPX-9999		STS InterMACS	
	N	%	N	%
Regular	2	66.7	174	42.4
Intermittent	1	33.3	236	57.6
TOTAL	3	100	410	100

**II.A. Pre-Implant Summaries - Clinical Characteristics**

**Exhibit 10. Laboratories**

The following tables summarize pre-implant laboratories at your site and STS InterMACS.

		HOSPX-9999	STS InterMACS
Sodium (mEq/L)	N	58	3079
	Mean	133.67	135.08
	Std	4.96	4.52
	Min	122.00	116.00
	Max	142.00	156.00
Potassium (mEq/L)	N	58	3079
	Mean	4.16	4.07
	Std	0.54	0.44
	Min	3.00	2.50
	Max	5.50	6.50
BUN (mg/dL)	N	58	3067
	Mean	37.12	28.82
	Std	42.42	17.20
	Min	10.00	1.30
	Max	336.00	336.00
Creatinine (mg/dL)	N	58	3079
	Mean	1.61	1.37
	Std	1.34	0.71
	Min	0.70	0.30
	Max	9.00	14.82
Alanine Aminotransferase/ALT (u/L)	N	56	3030
	Mean	38.13	49.39
	Std	30.01	98.62
	Min	8.00	3.00
	Max	139.00	1700.00
Aspartate Aminotransferase/AST (u/L)	N	56	3028
	Mean	39.11	43.94
	Std	43.00	102.77
	Min	11.00	2.00
	Max	273.00	3996.00
LDH (µkat/L), (U/L)	N	42	2179
	Mean	568.19	395.83
	Std	660.68	389.61
	Min	218.00	10.00
	Max	3892.00	6234.00
All	N	82	4117



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 10. Laboratories**

PRE-IMPLANT LABORATORIES		HOSPX-9999	STS InterMACS
Total Bilirubin (mg/dL)	N	56	3034
	Mean	1.42	1.25
	Std	1.45	1.25
	Min	0.20	0.10
	Max	8.00	19.70
Albumin (g/dL)	N	56	3020
	Mean	3.58	3.46
	Std	0.41	0.60
	Min	2.70	0.20
	Max	4.70	7.50
Pre-albumin (mg/dL)	N	45	1829
	Mean	18.03	18.20
	Std	7.58	7.04
	Min	7.00	3.00
	Max	41.90	49.60
Total Cholesterol (mg/dL)	N	49	2017
	Mean	129.86	126.47
	Std	53.21	40.33
	Min	60.00	50.00
	Max	410.00	410.00
Brain Natriuretic Peptide (pg/mL)	N	8	1351
	Mean	2133.00	1356.84
	Std	1538.58	1237.17
	Min	287.00	1.00
	Max	4253.00	7500.00
Pro Brain Natriuretic Peptide (pg/mL)	N	42	1322
	Mean	5495.10	6677.44
	Std	4645.47	7700.28
	Min	100.00	68.00
	Max	18430.00	60000.00
White Blood Cell Count (x10 <sup>6</sup> /μL)	N	58	3078
	Mean	9.20	8.70
	Std	3.24	3.93
	Min	4.16	2.30
	Max	18.43	67.40
Hemoglobin (g/dL)	N	58	3077
	Mean	10.60	10.99
	Std	2.52	2.20
	Min	4.26	0.77
	Max	15.60	18.80
All	N	82	4117

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Clinical Characteristics****Exhibit 10. Laboratories**

PRE-IMPLANT LABORATORIES		HOSPX-9999	STS Intermacs
Platelets (x10/ $\mu$ L)	N	58	3075
	Mean	222.59	197.70
	Std	88.49	84.60
	Min	47.00	4.00
	Max	505.00	800.00
INR	N	57	2946
	Mean	1.28	1.25
	Std	0.35	0.29
	Min	0.99	0.79
	Max	2.60	4.50
Sensitivity CRP (mg/L)	N	13	1086
	Mean	58.27	24.49
	Std	91.11	49.70
	Min	1.20	0.02
	Max	300.00	697.00
All	N	82	4117

PRE-IMPLANT LUPUS ANTICOAGULANT STATUS*	HOSPX-9999		STS Intermacs	
	N	%	N	%
Negative	.	.	375	12.2
Positive	.	.	43	1.4
Unknown	58	100	2662	86.4
TOTAL	58	100	3080	100

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant**

**Exhibit 11. Pre-Implant Comorbidities**

The following tables compares pre-implant comorbidities at the time of durable MCSD implant between your site and STS InterMACS over time. This section was revised during the v6.0 launch (11/24/20) and includes mapped data from patients implanted 2012 and later. Information on Prior Sternotomy and History of Hematopoietic Cancer is currently being mapped and will be available in the reports starting next quarter.

Cardiothoracic issues	HOSPX-9999																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Frequent ICD Shocks	23	0	0.0%	10	0	0.0%	10	0	0.0%	8	1	12.5%	0	.	.	0	.	.
Chronic Lung Disease	23	5	21.7%	10	0	0.0%	10	0	0.0%	10	1	10.0%	2	2	100.0%	0	.	.
Pulmonary Hypertension	23	6	26.1%	10	0	0.0%	10	0	0.0%	11	4	36.4%	1	1	100.0%	0	.	.
Recent Pulmonary Embolus	23	0	0.0%	10	0	0.0%	10	1	10.0%	10	0	0.0%	2	0	0.0%	0	.	.
History of Atrial Arrhythmia	23	4	17.4%	10	0	0.0%	10	1	10.0%	8	1	12.5%	1	1	100.0%	0	.	.
Thoracic Aortic Disease	22	1	4.5%	10	0	0.0%	10	0	0.0%	11	1	9.1%	1	1	100.0%	0	.	.

Cardiothoracic issues	STS InterMACS																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Frequent ICD Shocks	832	33	4.0%	609	35	5.7%	744	24	3.2%	592	27	4.6%	277	10	3.6%	0	.	.
Chronic Lung Disease	832	64	7.7%	609	57	9.4%	745	69	9.3%	592	106	17.9%	276	76	27.5%	0	.	.
Pulmonary Hypertension	832	150	18.0%	609	96	15.8%	744	139	18.7%	588	206	35.0%	276	129	46.7%	0	.	.
Recent Pulmonary Embolus	832	13	1.6%	609	8	1.3%	746	17	2.3%	599	13	2.2%	287	6	2.1%	0	.	.
History of Atrial Arrhythmia	832	156	18.8%	609	106	17.4%	745	128	17.2%	594	201	33.8%	281	134	47.7%	0	.	.
Thoracic Aortic Disease	831	5	0.6%	609	3	0.5%	745	4	0.5%	595	8	1.3%	282	3	1.1%	0	.	.

Cardiothoracic issues	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
Frequent ICD Shocks	51	1	2.0%	3054	129	4.2%
Chronic Lung Disease	55	8	14.5%	3054	372	12.2%
Pulmonary Hypertension	55	11	20.0%	3049	720	23.6%
Recent Pulmonary Embolus	55	1	1.8%	3073	57	1.9%
History of Atrial Arrhythmia	52	7	13.5%	3061	725	23.7%
Thoracic Aortic Disease	54	3	5.6%	3062	23	0.8%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant**

**Exhibit 11. Pre-Implant Comorbidities**

Nutritional/GI issues	HOSPX-9999																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Severe Diabetes	23	5	21.7%	10	0	0.0%	10	0	0.0%	12	3	25.0%	3	1	33.3%	0	.	.
Malnutrition/Cachexia	23	1	4.3%	10	0	0.0%	10	0	0.0%	12	1	8.3%	2	2	100.0%	0	.	.
History GI Ulcers	22	0	0.0%	10	0	0.0%	10	0	0.0%	10	1	10.0%	0	.	.	0	.	.
Liver Dysfunction	23	1	4.3%	10	0	0.0%	10	0	0.0%	8	1	12.5%	0	.	.	0	.	.
Hepatitis	23	0	0.0%	10	0	0.0%	10	0	0.0%	10	0	0.0%	2	0	0.0%	0	.	.

Nutritional/GI issues	STS InterMACS																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Severe Diabetes	832	102	12.3%	609	66	10.8%	746	83	11.1%	604	80	13.2%	287	55	19.2%	0	.	.
Malnutrition/Cachexia	832	21	2.5%	609	17	2.8%	743	15	2.0%	599	42	7.0%	280	24	8.6%	0	.	.
History GI Ulcers	831	4	0.5%	609	2	0.3%	746	2	0.3%	596	15	2.5%	282	8	2.8%	0	.	.
Liver Dysfunction	832	25	3.0%	609	23	3.8%	745	24	3.2%	596	40	6.7%	282	21	7.4%	0	.	.
Hepatitis	832	9	1.1%	609	10	1.6%	746	4	0.5%	597	8	1.3%	280	9	3.2%	0	.	.

Nutritional/GI issues	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
Severe Diabetes	58	9	15.5%	3078	386	12.5%
Malnutrition/Cachexia	57	4	7.0%	3063	119	3.9%
History GI Ulcers	52	1	1.9%	3064	31	1.0%
Liver Dysfunction	51	2	3.9%	3064	133	4.3%
Hepatitis	55	0	0.0%	3064	40	1.3%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant**

**Exhibit 11. Pre-Implant Comorbidities**

Vascular issues	HOSPX-9999																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Heparin-induced Thrombocytopenia	22	1	4.5%	10	0	0.0%	10	0	0.0%	10	1	10.0%	1	0	0.0%	0	.	.
Chronic Coagulopathy	22	0	0.0%	10	0	0.0%	10	0	0.0%	10	0	0.0%	0	.	.	0	.	.
Cerebrovascular Disease	22	2	9.1%	10	0	0.0%	10	0	0.0%	12	0	0.0%	2	0	0.0%	0	.	.
Major Stroke	22	2	9.1%	9	0	0.0%	9	0	0.0%	3	0	0.0%	0	.	.	0	.	.
Peripheral Arterial Disease	23	1	4.3%	10	0	0.0%	10	0	0.0%	12	0	0.0%	2	2	100.0%	0	.	.

Vascular issues	STS Intermacs																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Heparin-induced Thrombocytopenia	831	9	1.1%	609	10	1.6%	744	15	2.0%	589	8	1.4%	270	9	3.3%	0	.	.
Chronic Coagulopathy	831	5	0.6%	609	6	1.0%	744	14	1.9%	593	12	2.0%	270	4	1.5%	0	.	.
Cerebrovascular Disease	831	44	5.3%	609	37	6.1%	745	38	5.1%	599	46	7.7%	286	52	18.2%	0	.	.
Major Stroke	825	28	3.4%	597	23	3.9%	688	23	3.3%	302	37	12.3%	50	39	78.0%	0	.	.
Peripheral Arterial Disease	832	36	4.3%	609	25	4.1%	744	34	4.6%	599	36	6.0%	280	28	10.0%	0	.	.

Vascular issues	HOSPX-9999			STS Intermacs		
	N	Yes	%	N	Yes	%
Heparin-induced Thrombocytopenia	53	2	3.8%	3043	51	1.7%
Chronic Coagulopathy	52	0	0.0%	3047	41	1.3%
Cerebrovascular Disease	56	2	3.6%	3070	217	7.1%
Major Stroke	43	2	4.7%	2462	150	6.1%
Peripheral Arterial Disease	57	3	5.3%	3064	159	5.2%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant**

**Exhibit 11. Pre-Implant Comorbidities**

Oncology/infection issues	HOSPX-9999																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
History Solid Organ Cancer	23	0	0.0%	10	0	0.0%	10	1	10.0%	12	1	8.3%	2	0	0.0%	0	.	.
Currently has Cancer v6	1	0	0.0%	0	.	.	1	0	0.0%	8	0	0.0%	2	0	0.0%	0	.	.
History of Solid Organ Transplant v6	1	0	0.0%	0	.	.	1	0	0.0%	9	0	0.0%	3	0	0.0%	0	.	.
History of Bone Marrow Transplant (BMT)	23	0	0.0%	10	0	0.0%	10	0	0.0%	12	0	0.0%	3	0	0.0%	0	.	.
HIV	22	0	0.0%	10	0	0.0%	9	0	0.0%	3	0	0.0%	0	.	.	0	.	.

Oncology/infection issues	STS InterMACS																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
History Solid Organ Cancer	832	46	5.5%	609	24	3.9%	746	40	5.4%	602	35	5.8%	289	24	8.3%	0	.	.
Currently has Cancer v6	8	0	0.0%	12	0	0.0%	63	1	1.6%	331	5	1.5%	281	7	2.5%	0	.	.
History of Solid Organ Transplant v6	8	0	0.0%	12	0	0.0%	64	1	1.6%	335	1	0.3%	290	3	1.0%	0	.	.
History of Bone Marrow Transplant (BMT)	832	0	0.0%	609	1	0.2%	746	0	0.0%	601	3	0.5%	287	1	0.3%	0	.	.
HIV	827	8	1.0%	599	2	0.3%	685	5	0.7%	278	1	0.4%	0	.	.	0	.	.

Oncology/infection issues	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
History Solid Organ Cancer	57	2	3.5%	3078	169	5.5%
Currently has Cancer v6	12	0	0.0%	695	13	1.9%
History of Solid Organ Transplant v6	14	0	0.0%	709	5	0.7%
History of Bone Marrow Transplant (BMT)	58	0	0.0%	3075	5	0.2%
HIV	44	0	0.0%	2389	16	0.7%

***II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant***

***Exhibit 11. Pre-Implant Comorbidities***

Data collection for the psychosocial issues section changed structure as a part of the v6.0 release. Mapping of this data is underway and this information will be available in the reports starting next quarter.

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**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant****Exhibit 12. Pre-Implant Potential Barriers to Heart Transplant**

The following tables compare pre-implant potential barriers to heart transplant at your site and STS Intermacs over time. This section was revised during the v6.0 launch (11/24/20) and includes mapped data from patients implanted 2012 and later.

Potential Barriers to Heart Transplant	HOSPX-9999																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Advanced Age	23	4	17.4%	10	0	0.0%	10	0	0.0%	12	0	0.0%	3	0	0.0%	0	.	.
Frailty	23	0	0.0%	10	0	0.0%	10	0	0.0%	10	0	0.0%	2	1	50.0%	0	.	.
Patient Does Not Want Transplant	23	1	4.3%	10	0	0.0%	10	0	0.0%	8	0	0.0%	2	0	0.0%	0	.	.
Musculoskeletal Limitation to Ambulation	23	0	0.0%	10	0	0.0%	10	0	0.0%	10	0	0.0%	2	0	0.0%	0	.	.
Contraindications to Immunosuppression	23	0	0.0%	10	0	0.0%	10	0	0.0%	9	0	0.0%	2	0	0.0%	0	.	.
Allosensitization	23	1	4.3%	10	0	0.0%	10	0	0.0%	9	0	0.0%	1	1	100.0%	0	.	.
Chronic Renal Disease	23	1	4.3%	10	0	0.0%	10	0	0.0%	10	0	0.0%	2	1	50.0%	0	.	.
Large BMI	23	6	26.1%	10	2	20.0%	10	0	0.0%	12	2	16.7%	3	0	0.0%	0	.	.
Chronic Infectious Concerns	23	0	0.0%	10	0	0.0%	10	0	0.0%	9	1	11.1%	1	0	0.0%	0	.	.

Potential Barriers to Heart Transplant	STS Intermacs																	
	2020 Q1			2020 Q2			2020 Q3			2020 Q4			2021 Q1			2021 Q2		
	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%	N	Yes	%
Advanced Age	832	151	18.1%	609	104	17.1%	743	125	16.8%	592	117	19.8%	279	43	15.4%	0	.	.
Frailty	832	50	6.0%	609	34	5.6%	743	38	5.1%	581	44	7.6%	272	27	9.9%	0	.	.
Patient Does Not Want Transplant	832	17	2.0%	609	14	2.3%	740	20	2.7%	556	10	1.8%	235	8	3.4%	0	.	.
Musculoskeletal Limitation to Ambulation	832	7	0.8%	609	4	0.7%	743	1	0.1%	587	5	0.9%	266	6	2.3%	0	.	.
Contraindications to Immunosuppression	832	2	0.2%	609	0	0.0%	743	3	0.4%	578	6	1.0%	256	3	1.2%	0	.	.
Allosensitization	832	9	1.1%	609	5	0.8%	741	9	1.2%	567	9	1.6%	243	2	0.8%	0	.	.
Chronic Renal Disease	832	59	7.1%	609	39	6.4%	742	65	8.8%	588	89	15.1%	272	68	25.0%	0	.	.
Large BMI	832	140	16.8%	609	92	15.1%	744	126	16.9%	592	133	22.5%	280	77	27.5%	0	.	.
Chronic Infectious Concerns	832	6	0.7%	609	7	1.1%	743	8	1.1%	586	10	1.7%	267	8	3.0%	0	.	.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Comorbidities and Potential Barriers to Heart Transplant**

**Exhibit 12. Pre-Implant Potential Barriers to Heart Transplant**

Potential Barriers to Heart Transplant	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
Advanced Age	58	4	6.9%	3055	540	17.7%
Frailty	55	1	1.8%	3037	193	6.4%
Patient Does Not Want Transplant	53	1	1.9%	2972	69	2.3%
Musculoskeletal Limitation to Ambulation	55	0	0.0%	3037	23	0.8%
Contraindications to Immunosuppression	54	0	0.0%	3018	14	0.5%
Allosensitization	53	2	3.8%	2992	34	1.1%
Chronic Renal Disease	55	2	3.6%	3043	320	10.5%
Large BMI	58	10	17.2%	3057	568	18.6%
Chronic Infectious Concerns	53	1	1.9%	3037	39	1.3%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Hemodynamics****Exhibit 13. General Hemodynamics**

The following table summarizes pre-implant heart rate, systolic BP and diastolic BP at your site and STS InterMACS.

PRE-IMPLANT GENERAL HEMODYNAMICS		HOSPX-9999	STS InterMACS
Heart Rate	N	58	3075
	Mean	95.57	91.74
	Std	20.03	17.58
	Min	68.00	40.00
	Max	175.00	175.00
Diastolic Blood Pressure (mmHg)	N	56	3022
	Mean	66.71	68.47
	Std	11.45	11.84
	Min	42.00	26.00
	Max	90.00	120.00
Systolic Blood Pressure (mmHg)	N	56	3028
	Mean	108.23	108.08
	Std	15.72	16.68
	Min	70.00	56.00
	Max	145.00	183.00
All	N	82	4117

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Hemodynamics****Exhibit 14a. Echo Hemodynamics - LVEDD**

The following tables summarizes pre-implant LVEDD at your site and STS Intermacs over time.

**GROUP=HOSPX-9999**

PRE-IMPLANT LVEDD (cm)		2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
	<b>N</b>	22	9	9	11	2	0	53
	<b>Mean</b>	6.81	6.89	6.93	6.43	7.12	.	6.77
	<b>Std</b>	0.78	1.26	1.48	0.90	0.11	.	1.01
	<b>Min</b>	5.40	4.44	5.00	4.90	7.04	.	4.44
	<b>Max</b>	8.40	8.52	9.50	7.60	7.19	.	9.50

**GROUP=STS Intermacs**

PRE-IMPLANT LVEDD (cm)		2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
	<b>N</b>	672	505	615	507	234	0	2533
	<b>Mean</b>	6.77	6.68	6.77	6.77	6.81	.	6.76
	<b>Std</b>	1.09	1.08	1.11	1.04	0.95	.	1.07
	<b>Min</b>	3.60	2.02	3.18	3.78	4.10	.	2.02
	<b>Max</b>	11.50	10.20	11.00	10.57	9.80	.	11.50

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Hemodynamics****Exhibit 14b. Echo Hemodynamics - LVEF**

The following tables summarizes pre-implant LVEF at your site and STS Intermacs over time.

PRE-IMPLANT LVEF	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
> 50 (normal)	.	.	.	.	.	.	.	.	.	.	.	.
40-49 (mild)	.	.	.	.	.	.	.	.	.	.	.	.
30-39 (moderate)	.	.	.	.	.	.	.	.	.	.	.	.
20-29 (moderate/severe)	3	13.0 %	3	30.0 %	2	20.0 %	2	16.6 %	1	33.3 %	11	18.9 %
< 20 (severe)	20	86.9 %	7	70.0 %	8	80.0 %	9	75.0 %	2	66.6 %	46	79.3 %
Not Recorded or Not Documented	.	.	.	.	.	.	1	8.3 %	.	.	1	1.7 %
Unknown	.	.	.	.	.	.	.	.	.	.	.	.
<b>TOTAL</b>	23	100.0 %	10	100.0 %	10	100.0 %	12	100.0 %	3	100.0 %	58	100.0 %

PRE-IMPLANT LVEF	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
> 50 (normal)	2	0.2 %	1	0.1 %	1	0.1 %	2	0.3 %	1	0.3 %	7	0.2 %
40-49 (mild)	2	0.2 %	2	0.3 %	2	0.2 %	1	0.1 %	1	0.3 %	8	0.2 %
30-39 (moderate)	19	2.2 %	16	2.6 %	28	3.7 %	15	2.4 %	7	2.4 %	85	2.7 %
20-29 (moderate/severe)	216	25.9 %	151	24.7 %	192	25.7 %	148	24.5 %	87	30.0 %	794	25.7 %
< 20 (severe)	553	66.4 %	409	67.1 %	496	66.4 %	417	69.0 %	178	61.3 %	2053	66.6 %
Not Recorded or Not Documented	36	4.3 %	29	4.7 %	26	3.4 %	18	2.9 %	15	5.1 %	124	4.0 %
Unknown	4	0.4 %	1	0.1 %	1	0.1 %	3	0.4 %	1	0.3 %	10	0.3 %
<b>TOTAL</b>	832	100.0 %	609	100.0 %	746	100.0 %	604	100.0 %	290	100.0 %	3081	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Hemodynamics**

**Exhibit 14c. Echo Hemodynamics - RVEF**

The following tables summarizes pre-implant RVEF at your site and STS Intermacs over time.

PRE-IMPLANT RVEF	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Normal	8	34.7 %	2	20.0 %	2	20.0 %	4	33.3 %	.	.	16	27.5 %
Mild	5	21.7 %	5	50.0 %	1	10.0 %	2	16.6 %	2	66.6 %	15	25.8 %
Moderate	7	30.4 %	.	.	6	60.0 %	4	33.3 %	1	33.3 %	18	31.0 %
Severe	1	4.3 %	2	20.0 %	.	.	1	8.3 %	.	.	4	6.8 %
Not Done	1	4.3 %	.	.	.	.	.	.	.	.	1	1.7 %
Not Applicable (v4)	.	.	.	.	.	.	1	8.3 %	.	.	1	1.7 %
Unknown	1	4.3 %	1	10.0 %	1	10.0 %	.	.	.	.	3	5.1 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	12	100.0 %	3	100.0 %	58	100.0 %

PRE-IMPLANT RVEF	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Normal	179	21.5 %	146	23.9 %	172	23.0 %	126	20.8 %	69	23.7 %	692	22.4 %
Mild	225	27.0 %	139	22.8 %	186	24.9 %	150	24.8 %	66	22.7 %	766	24.8 %
Moderate	203	24.3 %	155	25.4 %	182	24.3 %	153	25.3 %	62	21.3 %	755	24.5 %
Severe	102	12.2 %	74	12.1 %	84	11.2 %	68	11.2 %	40	13.7 %	368	11.9 %
Not Done	71	8.5 %	64	10.5 %	69	9.2 %	54	8.9 %	25	8.6 %	283	9.1 %
Not Applicable (v4)	1	0.1 %	1	0.1 %	.	.	3	0.4 %	1	0.3 %	6	0.1 %
Unknown	51	6.1 %	30	4.9 %	53	7.1 %	50	8.2 %	27	9.3 %	211	6.8 %
TOTAL	832	100.0 %	609	100.0 %	746	100.0 %	604	100.0 %	290	100.0 %	3081	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Hemodynamics****Exhibit 14d. Echo Hemodynamics - Mitral Regurgitation**

The following tables summarizes pre-implant mitral regurgitation at your site and STS InterMACS over time.

PRE-IMPLANT MITRAL REGURGITATION	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
0 (none)	1	4.3 %	2	20.0 %	.	.	1	8.3 %	1	33.3 %	5	8.6 %
1 (mild)	11	47.8 %	3	30.0 %	4	40.0 %	4	33.3 %	.	.	22	37.9 %
2 (moderate)	5	21.7 %	2	20.0 %	4	40.0 %	3	25.0 %	1	33.3 %	15	25.8 %
3 (severe)	6	26.0 %	2	20.0 %	2	20.0 %	4	33.3 %	.	.	14	24.1 %
Not Recorded or Not Documented	.	.	1	10.0 %	.	.	.	.	1	33.3 %	2	3.4 %
<b>TOTAL</b>	23	100.0 %	10	100.0 %	10	100.0 %	12	100.0 %	3	100.0 %	58	100.0 %

PRE-IMPLANT MITRAL REGURGITATION	STS InterMACS											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
0 (none)	79	9.4 %	57	9.3 %	57	7.6 %	45	7.4 %	17	5.8 %	255	8.2 %
1 (mild)	253	30.4 %	205	33.6 %	259	34.7 %	219	36.2 %	100	34.4 %	1036	33.6 %
2 (moderate)	254	30.5 %	188	30.8 %	246	32.9 %	178	29.4 %	83	28.6 %	949	30.8 %
3 (severe)	176	21.1 %	117	19.2 %	142	19.0 %	126	20.8 %	67	23.1 %	628	20.3 %
Not Recorded or Not Documented	70	8.4 %	42	6.8 %	42	5.6 %	36	5.9 %	23	7.9 %	213	6.9 %
<b>TOTAL</b>	832	100.0 %	609	100.0 %	746	100.0 %	604	100.0 %	290	100.0 %	3081	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Hemodynamics**

**Exhibit 14e. Echo Hemodynamics - Aortic Regurgitation**

The following tables summarizes pre-implant aortic regurgitation at your site and STS Intermacs over time.

PRE-IMPLANT AORTIC REGURGITATION	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
0 (none)	8	34.7 %	2	20.0 %	2	20.0 %	4	33.3 %	.	.	16	27.5 %
1 (mild)	9	39.1 %	1	10.0 %	3	30.0 %	1	8.3 %	2	66.6 %	16	27.5 %
2 (moderate)	1	4.3 %	.	.	1	10.0 %	.	.	.	.	2	3.4 %
3 (severe)	.	.	1	10.0 %	.	.	.	.	.	.	1	1.7 %
Not Recorded or Not Documented	5	21.7 %	6	60.0 %	4	40.0 %	7	58.3 %	1	33.3 %	23	39.6 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	12	100.0 %	3	100.0 %	58	100.0 %

PRE-IMPLANT AORTIC REGURGITATION	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
0 (none)	445	53.4 %	329	54.0 %	391	52.4 %	320	52.9 %	151	52.0 %	1636	53.0 %
1 (mild)	248	29.8 %	163	26.7 %	229	30.6 %	193	31.9 %	79	27.2 %	912	29.6 %
2 (moderate)	26	3.1 %	27	4.4 %	29	3.8 %	17	2.8 %	15	5.1 %	114	3.7 %
3 (severe)	7	0.8 %	3	0.4 %	8	1.0 %	3	0.4 %	1	0.3 %	22	0.7 %
Not Recorded or Not Documented	106	12.7 %	87	14.2 %	89	11.9 %	71	11.7 %	44	15.1 %	397	12.8 %
TOTAL	832	100.0 %	609	100.0 %	746	100.0 %	604	100.0 %	290	100.0 %	3081	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

SITE: HOSPX - DEMO SITE REPORT

## II.A. Pre-Implant Summaries - Hemodynamics

## Exhibit 14f. Echo Hemodynamics - Tricuspid Regurgitation

The following tables summarizes pre-implant tricuspid regurgitation at your site and STS Intermacs over time.

PRE-IMPLANT TRICUSPID REGURGITATION	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
0 (none)	4	17.3 %	1	10.0 %	3	30.0 %	.	.	.	.	8	13.7 %
1 (mild)	9	39.1 %	6	60.0 %	5	50.0 %	6	50.0 %	2	66.6 %	28	48.2 %
2 (moderate)	9	39.1 %	2	20.0 %	1	10.0 %	4	33.3 %	1	33.3 %	17	29.3 %
3 (severe)	1	4.3 %	.	.	1	10.0 %	1	8.3 %	.	.	3	5.1 %
Not Recorded or Not Documented	.	.	1	10.0 %	.	.	1	8.3 %	.	.	2	3.4 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	12	100.0 %	3	100.0 %	58	100.0 %

PRE-IMPLANT TRICUSPID REGURGITATION	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
0 (none)	83	9.9 %	59	9.6 %	78	10.4 %	58	9.6 %	18	6.2 %	296	9.6 %
1 (mild)	357	42.9 %	275	45.1 %	343	45.9 %	263	43.5 %	125	43.1 %	1363	44.2 %
2 (moderate)	256	30.7 %	149	24.4 %	191	25.6 %	171	28.3 %	83	28.6 %	850	27.5 %
3 (severe)	73	8.7 %	73	11.9 %	80	10.7 %	68	11.2 %	34	11.7 %	328	10.6 %
Not Recorded or Not Documented	63	7.5 %	53	8.7 %	54	7.2 %	44	7.2 %	30	10.3 %	244	7.9 %
TOTAL	832	100.0 %	609	100.0 %	746	100.0 %	604	100.0 %	290	100.0 %	3081	100.0 %



**II.A. Pre-Implant Summaries - Hemodynamics**

**Exhibit 15. Swan Hemodynamics**

The following table summarizes pre-implant hemodynamics derived from a Swan-Ganz catheter at your site and STS InterMACS.

PRE-IMPLANT SWAN HEMODYNAMICS		HOSPX-9999	STS InterMACS
Pulmonary Artery Systolic Pressure (mmHg)	N	56	2766
	Mean	48.25	49.16
	Std	13.29	14.85
	Min	20.00	7.00
	Max	85.00	100.00
Pulmonary Artery Diastolic Pressure (mmHg)	N	56	2754
	Mean	24.66	24.61
	Std	8.91	8.81
	Min	6.00	0.00
	Max	53.00	60.00
~Mean RA Pressure (mmHg)~	N	39	1724
	Mean	22.13	12.25
	Std	11.74	8.33
	Min	2.00	-3.00
	Max	40.00	55.00
Mean Pulmonary Artery Capillary Wedge Pressure (mmHg)	N	49	2285
	Mean	22.80	24.61
	Std	9.43	9.47
	Min	4.00	1.00
	Max	48.00	50.00
Cardiac Index	N	55	2633
	Mean	2.49	2.15
	Std	0.98	0.78
	Min	1.03	0.70
	Max	6.60	13.00
Cardiac Output (L/min)	N	53	2625
	Mean	4.74	4.30
	Std	2.03	1.49
	Min	1.40	0.60
	Max	13.10	13.10
All	N	82	4117

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Hemodynamics****Exhibit 16. ECG Cardiac Rhythm**

The following tables summarizes pre-implant ECG cardiac rhythm at your site and STS Intermacs.

ECG CARDIAC RHYTHM	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Sinus	10	43.4 %	7	70.0 %	2	20.0 %	9	75.0 %	2	66.6 %	30	51.7 %
Atrial fibrillation	4	17.3 %	1	10.0 %	.	.	1	8.3 %	.	.	6	10.3 %
Atrial Flutter	.	.	.	.	1	10.0 %	.	.	.	.	1	1.7 %
Not done	.	.	.	.	.	.	.	.	.	.	.	.
Atrial Paced, Ventricular Sensed	1	4.3 %	.	.	1	10.0 %	.	.	.	.	2	3.4 %
Atrial Sensed, Ventricular Paced	4	17.3 %	.	.	.	.	1	8.3 %	.	.	5	8.6 %
Atrial Paced, Ventricular Paced	2	8.6 %	.	.	4	40.0 %	.	.	.	.	6	10.3 %
Junctional (v6)	.	.	.	.	.	.	.	.	.	.	.	.
Unknown	1	4.3 %	.	.	.	.	1	8.3 %	.	.	2	3.4 %
Other, specify	1	4.3 %	2	20.0 %	2	20.0 %	.	.	1	33.3 %	6	10.3 %
<b>TOTAL</b>	<b>23</b>	<b>100.0 %</b>	<b>10</b>	<b>100.0 %</b>	<b>10</b>	<b>100.0 %</b>	<b>12</b>	<b>100.0 %</b>	<b>3</b>	<b>100.0 %</b>	<b>58</b>	<b>100.0 %</b>

ECG CARDIAC RHYTHM	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Sinus	451	54.2 %	344	56.4 %	420	56.3 %	352	58.2 %	167	57.5 %	1734	56.2 %
Atrial fibrillation	68	8.1 %	29	4.7 %	56	7.5 %	39	6.4 %	25	8.6 %	217	7.0 %
Atrial Flutter	5	0.6 %	5	0.8 %	12	1.6 %	6	0.9 %	1	0.3 %	29	0.9 %
Not done	8	0.9 %	5	0.8 %	8	1.0 %	6	0.9 %	.	.	27	0.8 %
Atrial Paced, Ventricular Sensed	15	1.8 %	12	1.9 %	22	2.9 %	8	1.3 %	4	1.3 %	61	1.9 %
Atrial Sensed, Ventricular Paced	140	16.8 %	111	18.2 %	109	14.6 %	89	14.7 %	43	14.8 %	492	15.9 %
Atrial Paced, Ventricular Paced	75	9.0 %	57	9.3 %	69	9.2 %	50	8.2 %	23	7.9 %	274	8.8 %
Junctional (v6)	.	.	.	.	.	.	1	0.1 %	.	.	1	0.0 %
Unknown	19	2.2 %	12	1.9 %	8	1.0 %	23	3.8 %	6	2.0 %	68	2.2 %
Other, specify	51	6.1 %	34	5.5 %	42	5.6 %	30	4.9 %	21	7.2 %	178	5.7 %
<b>TOTAL</b>	<b>832</b>	<b>100.0 %</b>	<b>609</b>	<b>100.0 %</b>	<b>746</b>	<b>100.0 %</b>	<b>604</b>	<b>100.0 %</b>	<b>290</b>	<b>100.0 %</b>	<b>3081</b>	<b>100.0 %</b>

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 17a. Functional Capacity - NYHA Class**

The following table summarizes the pre-implant NYHA Class at your site and STS Intermacs over time.

PRE-IMPLANT NYHA CLASS	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Class I	.	.	.	.	.	.	.	.	.	.	.	.
Class II	.	.	.	.	1	10.0 %	.	.	.	.	1	1.7 %
Class III	1	4.3 %	1	10.0 %	.	.	.	.	.	.	2	3.4 %
Class IV	22	95.6 %	9	90.0 %	9	90.0 %	11	91.6 %	2	66.6 %	53	91.3 %
Unknown	.	.	.	.	.	.	1	8.3 %	1	33.3 %	2	3.4 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	12	100.0 %	3	100.0 %	58	100.0 %

PRE-IMPLANT NYHA CLASS	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Class I	2	0.2 %	.	.	4	0.5 %	.	.	1	0.3 %	7	0.2 %
Class II	11	1.3 %	9	1.4 %	13	1.7 %	12	1.9 %	4	1.3 %	49	1.5 %
Class III	104	12.5 %	70	11.4 %	97	13.0 %	96	15.8 %	42	14.4 %	409	13.2 %
Class IV	703	84.4 %	520	85.3 %	623	83.5 %	483	79.9 %	237	81.7 %	2566	83.2 %
Unknown	12	1.4 %	10	1.6 %	9	1.2 %	13	2.1 %	6	2.0 %	50	1.6 %
TOTAL	832	100.0 %	609	100.0 %	746	100.0 %	604	100.0 %	290	100.0 %	3081	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 17b. Functional Capacity - VO2 Max**

The following table summarizes the pre-implant VO2 max at your site and STS InterMACs.

VO2 MAX		HOSPX-9999	STS InterMACs
VO2 Max (mL/kg/min)	N	0	244
	Mean	.	15.96
	Std	.	62.54
	Min	.	0.90
	Max	.	978.00
All	N	82	4117

The following table summarizes the reasons the pre-implant VO2 max was incomplete at your site and STS InterMACs.

VO2 MAX - Reason for Incomplete	HOSPX-9999		STS InterMACs	
	N	%	N	%
Not Done: Other	42	72.4	1489	52.5
Not Done: Too Sick	13	22.4	1032	36.4
Unknown	3	5.2	316	11.1
TOTAL	58	100	2837	100

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 17c. Functional Capacity - R Value at Peak**

The following table summarizes the pre-implant R value at peak at your site and STS InterMACS.

R VALUE AT PEAK		HOSPX-9999	STS InterMACS
Peak R (%)	N	0	181
	Mean	.	8.72
	Std	.	15.93
	Min	.	0.72
	Max	.	78.00
All	N	82	4117

The following table summarizes the reasons the pre-implant R value at peak was incomplete at your site and InterMACS.

R VALUE AT PEAK - Reason for Incomplete	HOSPX-9999		STS InterMACS	
	N	%	N	%
Not Done	57	98.3	2565	88.4
Unknown	1	1.7	335	11.6
TOTAL	58	100	2900	100

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 17d. Functional Capacity - Six Minute Walk**

The following table summarizes the pre-implant six minute walk at your site and STS InterMACS.

6 MINUTE WALK		HOSPX-9999	STS InterMACS
Six Minute Walk (ft)	N	4	596
	Mean	1122.50	842.98
	Std	238.10	514.40
	Min	900.00	0.00
	Max	1400.00	8268.00
All	N	82	4117

The following table summarizes the reasons the pre-implant six minute walk was incomplete at your site and STS InterMACS.

6 MINUTE WALK - Reason for Incomplete	HOSPX-9999		STS InterMACS	
	N	%	N	%
Not Done: Other	40	74.1	1086	43.7
Not Done: Too Sick	12	22.2	1271	51.1
Unknown	2	3.7	128	5.2
TOTAL	54	100	2485	100

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life**

**Exhibit 18a. Quality of Life - EQ-5D Mobility**

The following table compares the EQ-5D Mobility domain between your site and STS InterMACS.

EQ-5D Mobility	HOSPX-9999									
	2020 Q1		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%
I have no problems in walking about	3	33.3 %	.	.	2	40.0 %	.	.	5	29.4 %
I have some problems in walking about	6	66.6 %	1	100.0 %	1	20.0 %	2	100.0 %	10	58.8 %
I am confined to bed	.	.	.	.	1	20.0 %	.	.	1	5.8 %
Unknown	.	.	.	.	1	20.0 %	.	.	1	5.8 %
<b>TOTAL</b>	9	100.0 %	1	100.0 %	5	100.0 %	2	100.0 %	17	100.0 %

EQ-5D Mobility	STS InterMACS											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
I have no problems in walking about	147	37.7 %	89	35.3 %	129	37.5 %	128	41.4 %	52	33.1 %	545	37.5 %
I have some problems in walking about	198	50.8 %	127	50.3 %	163	47.3 %	147	47.5 %	76	48.4 %	711	49.0 %
I am confined to bed	36	9.2 %	28	11.1 %	37	10.7 %	31	10.0 %	15	9.5 %	147	10.1 %
Unknown	8	2.0 %	8	3.1 %	15	4.3 %	3	0.9 %	14	8.9 %	48	3.3 %
<b>TOTAL</b>	389	100.0 %	252	100.0 %	344	100.0 %	309	100.0 %	157	100.0 %	1451	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life**

**Exhibit 18b. Quality of Life - EQ-5D Self Care**

The following table compares the EQ-5D Self Care domain between your site and STS InterMACS.

EQ-5D Self Care	HOSPX-9999									
	2020 Q1		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%
I have no problems with self-care	6	66.6 %	1	100.0 %	2	40.0 %	2	100.0 %	11	64.7 %
I have some problems washing or dressing myself	3	33.3 %	.	.	2	40.0 %	.	.	5	29.4 %
I am unable to wash or dress myself	.	.	.	.	.	.	.	.	.	.
Unknown	.	.	.	.	1	20.0 %	.	.	1	5.8 %
<b>TOTAL</b>	<b>9</b>	<b>100.0 %</b>	<b>1</b>	<b>100.0 %</b>	<b>5</b>	<b>100.0 %</b>	<b>2</b>	<b>100.0 %</b>	<b>17</b>	<b>100.0 %</b>

EQ-5D Self Care	STS InterMACS											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
I have no problems with self-care	228	58.6 %	146	57.9 %	201	58.4 %	205	66.3 %	91	57.9 %	871	60.0 %
I have some problems washing or dressing myself	123	31.6 %	80	31.7 %	103	29.9 %	74	23.9 %	43	27.3 %	423	29.1 %
I am unable to wash or dress myself	29	7.4 %	19	7.5 %	26	7.5 %	25	8.0 %	13	8.2 %	112	7.7 %
Unknown	9	2.3 %	7	2.7 %	14	4.0 %	5	1.6 %	10	6.3 %	45	3.1 %
<b>TOTAL</b>	<b>389</b>	<b>100.0 %</b>	<b>252</b>	<b>100.0 %</b>	<b>344</b>	<b>100.0 %</b>	<b>309</b>	<b>100.0 %</b>	<b>157</b>	<b>100.0 %</b>	<b>1451</b>	<b>100.0 %</b>



**II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life**

**Exhibit 18c. Quality of Life - EQ-5D Usual Activities**

The following table compares the EQ-5D Usual Activities domain between your site and STS InterMACS.

EQ-5D Usual Activities	HOSPX-9999									
	2020 Q1		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%
I have no problems with performing my usual activities	3	33.3 %	.	.	.	.	.	.	3	17.6 %
I have some problems with performing my usual activities	3	33.3 %	1	100.0 %	3	60.0 %	2	100.0 %	9	52.9 %
I am unable to perform my usual activities	3	33.3 %	.	.	1	20.0 %	.	.	4	23.5 %
Unknown	.	.	.	.	1	20.0 %	.	.	1	5.8 %
<b>TOTAL</b>	9	100.0 %	1	100.0 %	5	100.0 %	2	100.0 %	17	100.0 %

EQ-5D Usual Activities	STS InterMACS											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
I have no problems with performing my usual activities	93	23.9 %	61	24.2 %	81	23.5 %	87	28.1 %	38	24.2 %	360	24.8 %
I have some problems with performing my usual activities	193	49.6 %	116	46.0 %	160	46.5 %	148	47.8 %	75	47.7 %	692	47.6 %
I am unable to perform my usual activities	93	23.9 %	69	27.3 %	83	24.1 %	69	22.3 %	33	21.0 %	347	23.9 %
Unknown	10	2.5 %	6	2.3 %	20	5.8 %	5	1.6 %	11	7.0 %	52	3.5 %
<b>TOTAL</b>	389	100.0 %	252	100.0 %	344	100.0 %	309	100.0 %	157	100.0 %	1451	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT**

**II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life**

**Exhibit 18d. Quality of Life - EQ-5D Pain/Discomfort**

The following table compares the EQ-5D Pain/Discomfort domain between your site and STS Intermacs.

EQ-5D Pain/Discomfort	HOSPX-9999									
	2020 Q1		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%
I have no pain or discomfort	6	66.6 %	.	.	1	20.0 %	.	.	7	41.1 %
I have moderate pain or discomfort	3	33.3 %	1	100.0 %	2	40.0 %	1	50.0 %	7	41.1 %
I have extreme pain or discomfort	.	.	.	.	1	20.0 %	1	50.0 %	2	11.7 %
Unknown	.	.	.	.	1	20.0 %	.	.	1	5.8 %
<b>TOTAL</b>	9	100.0 %	1	100.0 %	5	100.0 %	2	100.0 %	17	100.0 %

EQ-5D Pain/Discomfort	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
I have no pain or discomfort	183	47.0 %	97	38.4 %	144	41.8 %	160	51.7 %	65	41.4 %	649	44.7 %
I have moderate pain or discomfort	176	45.2 %	130	51.5 %	146	42.4 %	128	41.4 %	69	43.9 %	649	44.7 %
I have extreme pain or discomfort	17	4.3 %	16	6.3 %	34	9.8 %	16	5.1 %	10	6.3 %	93	6.4 %
Unknown	13	3.3 %	9	3.5 %	20	5.8 %	5	1.6 %	13	8.2 %	60	4.1 %
<b>TOTAL</b>	389	100.0 %	252	100.0 %	344	100.0 %	309	100.0 %	157	100.0 %	1451	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 18e. Quality of Life - EQ-5D Anxiety/Depression**

The following table compares the EQ-5D Anxiety/Depression domain between your site and STS InterMACS.

EQ-5D Anxiety	HOSPX-9999									
	2020 Q1		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%
I am not anxious or depressed	5	55.5 %	1	100.0 %	2	40.0 %	.	.	8	47.0 %
I am moderately anxious or depressed	2	22.2 %	.	.	2	40.0 %	2	100.0 %	6	35.2 %
I am extremely anxious or depressed	2	22.2 %	.	.	.	.	.	.	2	11.7 %
Unknown	.	.	.	.	1	20.0 %	.	.	1	5.8 %
<b>TOTAL</b>	9	100.0 %	1	100.0 %	5	100.0 %	2	100.0 %	17	100.0 %

EQ-5D Anxiety	STS InterMACS											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
I am not anxious or depressed	189	48.5 %	110	43.6 %	152	44.1 %	153	49.5 %	70	44.5 %	674	46.4 %
I am moderately anxious or depressed	169	43.4 %	122	48.4 %	147	42.7 %	126	40.7 %	64	40.7 %	628	43.2 %
I am extremely anxious or depressed	19	4.8 %	12	4.7 %	27	7.8 %	27	8.7 %	11	7.0 %	96	6.6 %
Unknown	12	3.0 %	8	3.1 %	18	5.2 %	3	0.9 %	12	7.6 %	53	3.6 %
<b>TOTAL</b>	389	100.0 %	252	100.0 %	344	100.0 %	309	100.0 %	157	100.0 %	1451	100.0 %

***Exhibit 18f. Quality of Life - EQ-5D Visual Analog Scale***

**GROUP=HOSPX-9999**

**GROUP=STS Intermacs**

[illegible]

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 18g. Quality of Life - EQ-5D Incomplete - Patient Reasons**

The following table compares the Patient Reasons the EQ-5D was not completed.

Patient Reasons for Incomplete EQ-5D	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Too sick (ex., intubated/sedated, critically ill, on short-term VAD)	3	21.4 %	1	11.1 %	.	.	4	57.1 %	.	.	8	20.0 %
Too tired	2	14.2 %	.	.	.	.	1	14.2 %	.	.	3	7.5 %
Too stressed, anxious, and/or depressed	.	.	.	.	.	.	.	.	.	.	.	.
No time / too busy	3	21.4 %	1	11.1 %	2	22.2 %	1	14.2 %	.	.	7	17.5 %
Too much trouble / don't want to be bothered / not interested	1	7.1 %	1	11.1 %	1	11.1 %	.	.	.	.	3	7.5 %
Can't concentrate	.	.	.	.	.	.	.	.	.	.	.	.
Unwilling to complete instrument, no reason given	.	.	1	11.1 %	.	.	.	.	.	.	1	2.5 %
Unable to read English and/or illiterate	.	.	.	.	1	11.1 %	.	.	.	.	1	2.5 %
Administrative (check specific reason below)	5	35.7 %	5	55.5 %	5	55.5 %	1	14.2 %	1	100.0 %	17	42.5 %
<b>TOTAL</b>	<b>14</b>	<b>100.0 %</b>	<b>9</b>	<b>100.0 %</b>	<b>9</b>	<b>100.0 %</b>	<b>7</b>	<b>100.0 %</b>	<b>1</b>	<b>100.0 %</b>	<b>40</b>	<b>100.0 %</b>

Patient Reasons for Incomplete EQ-5D	STS InterMACS											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Too sick (ex., intubated/sedated, critically ill, on short-term VAD)	142	37.1 %	112	37.7 %	117	34.0 %	102	40.9 %	46	38.0 %	519	37.2 %
Too tired	7	1.8 %	2	0.6 %	6	1.7 %	5	2.0 %	3	2.4 %	23	1.6 %
Too stressed, anxious, and/or depressed	9	2.3 %	18	6.0 %	19	5.5 %	11	4.4 %	3	2.4 %	60	4.3 %
No time / too busy	34	8.9 %	20	6.7 %	29	8.4 %	22	8.8 %	10	8.2 %	115	8.2 %
Too much trouble / don't want to be bothered / not interested	5	1.3 %	5	1.6 %	9	2.6 %	3	1.2 %	2	1.6 %	24	1.7 %
Can't concentrate	4	1.0 %	1	0.3 %	1	0.2 %	3	1.2 %	.	.	9	0.6 %
Unwilling to complete instrument, no reason given	6	1.5 %	3	1.0 %	6	1.7 %	9	3.6 %	5	4.1 %	29	2.0 %
Unable to read English and/or illiterate	2	0.5 %	1	0.3 %	4	1.1 %	4	1.6 %	1	0.8 %	12	0.8 %
Administrative (check specific reason below)	173	45.2 %	135	45.4 %	153	44.4 %	90	36.1 %	51	42.1 %	602	43.2 %
<b>TOTAL</b>	<b>382</b>	<b>100.0 %</b>	<b>297</b>	<b>100.0 %</b>	<b>344</b>	<b>100.0 %</b>	<b>249</b>	<b>100.0 %</b>	<b>121</b>	<b>100.0 %</b>	<b>1393</b>	<b>100.0 %</b>

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 18h. Quality of Life - EQ-5D Incomplete - Administrative Reasons**

The following table compares the Administrative Reasons the EQ-5D was not completed.

Administrative Reasons for Incomplete EQ-5D	HOSPX-9999											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Urgent/emergent implant, no time to administer QOL instruments	.	.	.	.	1	20.0 %	1	100.0 %	.	.	2	11.7 %
Coordinator too busy or forgot to administer QOL instruments	5	100.0 %	4	80.0 %	4	80.0 %	.	.	1	100.0 %	14	82.3 %
Unable to contact patient (ie., not hospitalized or no clinic visit) within the window for QOL instr	.	.	1	20.0 %	.	.	.	.	.	.	1	5.8 %
Other reason (describe)	.	.	.	.	.	.	.	.	.	.	.	.
<b>TOTAL</b>	5	100.0 %	5	100.0 %	5	100.0 %	1	100.0 %	1	100.0 %	17	100.0 %

Administrative Reasons for Incomplete EQ-5D	STS Intermacs											
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%
Urgent/emergent implant, no time to administer QOL instruments	11	6.3 %	7	5.1 %	3	1.9 %	5	5.5 %	1	1.9 %	27	4.4 %
Coordinator too busy or forgot to administer QOL instruments	92	53.1 %	47	34.8 %	59	38.5 %	41	45.5 %	22	43.1 %	261	43.3 %
Unable to contact patient (ie., not hospitalized or no clinic visit) within the window for QOL instr	8	4.6 %	23	17.0 %	30	19.6 %	12	13.3 %	11	21.5 %	84	13.9 %
Other reason (describe)	62	35.8 %	58	42.9 %	61	39.8 %	32	35.5 %	17	33.3 %	230	38.2 %
<b>TOTAL</b>	173	100.0 %	135	100.0 %	153	100.0 %	90	100.0 %	51	100.0 %	602	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.A. Pre-Implant Summaries - Functional Capacity and Quality of Life****Exhibit 19. Trailmaking**

Trailmaking Test time is the number of seconds required to complete the test.

**GROUP=HOSPX-9999**

Trailmaking Time(s)		2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
	<b>N</b>	4	0	1	3	1	0	9
	<b>Mean</b>	101.50	.	168.00	96.67	181.00	.	116.11
	<b>Std</b>	57.98	.	.	12.58	.	.	49.11
	<b>Min</b>	46.00	.	168.00	85.00	181.00	.	46.00
	<b>Max</b>	183.00	.	168.00	110.00	181.00	.	183.00

**GROUP=STS Intermacs**

Trailmaking Time(s)		2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
	<b>N</b>	235	162	222	179	105	0	903
	<b>Mean</b>	174.99	137.75	144.14	131.37	150.36	.	149.21
	<b>Std</b>	328.31	71.37	96.62	94.22	118.38	.	186.53
	<b>Min</b>	46.00	41.00	28.00	13.00	6.00	.	6.00
	<b>Max</b>	3600.00	423.00	948.00	840.00	1093.00	.	3600.00

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.B. Implant Summaries****Exhibit 20. VAD Indication**

The following table summarizes additional implant reasons that necessitated the placement of a VAD at your site and STS InterMACS.

VAD INDICATION	HOSPX-9999		STS InterMACS	
	N	%	N	%
Failure to wean from Cardio Pulmonary Bypass	.	.	32	1.3 %
Persistent Heart Failure Following Cardiac Surgery	.	.	32	1.3 %
None	44	100.0 %	2336	97.3 %
Total Patients	44	100.0 %	2400	100.0 %



COVERAGE: January 1, 2020 - June 30, 2021

SITE: HOSPX - DEMO SITE REPORT

## II.B. Implant Summaries

## Exhibit 21. Device Type

The following tables summarizes the implant side (location) of VADs at your site and STS InterMACs over time.

Device Type	HOSPX-9999													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
LVAD	22	95.6 %	9	90.0 %	10	100.0 %	12	85.7 %	13	100.0 %	12	100.0 %	78	95.1 %
RVAD	.	.	.	.	.	.	.	.	.	.	.	.	.	.
BIVAD	1	4.3 %	1	10.0 %	.	.	1	7.1 %	.	.	.	.	3	3.6 %
TAH	.	.	.	.	.	.	1	7.1 %	.	.	.	.	1	1.2 %
TOTAL	23	100.0 %	10	100.0 %	10	100.0 %	14	100.0 %	13	100.0 %	12	100.0 %	82	100.0 %

Device Type	STS InterMACs													
	2020 Q1		2020 Q2		2020 Q3		2020 Q4		2021 Q1		2021 Q2		TOTAL	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%
LVAD	783	93.8 %	569	92.6 %	723	95.2 %	606	96.6 %	625	93.4 %	568	92.5 %	3874	94.0 %
RVAD	3	0.3 %	2	0.3 %	.	.	.	.	.	.	1	0.1 %	6	0.1 %
BIVAD	46	5.5 %	42	6.8 %	32	4.2 %	20	3.1 %	42	6.2 %	43	7.0 %	225	5.4 %
TAH	2	0.2 %	1	0.1 %	4	0.5 %	1	0.1 %	2	0.2 %	2	0.3 %	12	0.2 %
TOTAL	834	100.0 %	614	100.0 %	759	100.0 %	627	100.0 %	669	100.0 %	614	100.0 %	4117	100.0 %

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.B. Implant Summaries****Exhibit 22. Additional Interventions within 48 Hours of Implant**

This table lists the interventions that occurred during the 48 hours prior to implant. A patient can have more than 1 additional intervention.

ADDITIONAL INTERVENTIONS	HOSPX-9999			STS InterMACS		
	N	Yes	%	N	Yes	%
IABP	45	2	4.44%	2398	238	9.92%
Dialysis	45	0	0.00%	2398	30	1.25%
Ultrafiltration	45	0	0.00%	2398	6	0.25%
Ventilator	45	1	2.22%	2398	54	2.25%
Feeding Tube	45	0	0.00%	2398	23	0.96%
ECMO	45	0	0.00%	2398	45	1.88%
None	45	42	93.33%	2398	2007	83.69%
CABG+	45	0	0.00%	2398	0	0.00%
Aortic Valve Replacement/Repair+	45	0	0.00%	2398	3	0.13%
Mitral Valve Replacement/Repair+	45	0	0.00%	2398	0	0.00%
Congenital Cardiac Surgery+	45	0	0.00%	2398	1	0.04%
LVAD+	45	0	0.00%	2398	53	2.21%
RVAD+	45	0	0.00%	2398	10	0.42%
TAH+	45	0	0.00%	2398	0	0.00%
Aneurysmectomy+	45	0	0.00%	2398	0	0.00%

Note: + = variable collected post relaunch (5/2/2012)

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Adverse Event Rates*****Exhibit 23a. Patient Percent Experiencing Each Adverse Event Type***

For each adverse event type, the percent of patients with a least one event of that type reported is presented at for your site and STS-INTERMACS overall.

Patient percent experiencing a specific adverse event = number of unique patients with reported event / number of patients at your site \* 100

While useful, this measure does not take into consideration the varying amount of time on support for each patient (exposure time) or the timing of the adverse events. Subsequent exhibits use adverse event rates that more accurately compare adverse events reported at your site to the overall cohort.

	HOSPX-9999			STS Intermacs		
	Events	Patients	Patient Percent	Events	Patients	Patient Percent
Arterial Non-CNS Thromboembolism	.	.	.	24	20	0.5%
Bleeding	14	10	12.2%	1328	860	20.9%
Cardiac Arrhythmia	11	11	13.4%	1030	759	18.4%
Device Malfunction and/or Pump Thrombosis	4	4	4.9%	144	125	3.0%
Hepatic Dysfunction	.	.	.	105	101	2.5%
Infection	24	19	23.2%	1876	1196	29.1%
Myocardial Infarction	.	.	.	6	6	0.1%
Neurological Dysfunction	12	11	13.4%	568	470	11.4%
Other Serious Adverse Event	1	1	1.2%	1171	714	17.3%
Pericardial Drainage	.	.	.	93	87	2.1%
Psychiatric Episode	.	.	.	164	142	3.4%
Rehospitalization	63	29	35.4%	4107	1815	44.1%
Renal Dysfunction	4	4	4.9%	513	465	11.3%
Respiratory Failure	9	9	11.0%	711	579	14.1%
Venous Thromboembolism	3	3	3.7%	77	70	1.7%
Wound Dehiscence	1	1	1.2%	41	40	1.0%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Adverse Event Rates*****Exhibit 23b. Adverse Event Exposure***

The following table summarizes the total time patients receiving primary prospective implants have been followed at your site and STS InterMACS overall. The total follow-up time is divided into an early period (less than or equal to three months) and late period (more than three months). These totals are the accrued exposure time for each patient group and are used as the denominators in the following rate calculations.

Patient Follow-Up	HOSPX-9999	STS InterMACS
Patient exposure during the first 3 months post implant (months)	184	10607
Patient exposure after the first 3 months post implant (months)	368	21479
Number of Patients	82	4117

**II.C. Post Implant Summary - Adverse Event Rates**

**Exhibit 23c. Adverse Event Rates**

**GROUP=HOSPX-9999**

	HOSPX-9999					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
Bleeding	9	9.8%	4.89	5	4.9%	1.36
Cardiac Arrhythmia	10	12.2%	5.43	1	1.2%	0.27
Device Malfunction and/or Pump Thrombosis	4	4.9%	2.17	.	.	.
Infection	18	17.1%	9.77	6	7.3%	1.63
Neurological Dysfunction	10	12.2%	5.43	2	2.4%	0.54
Other Serious Adverse Event	1	1.2%	0.54	.	.	.
Rehospitalization	22	24.4%	11.94	41	22.0%	11.15
Renal Dysfunction	4	4.9%	2.17	.	.	.
Respiratory Failure	7	8.5%	3.80	2	2.4%	0.54
Venous Thromboembolism	3	3.7%	1.63	.	.	.
Wound Dehiscence	1	1.2%	0.54	.	.	.

**GROUP=STS InterMACS**

	STS InterMACS					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
Arterial Non-CNS Thromboembolism	21	0.4%	0.20	3	0.0%	0.01
Bleeding	897	16.1%	8.46	431	7.6%	2.01
Cardiac Arrhythmia	830	16.1%	7.83	200	3.7%	0.93
Device Malfunction and/or Pump Thrombosis	78	1.8%	0.74	66	1.4%	0.31
Hepatic Dysfunction	75	1.8%	0.71	30	0.7%	0.14
Infection	1116	20.1%	10.52	760	13.3%	3.54
Myocardial Infarction	4	0.1%	0.04	2	0.0%	0.01
Neurological Dysfunction	392	8.5%	3.70	176	3.6%	0.82
Other Serious Adverse Event	889	14.7%	8.38	282	4.9%	1.31
Pericardial Drainage	92	2.1%	0.87	1	0.0%	0.00
Psychiatric Episode	121	2.7%	1.14	43	0.9%	0.20
Rehospitalization	1532	27.2%	14.44	2575	30.2%	11.99
Renal Dysfunction	455	10.3%	4.29	58	1.3%	0.27
Respiratory Failure	639	13.1%	6.02	72	1.5%	0.34
Venous Thromboembolism	69	1.5%	0.65	8	0.2%	0.04
Wound Dehiscence	39	0.9%	0.37	2	0.0%	0.01

COVERAGE: January 1, 2020 - June 30, 2021

SITE: HOSPX - DEMO SITE REPORT

## II.C. Post Implant Summary - Adverse Event Rates

## Exhibit 23d. Infection Rates by Location

The following table compares infection rates according to location at your site and STS InterMACS. Every infection location reported is counted in the table.

## GROUP=HOSPX-9999

	HOSPX-9999					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
GI	.	.	.	1	1.2%	0.27
Line Sepsis	3	3.7%	1.63	.	.	.
Mediastinum	1	1.2%	0.54	.	.	.
Other Specify	3	3.7%	1.63	.	.	.
Positive Blood Cultures	4	3.7%	2.17	1	1.2%	0.27
Pulmonary	9	11.0%	4.89	1	1.2%	0.27
Pump/Related - Drive Line	3	3.7%	1.63	1	1.2%	0.27
Unknown	.	.	.	1	1.2%	0.27
Urinary Tract	.	.	.	2	2.4%	0.54

## GROUP=STS InterMACS

	STS InterMACS					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
GI	75	1.8%	0.71	24	0.6%	0.11
Line Sepsis	17	0.4%	0.16	16	0.4%	0.07
Mediastinum	46	1.0%	0.43	12	0.3%	0.06
Other Specify	181	4.0%	1.71	114	2.6%	0.53
Peripheral Wound	41	0.9%	0.39	25	0.5%	0.12
Positive Blood Cultures	260	5.7%	2.45	208	4.2%	0.97
Pulmonary	376	7.9%	3.54	106	2.4%	0.49
Pump/Related - Drive Line	111	2.6%	1.05	270	5.2%	1.26
Pump/Related - Exit Cannula	4	0.1%	0.04	11	0.3%	0.05
Pump/Related - Pump Interior	4	0.1%	0.04	4	0.1%	0.02
Pump/Related - Pump Pocket	7	0.2%	0.07	7	0.2%	0.03
Unknown	28	0.6%	0.26	17	0.4%	0.08
Urinary Tract	165	3.5%	1.56	83	1.7%	0.39

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Adverse Event Rates****Exhibit 23e. Bleeding Rates by Source**

The following table compares bleeding rates according to source at your site and STS InterMACS. Every bleed source reported is counted in the table.

NOTE: These rates are reported for patients receiving a implant starting in March 2009.

**GROUP=HOSPX-9999**

	HOSPX-9999					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
ENT / Dental	2	2.4%	1.09	.	.	.
GI OVERALL: upper, lower, unknown	6	6.1%	3.26	3	3.7%	0.82
GI: Lower gastrointestinal (colon, rectum, and anus)	2	2.4%	1.09	.	.	.
GI: Upper gastrointestinal (esophagus, stomach, duod)	1	1.2%	0.54	1	1.2%	0.27
GI: unknown, but guaiac positive stools	3	3.7%	1.63	2	2.4%	0.54
Mediastinal: Unspecified	1	1.2%	0.54	.	.	.
Other	3	3.7%	1.63	.	.	.
Pulmonary	.	.	.	2	1.2%	0.54

**GROUP=STS InterMACS**

	STS InterMACS					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
Device anastomosis	3	0.1%	0.03	.	.	.
ENT / Dental	57	1.2%	0.54	21	0.4%	0.10
GI OVERALL: upper, lower, unknown	411	8.2%	3.87	321	5.7%	1.49
GI: Lower gastrointestinal (colon, rectum, and anus)	108	2.3%	1.02	72	1.6%	0.34
GI: Upper gastrointestinal (esophagus, stomach, duod)	209	4.4%	1.97	173	3.3%	0.81
GI: unknown, but guaiac positive stools	109	2.4%	1.03	83	1.7%	0.39
Intra-abdominal	11	0.3%	0.10	6	0.1%	0.03
Mediastinal: Unspecified	49	1.1%	0.46	1	0.0%	0.00
Mediastinal: aortic-venous cannulation site	1	0.0%	0.01	.	.	.
Mediastinal: chest wall	70	1.6%	0.66	1	0.0%	0.00
Mediastinal: coagulopathy with no surgical site	19	0.4%	0.18	.	.	.
Mediastinal: inflow conduit	4	0.1%	0.04	.	.	.
Mediastinal: other surgical site	27	0.6%	0.25	.	.	.
Mediastinal: outflow conduit	7	0.2%	0.07	.	.	.
Mediastinal: outflow-aorta anastomosis	12	0.3%	0.11	1	0.0%	0.00
Other	238	4.6%	2.24	82	1.7%	0.38
Pleural space	50	1.2%	0.47	1	0.0%	0.00
Pulmonary	29	0.6%	0.27	3	0.0%	0.01
Pump Pocket	.	.	.	1	0.0%	0.00
Retroperitoneal	13	0.3%	0.12	4	0.1%	0.02
Urinary tract	6	0.1%	0.06	12	0.2%	0.06

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Adverse Event Rates****Exhibit 23f. Device Malfunction and/or Pump Thrombosis by type**

The following table compares Device Malfunction and/or Pump Thrombosis rates according to type at your site and STS InterMACS.

NOTE: These rates are reported for patients receiving implant starting with Version 4.0 (June 2, 2014).

**GROUP=HOSPX-9999**

	HOSPX-9999		
	Early (During the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)
Pump Thrombosis	3	3.7%	1.63

**GROUP=STS InterMACS**

	STS InterMACS					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
Device Malfunction	35	0.9%	0.33	29	0.6%	0.14
Pump Thrombosis	35	0.8%	0.33	24	0.6%	0.11



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Adverse Event Rates****Exhibit 23g. Neurological Dysfunction by Category**

The following table compares neurological dysfunction rates according to category at your site and STS InterMACS.

NOTE: These rates are reported for patients receiving implant starting with Version 3.0 (May 2, 2012).

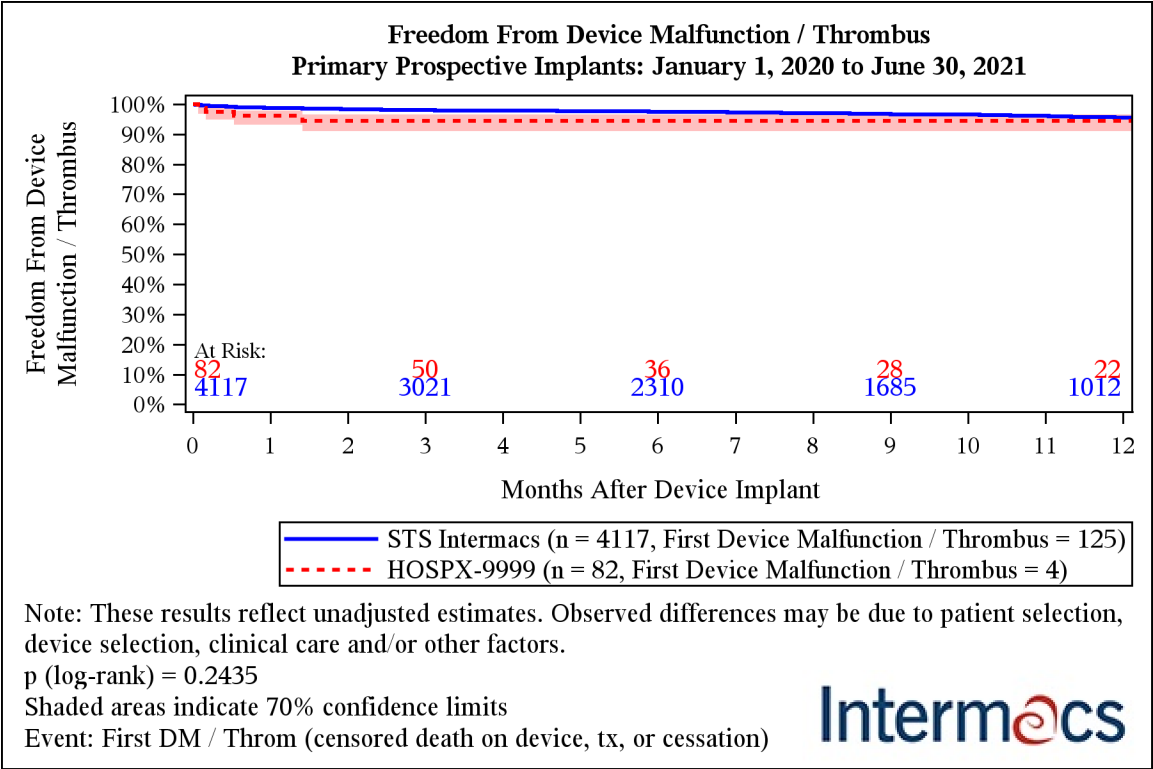
**GROUP=HOSPX-9999**

	HOSPX-9999					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
CVA	10	12.2%	5.43	2	2.4%	0.54

**GROUP=STS InterMACS**

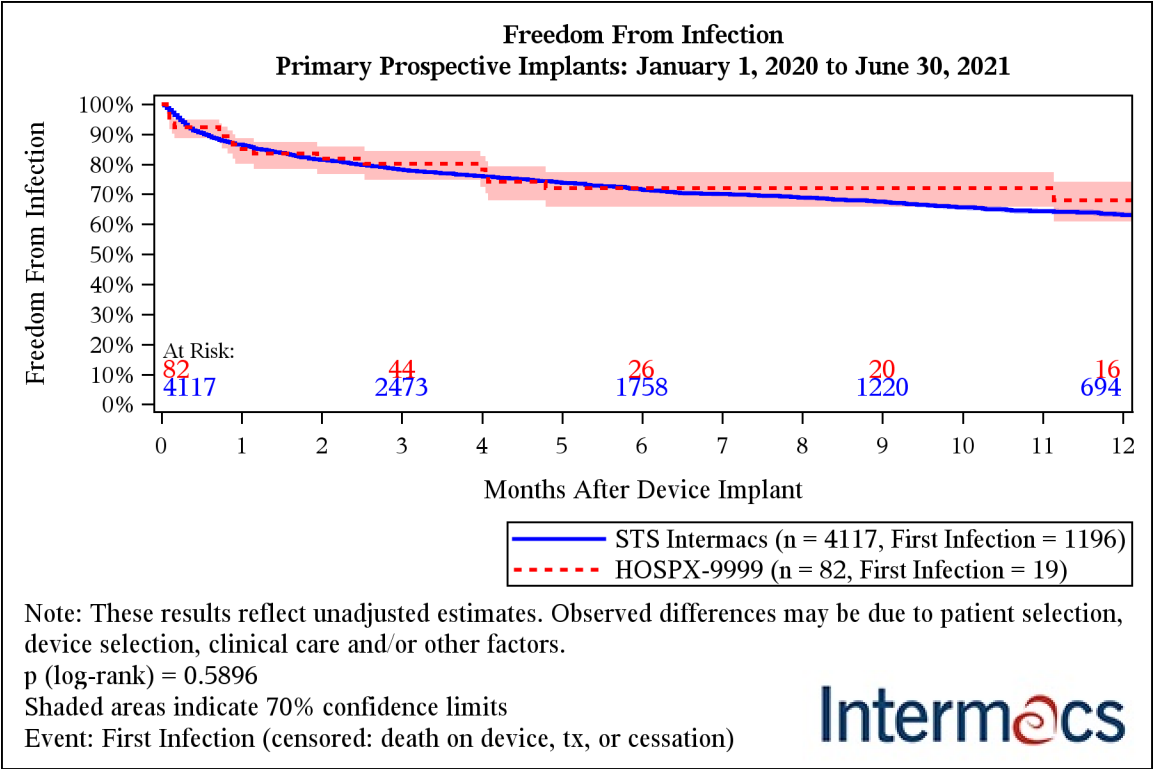
	STS InterMACS					
	Early (During the First Three Months)			Late (After the First Three Months)		
	Episodes	Patient %	Rate (per 100 pt month)	Episodes	Patient %	Rate (per 100 pt month)
CVA	223	5.1%	2.10	93	2.1%	0.43
Confusion	35	0.8%	0.33	16	0.3%	0.07
Encephalopathy	84	1.9%	0.79	31	0.7%	0.14
Seizure	25	0.6%	0.24	12	0.3%	0.06
TIA	25	0.6%	0.24	24	0.5%	0.11

Exhibit 24a. Time to First Device Malfunction / Thrombus



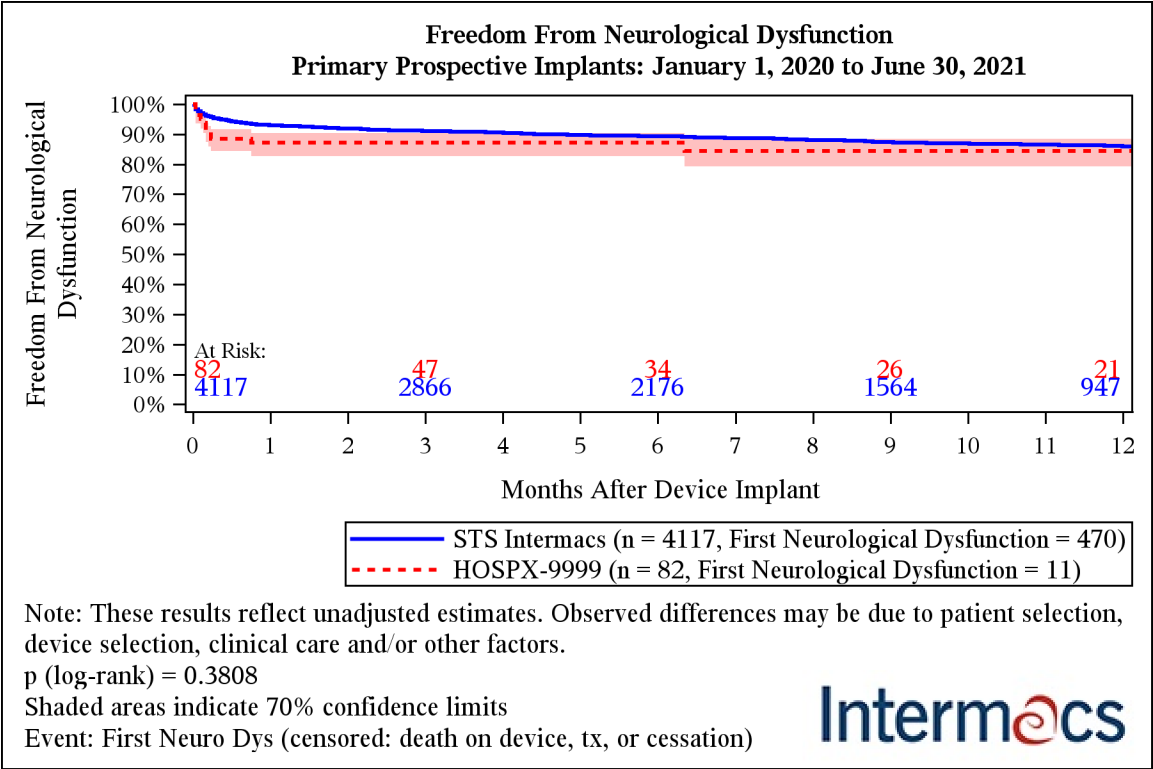
Months after Device Implant	STS Intermacs	HOSPX-9999
1	98.7% (98.5%-98.9%)	96.1% (93.1%-97.8%)
3	98.0% (97.8%-98.2%)	94.5% (91.1%-96.6%)
6	97.4% (97.2%-97.7%)	94.5% (91.1%-96.6%)
9	96.7% (96.4%-97.0%)	94.5% (91.1%-96.6%)
12	95.5% (95.1%-96.0%)	94.5% (91.1%-96.6%)

Exhibit 24b. Time to First Infection



Months after Device Implant	STS Intermacs	HOSPX-9999
1	86.4% (85.9%-87.0%)	85.0% (80.2%-88.7%)
3	78.2% (77.5%-78.9%)	80.1% (74.8%-84.4%)
6	71.6% (70.8%-72.4%)	72.0% (65.8%-77.4%)
9	67.5% (66.7%-68.3%)	72.0% (65.8%-77.4%)
12	63.1% (62.2%-64.1%)	68.0% (60.8%-74.2%)

Exhibit 24c. Time to First Neurological Dysfunction



Months after Device Implant	STS Intermacs	HOSPX-9999
1	93.0% (92.6%-93.4%)	87.1% (82.8%-90.5%)
3	91.1% (90.6%-91.5%)	87.1% (82.8%-90.5%)
6	89.3% (88.7%-89.8%)	87.1% (82.8%-90.5%)
9	87.3% (86.7%-87.9%)	84.4% (79.2%-88.4%)
12	85.9% (85.3%-86.6%)	84.4% (79.2%-88.4%)

COVERAGE: January 1, 2020 - June 30, 2021

SITE: HOSPX - DEMO SITE REPORT

**Exhibit 25. Hospital Days for Discharged Patients**

This table compares hospital days (initial hospitalization) from implant date to discharge date for patients with submitted discharge forms. For most patients this is the date they were discharged alive on a device but for patients that died or were transplanted in the implantation hospitalization it is the death date or transplant date, respectively. The first section (All) compares overall hospital days. The remaining sections compare hospital days by each device type, LVAD, Bi-VAD and TAH respectively.

HOSPITAL DAYS FOR DISCHARGED PATIENTS			HOSPX-9999						
			2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
All		N	16	9	8	10	9	2	54
		Mean	20.13	20.89	41.25	23.70	22.00	20.00	24.35
		Std	9.63	6.43	35.03	7.18	7.33	2.83	16.24
		Median	20	21	24	21	19	20	21
		Min	8	11	13	12	14	18	8
		Max	48	29	100	37	36	22	100
BiVAD		N	.	.	.	1	.	.	1
		Mean	.	.	.	29.00	.	.	29.00
		Std	.	.	.	.	.	.	.
		Median	.	.	.	29	.	.	29
		Min	.	.	.	29	.	.	29
		Max	.	.	.	29	.	.	29
LVAD		N	16	9	8	9	9	2	53
		Mean	20.13	20.89	41.25	23.11	22.00	20.00	24.26
		Std	9.63	6.43	35.03	7.36	7.33	2.83	16.38
		Median	20	21	24	21	19	20	21
		Min	8	11	13	12	14	18	8
		Max	48	29	100	37	36	22	100
RVAD		N	.	.	.	.	.	.	.
		Mean	.	.	.	.	.	.	.
		Std	.	.	.	.	.	.	.
		Median	.	.	.	.	.	.	.
		Min	.	.	.	.	.	.	.
		Max	.	.	.	.	.	.	.
TAH		N	.	.	.	.	.	.	.
		Mean	.	.	.	.	.	.	.
		Std	.	.	.	.	.	.	.
		Median	.	.	.	.	.	.	.
		Min	.	.	.	.	.	.	.
		Max	.	.	.	.	.	.	.

**Exhibit 25. Hospital Days for Discharged Patients**

HOSPITAL DAYS FOR DISCHARGED PATIENTS			STS InterMACS						
			2020 Q1	2020 Q2	2020 Q3	2020 Q4	2021 Q1	2021 Q2	TOTAL
All		N	730	548	667	550	583	399	3477
		Mean	27.66	26.83	26.96	26.35	25.08	21.00	25.99
		Std	27.81	24.92	21.52	18.64	16.37	11.44	21.62
		Median	21	21	20	21	20	18	20
		Min	0	3	0	0	1	0	0
		Max	387	378	164	177	120	81	387
BiVAD		N	29	29	20	11	29	14	132
		Mean	49.52	52.59	42.90	38.55	34.07	33.07	43.14
		Std	37.44	67.27	19.98	14.00	14.99	16.96	38.42
		Median	32	34	37	35	28	36	34
		Min	17	14	0	25	17	0	0
		Max	154	378	77	61	77	71	378
LVAD		N	700	518	645	539	552	385	3339
		Mean	26.79	25.41	26.46	26.10	24.46	20.56	25.30
		Std	27.00	19.31	21.43	18.65	16.13	10.97	20.38
		Median	20	20	19	20	20	18	20
		Min	0	3	0	0	1	0	0
		Max	387	210	164	177	120	81	387
RVAD		N	1	1	.	.	.	.	2
		Mean	7.00	17.00	.	.	.	.	12.00
		Std	.	.	.	.	.	.	7.07
		Median	7	17	.	.	.	.	12
		Min	7	17	.	.	.	.	7
		Max	7	17	.	.	.	.	17
TAH		N	.	.	2	.	2	.	4
		Mean	.	.	28.00	.	65.00	.	46.50
		Std	.	.	7.07	.	25.46	.	26.25
		Median	.	.	28	.	65	.	40
		Min	.	.	23	.	47	.	23
		Max	.	.	33	.	83	.	83

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - 30 Day Readmission****Exhibit 26. 30 Days Readmission**

The following tables present the counts and percentages of patients that were discharged alive on a device that were readmitted within 30 days for your site and for STS InterMACS overall. Percentages are listed by device type and discharge year.

**GROUP=HOSPX-9999**

30 Day Readmission		Device Type						TOTAL		
		LVAD			BiVAD					
		Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission	Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission	Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission
Discharge Year										
	2020Q1	16	5	31.3%	.	.	.	16	5	31.3%
	2020Q2	5	2	40.0%	.	.	.	5	2	40.0%
	2020Q3	9	2	22.2%	.	.	.	9	2	22.2%
	2020Q4	10	2	20.0%	.	.	.	10	2	20.0%
	2021Q1	9	3	33.3%	1	0	0.0%	10	3	30.0%
	2021Q2	4	1	25.0%	.	.	.	4	1	25.0%
	TOTAL	53	15	28.3%	1	0	0.0%	54	15	27.8%

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - 30 Day Readmission****Exhibit 26. 30 Days Readmission**

GROUP=STS Intermacs

30 Day Readmission		Device Type								
		LVAD			RVAD			BiVAD		
		Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission	Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission	Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission
Discharge Year										
	2020Q1	530	123	23.2%	.	.	.	13	3	23.1%
	2020Q2	502	123	24.5%	.	.	.	27	7	25.9%
	2020Q3	636	153	24.1%	1	0	0.0%	27	6	22.2%
	2020Q4	595	138	23.2%	.	.	.	12	4	33.3%
	2021Q1	506	127	25.1%	.	.	.	24	4	16.7%
	2021Q2	545	110	20.2%	.	.	.	27	7	25.9%
	TOTAL	3314	774	23.4%	1	0	0.0%	130	31	23.8%

30 Day Readmission		Device Type			TOTAL		
		TAH					
		Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission	Patients Discharged Alive on Device (n)	Patients with 30 day Readmission	% With 30 day Readmission
Discharge Year							
	2020Q1	.	.	.	543	126	23.2%
	2020Q2	.	.	.	529	130	24.6%
	2020Q3	2	2	100.0%	666	161	24.2%
	2020Q4	.	.	.	607	142	23.4%
	2021Q1	.	.	.	530	131	24.7%
	2021Q2	2	1	50.0%	574	118	20.6%
	TOTAL	4	3	75.0%	3449	808	23.4%



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 27a. 6 Minute Walk - Overall**

The following tables summarize Six Minute Walk completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	82	66	80.5	12	14.6	4	4.9	1122.5	238.1	1095.0	900.0	1400.0
3 Month	37	23	62.2	2	5.4	12	32.4	975.1	188.7	945.0	745.0	1375.0
6 Month	27	16	59.3	1	3.7	10	37.0	828.4	211.4	832.5	500.0	1200.0
1 Year	10	8	80.0	.	.	2	20.0	770.0	346.5	770.0	525.0	1015.0

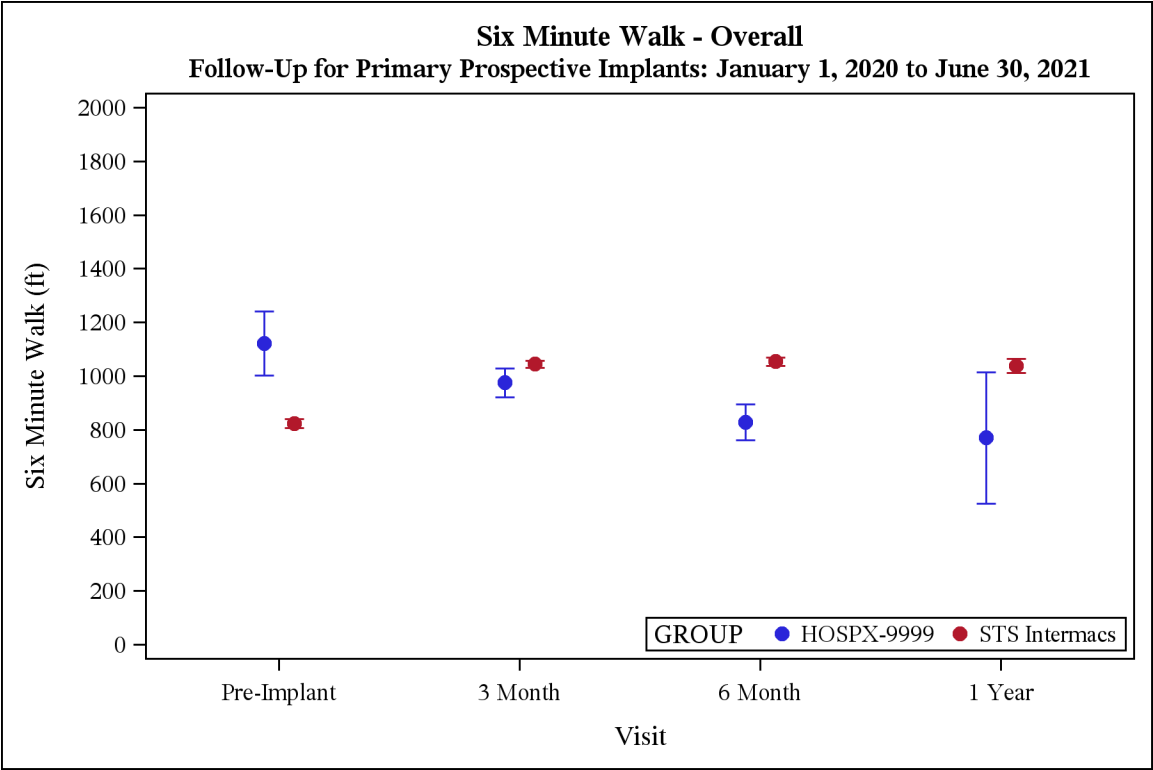
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS												
		Not Done: Other/Unknown		Not Done: Too Sick		Outlier		Complete						
		N	%	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	2250	54.7	1271	30.9	3	0.1	593	14.4	823.3	396.3	805.0	0.0	2300.0
3 Month	2755	1844	66.9	230	8.3	3	0.1	678	24.6	1044.3	359.9	1050.0	26.0	2320.0
6 Month	2033	1295	63.7	123	6.1	7	0.3	608	29.9	1054.5	380.3	1084.0	2.0	2175.0
1 Year	771	480	62.3	41	5.3	2	0.3	248	32.2	1038.0	414.6	1087.0	3.0	2145.0

II.C. Post Implant Summary - Functional Capacity

Exhibit 27a. 6 Minute Walk - Overall

The following figure summarize Six Minute Walk - Overall values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 27b. 6 Minute Walk - LVAD**

The following tables summarize Six Minute Walk completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%			N	%	Mean	Std	Median
Pre-Implant	78	64	82.1	10	12.8	4	5.1	1122.5	238.1	1095.0	900.0	1400.0
3 Month	36	23	63.9	2	5.6	11	30.6	980.5	196.9	975.0	745.0	1375.0
6 Month	27	16	59.3	1	3.7	10	37.0	828.4	211.4	832.5	500.0	1200.0
1 Year	10	8	80.0	.	.	2	20.0	770.0	346.5	770.0	525.0	1015.0

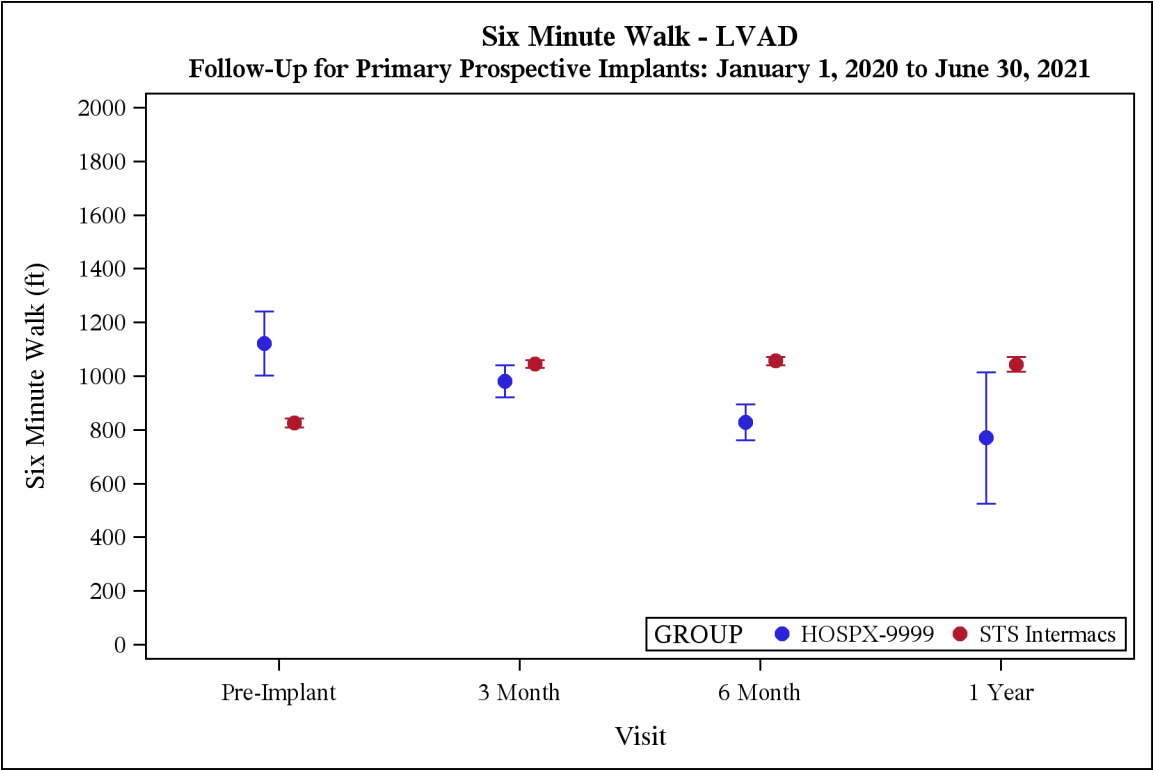
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS												
		Not Done: Other/Unknown		Not Done: Too Sick		Outlier		Complete						
		N	%	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	3874	2132	55.0	1160	29.9	3	0.1	579	14.9	825.6	398.7	809.0	0.0	2300.0
3 Month	2634	1775	67.4	203	7.7	3	0.1	653	24.8	1046.3	361.4	1050.0	26.0	2320.0
6 Month	1959	1250	63.8	113	5.8	7	0.4	589	30.1	1056.1	378.8	1085.0	2.0	2175.0
1 Year	738	460	62.3	38	5.1	2	0.3	238	32.2	1043.7	415.1	1094.0	3.0	2145.0

II.C. Post Implant Summary - Functional Capacity

Exhibit 27b. 6 Minute Walk - LVAD

The following figure summarize Six Minute Walk - LVAD values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 27c. 6 Minute Walk - BiVAD**

The following tables summarize Six Minute Walk completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	3	2	66.7	1	33.3	.	.	.	.	.	.	.
3 Month	1	.	.	.	.	1	100.0	915.0	.	915.0	915.0	915.0

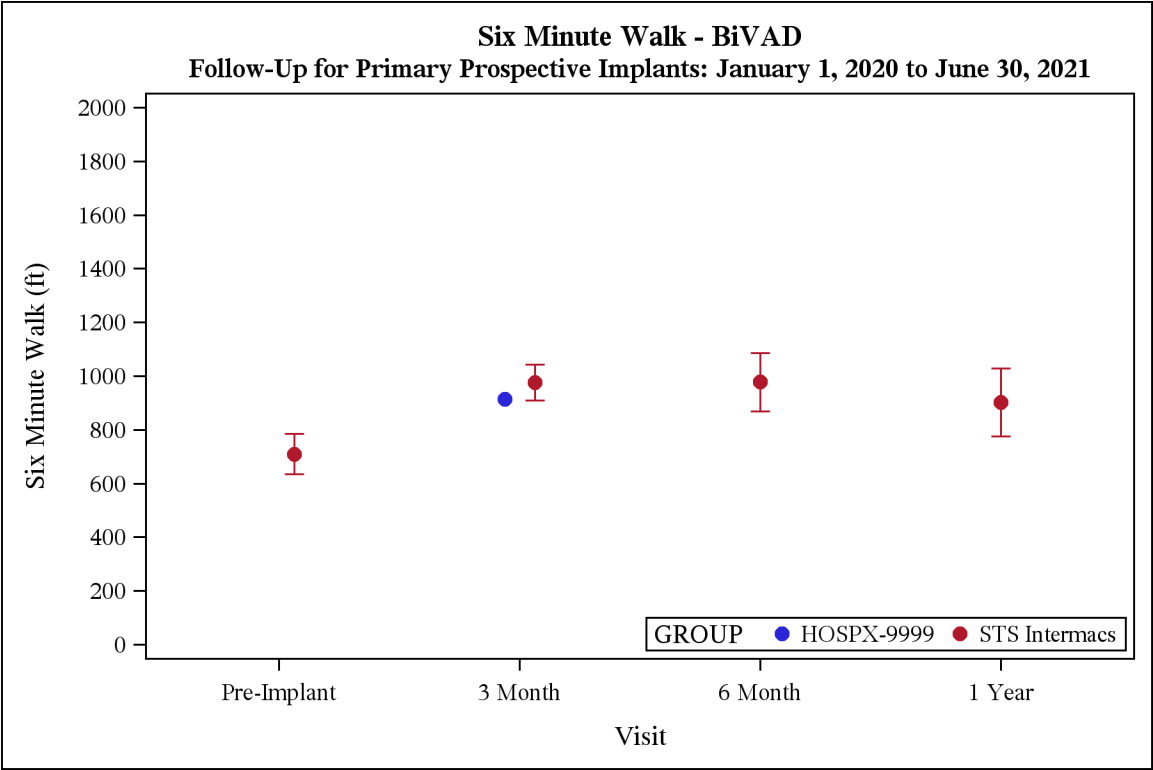
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	225	110	48.9	102	45.3	13	5.8	709.2	271.9	800.0	126.0	1140.0
3 Month	113	66	58.4	25	22.1	22	19.5	975.8	312.7	982.0	443.0	1500.0
6 Month	69	42	60.9	10	14.5	17	24.6	977.9	448.0	931.0	3.0	1698.0
1 Year	31	18	58.1	3	9.7	10	32.3	902.5	400.5	929.0	50.0	1478.0

II.C. Post Implant Summary - Functional Capacity

Exhibit 27c. 6 Minute Walk - BiVAD

The following figure summarize Six Minute Walk - BiVAD values your site and STS InterMACS at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 27d. 6 Minute Walk - TAH**

The following tables summarize Six Minute Walk completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS		Six Minute Walk (ft)				
		Not Done: Too Sick						
	N	%	Mean	Std	Median	Min	Max	
Pre-Implant	1	1	100.0	.	.	.	.	.

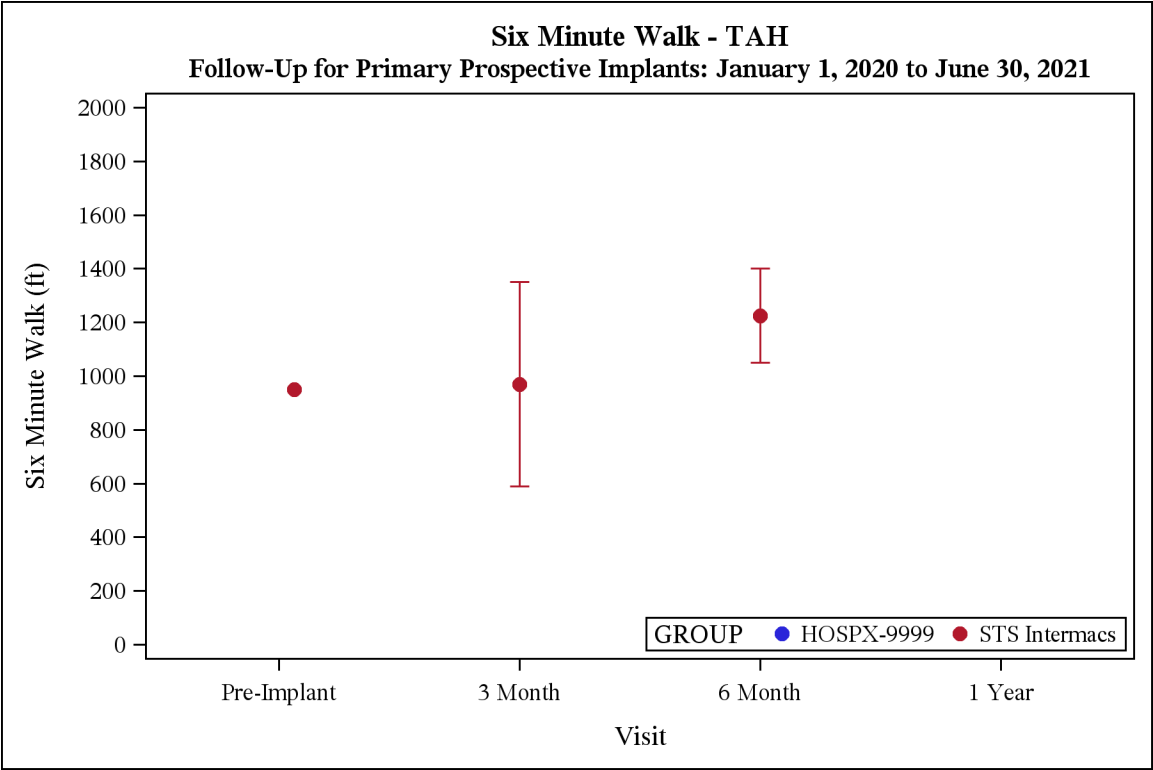
**GROUP=STS InterMACs**

VISIT		COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
	N	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	12	5	41.7	6	50.0	1	8.3	950.0	.	950.0	950.0	950.0
3 Month	5	1	20.0	2	40.0	2	40.0	970.0	537.4	970.0	590.0	1350.0
6 Month	2	.	.	.	.	2	100.0	1225.0	247.5	1225.0	1050.0	1400.0

II.C. Post Implant Summary - Functional Capacity

Exhibit 27d. 6 Minute Walk - TAH

The following figure summarize Six Minute Walk - TAH values your site and STS InterMACS at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.





COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 28. VO2 Max**

The following tables summarize VO2 Max completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary.

Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS				VO2 Max (mL/kg/min)				
		Not Done: Other/Unknown		Not Done: Too Sick						
		N	N	%	N	%	Mean	Std	Median	Min
Pre-Implant	82	69	84.1	13	15.9	.	.	.	.	.
3 Month	37	36	97.3	1	2.7	.	.	.	.	.
6 Month	27	27	100.0	.	.	.	.	.	.	.
1 Year	10	10	100.0	.	.	.	.	.	.	.

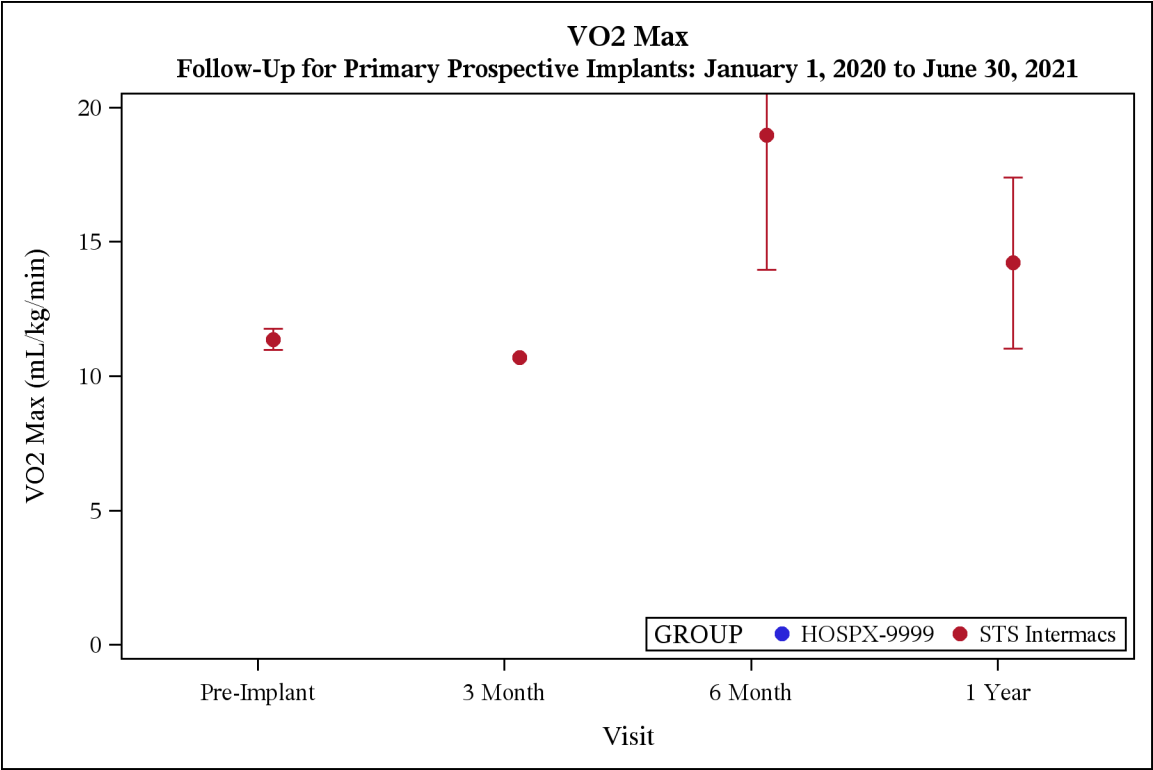
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS								VO2 Max (mL/kg/min)				
		Not Done: Other/Unknown		Not Done: Too Sick		Outlier		Complete						
		N	%	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	2841	69.0	1032	25.1	3	0.1	241	5.9	11.4	6.2	10.5	0.9	63.0
3 Month	2755	2610	94.7	142	5.2	2	0.1	1	0.0	10.7	.	10.7	10.7	10.7
6 Month	2033	1942	95.5	81	4.0	.	.	10	0.5	19.0	15.8	15.2	9.4	63.0
1 Year	771	747	96.9	22	2.9	.	.	2	0.3	14.2	4.5	14.2	11.0	17.4

II.C. Post Implant Summary - Functional Capacity

Exhibit 28. VO2 Max

The following figure summarize VO2 Max values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 29. Peak R**

The following tables summarize Peak R completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS		Peak R (%)				
		Not Done: Other/Unknown						
	N	N	%	Mean	Std	Median	Min	Max
Pre-Implant	82	82	100.0	.	.	.	.	.
3 Month	37	37	100.0	.	.	.	.	.
6 Month	27	27	100.0	.	.	.	.	.
1 Year	10	10	100.0	.	.	.	.	.

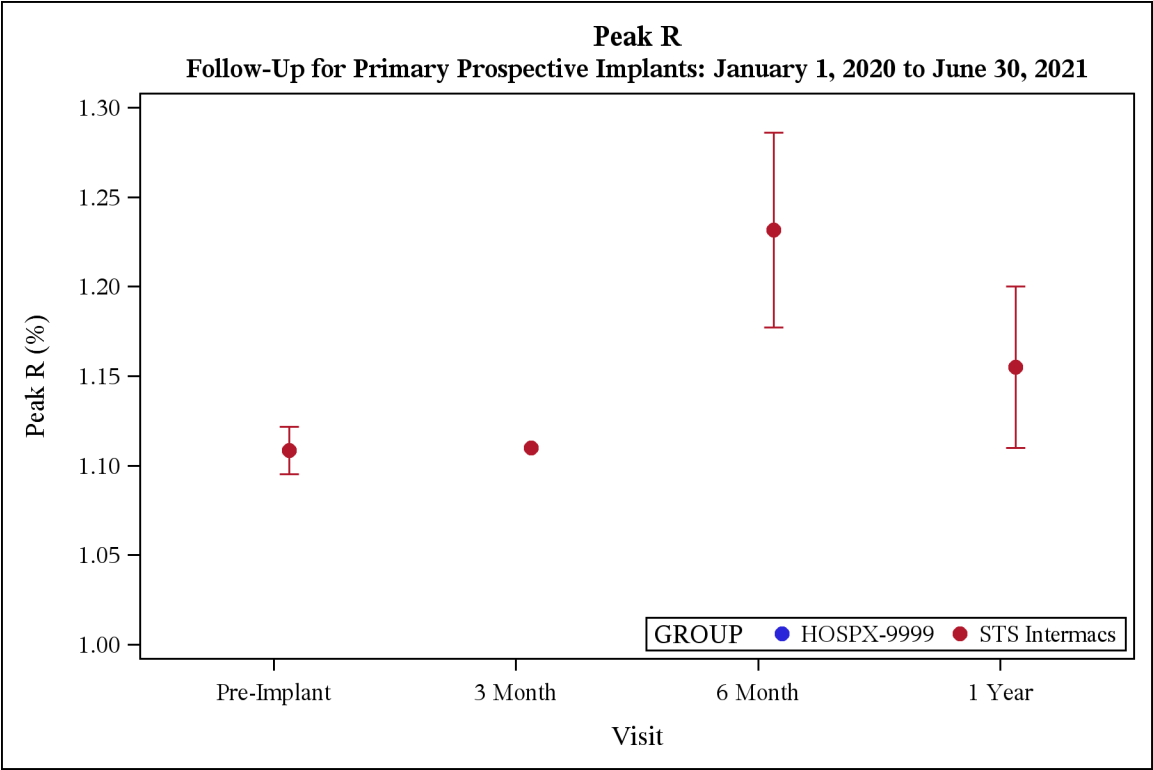
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS						Peak R (%)				
		Not Done: Other/Unknown		Outlier		Complete						
	N	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	3936	95.6	40	1.0	141	3.4	1.1	0.2	1.1	0.7	1.7
3 Month	2755	2754	100.0	.	.	1	0.0	1.1	.	1.1	1.1	1.1
6 Month	2033	2025	99.6	2	0.1	6	0.3	1.2	0.1	1.2	1.1	1.4
1 Year	771	769	99.7	.	.	2	0.3	1.2	0.1	1.2	1.1	1.2

II.C. Post Implant Summary - Functional Capacity

Exhibit 29. Peak R

The following figure summarize Peak R values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 30. Gait Speed**

The following tables summarize Gait Speed completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary.

Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS						Gait Speed (Feet/Sec) - DV					
		Not Done: Other/Unknown		Not Done: Too Sick		Complete							
		N	%	N	%	N	%	Mean	Std	Median	Min	Max	
Pre-Implant	82	69	84.1	13	15.9	.	.	.	.	.	.	.	
3 Month	37	24	64.9	2	5.4	11	29.7	3.0	0.5	3.0	2.1	3.8	
6 Month	27	18	66.7	1	3.7	8	29.6	2.6	0.5	2.5	1.9	3.8	
1 Year	10	8	80.0	.	.	2	20.0	2.0	0.7	2.0	1.5	2.5	

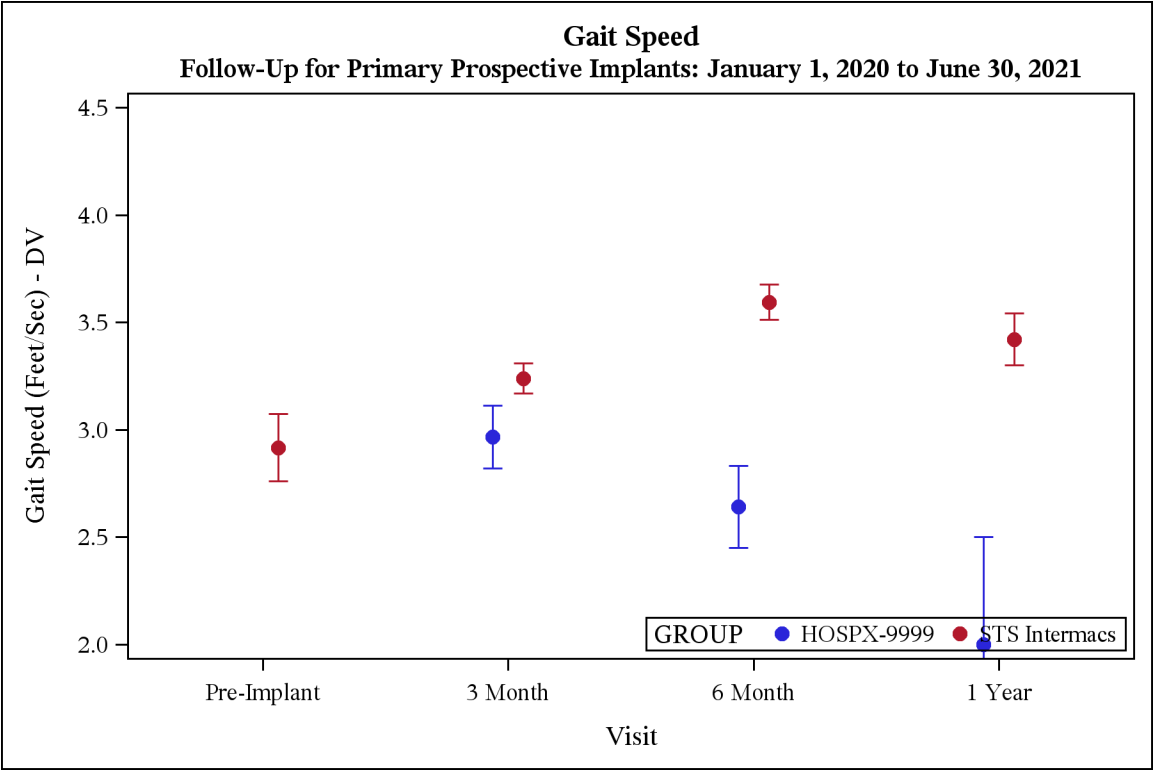
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS								Gait Speed (Feet/Sec) - DV					
		Not Done: Other/Unknown		Not Done: Too Sick		Outlier		Complete							
		N	%	N	%	N	%	N	%	Mean	Std	Median	Min	Max	
Pre-Implant	4117	2767	67.2	1201	29.2	16	0.4	133	3.2	2.9	1.8	2.6	0.0	10.0	
3 Month	2755	2195	79.7	203	7.4	2	0.1	355	12.9	3.2	1.3	3.0	0.0	10.0	
6 Month	2033	1608	79.1	115	5.7	1	0.0	309	15.2	3.6	1.4	3.4	0.0	10.0	
1 Year	771	606	78.6	36	4.7	1	0.1	128	16.6	3.4	1.4	3.3	0.1	10.0	

II.C. Post Implant Summary - Functional Capacity

Exhibit 30. Gait Speed

The following figure summarize Gait Speed values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 31. Trailmaking**

The following tables summarize Trailmaking completion status and values at your site and STS InterMACS at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS					Trailmaking Time (sec)				
		Incomplete		Complete							
	N	N	%	N	%		Mean	Std	Median	Min	Max
Pre-Implant	82	73	89.0	9	11.0		116.1	49.1	95.0	46.0	183.0
3 Month	37	29	78.4	8	21.6		118.3	46.1	113.5	52.0	199.0
6 Month	27	25	92.6	2	7.4		53.5	30.4	53.5	32.0	75.0
1 Year	10	8	80.0	2	20.0		154.0	11.3	154.0	146.0	162.0

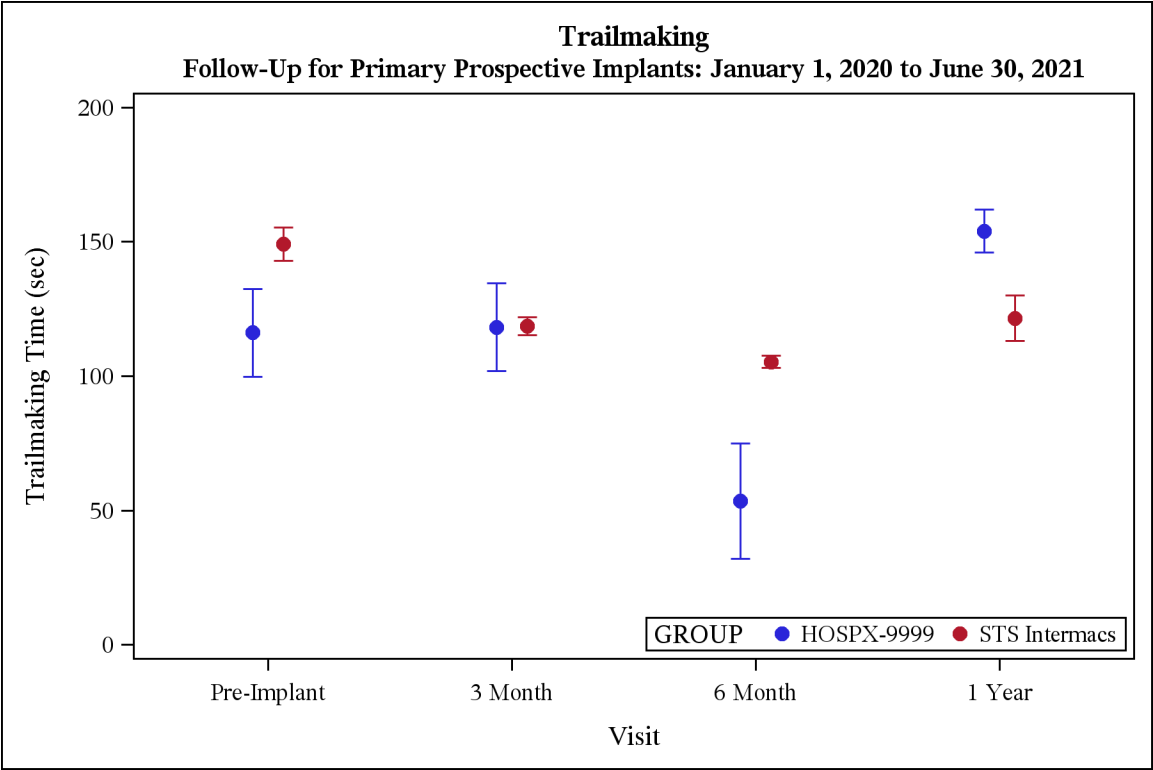
**GROUP=STS InterMACS**

VISIT	Patients (n)	COMPLETION STATUS					Trailmaking Time (sec)				
		Incomplete		Complete							
	N	N	%	N	%		Mean	Std	Median	Min	Max
Pre-Implant	4117	3214	78.1	903	21.9		149.2	186.5	120.0	6.0	3600.0
3 Month	2755	2049	74.4	706	25.6		118.7	87.8	97.0	9.0	1423.0
6 Month	2033	1446	71.1	587	28.9		105.4	56.0	95.0	4.0	561.0
1 Year	771	509	66.0	262	34.0		121.6	138.2	96.5	8.0	2134.0

II.C. Post Implant Summary - Functional Capacity

Exhibit 31. Trailmaking

The following figure summarize Trailmaking values your site and STS InterMACS at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.





COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Functional Capacity****Exhibit 32. NYHA Class**

The following tables summarize NYHA completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS				NYHA Class				
		Not Done: Other/Unknown		Complete						
	N	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	82	26	31.7	56	68.3	3.9	0.3	4.0	2.0	4.0
3 Month	37	7	18.9	30	81.1	2.7	1.0	2.0	1.0	4.0
6 Month	27	4	14.8	23	85.2	2.4	0.8	2.0	1.0	4.0
1 Year	10	.	.	10	100.0	2.0	0.5	2.0	1.0	3.0

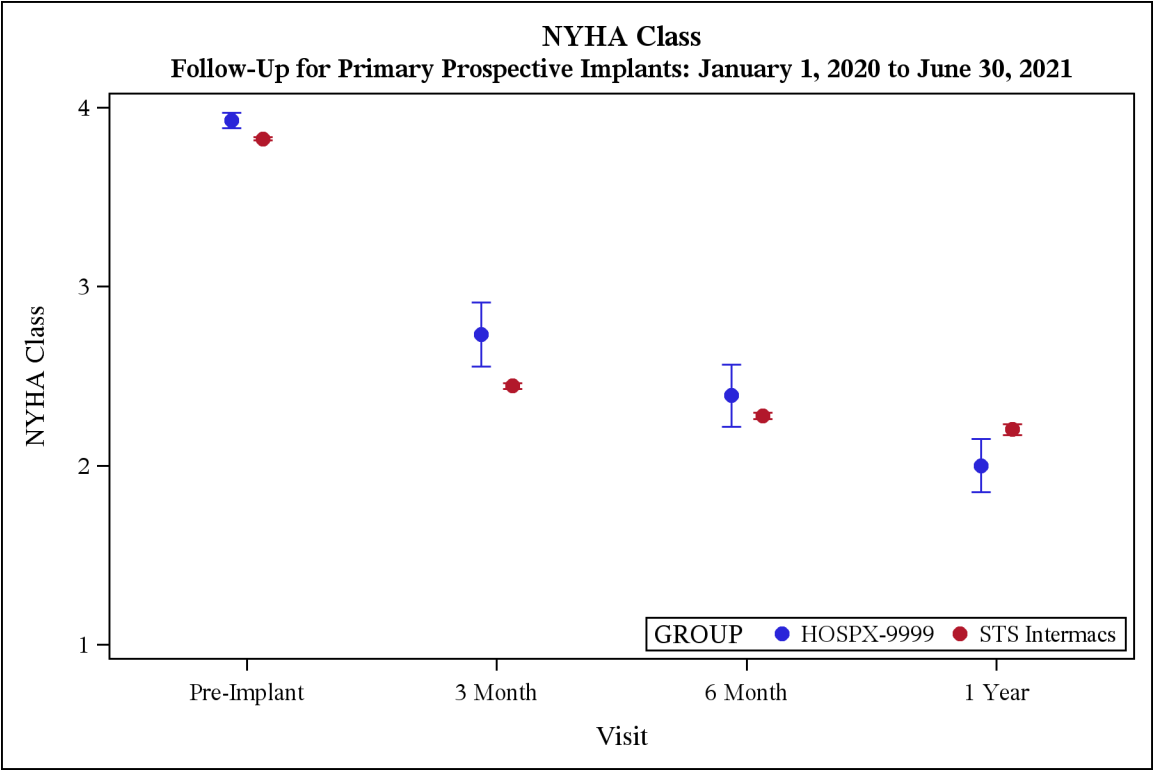
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS				NYHA Class				
		Not Done: Other/Unknown		Complete						
	N	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	1086	26.4	3031	73.6	3.8	0.4	4.0	1.0	4.0
3 Month	2755	384	13.9	2371	86.1	2.4	0.8	2.0	1.0	4.0
6 Month	2033	227	11.2	1806	88.8	2.3	0.8	2.0	1.0	4.0
1 Year	771	84	10.9	687	89.1	2.2	0.8	2.0	1.0	4.0

II.C. Post Implant Summary - Functional Capacity

Exhibit 32. NYHA Class

The following figure summarize NYHA Class values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Quality of Life****Exhibit 33a. EQ-5D Index**

The following tables summarize EQ-5D Index completion status and values at your site and STS InterMACS at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS											
		Not Done: Other/Unknown		Not Done: Too Sick		Complete							
		N	%	N	%			N	%	Mean	Std	Median	Min
Pre-Implant	82	58	70.7	8	9.8	16	19.5	0.7	0.2	0.7	0.2	1.0	
3 Month	37	15	40.5	1	2.7	21	56.8	0.8	0.2	0.8	0.3	1.0	
6 Month	27	10	37.0	1	3.7	16	59.3	0.8	0.2	0.8	0.1	1.0	
1 Year	10	5	50.0	.	.	5	50.0	0.9	0.1	0.8	0.8	1.0	

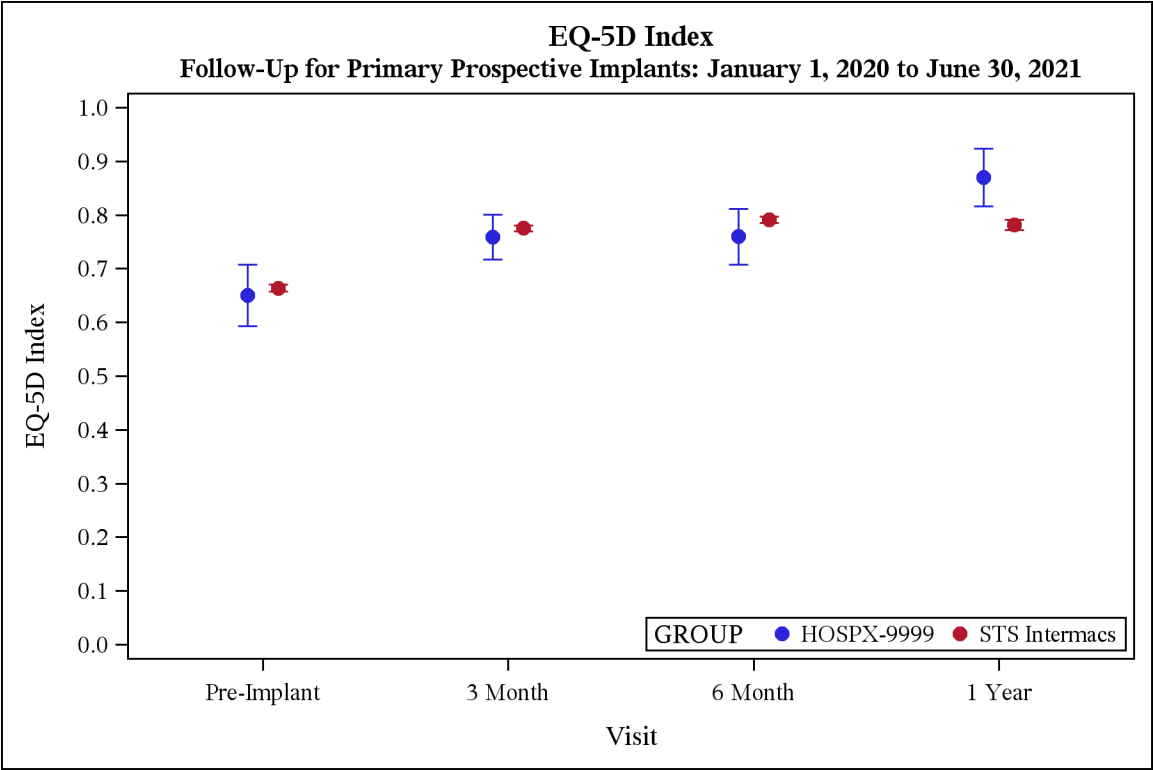
**GROUP=STS InterMACS**

VISIT	Patients (n)	COMPLETION STATUS						EQ-5D Index				
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	2235	54.3	519	12.6	1363	33.1	0.7	0.2	0.7	-0.1	1.0
3 Month	2755	1564	56.8	80	2.9	1111	40.3	0.8	0.2	0.8	-0.1	1.0
6 Month	2033	1047	51.5	34	1.7	952	46.8	0.8	0.2	0.8	-0.1	1.0
1 Year	771	371	48.1	7	0.9	393	51.0	0.8	0.2	0.8	0.1	1.0

II.C. Post Implant Summary - Quality of Life

Exhibit 33a. EQ-5D Index

The following figure summarize EQ-5D Index values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Quality of Life****Exhibit 33b. EQ-5D Visual Analog Scale**

The following tables summarize EQ-5D Visual Analog Scale completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS						VAS: Own Health State				
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
	N	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	82	58	70.7	8	9.8	16	19.5	37.6	25.9	36.0	0.0	90.0
3 Month	37	12	32.4	1	2.7	24	64.9	72.5	21.6	80.0	30.0	100.0
6 Month	27	11	40.7	1	3.7	15	55.6	71.7	14.4	75.0	45.0	95.0
1 Year	10	5	50.0	.	.	5	50.0	74.0	15.2	80.0	50.0	90.0

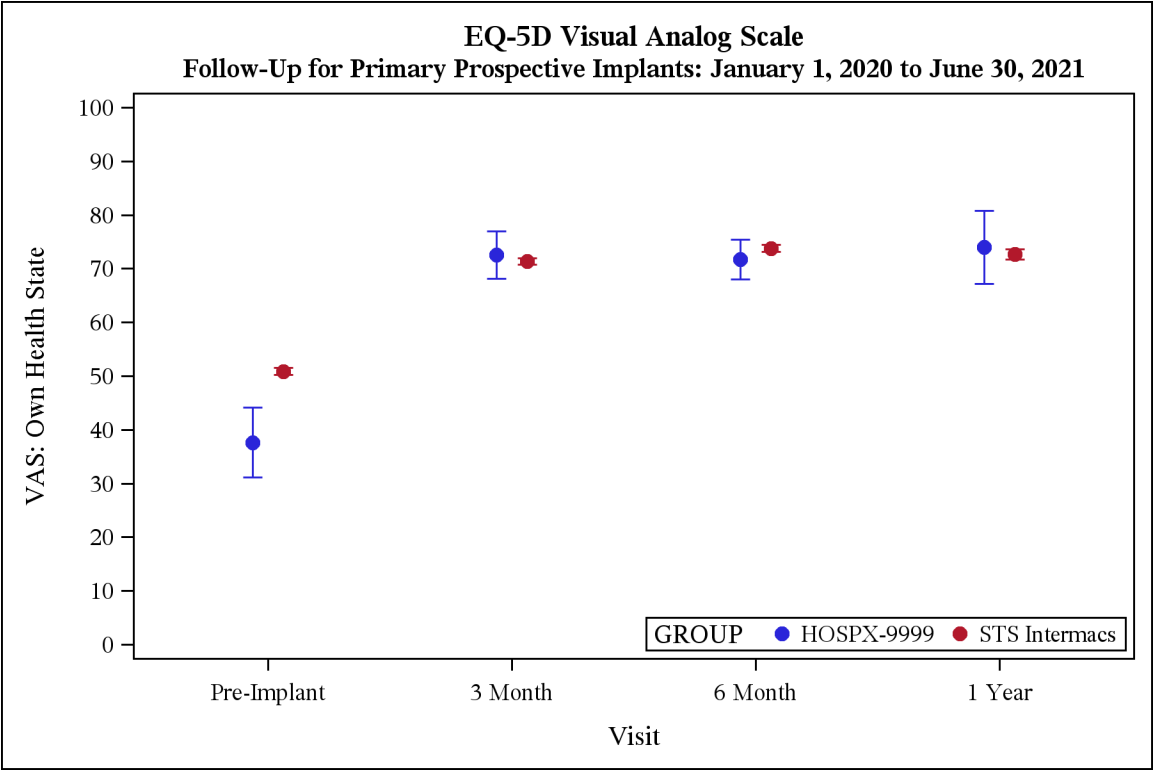
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	2262	54.9	519	12.6	1336	32.5	50.9	24.2	50.0	0.0	100.0
3 Month	2755	1596	57.9	80	2.9	1079	39.2	71.3	18.8	75.0	0.0	100.0
6 Month	2033	1075	52.9	34	1.7	924	45.5	73.8	18.9	75.5	0.0	100.0
1 Year	771	385	49.9	7	0.9	379	49.2	72.7	19.3	75.0	0.0	100.0

II.C. Post Implant Summary - Quality of Life

Exhibit 33b. EQ-5D Visual Analog Scale

The following figure summarize EQ-5D Visual Analog Scale values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****II.C. Post Implant Summary - Quality of Life****Exhibit 33c. KCCQ-12 - Scored**

The following tables summarize KCCQ-12 - Scored completion status and values at your site and STS InterMACs at select follow-up visits. Only follow-up data for patients first devices are considered for this summary. Unlikely values have been categorized as outliers and are listed in the accompanying data quality report.

**GROUP=HOSPX-9999**

VISIT	Patients (n)	COMPLETION STATUS						KCCQ-12 Score				
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
	N	N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	82	58	70.7	8	9.8	16	19.5	31.7	15.7	31.0	6.8	62.5
3 Month	37	12	32.4	1	2.7	24	64.9	58.6	27.4	61.0	12.0	100.0
6 Month	27	11	40.7	1	3.7	15	55.6	59.6	23.9	62.5	17.7	90.6
1 Year	10	6	60.0	.	.	4	40.0	70.8	18.9	75.0	45.8	87.5

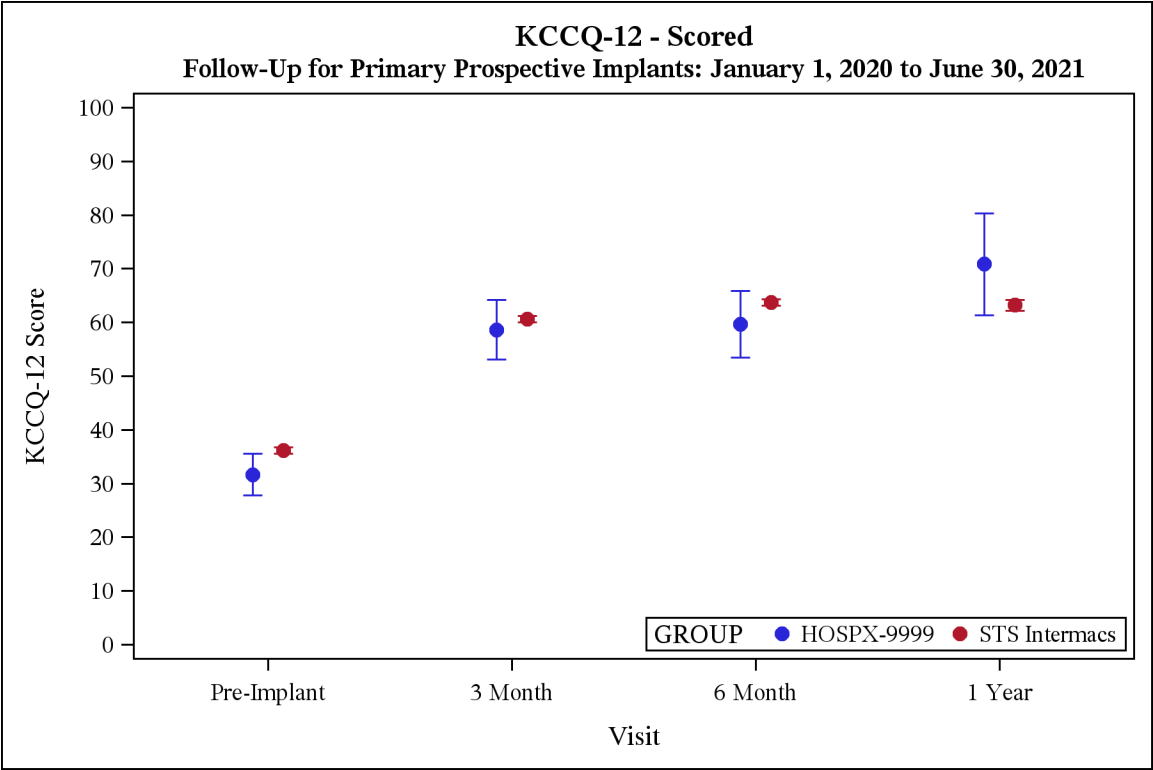
**GROUP=STS InterMACs**

VISIT	Patients (n)	COMPLETION STATUS										
		Not Done: Other/Unknown		Not Done: Too Sick		Complete						
		N	%	N	%	N	%	Mean	Std	Median	Min	Max
Pre-Implant	4117	2087	50.7	543	13.2	1487	36.1	36.2	21.3	33.3	0.0	100.0
3 Month	2755	1416	51.4	89	3.2	1250	45.4	60.6	21.2	62.5	0.0	100.0
6 Month	2033	926	45.5	37	1.8	1070	52.6	63.7	20.9	65.6	0.0	100.0
1 Year	771	340	44.1	7	0.9	424	55.0	63.2	20.7	66.1	0.0	100.0

II.C. Post Implant Summary - Quality of Life

Exhibit 33c. KCCQ-12 - Scored

The following figure summarize KCCQ-12 - Scored values your site and STS Intermacs at select follow-up visits. Only follow-up data for patients' first devices are considered for this summary. The dots represent average values and the error bars are the standard errors.





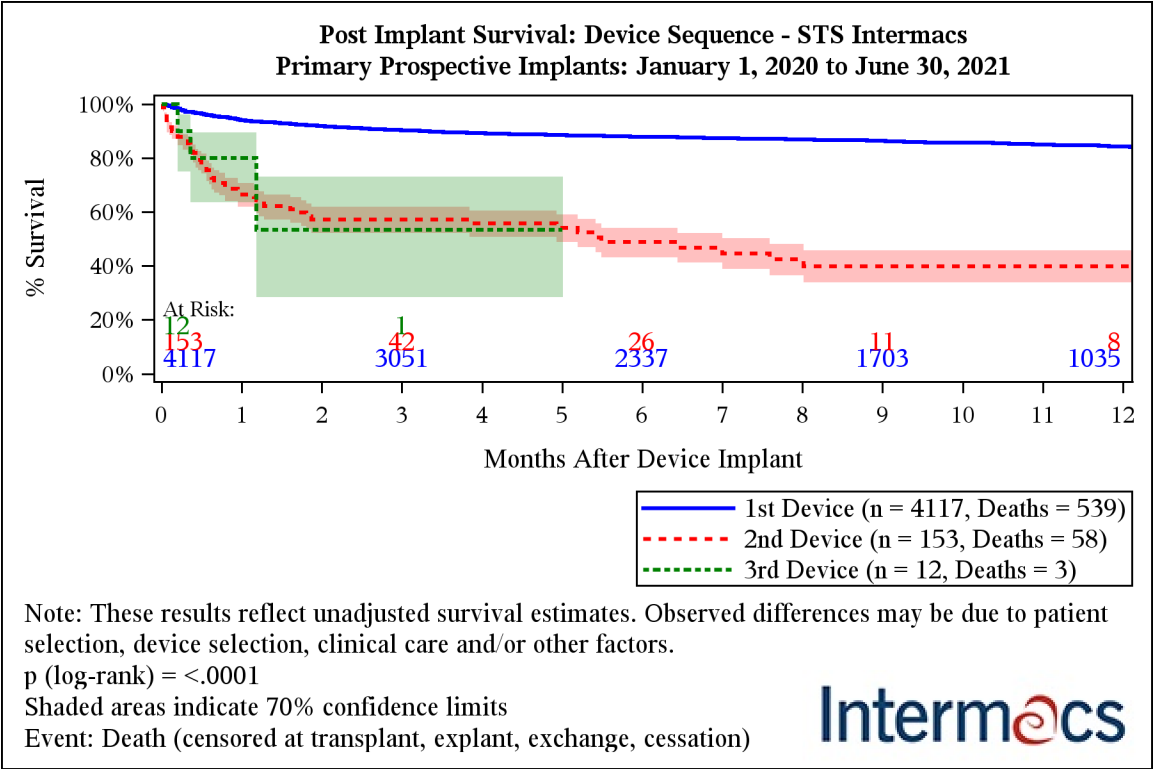
***II.E. Post Implant Outcomes***

This section provides statistical summaries of outcomes after VAD implant. These depictions include all patients who received a primary device at your institution and compares it with the equivalent group in InterMACS. The p-values are a univariate comparison (log-rank test) of survival at your institution with survival for the entire registry. Univariate comparisons are well known to be limited in value because no adjustment is made for differing patient characteristics in the groups. Nevertheless, these comparisons can provide an initial comparison of unadjusted results. Future version of this report will provide risk adjusted comparisons.

Note: If your site did not report any patients within a specified group, only the overall STS InterMACS data will be displayed.

Exhibit 34a. Post Implant Survival - Device Sequence - STS Intermacs

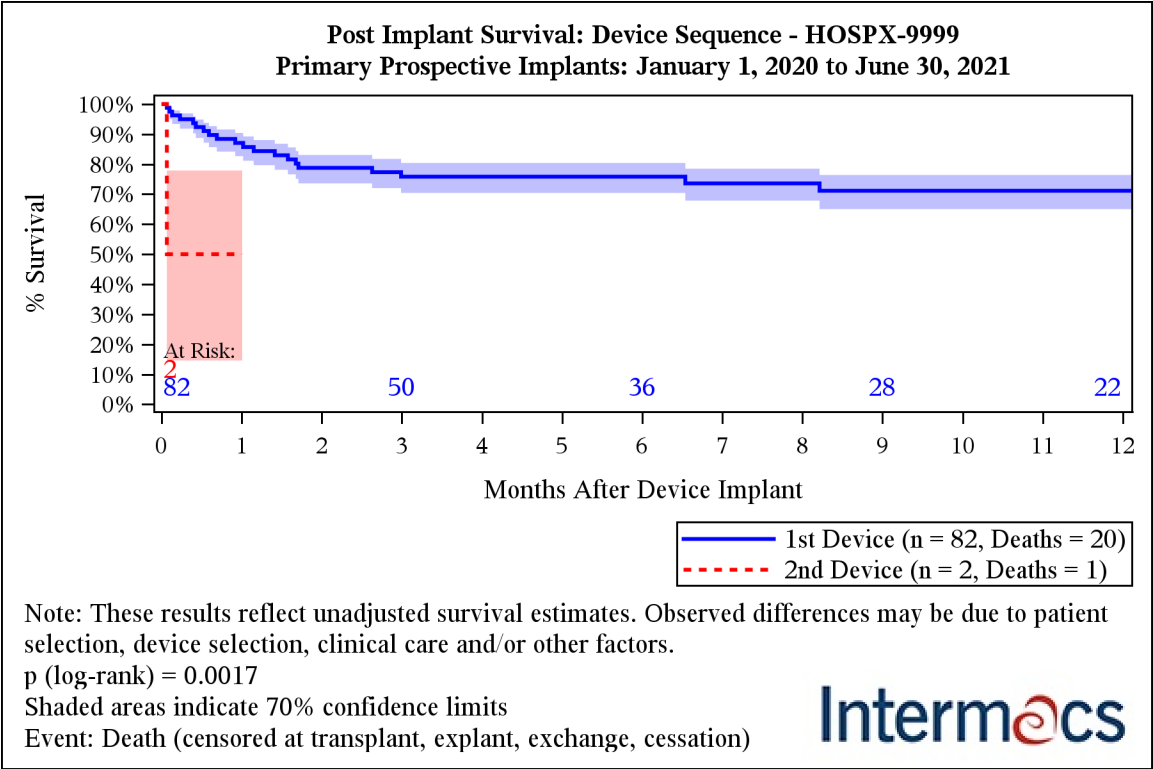
The following figure compares survival time on specific devices based on device sequence for all of STS Intermacs. Each curve represents survival from the time the device was implanted until death. Patients are censored at time of transplant, explant for any reason, or the device was turned off.



Months after Device Implant	1st Device	2nd Device	3rd Device
1	94.1% (93.7%-94.5%)	66.5% (61.9%-70.7%)	80.0% (63.6%-89.6%)
3	90.3% (89.8%-90.7%)	57.2% (52.2%-61.9%)	53.3% (28.3%-73.1%)
6	87.9% (87.3%-88.4%)	48.8% (43.2%-54.1%)	
9	86.4% (85.8%-86.9%)	39.8% (33.8%-45.8%)	
12	84.3% (83.6%-85.0%)	39.8% (33.8%-45.8%)	

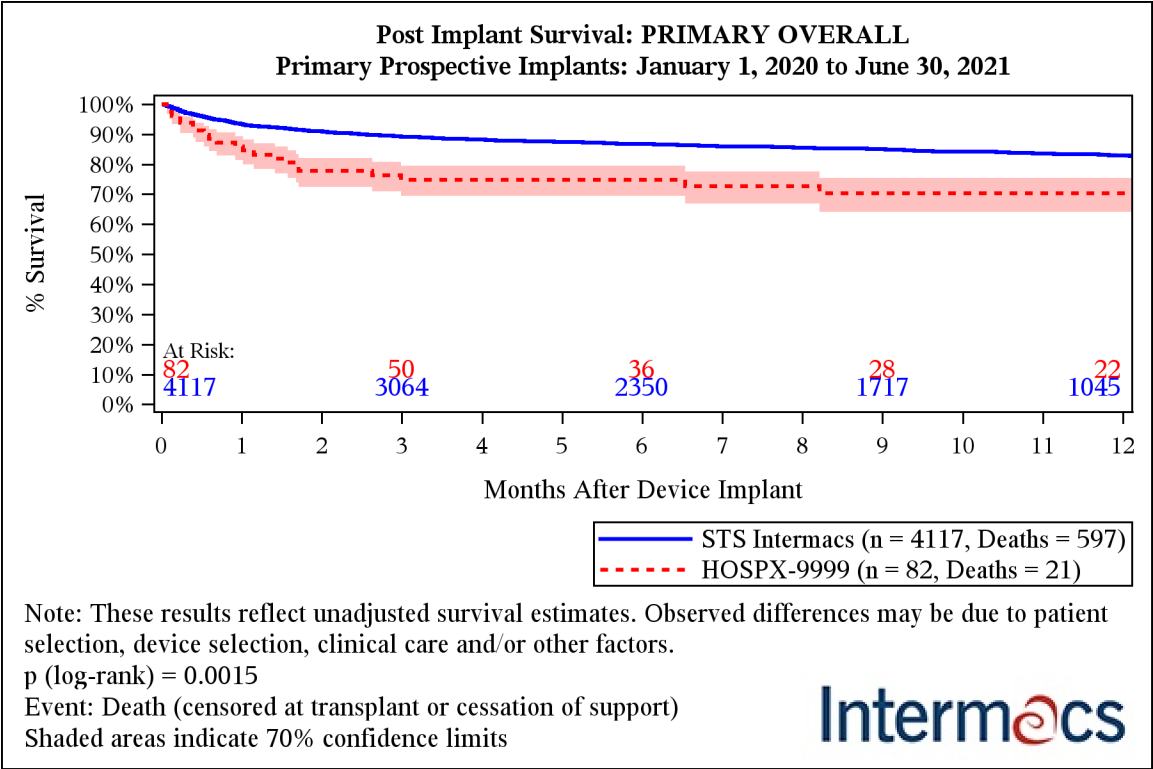
Exhibit 34b. Post Implant Survival - Device Sequence - HOSPX-9999

The following figure compares survival time on specific devices based on device sequence for your site. Each curve represents survival from the time the device was implanted until death. Patients are censored at transplant, explant, for any reason, or the device was turned off.



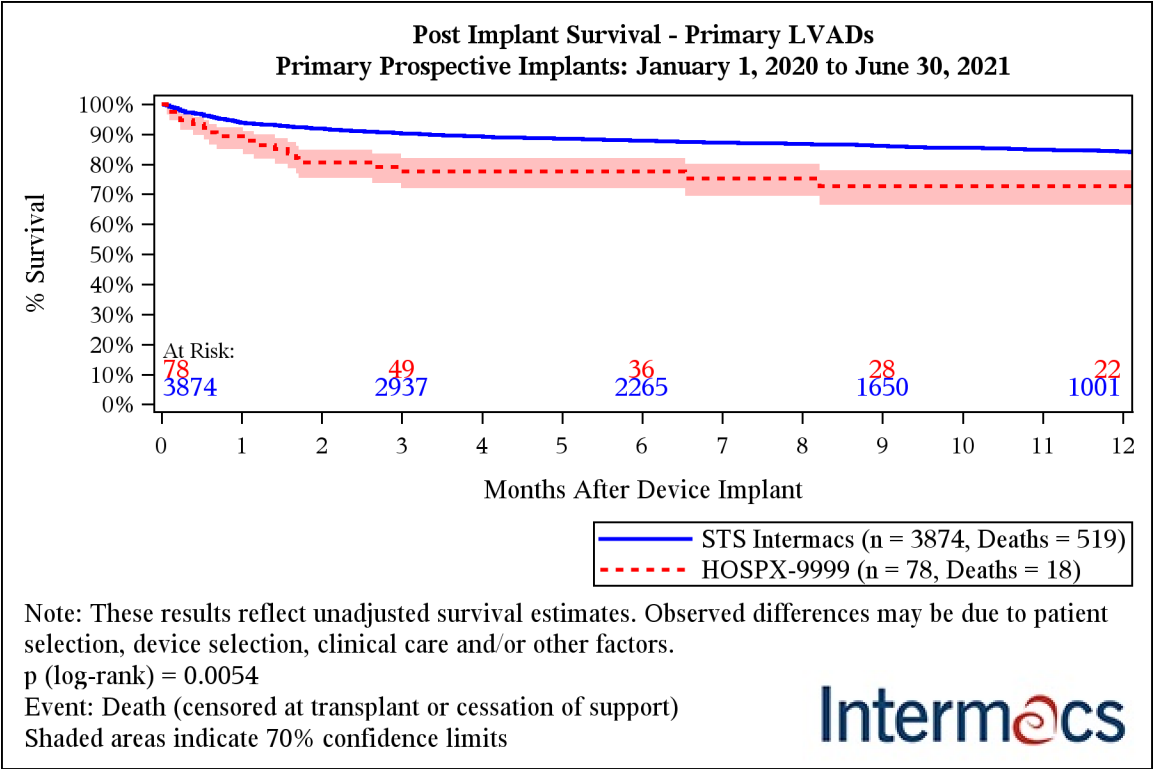
Months after Device Implant	1st Device	2nd Device
1	87.1% (82.7%-90.4%)	50.0% (14.6%-77.9%)
3	75.8% (70.4%-80.4%)	
6	75.8% (70.4%-80.4%)	
9	71.1% (65.0%-76.4%)	
12	71.1% (65.0%-76.4%)	

Exhibit 35. Post Implant Survival - PRIMARY OVERALL



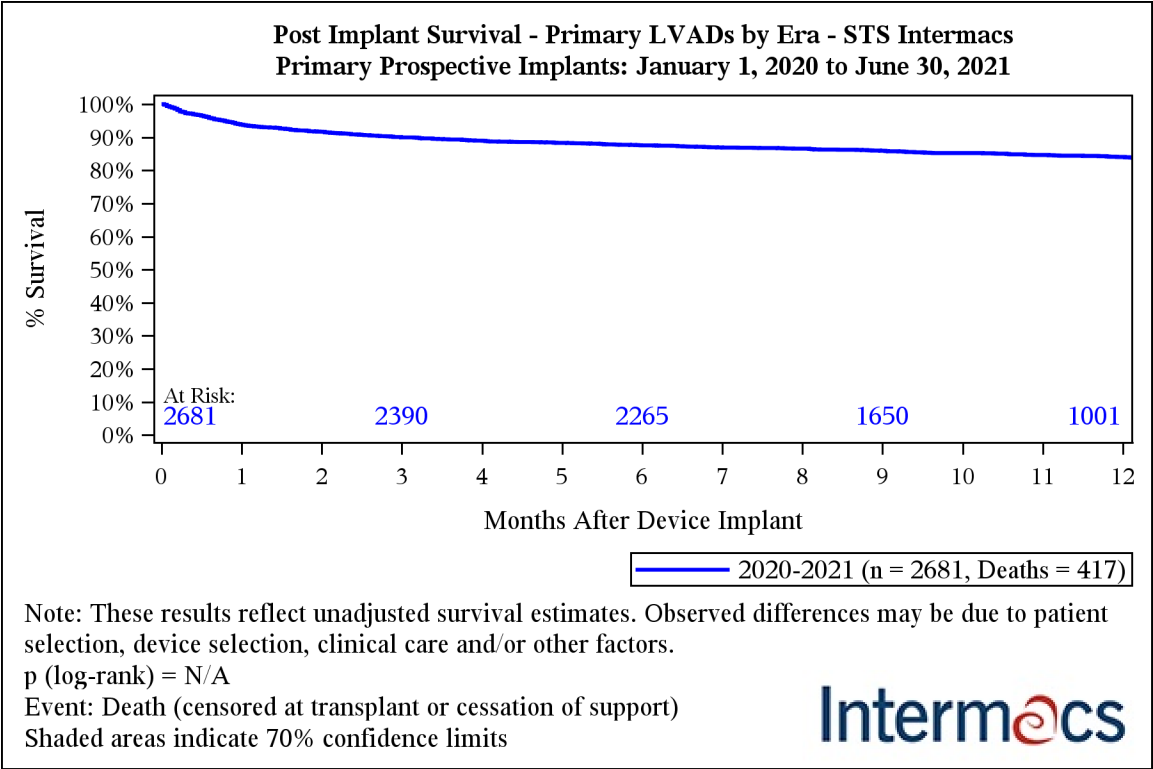
Months after Device Implant	STS Intermacs	HOSPX-9999
1	93.3% (92.9%-93.7%)	85.9% (81.4%-89.4%)
3	89.2% (88.7%-89.7%)	74.8% (69.4%-79.5%)
6	86.6% (86.1%-87.2%)	74.8% (69.4%-79.5%)
9	85.0% (84.3%-85.6%)	70.2% (64.1%-75.5%)
12	82.9% (82.2%-83.6%)	70.2% (64.1%-75.5%)

Exhibit 36. Post Implant Survival - Primary LVADs



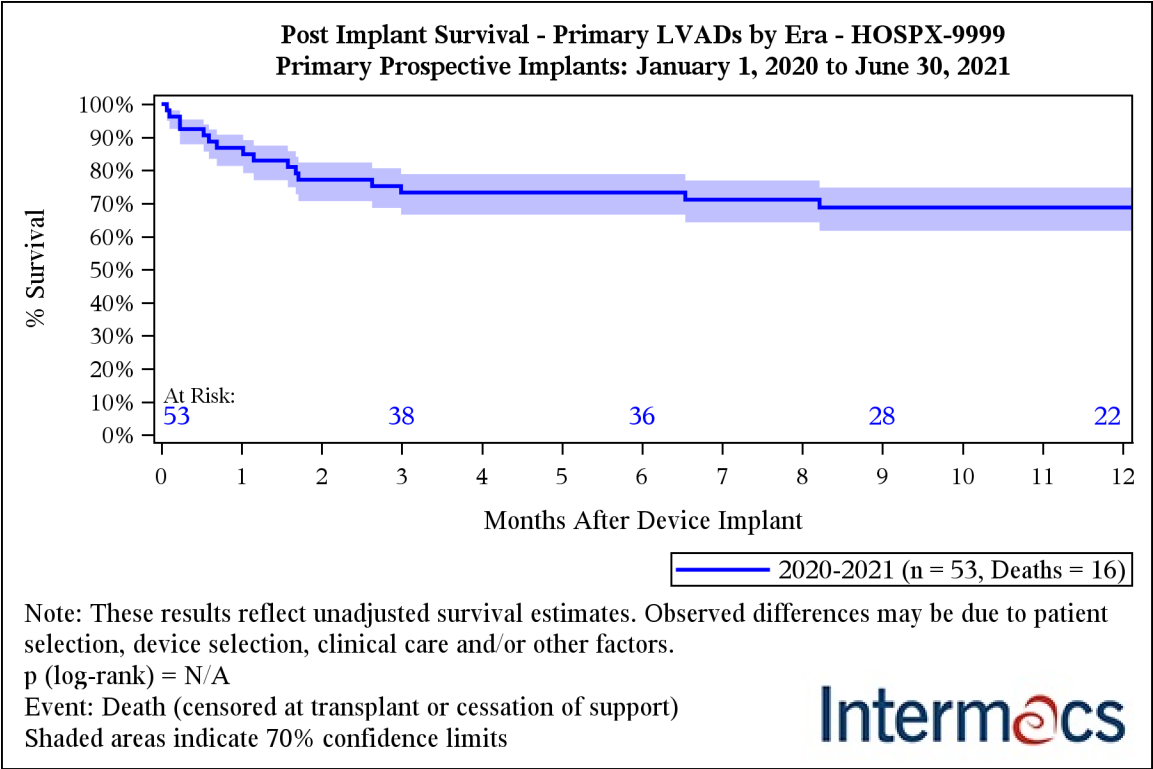
Months after Device Implant	STS Intermacs	HOSPX-9999
1	93.9% (93.5%-94.3%)	89.2% (85.0%-92.3%)
3	90.2% (89.7%-90.7%)	77.5% (72.1%-82.1%)
6	87.8% (87.2%-88.3%)	77.5% (72.1%-82.1%)
9	86.1% (85.5%-86.7%)	72.7% (66.6%-78.0%)
12	84.2% (83.5%-84.9%)	72.7% (66.6%-78.0%)

Exhibit 37a. Post Implant Survival - Primary LVADs by Era - STS Intermacs



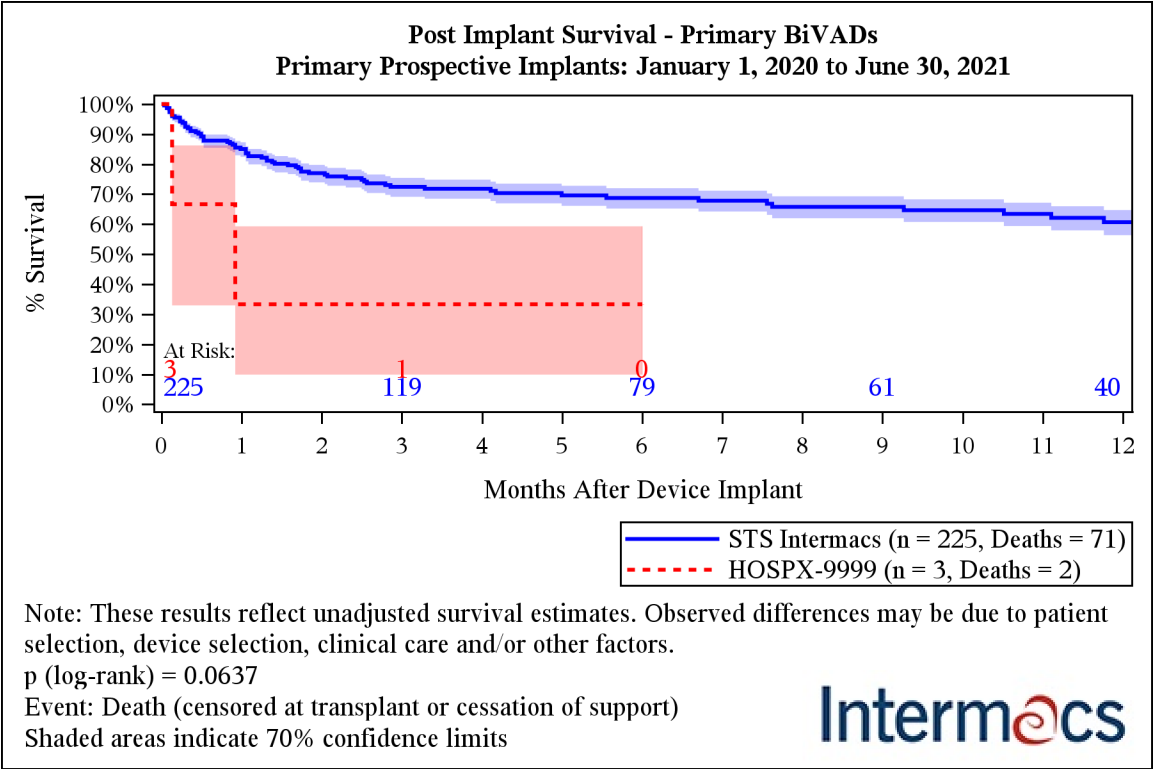
Months after Device Implant	2020-2021
1	93.8% (93.3%-94.3%)
3	89.9% (89.3%-90.5%)
6	87.6% (86.9%-88.2%)
9	85.9% (85.2%-86.6%)
12	84.0% (83.3%-84.8%)

Exhibit 37b. Post Implant Survival - Primary LVADs by Era - HOSPX-9999



Months after Device Implant	2020-2021
1	86.8% (81.3%-90.8%)
3	73.3% (66.6%-78.9%)
6	73.3% (66.6%-78.9%)
9	68.8% (61.7%-74.8%)
12	68.8% (61.7%-74.8%)

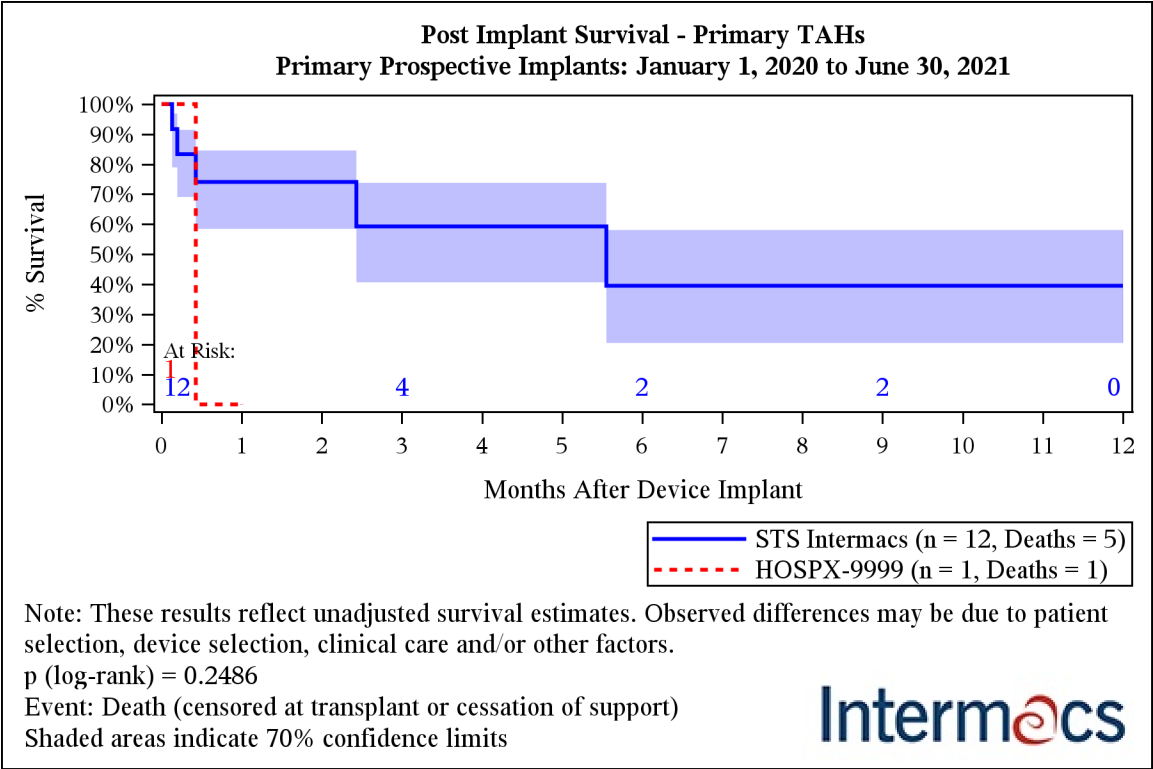
Exhibit 38. Post Implant Survival - Primary BiVADs



Months after Device Implant	STS Intermacs	HOSPX-9999
1	85.0% (82.4%-87.3%)	33.3% (9.9%-59.3%)
3	72.4% (69.1%-75.4%)	33.3% (9.9%-59.3%)
6	68.7% (65.2%-72.0%)	33.3% (9.9%-59.3%)
9	65.8% (62.0%-69.3%)	
12	60.7% (56.4%-64.7%)	



Exhibit 39. Post Implant Survival - Primary TAHs



Months after Device Implant	STS Intermacs	HOSPX-9999
1	74.1% (58.4%-84.6%)	0.0% (0.0%-0.0%)
3	59.3% (40.7%-73.8%)	
6	39.5% (20.5%-58.1%)	
9	39.5% (20.5%-58.1%)	
12	39.5% (20.5%-58.1%)	

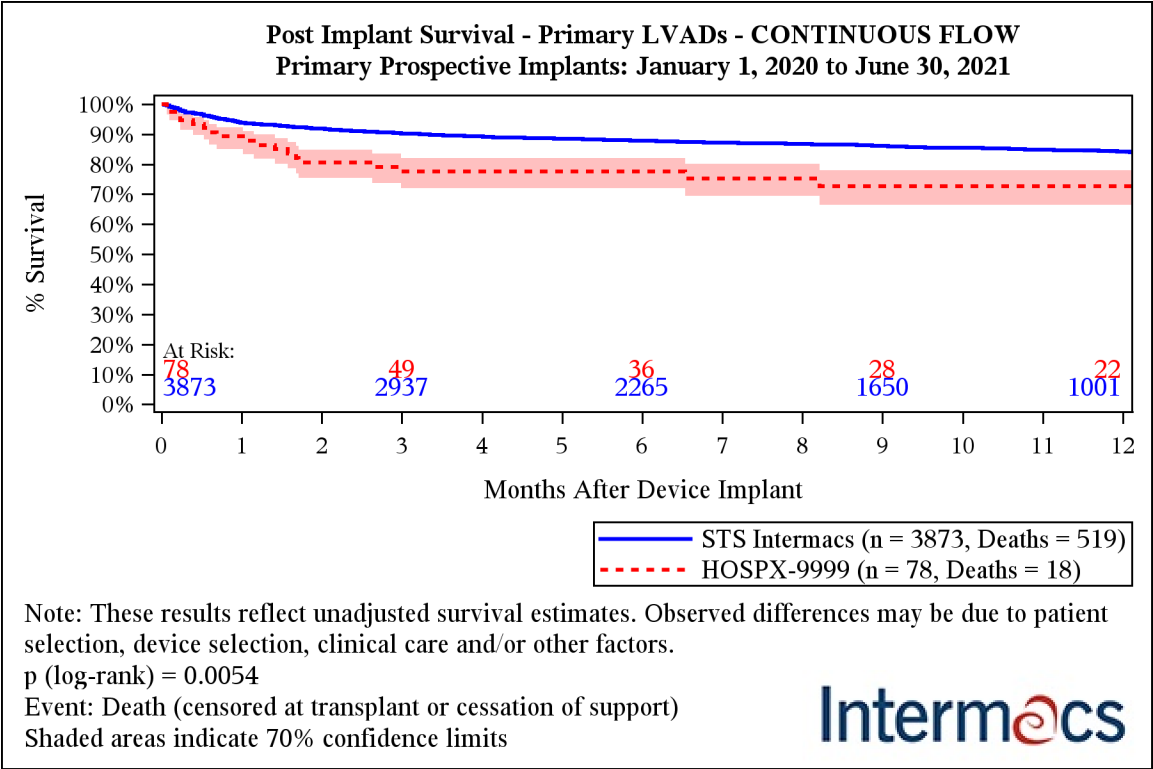
***COVERAGE: January 1, 2020 - June 30, 2021***

***SITE: HOSPX - DEMO SITE REPORT***

***Exhibit 40. Post Implant Survival - Primary LVADs - PULSATILE FLOW***

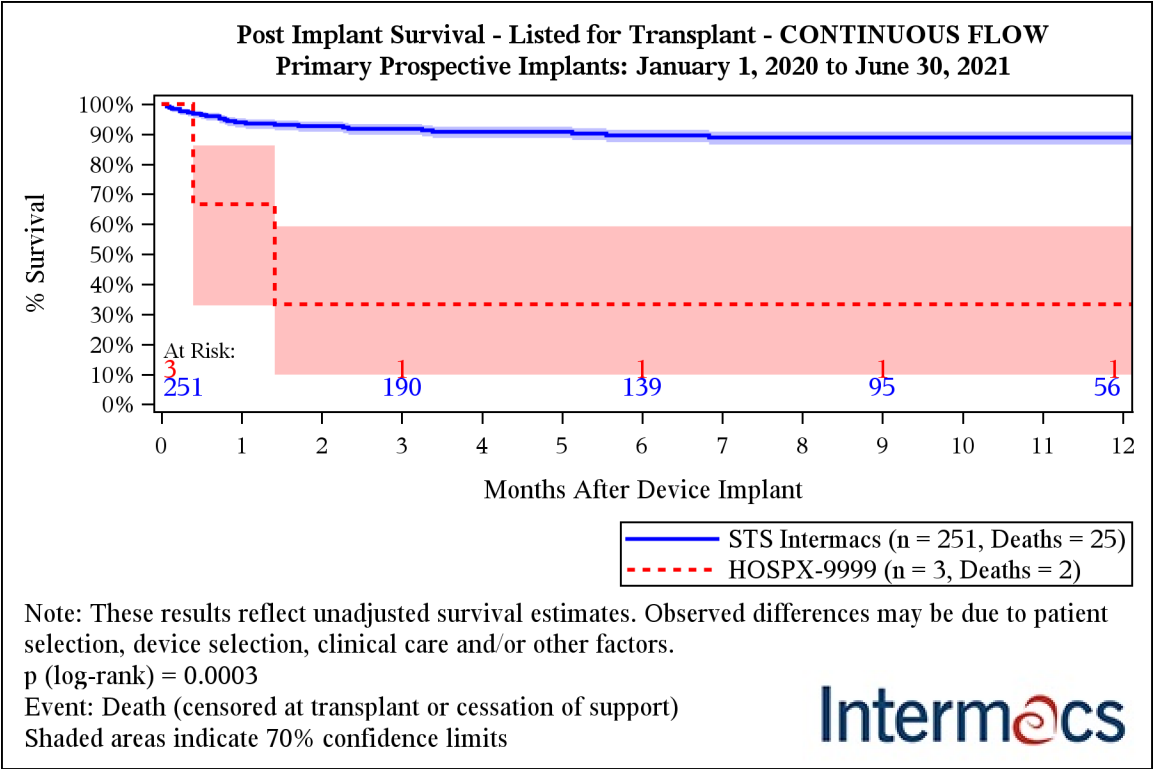
Not enough patients or events to produce exhibit

Exhibit 41. Post Implant Survival - Primary LVADs - CONTINUOUS FLOW



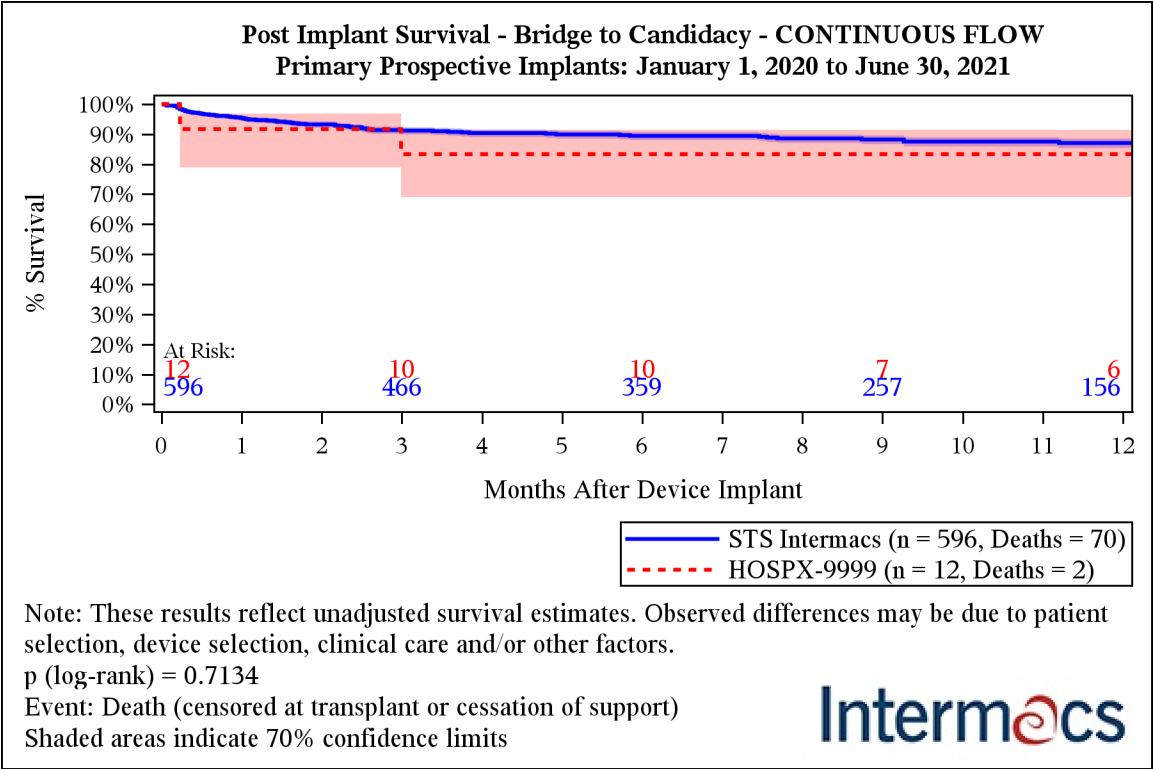
Months after Device Implant	STS Intermacs	HOSPX-9999
1	93.9% (93.5%-94.3%)	89.2% (85.0%-92.3%)
3	90.2% (89.7%-90.7%)	77.5% (72.1%-82.1%)
6	87.8% (87.2%-88.3%)	77.5% (72.1%-82.1%)
9	86.1% (85.5%-86.7%)	72.7% (66.6%-78.0%)
12	84.2% (83.5%-84.9%)	72.7% (66.6%-78.0%)

Exhibit 42. Post Implant Survival - Listed for Transplant - CONTINUOUS FLOW



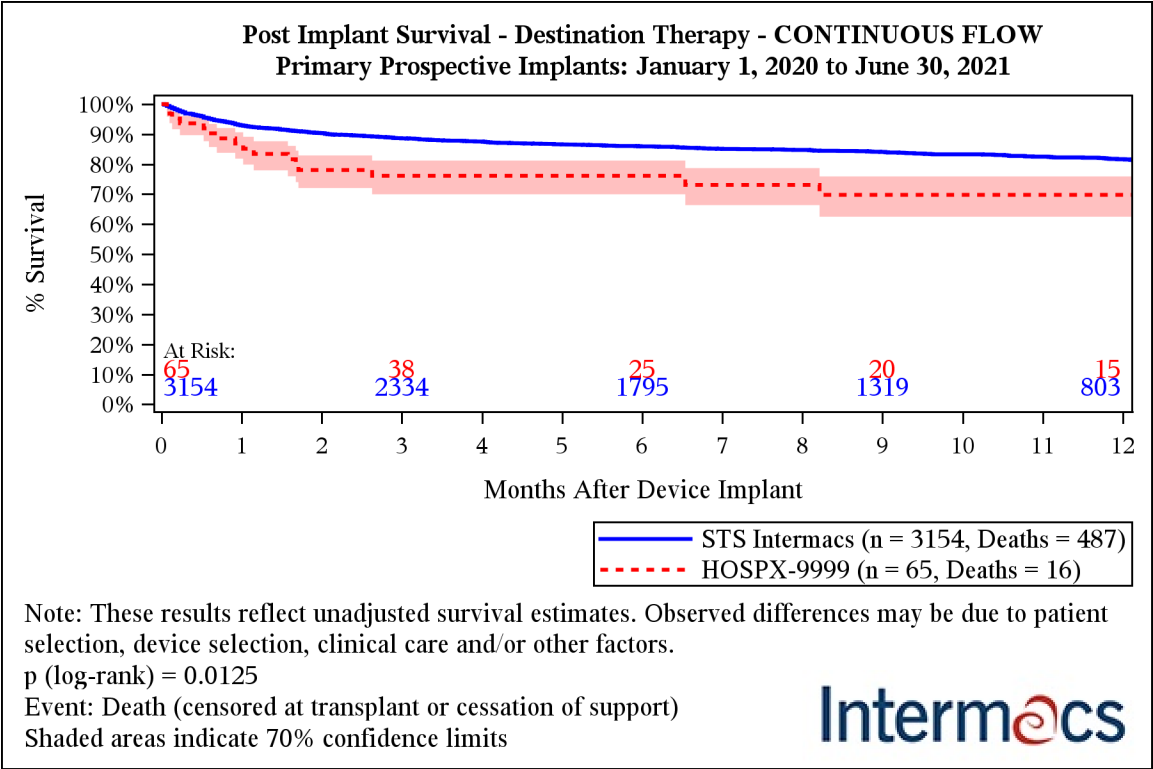
Months after Device Implant	STS Intermacs	HOSPX-9999
1	93.9% (92.2%-95.3%)	66.7% (33.0%-86.2%)
3	91.8% (89.8%-93.4%)	33.3% (9.9%-59.3%)
6	89.6% (87.3%-91.4%)	33.3% (9.9%-59.3%)
9	88.9% (86.5%-90.8%)	33.3% (9.9%-59.3%)
12	88.9% (86.5%-90.8%)	33.3% (9.9%-59.3%)

Exhibit 43. Post Implant Survival - Bridge to Candidacy - CONTINUOUS FLOW



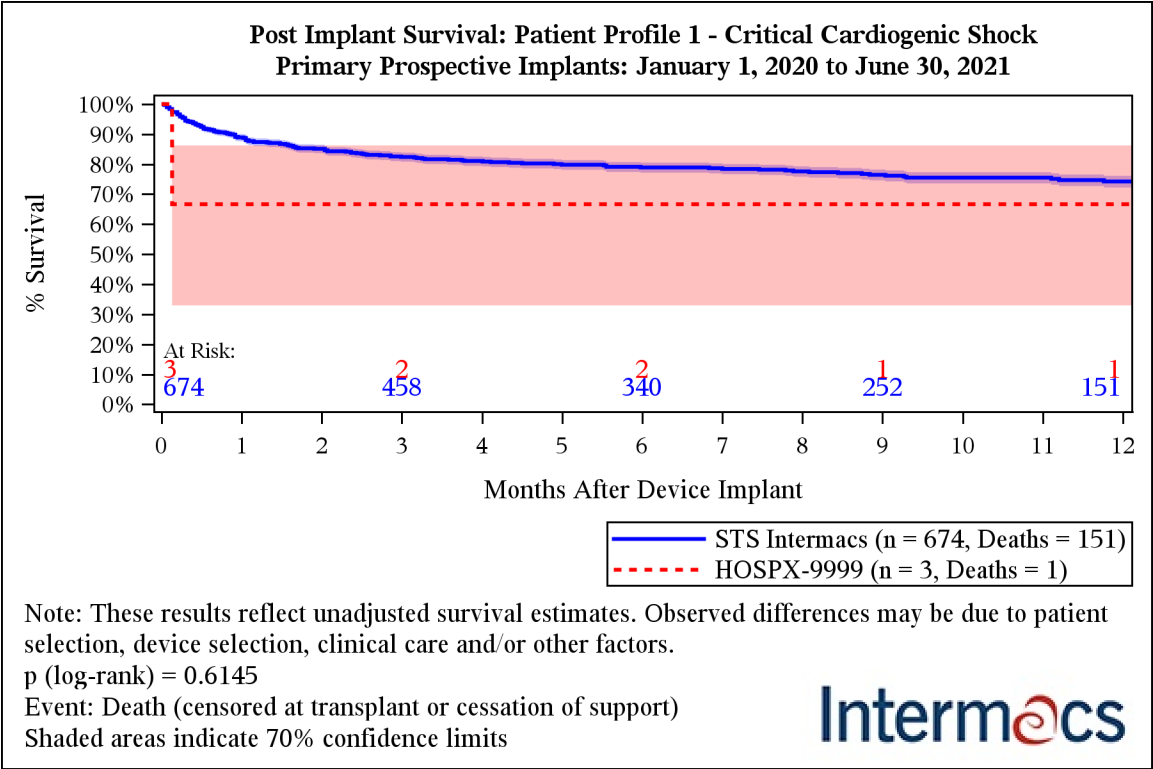
Months after Device Implant	STS Intermacs	HOSPX-9999
1	95.4% (94.4%-96.2%)	91.7% (78.9%-96.9%)
3	91.2% (89.9%-92.3%)	83.3% (69.1%-91.4%)
6	89.4% (88.0%-90.7%)	83.3% (69.1%-91.4%)
9	88.2% (86.7%-89.6%)	83.3% (69.1%-91.4%)
12	87.0% (85.4%-88.5%)	83.3% (69.1%-91.4%)

Exhibit 44. Post Implant Survival - Destination Therapy - CONTINUOUS FLOW



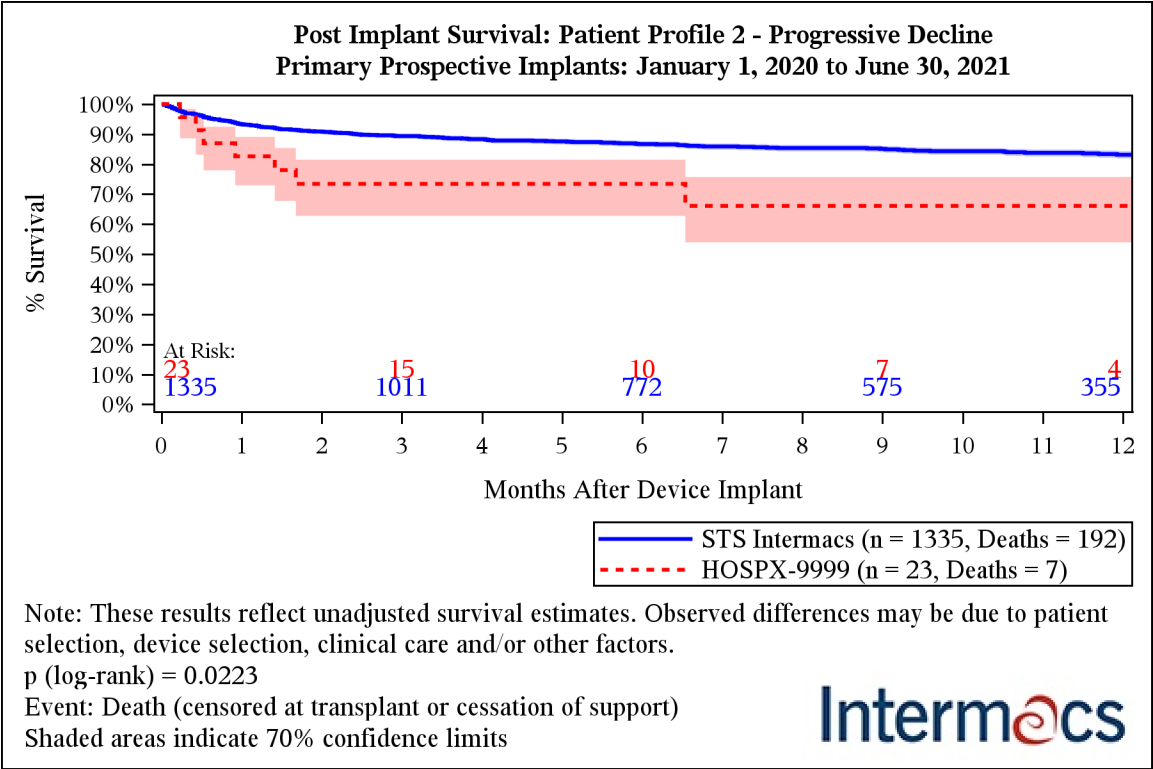
Months after Device Implant	STS Intermacs	HOSPX-9999
1	92.9% (92.4%-93.3%)	86.9% (81.8%-90.6%)
3	88.6% (88.0%-89.2%)	76.1% (70.0%-81.2%)
6	85.9% (85.3%-86.6%)	76.1% (70.0%-81.2%)
9	84.1% (83.3%-84.8%)	69.8% (62.5%-75.9%)
12	81.7% (80.8%-82.5%)	69.8% (62.5%-75.9%)

Exhibit 45a. Post Implant Survival: Patient Profile 1 - Critical Cardiogenic Shock



Months after Device Implant	STS Intermacs	HOSPX-9999
1	88.9% (87.6%-90.1%)	66.7% (33.0%-86.2%)
3	82.4% (80.8%-83.8%)	66.7% (33.0%-86.2%)
6	78.9% (77.2%-80.5%)	66.7% (33.0%-86.2%)
9	76.5% (74.6%-78.2%)	66.7% (33.0%-86.2%)
12	74.2% (72.2%-76.1%)	66.7% (33.0%-86.2%)

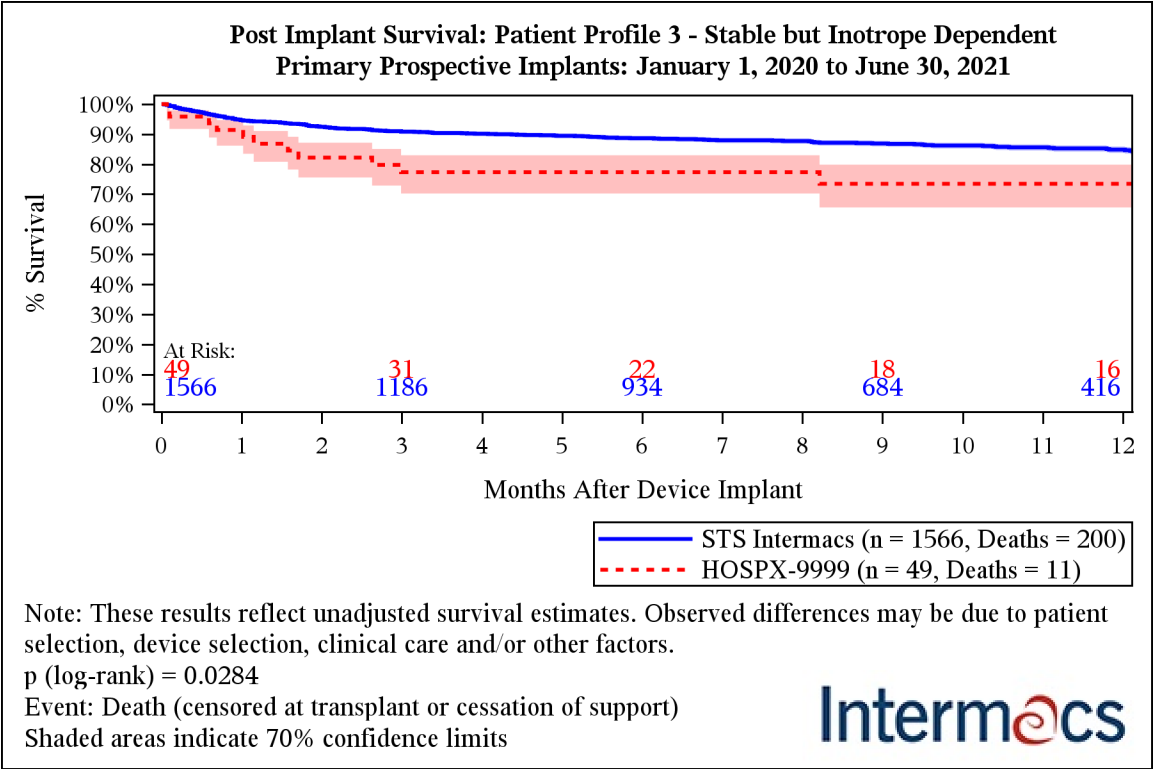
Exhibit 45b. Post Implant Survival: Patient Profile 2 - Progressive Decline



Months after Device Implant	STS Intermacs	HOSPX-9999
1	93.3% (92.6%-93.9%)	82.6% (73.0%-89.1%)
3	89.3% (88.4%-90.2%)	73.4% (62.8%-81.5%)
6	86.7% (85.7%-87.6%)	73.4% (62.8%-81.5%)
9	85.1% (84.0%-86.1%)	66.1% (54.0%-75.7%)
12	83.1% (81.9%-84.3%)	66.1% (54.0%-75.7%)

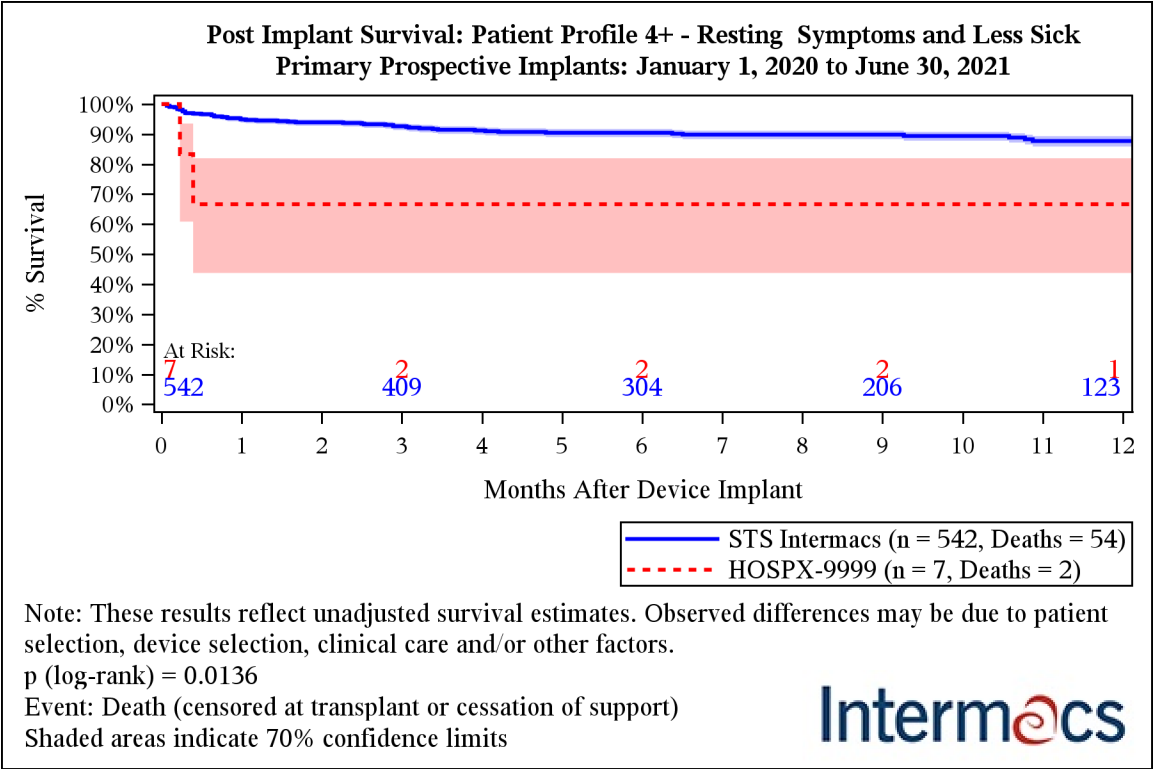


Exhibit 45c. Post Implant Survival: Patient Profile 3 - Stable but Inotrope Dependent



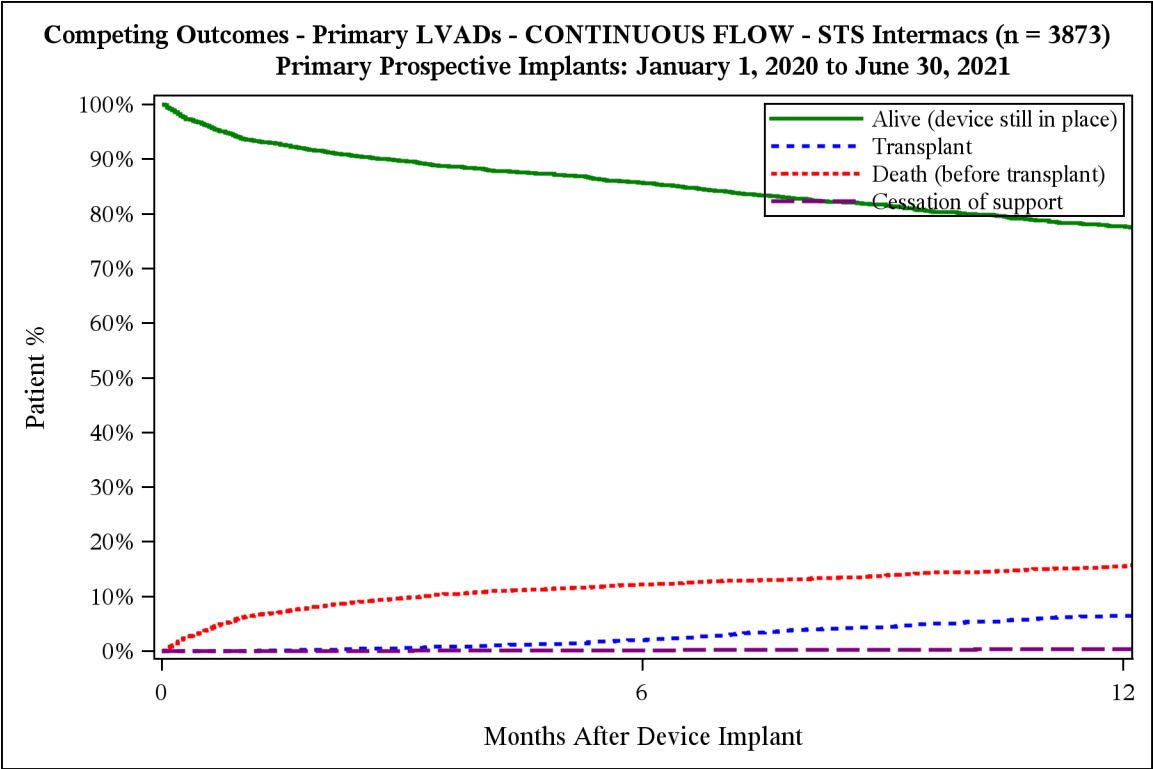
Months after Device Implant	STS Intermacs	HOSPX-9999
1	94.7% (94.0%-95.2%)	91.4% (86.2%-94.7%)
3	90.8% (90.1%-91.6%)	77.3% (70.2%-83.0%)
6	88.6% (87.8%-89.5%)	77.3% (70.2%-83.0%)
9	86.9% (85.9%-87.8%)	73.5% (65.6%-79.8%)
12	84.9% (83.7%-85.9%)	73.5% (65.6%-79.8%)

Exhibit 45d. Post Implant Survival: Patient Profile 4+ Resting Symptoms and Less Sick



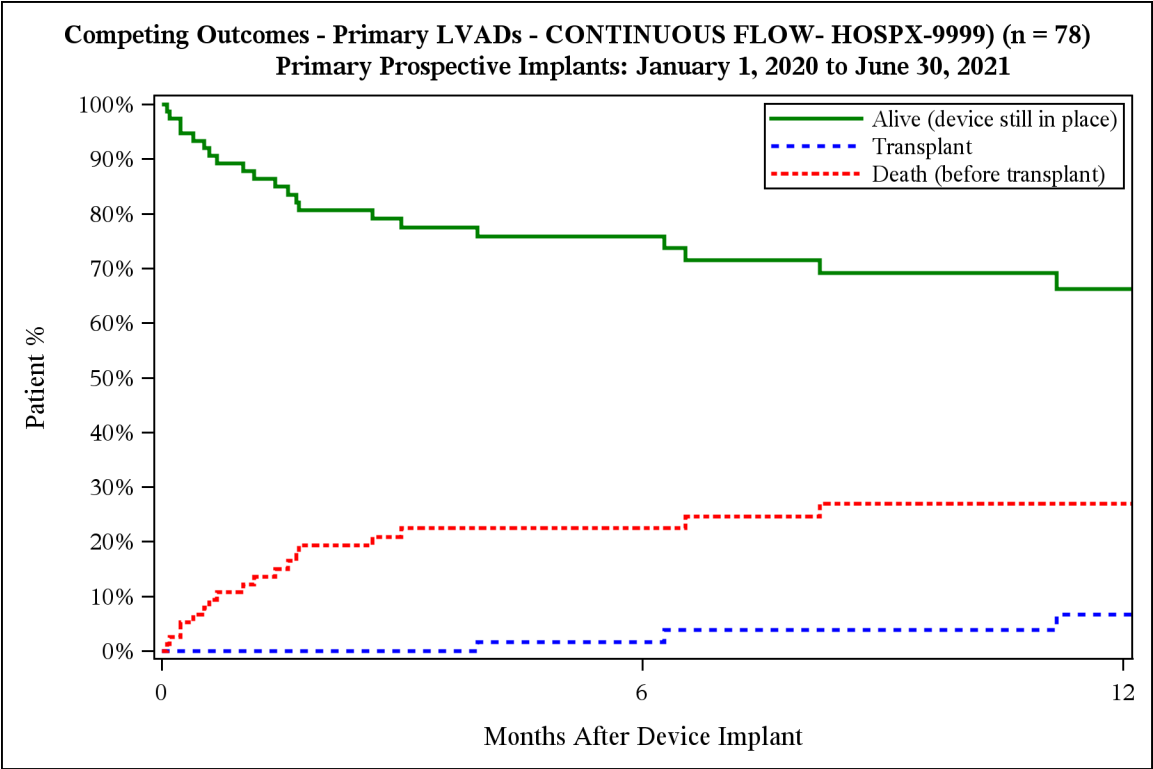
Months after Device Implant	STS Intermacs	HOSPX-9999
1	94.9% (93.9%-95.8%)	66.7% (43.8%-82.0%)
3	92.6% (91.4%-93.7%)	66.7% (43.8%-82.0%)
6	90.4% (89.0%-91.7%)	66.7% (43.8%-82.0%)
9	89.8% (88.3%-91.1%)	66.7% (43.8%-82.0%)
12	87.7% (85.9%-89.3%)	66.7% (43.8%-82.0%)

Exhibit 46a. Competing Outcomes - Primary LVADs - CONTINUOUS FLOW - STS Intermacs



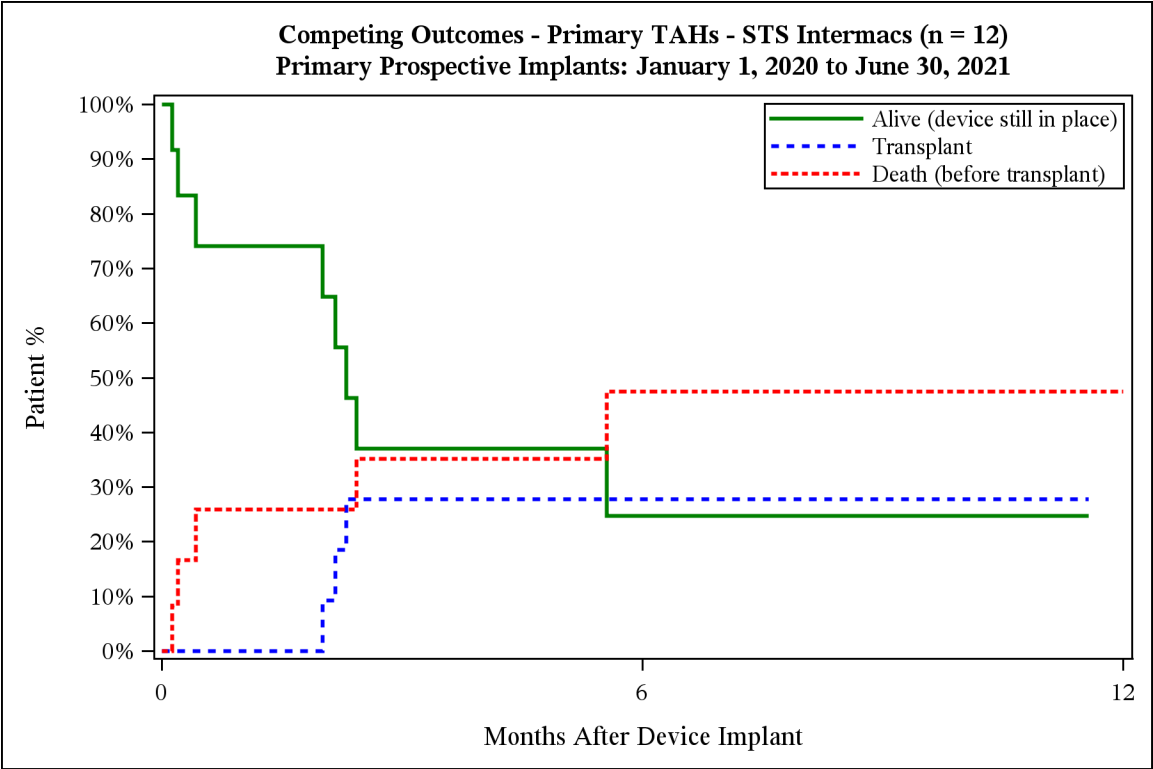
Outcome	Months After Device Implant				
	1	3	6	9	12
Alive (device still in place)	93.8%	89.6%	85.7%	81.6%	77.7%
Transplant	0.1%	0.6%	2.0%	4.4%	6.5%
Death (before transplant)	6.1%	9.7%	12.2%	13.8%	15.5%
Cessation of support	0.0%	0.1%	0.2%	0.2%	0.3%
Total	100%	100%	100%	100%	100%

Exhibit 46b. Competing Outcomes - Primary LVADs - CONTINUOUS FLOW - HOSPX-9999



Outcome	Months After Device Implant				
	1	3	6	9	12
Alive (device still in place)	89.2%	77.5%	75.9%	69.1%	66.3%
Transplant	0.0%	0.0%	1.7%	3.9%	6.7%
Death (before transplant)	10.8%	22.5%	22.5%	27.0%	27.0%
Total	100%	100%	100%	100%	100%

Exhibit 47a. Competing Outcomes - Primary TAHs - STS Intermacs



Outcome	Months After Device Implant				
	1	3	6	9	12
Alive (device still in place)	74.1%	37.0%	24.7%	24.7%	.
Transplant	0.0%	27.8%	27.8%	27.8%	.
Death (before transplant)	25.9%	35.2%	47.5%	47.5%	47.5%
Total	100%	100%	100%	100%	47.5%

***COVERAGE: January 1, 2020 - June 30, 2021***

***SITE: HOSPX - DEMO SITE REPORT***

***Exhibit 47b. Competing Outcomes - Primary TAHs - HOSPX-9999***

Not enough patients or events to produce exhibit

***IV. Zone Conditions: Hemolysis, Hypertension, and Right Heart Failure***

The following Exhibits consist of data collected regarding the three “Zone Conditions”: Hemolysis, Hypertension, and Right Heart Failure. These zones were added to the STS InterMACS released in June of 2014. The zone sections, including data fields and flag calculations, were added to the Web Based Data Entry (WBDE) system. In the WBDE, the flags are calculated on any applicable form that is updated by a user after the release date, and the flags are displayed in the WBDE (on the Patient Summary). The report exhibits on the following pages provide useful, clinical analysis of the flags by adding comparison to the STS InterMACS Aggregate Group, and include some further division into relevant categories, such as classification of severity, and timing.

Note: Further information on the calculation and processing of the Zone Conditions can be found on the [InterMACS.org](https://www.intermacs.org) website, in the Reports FAQ section. For any queries about the zone conditions or the exhibits, please don't hesitate to contact the InterMACS Data Warehouse and Analytics Center.

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT*****Exhibit 48a: Hemolysis Evaluation Condition Coverage at Follow-up***

The table below consists of data that was collected in the Hemolysis Zone for each Follow-Up interval. Patients that were implanted with a Primary Device on or after June 2, 2014 are analyzed in this exhibit. In the 'Unable to Evaluate' column, the condition could not be evaluated due to missing variables.

**GROUP=HOSPX-9999**

Follow-up Visit	Hemolysis Evaluation		
	All	Condition Evaluated	
		N	%
3 Month	37	37	100.00
6 Month	27	27	100.00
1 Year	10	10	100.00

**GROUP=STS Intermacs**

Follow-up Visit	Hemolysis Evaluation				
	All	Unable to Evaluate		Condition Evaluated	
		N	%	N	%
3 Month	2755	136	4.94	2619	95.06
6 Month	2033	100	4.92	1933	95.08
1 Year	771	28	3.63	743	96.37



COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****IV. Zone Conditions: Hemolysis*****Exhibit 48b: Hemolysis Major and Minor Condition Coverage at Follow-up***

The table below consists of patients who had Major or Minor Hemolysis Conditions for each Follow-Up interval. Patients that were implanted with a Primary Device on or after June 2, 2014 are analyzed in this exhibit.

**GROUP=HOSPX-9999**

Follow-up Visit	Hemolysis Condition						
	All		Major		Minor		No
	N	N	%	N	%	N	%
<b>3 Month</b>	37	2	5.41	5	13.51	30	81.08
<b>6 Month</b>	27	1	3.70	1	3.70	25	92.59
<b>1 Year</b>	10	1	10.00	2	20.00	7	70.00

**GROUP=STS Intermacs**

Follow-up Visit	Hemolysis Condition						
	All		Major		Minor		No
	N	N	%	N	%	N	%
<b>3 Month</b>	2619	54	2.06	349	13.33	2216	84.61
<b>6 Month</b>	1933	25	1.29	220	11.38	1688	87.33
<b>1 Year</b>	743	16	2.15	104	14.00	623	83.85

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT*****Exhibit 48c: Hypertension Evaluation Condition Coverage at Follow-up***

The table below consists of data that was collected in the Hypertension Zone for each Follow-Up interval. Patients that were implanted with a Primary Device on or after June 2, 2014 are analyzed in this exhibit. In the 'Unable to Evaluate' column, the condition could not be evaluated due to missing variables.

**GROUP=HOSPX-9999**

Follow-up Visit	Hypertension Evaluation				
	All	Unable to Evaluate		Condition Evaluated	
		N	%	N	%
3 Month	37	21	56.76	16	43.24
6 Month	27	15	55.56	12	44.44
1 Year	10	8	80.00	2	20.00

**GROUP=STS Intermacs**

Follow-up Visit	Hypertension Evaluation				
	All	Unable to Evaluate		Condition Evaluated	
		N	%	N	%
3 Month	2755	662	24.03	2093	75.97
6 Month	2033	458	22.53	1575	77.47
1 Year	771	194	25.16	577	74.84

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT*****Exhibit 48d: Hypertension No or Yes Condition Coverage at Follow-up***

The table below consists of patients who did or did not have Hypertension Conditions for each Follow-Up interval. Patients that were implanted with a Primary Device on or after June 2, 2014 are analyzed in this exhibit.

**GROUP=HOSPX-9999**

Follow-up Visit	Hypertension Condition				
	All	HTN		No HTN	
	N	N	%	N	%
3 Month	16	.	.	16	100.00
6 Month	12	1	8.33	11	91.67
1 Year	2	1	50.00	1	50.00

**GROUP=STS Intermacs**

Follow-up Visit	Hypertension Condition				
	All	HTN		No HTN	
	N	N	%	N	%
3 Month	2093	79	3.77	2014	96.23
6 Month	1575	69	4.38	1506	95.62
1 Year	577	20	3.47	557	96.53

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT****IV. Zone Conditions: Right Heart Failure*****Exhibit 48e: Right Heart Failure Evaluation Condition Coverage at Follow-up***

The table below consists of data that was collected in the Right Heart Failure Zone for each Follow-Up interval. Patients that were implanted with a Primary Device on or after June 2, 2014 are analyzed in this exhibit. In the 'Unable to Evaluate' column, the condition could not be evaluated due to missing variables.

**GROUP=HOSPX-9999**

Follow-up Visit	All	RHF Evaluation			
		Unable to Evaluate		Condition Evaluated	
		N	%	N	%
3 Month	37	1	2.70	36	97.30
6 Month	27	.	.	27	100.00
1 Year	10	.	.	10	100.00

**GROUP=STS InterMACS**

Follow-up Visit	All	RHF Evaluation			
		Unable to Evaluate		Condition Evaluated	
		N	%	N	%
3 Month	2755	121	4.39	2634	95.61
6 Month	2033	74	3.64	1959	96.36
1 Year	771	33	4.28	738	95.72

COVERAGE: January 1, 2020 - June 30, 2021

**SITE: HOSPX - DEMO SITE REPORT*****Exhibit 48f: Right Heart Failure Evaluation Condition Coverage at Follow-up***

The table below consists of patients who Right Heart Failure for each Follow-Up interval, including analysis of severity. Patients that were implanted with a Primary Device on or after June 2, 2014 are analyzed in this exhibit. For full details on how each severity level is calculated, please check the Reports FAQ section on the InterMacS.org website.

**GROUP=HOSPX-9999**

Follow-up Visit	RHF Condition						
	All		1. No RHF	3. RHF (Mild)		4. RHF (Inotropic Support)	
	N	N	%	N	%	N	%
3 Month	36	34	94.44	1	2.78	1	2.78
6 Month	27	27	100.00	.	.	.	.
1 Year	10	10	100.00	.	.	.	.

**GROUP=STS InterMacS**

Follow-up Visit	RHF Condition								
	All		1. No RHF	3. RHF (Mild)		4. RHF (Inotropic Support)		5. RHF (RVAD Support)	
	N	N	%	N	%	N	%	N	%
3 Month	2634	2334	88.61	107	4.06	188	7.14	5	0.19
6 Month	1959	1802	91.99	72	3.68	81	4.13	4	0.20
1 Year	738	665	90.11	36	4.88	37	5.01	.	.

**Exhibit 49: Patients Implanted at your Center but Excluded from the Cumulative - All Patient Report**

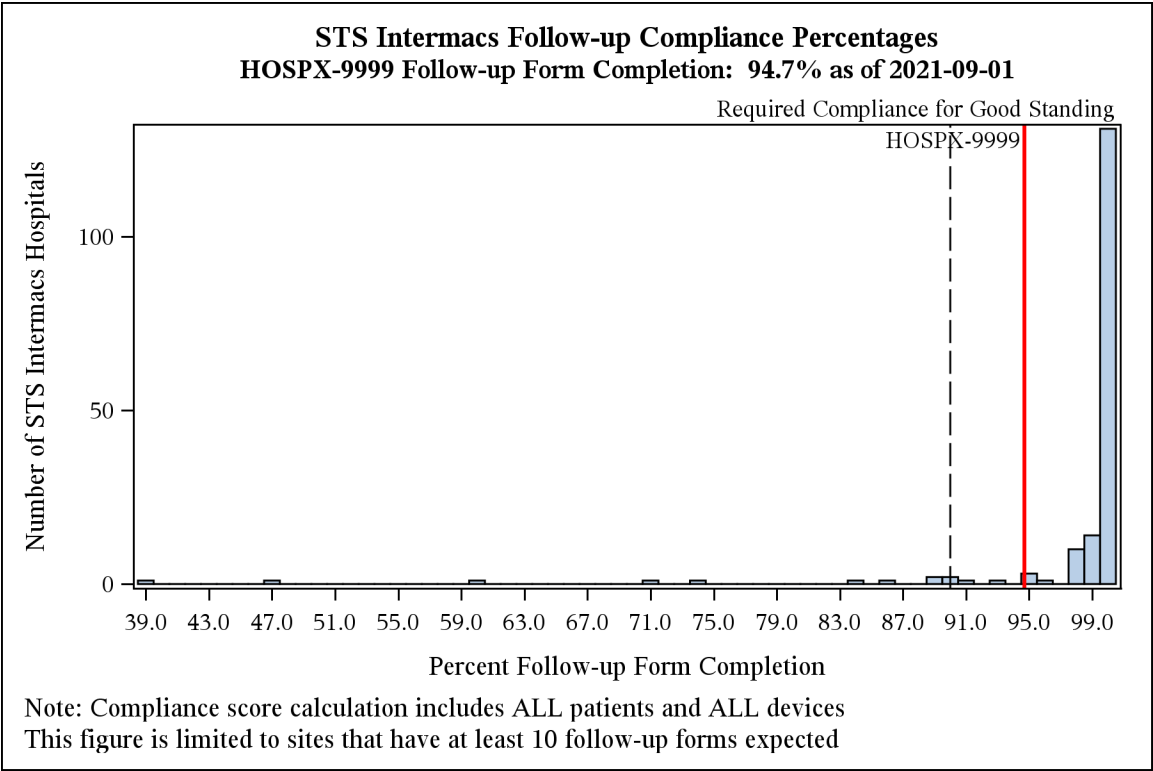
Excluded Patient ID	Exclusion Reason	Implant Year
452	Retrospective Patient	2006
631	Pediatric Patient (Age<19)	2007
1060	Patient Implant Date Outside of Report Coverage	2006
4756	Pediatric Patient (Age<19)	2011
5048	Pediatric Patient (Age<19)	2011
5561	Retrospective Patient	2010
5590	Retrospective Patient	2010
5591	Retrospective Patient	2010
5593	Retrospective Patient	2010
7012	Pediatric Patient (Age<19)	2012
107122	Retrospective Patient	2015
116990	Retrospective Patient	2018
125366	Implant, Pre-Implant, or Patient form not validated	2020
125722	Implant, Pre-Implant, or Patient form not validated	2020
126037	Implant, Pre-Implant, or Patient form not validated	2020
126223	Implant, Pre-Implant, or Patient form not validated	2020
126245	Implant, Pre-Implant, or Patient form not validated	2020
126375	Implant, Pre-Implant, or Patient form not validated	2020
126411	Implant, Pre-Implant, or Patient form not validated	2020
126738	Implant, Pre-Implant, or Patient form not validated	2021
126823	Implant, Pre-Implant, or Patient form not validated	2021
126928	Implant, Pre-Implant, or Patient form not validated	2021
127069	Implant, Pre-Implant, or Patient form not validated	2021
127251	Implant, Pre-Implant, or Patient form not validated	2021
127334	Implant, Pre-Implant, or Patient form not validated	2021
127727	Implant, Pre-Implant, or Patient form not validated	2021
127743	Implant, Pre-Implant, or Patient form not validated	2021
127744	Implant, Pre-Implant, or Patient form not validated	2021
127829	Implant, Pre-Implant, or Patient form not validated	2021
127830	Implant, Pre-Implant, or Patient form not validated	2021
127984	Implant, Pre-Implant, or Patient form not validated	2021
128045	Implant, Pre-Implant, or Patient form not validated	2021

III. Registry Compliance

Exhibit 50. Compliance

Site compliance is determined by the percentage of all follow-up forms that are due during this reporting period that have been completed. **This calculation has been updated to include ALL follow-up forms expected for ALL patients and ALL devices.** Only active sites that have at least 10 follow-up forms due are included in this figure (n = 172 sites). This exhibit is the same in both cumulative and recent report. It is based on all follow-up forms.

STS Intermacs has defined required compliance as 90%. If your hospital is below 90%, please examine your patient follow-up table that is contained in the STS Intermacs Data Quality Quarterly Report. This table will identify the exact patients who have a 'past due' follow-up form.



BiVAD: BiVentricular Assist Device

BMI: Body Mass Index

BP: Blood Pressure

BSA: Body Surface Area

BTC: Bridge to Candidacy

BUN: Blood Urea Nitrogen

CMS: Centers for Medicare and Medicaid

COPD: Chronic Obstructive Pulmonary Disease

CNS: Central Nervous System

CRP: C - Reactive Protein

CVA: Cerebrovascular Accident

DCC: Data Coordinating Center

DT: Destination Therapy

ECMO: Extracorporeal-membrane Oxygenation

EQ-5D: Euro Quality of Life

FDA: Federal Drug Administration

HF: Heart Failure

IABP: Intra-Aortic Balloon Pump

IgG: Immunoglobulin G

INR: International Normalized Ratio

Intermacs: Interagency Registry for Mechanically Assisted Circulatory Support

LVAD: Left Ventricular Assist Device

LVEF: Left Ventricular Ejection Fraction

LVEDD: Left Ventricular End Diastolic Dysfunction

LVSF: Left Ventricular Shortening Fraction

MCSD: Mechanically Circulatory Support Device

NHLBI: National Heart Lung and Blood Institute

NT pro brain natriuretic peptide: N-Terminal pro brain Natriuretic peptide

NYHA: New York Heart Association

OR: Operating Room

Regurg: Regurgitation

RVAD: Right Ventricular Assist Device

RVEF: Right Ventricular Ejection Fraction

SAE: Serious Adverse Event

SGOT-AST: Serum Glutamic Oxaloacetic Transaminase

SGPT-ALT: Serum Glutamic Pyruvic Transaminase

STS: Society of Thoracic Surgeons

TAH: Total Artificial Heart

TIA: Transient Ischemic Attack

VAD: Ventricular Assist Device

VAS: Visual Analog Scale