

LATITUDE™ Patient Management - Combined Follow-up Report

Report Created: 01 Sep 2025



Date of Birth:

Device: **RESONATE X4 CRT-D**
G447/201681

Clinic: **CHU Haut Leveque Bordeaux HOPIT**

Search Tags:

Tachy Mode: **Monitor + Therapy**

Latest Device Transmission: **30 Mar 2025 00:51 CET**

Last Office Interrogation: **29 Aug 2024**

Implant Date: **25 Jan 2019**

Patient Group: **TACHY_CHU de Bordeaux (Primary)**

My Alerts

29 Mar 2025 10:34



Left ventricular intrinsic amplitude out of range.

For Technical Support contact 1-800-CARDIAC (Americas) or your local Boston Scientific Representative.

Events Since Last Reset (25 Jul 2019)

29 Mar 2025 10:38

LV Auto

29 Mar 2025 10:37

RA Auto

See last page for full list of Events Since Last Reset.

Battery

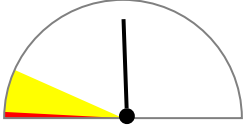
Approximate time to explant: **3.5 years** from 30 Mar 2025

Last Capacitor Re-form Charge Time

29 Dec 2024 16:33

11.7 s

One Year Remaining

Explant 

See last page for additional battery information.

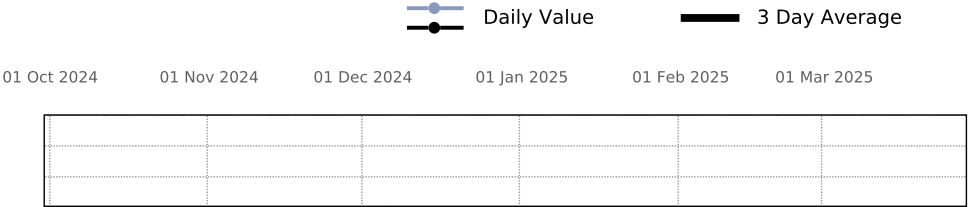
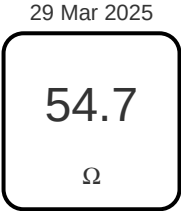
Leads	Implant (25 Jan 2019)	Most Recent In-Office Measurement (29 Aug 2024)	Most Recent Daily Measurement (29 Mar 2025)
 Atrial			
Intrinsic Amplitude	10.0 mV	4.8 mV	4.8 mV
Pace Impedance	600 Ω	648 Ω	632 Ω
Pace Threshold	0.8 V @ 0.4 ms	0.7 V @ 0.4 ms	0.5 V @ 0.4 ms
 Right Ventricular			
Intrinsic Amplitude	7.0 mV	6.9 mV	12.1 mV
Pace Impedance	600 Ω	521 Ω	523 Ω
Pace Threshold	0.5 V @ 0.4 ms	0.5 V @ 0.4 ms	0.4 V @ 0.4 ms
 Left Ventricular			
Intrinsic Amplitude	9.0 mV	4.8 mV	 2.0 mV
Pace Impedance (LVa)	650 Ω	761 Ω	777 Ω
Pace Impedance (LVb)		671 Ω	
Pace Threshold	1.5 V @ 0.4 ms	2.4 V @ 0.6 ms	2.2 V @ 0.6 ms
Shock			
Shock Impedance	65 Ω	74 Ω	71 Ω

Ventricular Tachy					
VF	240 min ⁻¹		ATP		41 J, 41 J, 41 Jx6
VT	185 min ⁻¹		Burst	Ramp	41 J, 41 J, 41 Jx4
VT-1	165 min ⁻¹		Monitor Only		
Atrial Tachy			Pacing Output		
ATR Mode Switch	170 min ⁻¹	VDI	 Atrial		Trend 2.0 V @ 0.4 ms
Brady/CRT			 Right Ventricular		Trend 2.2 V @ 0.4 ms
Mode		DDD	 Left Ventricular (LVa)		Trend 3.5 V @ 0.6 ms
Lower Rate Limit		50 min ⁻¹	 Left Ventricular (LVb)		Off
Maximum Tracking Rate		155 min ⁻¹	Sensitivity		
Paced AV Delay		100 - 160 ms	 Atrial		AGC 0.25 mV
Sensed AV Delay		75 - 120 ms	 Right Ventricular		AGC 0.6 mV
A-Refractory (PVARP)		280 - 280 ms	 Left Ventricular		AGC 1.0 mV
RV-Refractory (RVRP)		230 - 250 ms	Leads Configuration (Pace/Sense)		
LV-Refractory (LVRP)		250 ms	 Atrial		Bipolar
Ventricular Pacing Chamber		BiV	 Right Ventricular		Bipolar
LV Offset		0 ms	 LVa (Pace)		LVRing2>>Can
			 LVb (Pace)		Off
			 LV (Sense)		LVTip1>>LVRing2
			Rate Adaptive Pacing		
			Minute Ventilation		Passive
			Accelerometer		Passive
			LV MultiSite Pacing		
			Pacing Order		Off
Rhythm ID Update					
Last Successful Completion					24 Mar 2025 06:33

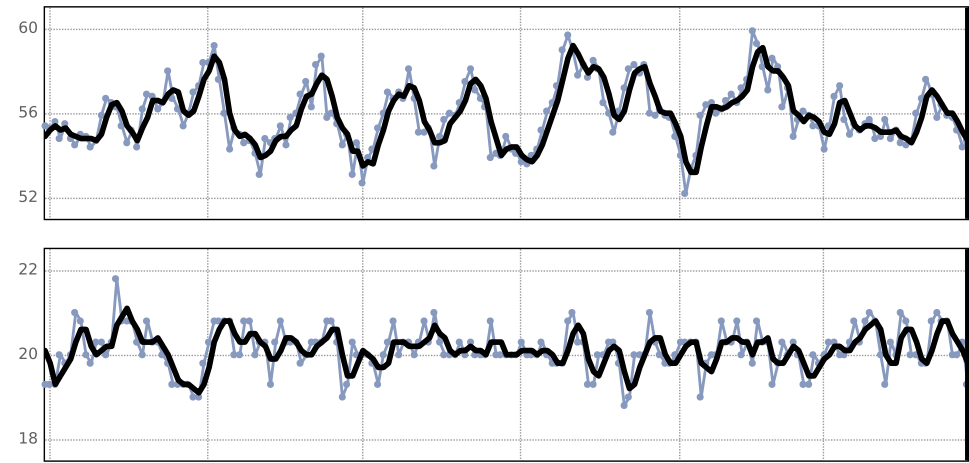
Trend Graphs

R = Counter Reset
P = Program
I = Office Interrogation

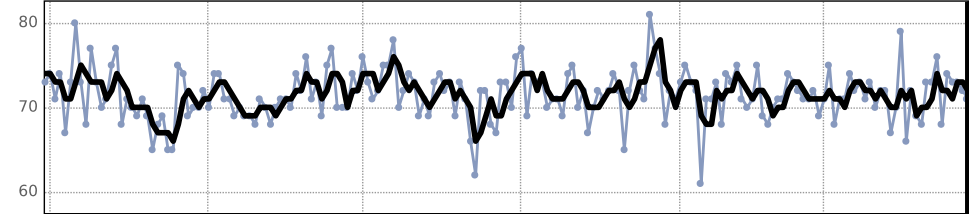
Thoracic Impedance



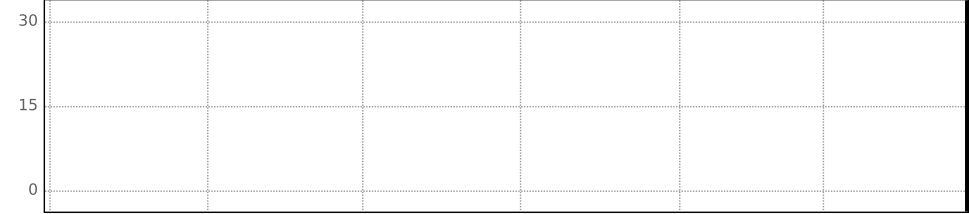
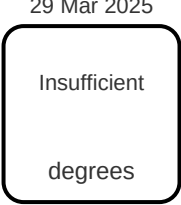
Respiratory Rate



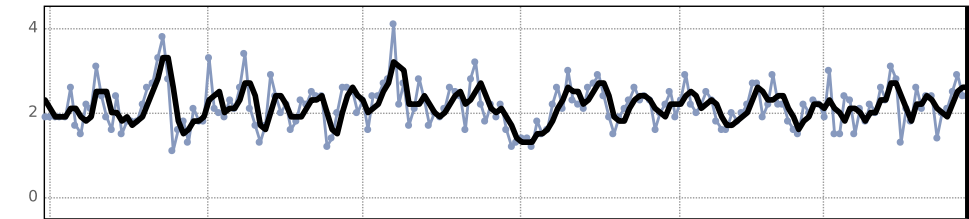
Night Heart Rate



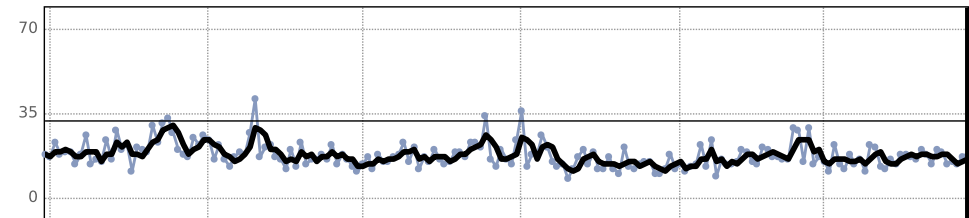
Sleep Incline



Activity Level

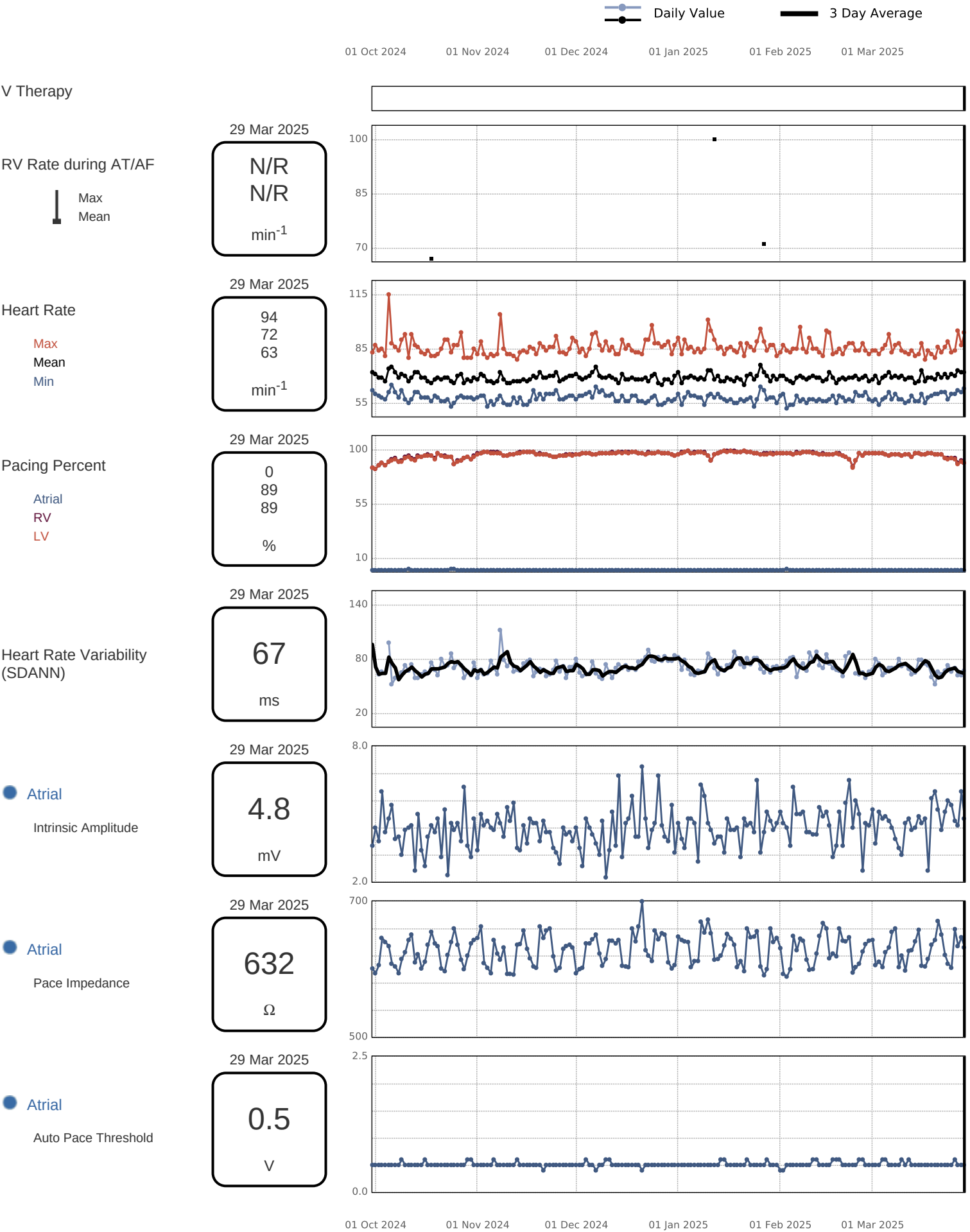


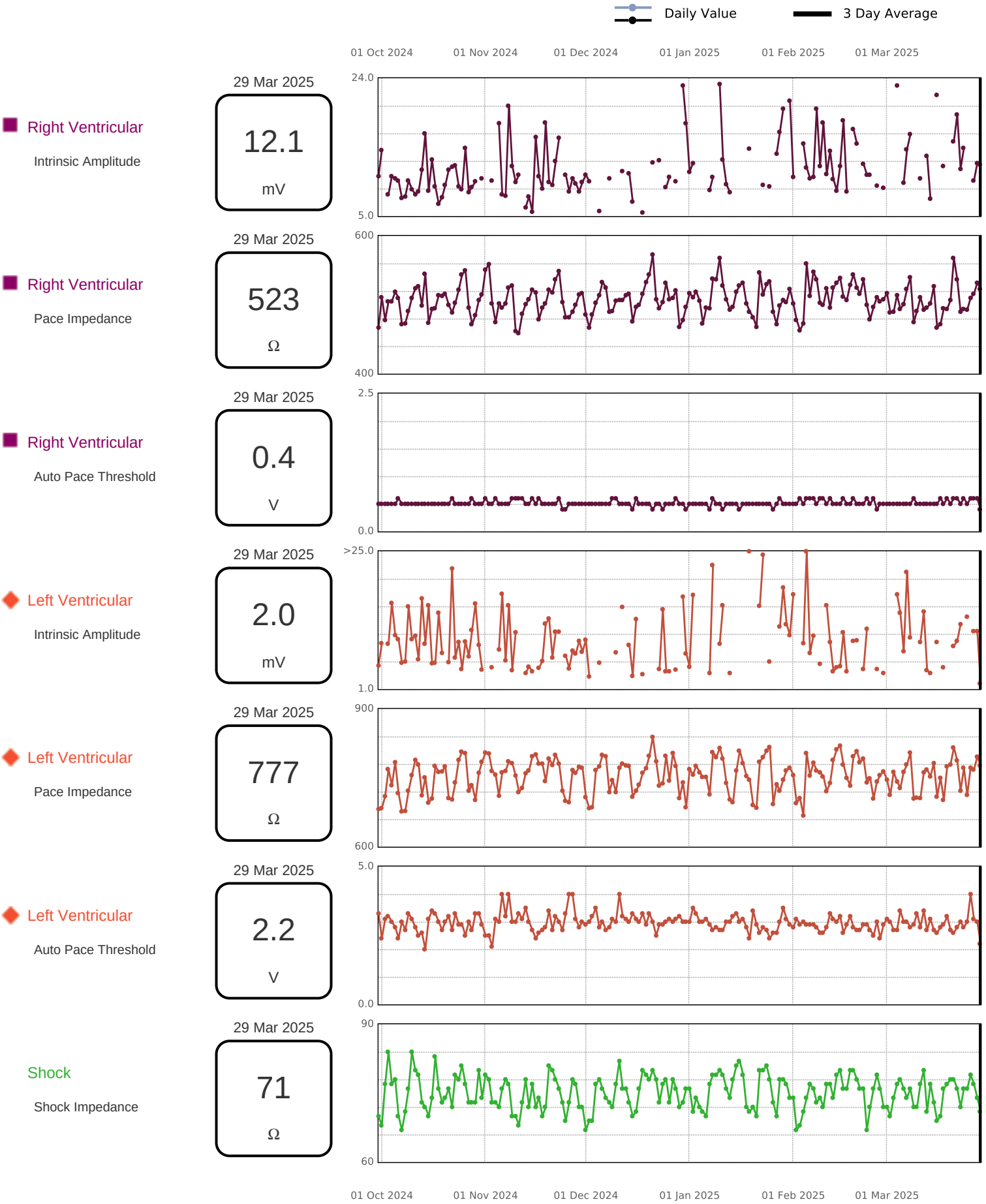
AP Scan™



AT/AF Burden







Ventricular Tachy Counters	Since Last Reset 25 Jul 2019	Device Totals
Ventricular Episode Counters		
Total Episodes	186	186
Treated		
VF Therapy	0	0
 VT Therapy	2	2
VT-1 Therapy	0	0
Commanded Therapy	0	0
Non-Treated		
No Therapy Programmed	0	0
 NonsustainedV Episodes	183	183
Other Untreated Episodes	1	1
Ventricular Therapy Counters		
ATP Delivered	2	2
ATP % Successful	50	50
Shocks Delivered	0	0
First Shock % Successful	0	0
Shocks Diverted	0	0

Brady/CRT Counters	Reset Before Last 180 day(s) 26 Jan 2019 to 25 Jul 2019	Since Last Reset 2074 day(s) 25 Jul 2019 to 30 Mar 2025
Counters		
% A Paced	12	1
% RV Paced	100	95
% LVa Paced	100	97
% LVb Paced	0	0
Intrinsic Promotion		
Rate Hysteresis		
% Successful	0	0
Atrial Arrhythmia		
% AT/AF (One Year of Data)	N/R	<1
Total Time in AT/AF (min) (One Year of Data)	N/R	0.2
Episodes by Duration		
< 1 minute	1	17
1 min - < 1 hr	0	1
1 hr - < 24 hr	0	0
24 hr - < 48 hr	0	1
> 48 hr	0	6
Total PACs	1747	103840
Ventricular Counters		
Total PVCs	59064	4215800
Three or More PVCs	3	53

Clinical Counters	Since Last Reset 25 Jul 2019	Device Totals
MRI Protection Mode	0	0

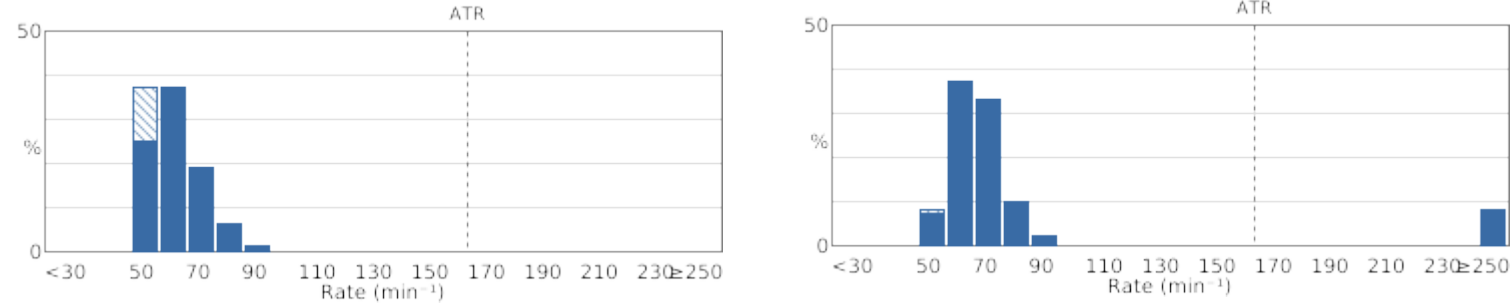
AT/AF Overview: Since Last Reset (25 Jul 2019 to 30 Mar 2025)		
AT/AF (One Year of Data): <1 %	AT/AF Events: 25	
Total Time in AT/AF (min) (One Year of Data): 0.2		
Most Recent: 27 Jan 2025 03:03	Avg V Rate: 71 min ⁻¹	Duration: 00:00:01 hh:mm:ss
Longest: 29 Oct 2020 15:46	Avg V Rate: 102 min ⁻¹	Duration: >48 Hours
Fastest RVS Rate: 28 Oct 2020 09:09	Max V Rate: 243 min ⁻¹	Duration: 30:37:05 hh:mm:ss

AT/AF Overview: Reset Before Last (26 Jan 2019 to 25 Jul 2019)		
Longest: 19 Jul 2019 03:02	Avg V Rate: 75 min ⁻¹	Duration: 00:00:03 hh:mm:ss
Fastest RVS Rate: 19 Jul 2019 03:02	Max V Rate: N/R	Duration: 00:00:03 hh:mm:ss

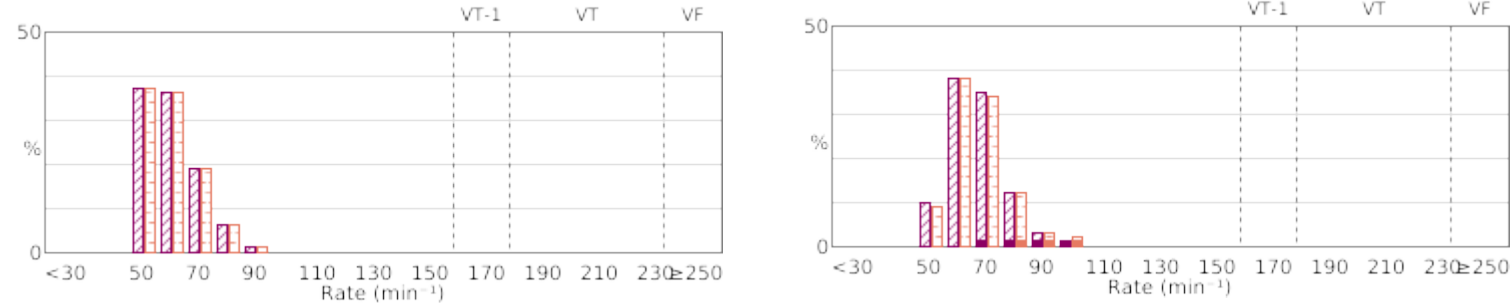
Histograms



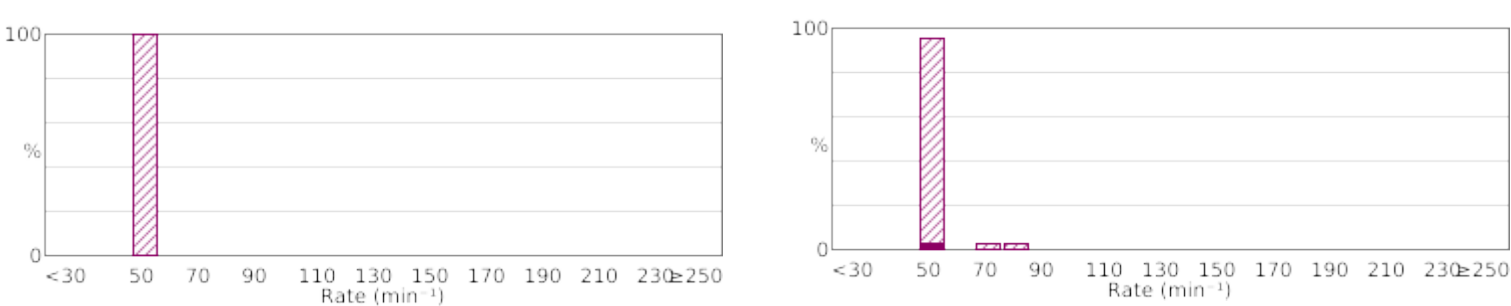
Atrial Activity



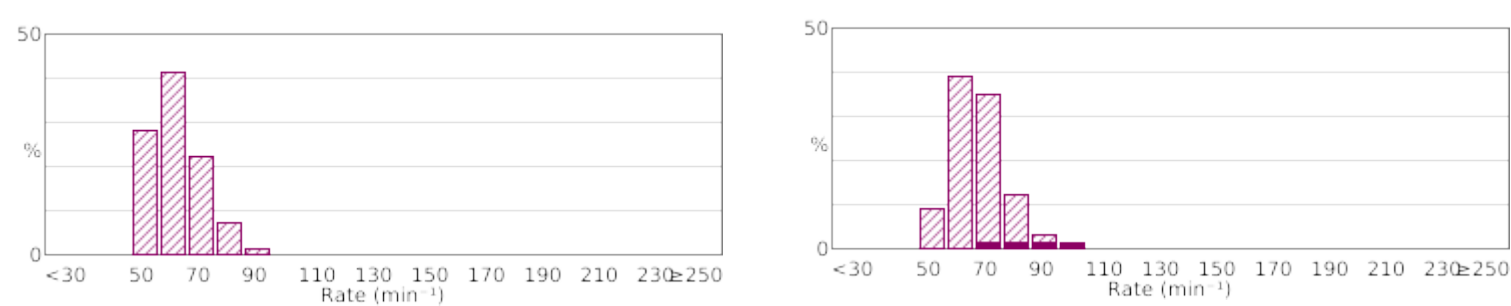
Ventricular Activity



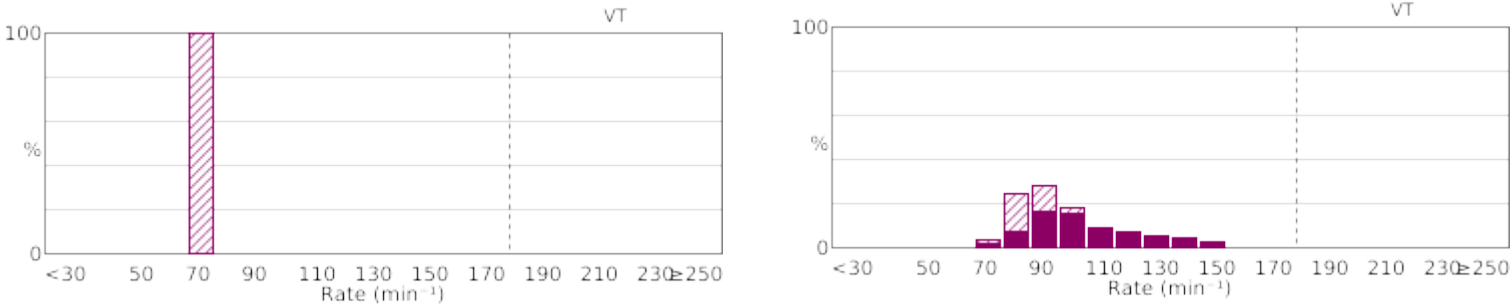
Ventricular Response to Atrial Pace



Ventricular Response to Atrial Sense



RV Rate during AT/AF



Histogram Rate Counts

Atrial	Reset Before Last 180 day(s)		Since Last Reset 2074 day(s)	
	26 Jan 2019 to 25 Jul 2019		25 Jul 2019 to 30 Mar 2025	
Rate (min ⁻¹)	Paced	Sensed	Paced	Sensed
0-29	0	10	0	221
30-39	1	187	54	13.5K
40-49	2.1K	2.7K	5.6K	17.2K
50-59	1.9M	4.1M	1.4M	16.4M
60-69	6	5.9M	6.9K	82.4M
70-79	0	3.1M	54.0K	74.0M
80-89	0	961.7K	45.4K	23.1M
90-99	24	204.8K	11.9K	3.6M
100-109	0	27.4K	1.5K	552.6K
110-119	0	9.7K	334	187.2K
120-129	0	868	0	118.0K
130-139	0	197	0	98.3K
140-149	0	174	0	112.8K
150-159	0	142	0	132.1K
160-169	0	120	0	176.8K
170-179	0	71	0	222.8K
180-189	0	52	0	242.2K
190-199	0	23	0	232.9K
200-209	0	15	0	257.5K
210-219	0	3	1	252.5K
220-229	0	4	0	319.6K
230-239	0	1	0	335.7K
240-249	0	1	0	430.9K
>=250	0	2	0	17.2M

Right Ventricular	Reset Before Last 180 day(s)		Since Last Reset 2074 day(s)	
	26 Jan 2019 to 25 Jul 2019		25 Jul 2019 to 30 Mar 2025	
Rate (min ⁻¹)	Paced	Sensed	Paced	Sensed
0-29	0	0	0	0
30-39	0	0	0	0
40-49	791	53	2.2K	138
50-59	6.0M	6.4K	20.2M	102.0K
60-69	5.9M	5.3K	79.7M	165.5K
70-79	3.1M	5.8K	70.8M	1.3M
80-89	945.7K	15.4K	23.1M	2.0M
90-99	201.1K	29.4K	4.2M	2.3M
100-109	27.5K	8.7K	678.2K	1.8M
110-119	10.0K	4.1K	180.0K	892.8K
120-129	946	1.7K	74.9K	447.0K
130-139	239	515	23.8K	339.1K
140-149	185	375	10.8K	247.3K
150-159	194	295	5.3K	113.3K
160-169	0	197	0	34.4K
170-179	0	95	0	12.4K
180-189	0	47	0	5.7K
190-199	0	18	0	2.7K
200-209	0	10	0	1.1K
210-219	0	5	0	475
220-229	0	5	0	152
230-239	0	1	9	56
240-249	0	2	9	41
>=250	0	0	0	52

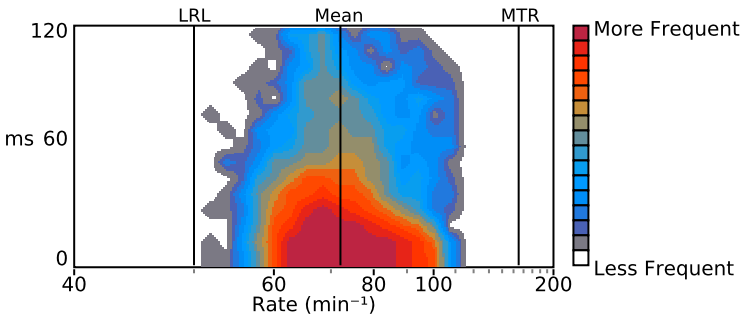
Left Ventricular	Reset Before Last 180 day(s)		Since Last Reset 2074 day(s)	
	26 Jan 2019 to 25 Jul 2019		25 Jul 2019 to 30 Mar 2025	
	Rate (min ⁻¹)	Paced	Sensed	Paced
0-29	5	4	12	5.3K
30-39	5	1	1.1K	524
40-49	15.0K	3.1K	619.0K	59.2K
50-59	5.9M	4.8K	19.8M	56.7K
60-69	5.9M	5.3K	79.5M	132.3K
70-79	3.1M	5.1K	70.5M	990.6K
80-89	945.5K	13.3K	23.3M	1.9M
90-99	200.9K	30.6K	5.0M	1.4M
100-109	27.4K	14.9K	1.5M	1.3M
110-119	9.9K	1.5K	709.0K	400.2K
120-129	1.0K	527	449.9K	326.7K
130-139	299	410	103.9K	188.9K
140-149	189	362	41.5K	107.2K
150-159	193	256	5.9K	58.6K
160-169	20	203	852	24.7K
170-179	5	76	122	10.9K
180-189	0	41	0	5.7K
190-199	0	15	1	2.5K
200-209	0	10	1	856
210-219	0	0	2	229
220-229	0	3	1	120
230-239	0	1	8	51
240-249	0	0	8	0
>=250	1	0	5	0

RV Rate during AT/AF	Reset Before Last 180 day(s)		Since Last Reset 2074 day(s)	
	26 Jan 2019 to 25 Jul 2019		25 Jul 2019 to 30 Mar 2025	
	Rate (min ⁻¹)	Paced	Sensed	Paced
0-29	0	0	0	0
30-39	0	0	0	0
40-49	0	0	0	0
50-59	0	0	0	1
60-69	0	0	0	16
70-79	3	0	136.7K	28.5K
80-89	0	0	936.4K	412.3K
90-99	0	0	668.9K	893.7K
100-109	0	0	160.7K	817.4K
110-119	0	0	25.2K	515.2K
120-129	0	0	3.3K	379.6K
130-139	0	0	140	303.5K
140-149	0	0	1	226.2K
150-159	0	0	0	97.9K
160-169	0	0	0	23.6K
170-179	0	0	0	3.0K
180-189	0	0	0	361
190-199	0	0	0	156
200-209	0	0	0	83
210-219	0	0	0	33
220-229	0	0	0	9
230-239	0	0	0	7
240-249	0	0	0	3
>=250	0	0	0	0

Heart Rate Variability

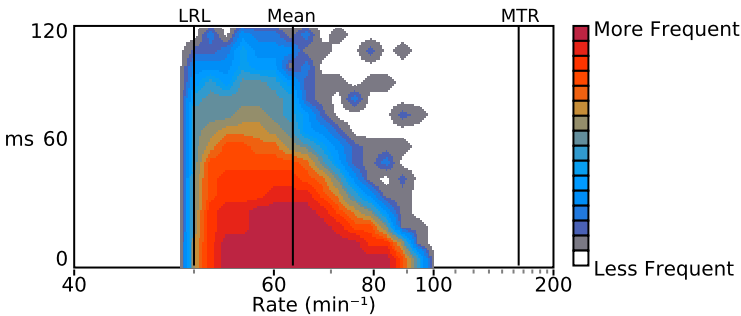
Last measured for 24-hr period ending 29 Mar 2025 17:25

% of Time Used	69
Footprint	40 %
SDANN	67 ms
Mode	DDD
Sensed AV Delay	75 - 120 ms
Ventricular Pacing Chamber	BiV
LV Offset	0 ms



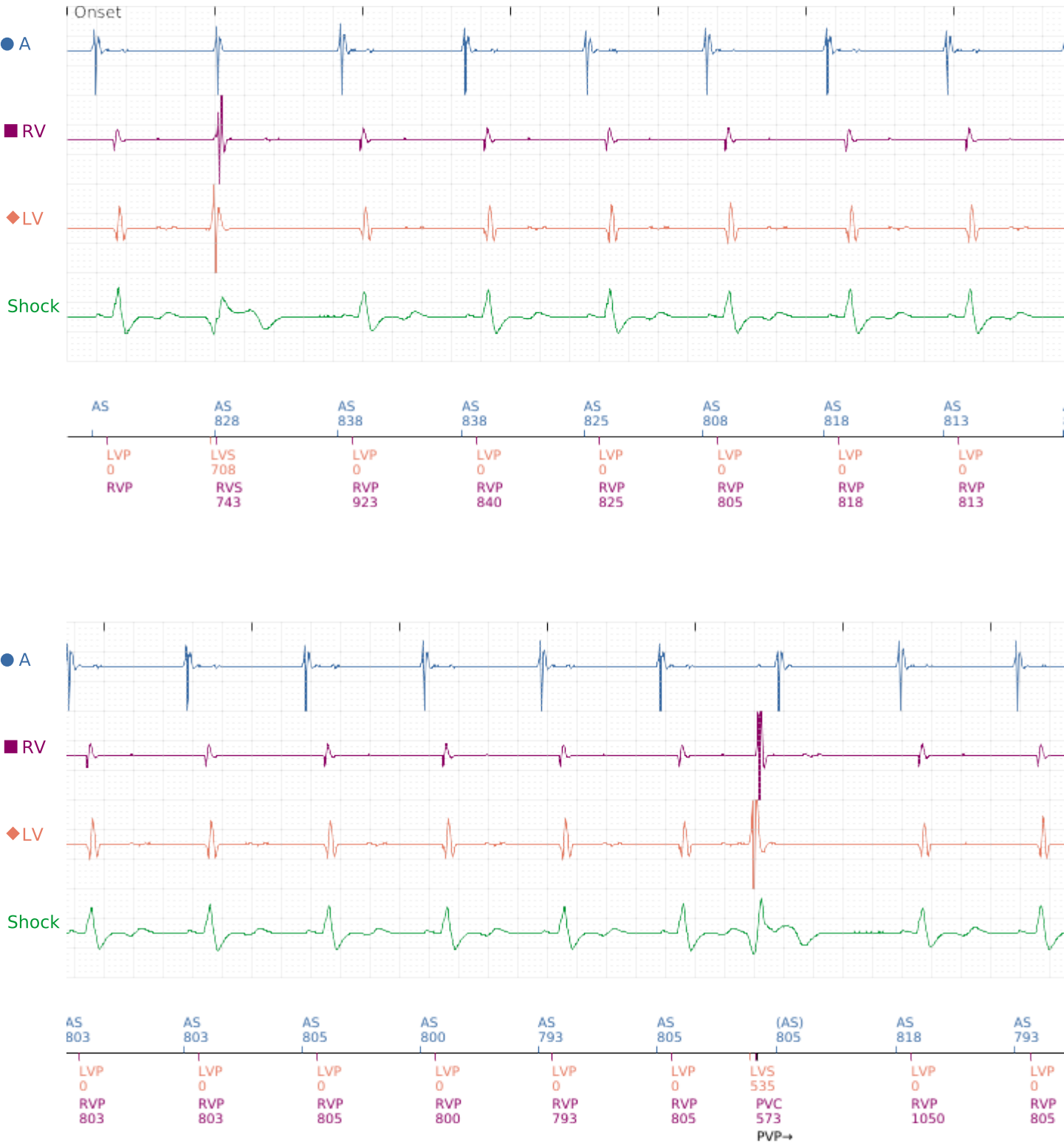
Reference: 24-hr period ending 27 Jan 2019 15:59

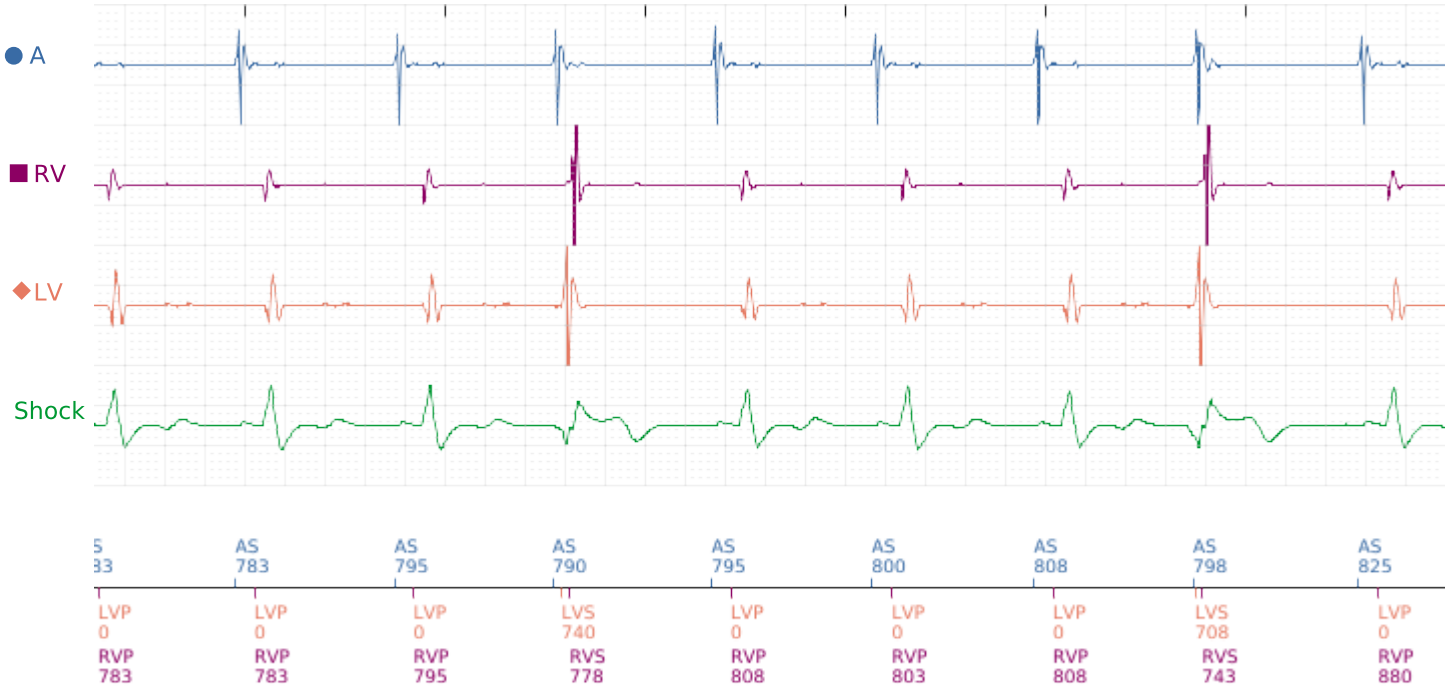
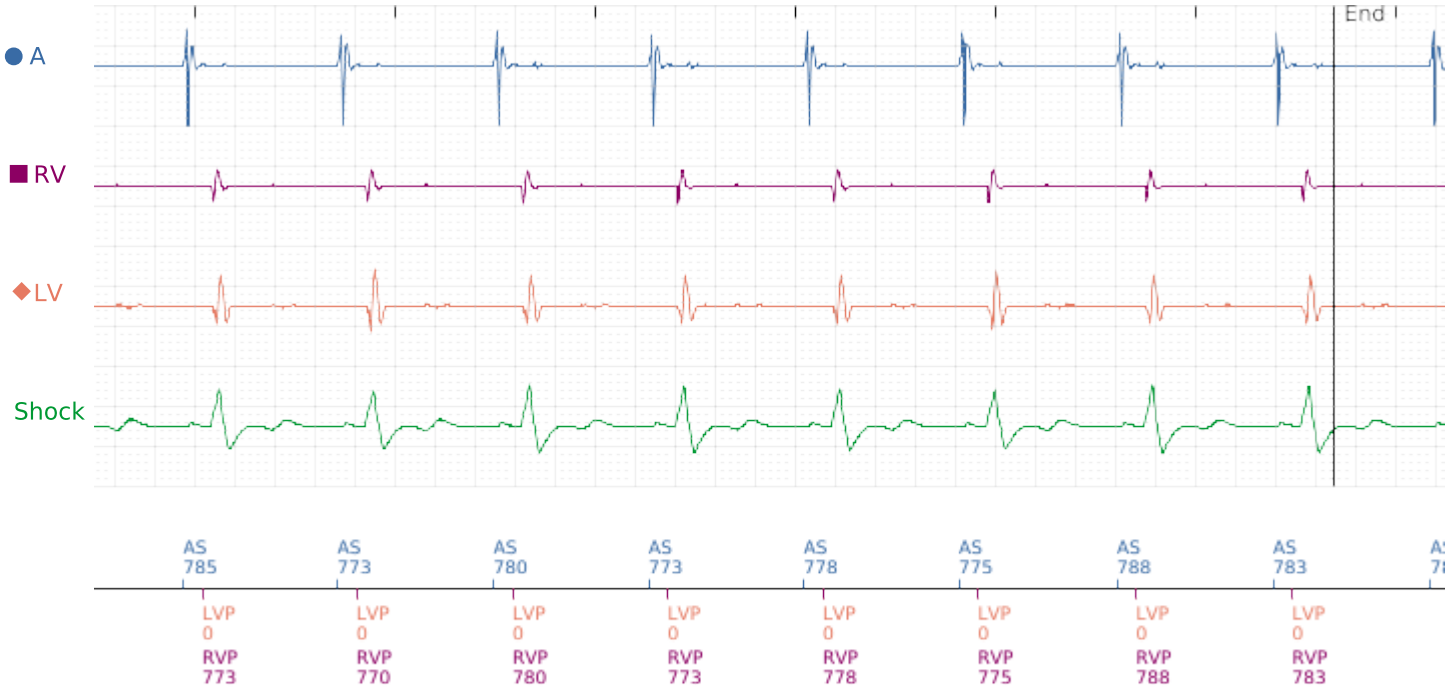
% of Time Used	94
Footprint	38 %
SDANN	91 ms
Mode	DDD
Sensed AV Delay	75 - 120 ms
Ventricular Pacing Chamber	BiV
LV Offset	0 ms

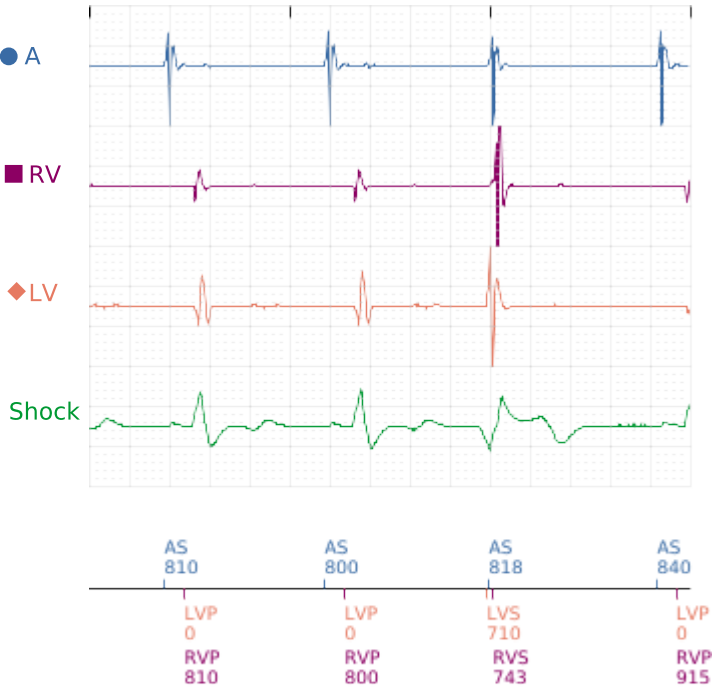


Presenting EGM (30 Mar 2025)

EGM displayed at 25mm per second







29 Mar 2025 10:38	LV Auto
29 Mar 2025 10:37	RA Auto
29 Mar 2025 10:36	RV Auto
26 Mar 2025 19:59	NonSustV at 176 min ⁻¹ , Nonsustained
26 Mar 2025 19:36	LV Auto
26 Mar 2025 19:35	RA Auto
26 Mar 2025 19:34	RV Auto
13 Mar 2025 16:38	LV Auto
13 Mar 2025 16:37	RA Auto
13 Mar 2025 16:36	RV Auto
13 Mar 2025 03:16	NonSustV at 171 min ⁻¹ , Nonsustained
02 Mar 2025 07:41	LV Auto
02 Mar 2025 07:39	RA Auto
02 Mar 2025 07:38	RV Auto
23 Feb 2025 08:34	LV Auto
23 Feb 2025 07:36	RA Auto
23 Feb 2025 07:34	RV Auto
11 Feb 2025 06:44	NonSustV at 171 min ⁻¹ , Nonsustained
09 Feb 2025 14:46	NonSustV at 175 min ⁻¹ , Nonsustained
27 Jan 2025 18:10	NonSustV at 164 min ⁻¹ , Nonsustained
27 Jan 2025 03:03	ATR at 71 min ⁻¹ , Avg V Rate in ATR: 71 min ⁻¹
15 Jan 2025 07:07	NonSustV at 175 min ⁻¹ , Nonsustained
13 Jan 2025 19:48	NonSustV at 185 min ⁻¹ , Nonsustained
12 Jan 2025 01:58	ATR at 193 min ⁻¹ , Avg V Rate in ATR: 100 min ⁻¹
01 Jan 2025 20:09	NonSustV at 170 min ⁻¹ , Nonsustained
31 Dec 2024 15:22	NonSustV at 186 min ⁻¹ , Nonsustained
31 Dec 2024 07:16	NonSustV at 171 min ⁻¹ , Nonsustained
18 Oct 2024 16:06	ATR at 63 min ⁻¹ , Avg V Rate in ATR: 67 min ⁻¹
15 Aug 2023 14:09	ATR at 78 min ⁻¹ , Avg V Rate in ATR: 75 min ⁻¹
29 Jun 2023 06:32	ATR at 81 min ⁻¹ , Avg V Rate in ATR: 80 min ⁻¹
06 Jun 2023 08:48	ATR at 76 min ⁻¹ , Avg V Rate in ATR: 78 min ⁻¹
17 Mar 2023 09:01	ATR at 64 min ⁻¹ , Avg V Rate in ATR: 69 min ⁻¹
30 Jan 2023 13:08	ATR at 159 min ⁻¹ , Avg V Rate in ATR: 142 min ⁻¹
13 Dec 2022 09:56	ATR at 96 min ⁻¹ , Avg V Rate in ATR: 70 min ⁻¹
29 Oct 2022 23:38	VT at 203 min ⁻¹ , No Therapy
19 Sep 2022 08:12	ATR at 65 min ⁻¹ , Avg V Rate in ATR: 69 min ⁻¹
19 Sep 2020 14:53	 VT at 199 min ⁻¹ , ATPx1
20 Apr 2020 16:42	 VT at 186 min ⁻¹ , ATPx1
Total Events: 2 VT, 183 NonSustV, 1 Other Untreated, 25 ATR	

Battery (Continued)			
Last Delivered Shock	N/R	Time Since Implant	75 months
Energy	N/R	Charge Remaining	0.90 ampere-hours
Charge Time	N/R	Power Consumption	59 µW
Shock Impedance	N/R	(Measured with programmed parameters)	
Beep when Explant is Indicated	On	This device is using 118% of the power it would use at the following parameters:	
		 A	15% pacing, 70 min ⁻¹ , 2.5 V, 0.4 ms, 500 Ω
		 RV	100% pacing, 70 min ⁻¹ , 2.5 V, 0.4 ms, 700 Ω
		 LVa	100% pacing, 70 min ⁻¹ , 3.5 V, 0.4 ms, 700 Ω
		 LVb	Off