

LATITUDE™ Patient Management - Combined Follow-up Report

Report Created: 18 Aug 2025



Date of Birth:

Device: **RESONATE X4 CRT-D**
G447/206071

Clinic: **CHU Haut Leveque Bordeaux HOPIT**

Search Tags:

Tachy Mode: **Monitor + Therapy**

Latest Device Transmission: **25 Sep 2023 00:32 CEST**

Last Office Interrogation: **17 May 2022**

Implant Date: **11 Mar 2019**

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

My Alerts

There are no alerts to display.

Events Since Last Reset (17 May 2022)

24 Sep 2023 05:05LV Auto

24 Sep 2023 05:03RA Auto

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

Battery

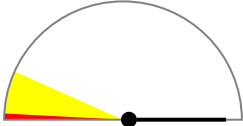
OK

Approximate time to explant: **7.5 years** from 25 Sep 2023

Last Capacitor Re-form21 Aug 2023 18:59

Charge Time10.2 s

One Year Remaining

Explant

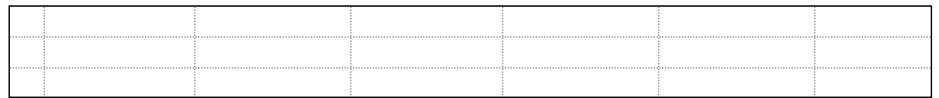
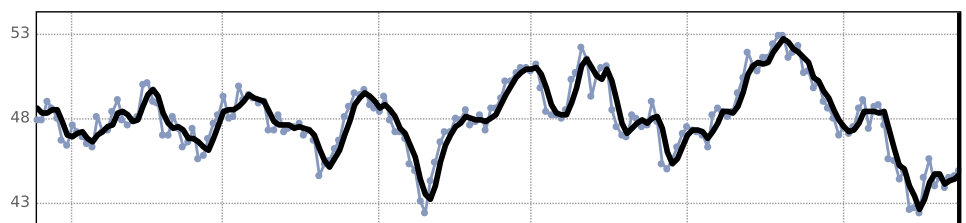
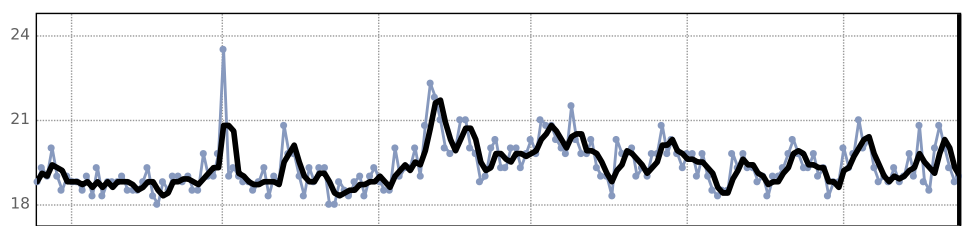
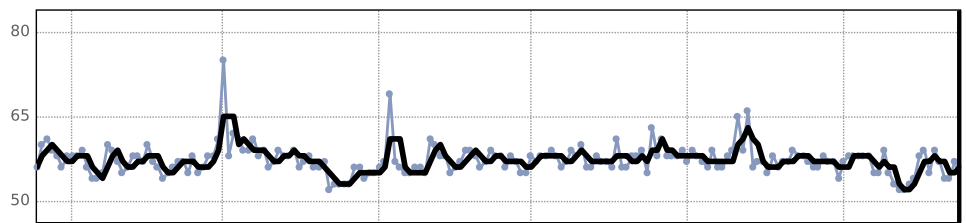
See last page for additional battery information.

Leads	Implant (11 Mar 2019)	Most Recent In-Office Measurement (17 May 2022)	Most Recent Daily Measurement (24 Sep 2023)
● Atrial			
Intrinsic Amplitude	N/R	5.6 mV	2.8 mV
Pace Impedance	N/R	695 Ω	611 Ω
Pace Threshold	N/R	0.6 V @ 0.4 ms	0.5 V @ 0.4 ms
■ Right Ventricular			
Intrinsic Amplitude	N/R	7.7 mV	6.8 mV
Pace Impedance	N/R	544 Ω	484 Ω
Pace Threshold	N/R	Auto 0.7 V @ 0.4 ms	1.0 V @ 0.4 ms
◆ Left Ventricular			
Intrinsic Amplitude	N/R	19.5 mV	18.5 mV
Pace Impedance (LVa)	N/R	876 Ω	839 Ω
Pace Impedance (LVb)		875 Ω	
Pace Threshold	N/R	Auto 1.2 V @ 0.4 ms	1.5 V @ 0.4 ms
■ Shock			
Shock Impedance	N/R	71 Ω	63 Ω

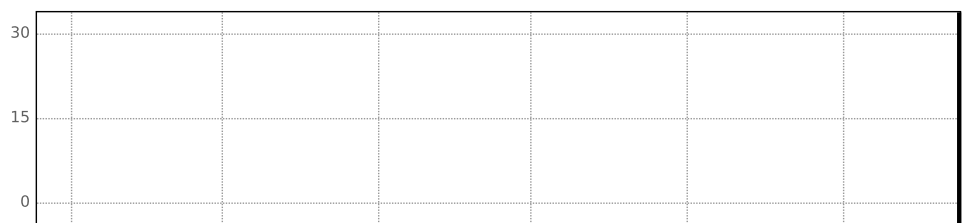
Settings					
Ventricular Tachy					
VF	250 min ⁻¹		ATP		41 J, 41 J, 41 Jx6
VT	185 min ⁻¹		Burst	Ramp	41 J, 41 J, 41 Jx4
Atrial Tachy			Pacing Output		
ATR Mode Switch	170 min ⁻¹	VDI	 Atrial		Trend 2.5 V @ 0.4 ms
Brady/CRT			 Right Ventricular		Auto 2.0 V @ 0.4 ms
Mode		DDD	 Left Ventricular (LVa)		Trend 3.0 V @ 0.4 ms
Lower Rate Limit		50 min ⁻¹	 Left Ventricular (LVb)		Off
Maximum Tracking Rate		130 min ⁻¹	Sensitivity		
Paced AV Delay		100 - 140 ms	 Atrial		AGC 0.25 mV
Sensed AV Delay		70 - 100 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)		LVTip1>>RV
			 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					18 Sep 2023 16:59

 Daily Value
 3 Day Average

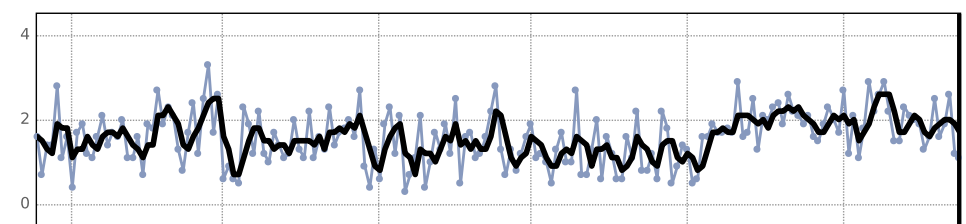
01 Apr 2023	01 May 2023	01 Jun 2023	01 Jul 2023	01 Aug 2023	01 Sep 2023
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 Ω  min^{-1}  min^{-1} 

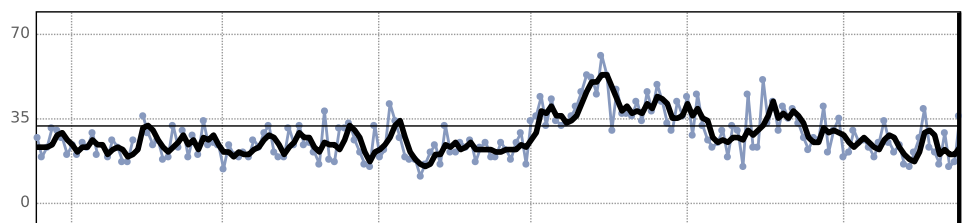
degrees



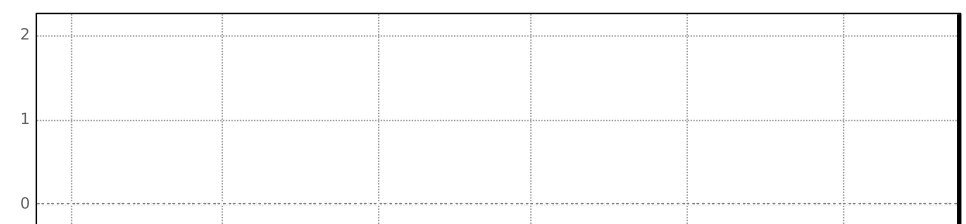
hour(s)



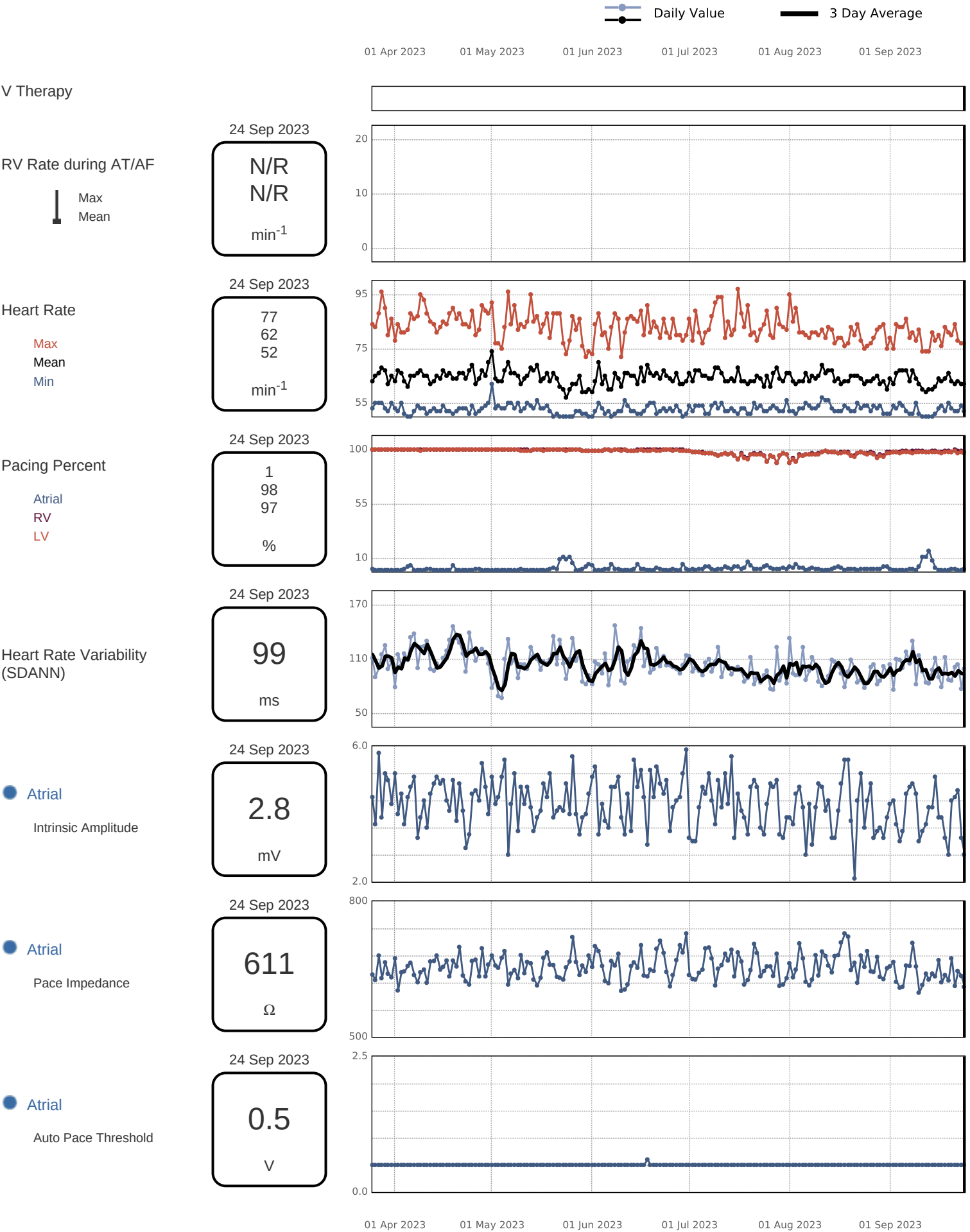
events/h



hour(s)



01 Apr 2023 01 May 2023 01 Jun 2023 01 Jul 2023 01 Aug 2023 01 Sep 2023





Ventricular Tachy Counters	Since Last Reset 17 May 2022	Device Totals
Ventricular Episode Counters		
Total Episodes	0	3
Treated		
VF Therapy	0	0
VT Therapy	0	0
VT-1 Therapy	0	0
Commanded Therapy	0	0
Non-Treated		
No Therapy Programmed	0	0
NonsustainedV Episodes	0	3
Other Untreated Episodes	0	0
Ventricular Therapy Counters		
ATP Delivered	0	0
ATP % Successful	0	0
Shocks Delivered	0	0
First Shock % Successful	0	0
Shocks Diverted	0	0

Brady/CRT Counters	Reset Before Last 988 day(s) 01 Sep 2019 to 17 May 2022	Since Last Reset 495 day(s) 17 May 2022 to 25 Sep 2023
Counters		
% A Paced	0	1
% RV Paced	99	99
% LVa Paced	99	99
% LVb Paced	0	0
Intrinsic Promotion		
Rate Hysteresis		
% Successful	0	0
Atrial Arrhythmia		
% AT/AF (One Year of Data)	N/R	0
Total Time in AT/AF (min) (One Year of Data)	N/R	0.0
Episodes by Duration		
< 1 minute	1	0
1 min - < 1 hr	0	0
1 hr - < 24 hr	0	0
24 hr - < 48 hr	0	0
> 48 hr	0	0
Total PACs	39532	11008
Ventricular Counters		
Total PVCs	601874	356104
Three or More PVCs	12	0

Clinical Counters	Since Last Reset 17 May 2022	Device Totals
MRI Protection Mode	0	0

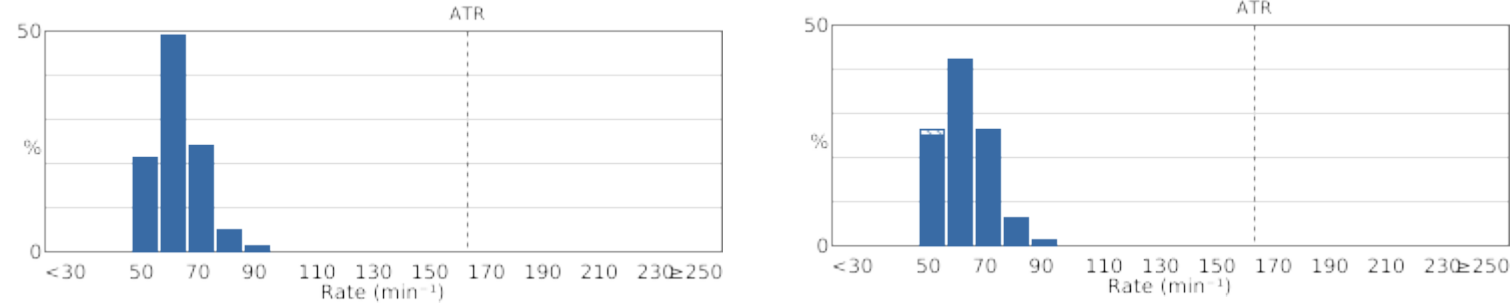
AT/AF Overview: Since Last Reset (17 May 2022 to 25 Sep 2023)	
AT/AF (One Year of Data): 0 %	AT/AF Events: 0
Total Time in AT/AF (min) (One Year of Data): 0.0	
There are no ATR events to display.	

AT/AF Overview: Reset Before Last (01 Sep 2019 to 17 May 2022)		
Longest: 18 Dec 2019 18:02	Avg V Rate: 78 min ⁻¹	Duration: 00:00:03 hh:mm:ss
Fastest RVS Rate: 18 Dec 2019 18:02	Max V Rate: N/R	Duration: 00:00:03 hh:mm:ss

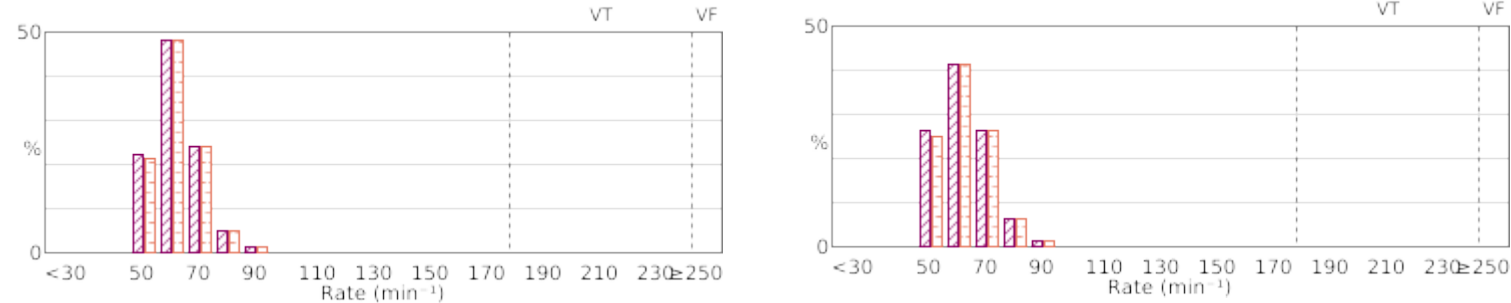
Histograms



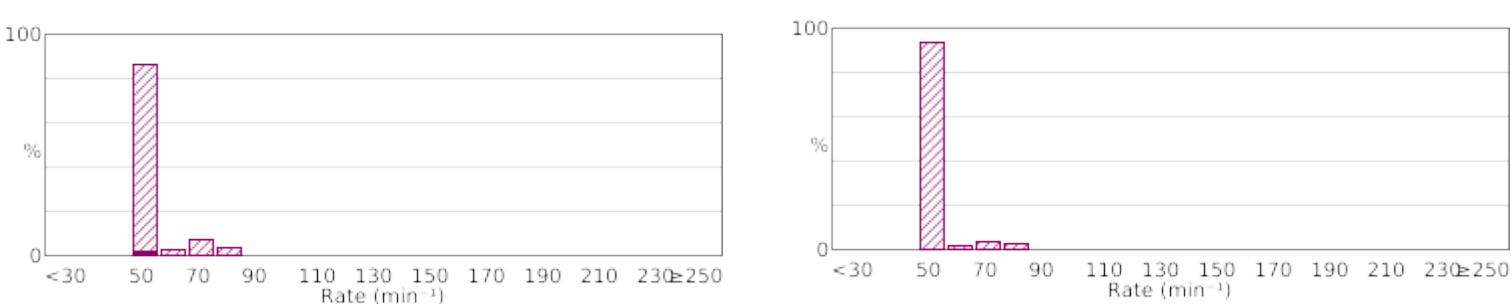
Atrial Activity



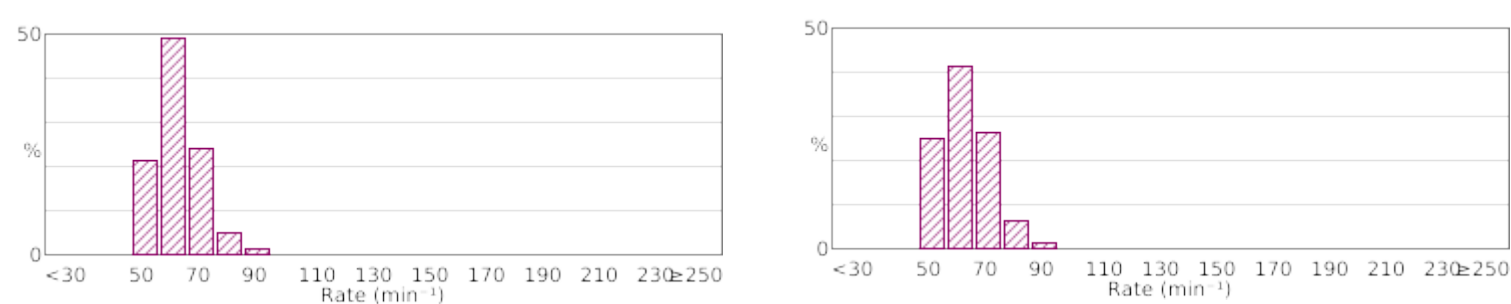
Ventricular Activity



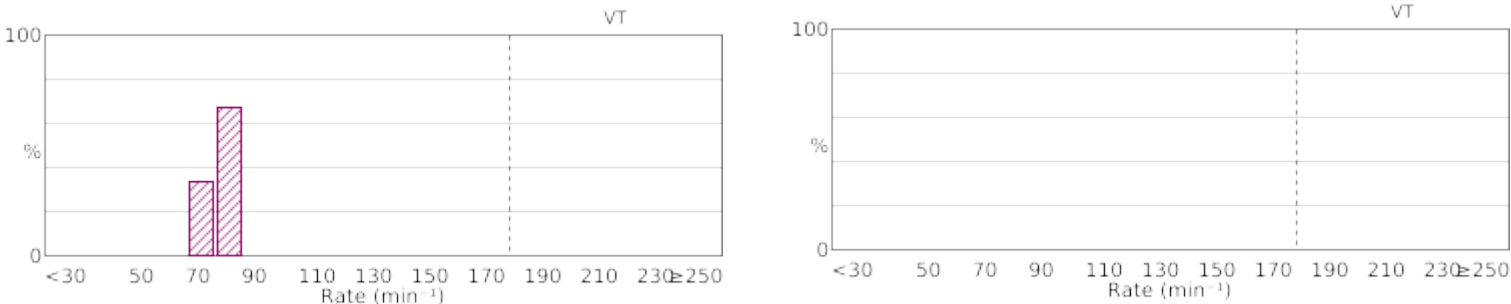
Ventricular Response to Atrial Pace



Ventricular Response to Atrial Sense



RV Rate during AT/AF



Histogram Rate Counts

Atrial	Reset Before Last 988 day(s)		Since Last Reset 495 day(s)	
	01 Sep 2019 to 17 May 2022		17 May 2022 to 25 Sep 2023	
Rate (min ⁻¹)	Paced	Sensed	Paced	Sensed
0-29	0	43	0	12
30-39	26	776	5	153
40-49	3.4K	1.4K	2.1K	2.2K
50-59	245.7K	19.4M	417.2K	11.3M
60-69	13.6K	45.2M	9.4K	19.2M
70-79	43.0K	22.3M	17.2K	12.2M
80-89	20.9K	4.5M	9.9K	2.7M
90-99	2.6K	562.6K	2.2K	248.3K
100-109	82	49.8K	144	22.6K
110-119	1	11.4K	129	2.9K
120-129	0	3.6K	0	1.9K
130-139	0	2.2K	0	1.5K
140-149	0	1.6K	0	815
150-159	0	877	0	360
160-169	0	831	0	368
170-179	0	886	0	197
180-189	0	268	0	59
190-199	0	150	0	48
200-209	0	95	0	25
210-219	0	64	0	16
220-229	0	43	0	10
230-239	0	25	0	11
240-249	0	29	0	6
>=250	0	161	0	80

Right Ventricular	Reset Before Last 988 day(s)		Since Last Reset 495 day(s)	
	01 Sep 2019 to 17 May 2022		17 May 2022 to 25 Sep 2023	
Rate (min ⁻¹)	Paced	Sensed	Paced	Sensed
0-29	0	0	0	0
30-39	0	0	0	0
40-49	2.1K	5	517	3
50-59	20.0M	11.8K	11.9M	6.9K
60-69	44.8M	22.1K	19.0M	25.5K
70-79	22.2M	24.3K	12.1M	114.7K
80-89	4.5M	101.8K	2.7M	77.9K
90-99	539.5K	264.1K	246.8K	56.6K
100-109	38.0K	239.8K	21.8K	48.2K
110-119	5.8K	58.2K	3.4K	58.9K
120-129	2.6K	70.7K	1.9K	64.1K
130-139	3.1K	41.5K	2.2K	5.5K
140-149	0	5.8K	0	2.6K
150-159	0	3.2K	0	2.0K
160-169	0	1.5K	0	352
170-179	0	638	0	152
180-189	0	206	0	54
190-199	0	98	0	36
200-209	0	34	0	10
210-219	0	4	0	8
220-229	0	3	0	2
230-239	0	1	0	2
240-249	0	2	0	0
>=250	0	1	0	0

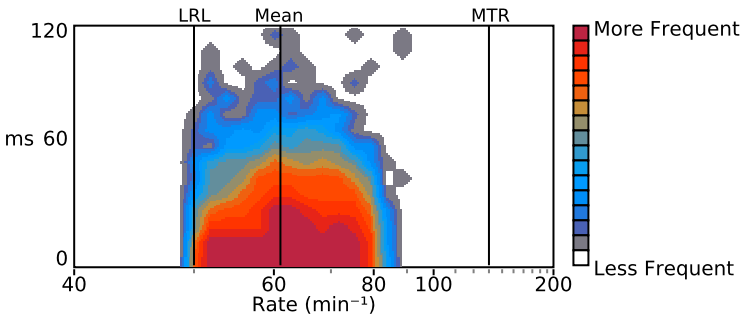
Reset Before Last 988 day(s)			Since Last Reset 495 day(s)	
01 Sep 2019 to 17 May 2022			17 May 2022 to 25 Sep 2023	
Left Ventricular				
Rate (min ⁻¹)	Paced	Sensed	Paced	Sensed
0-29	0	496	6	345
30-39	23	16	48	22
40-49	239.3K	5.8K	172.2K	2.5K
50-59	19.7M	7.1K	11.7M	4.2K
60-69	44.7M	22.0K	18.9M	19.7K
70-79	22.1M	23.7K	12.1M	80.7K
80-89	4.5M	68.8K	2.7M	118.8K
90-99	540.1K	180.4K	247.9K	56.0K
100-109	38.0K	310.9K	22.7K	73.6K
110-119	5.9K	158.7K	4.1K	61.6K
120-129	2.8K	48.4K	2.9K	43.1K
130-139	2.8K	12.4K	2.7K	23.0K
140-149	79	4.3K	713	5.3K
150-159	0	2.4K	60	925
160-169	0	1.2K	0	600
170-179	0	469	0	472
180-189	0	187	0	375
190-199	0	85	0	282
200-209	0	27	0	240
210-219	0	7	0	189
220-229	0	1	0	190
230-239	0	0	0	112
240-249	0	0	0	0
>=250	0	0	0	0

Reset Before Last 988 day(s)			Since Last Reset 495 day(s)	
01 Sep 2019 to 17 May 2022			17 May 2022 to 25 Sep 2023	
RV Rate during AT/AF				
Rate (min ⁻¹)	Paced	Sensed	Paced	Sensed
0-29	0	0	0	0
30-39	0	0	0	0
40-49	0	0	0	0
50-59	0	0	0	0
60-69	0	0	0	0
70-79	1	0	0	0
80-89	2	0	0	0
90-99	0	0	0	0
100-109	0	0	0	0
110-119	0	0	0	0
120-129	0	0	0	0
130-139	0	0	0	0
140-149	0	0	0	0
150-159	0	0	0	0
160-169	0	0	0	0
170-179	0	0	0	0
180-189	0	0	0	0
190-199	0	0	0	0
200-209	0	0	0	0
210-219	0	0	0	0
220-229	0	0	0	0
230-239	0	0	0	0
240-249	0	0	0	0
>=250	0	0	0	0

Heart Rate Variability

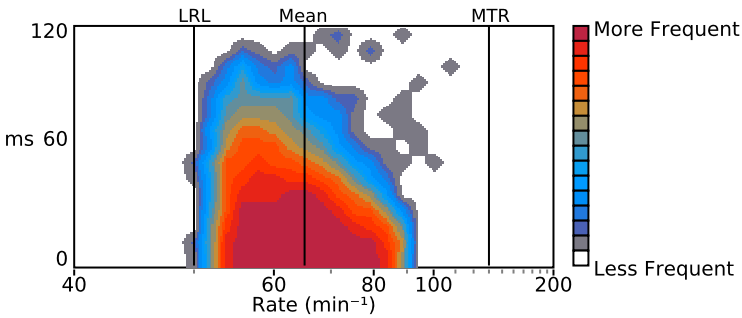
Last measured for 24-hr period ending 24 Sep 2023 17:53

% of Time Used	93
Footprint	31 %
SDANN	99 ms
Mode	DDD
Sensed AV Delay	70 - 100 ms
Ventricular Pacing Chamber	BiV
LV Offset	0 ms



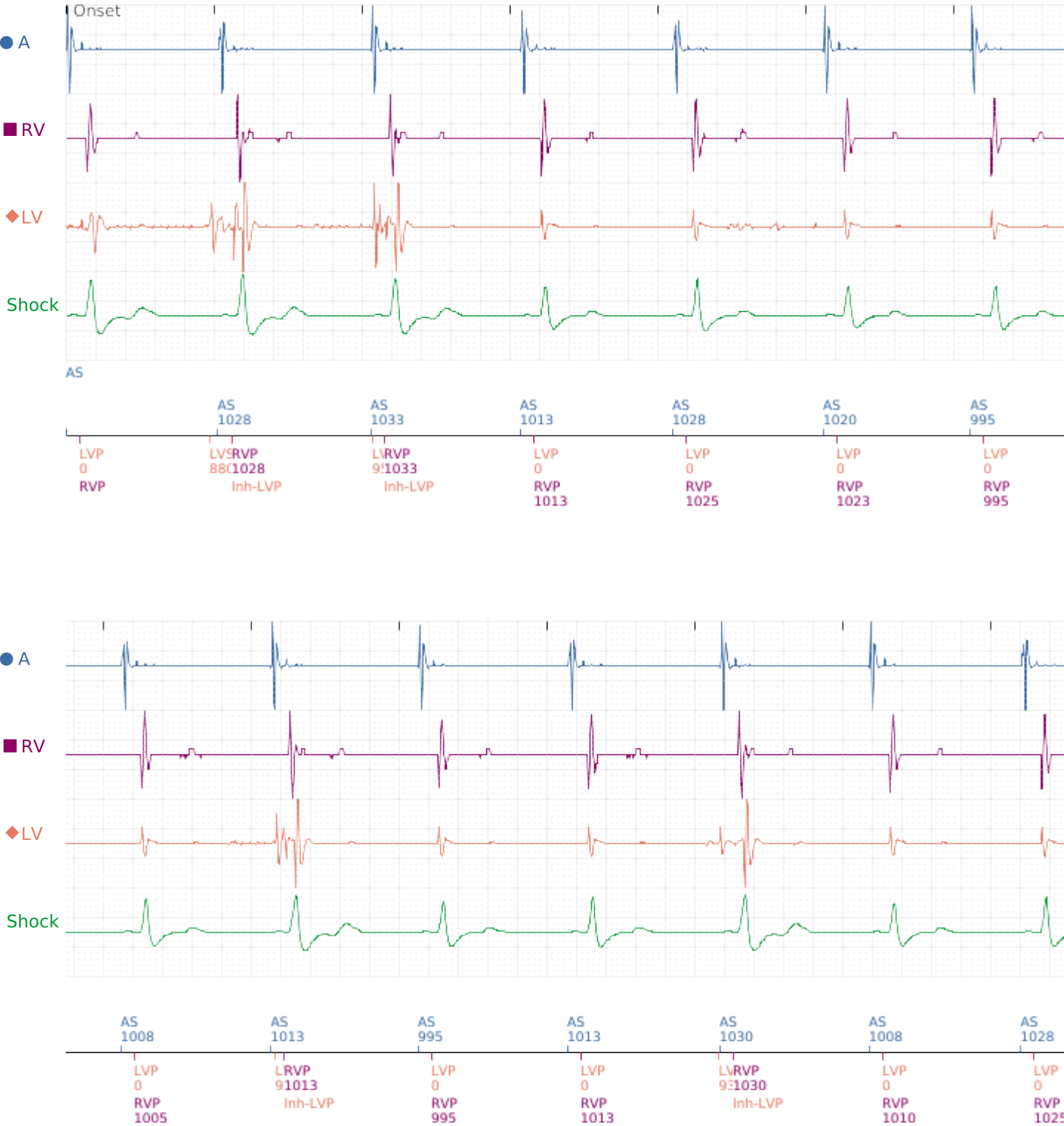
Reference: 24-hr period ending 13 Mar 2019 16:54

% of Time Used	99
Footprint	33 %
SDANN	85 ms
Mode	DDD
Sensed AV Delay	70 - 100 ms
Ventricular Pacing Chamber	BiV
LV Offset	0 ms

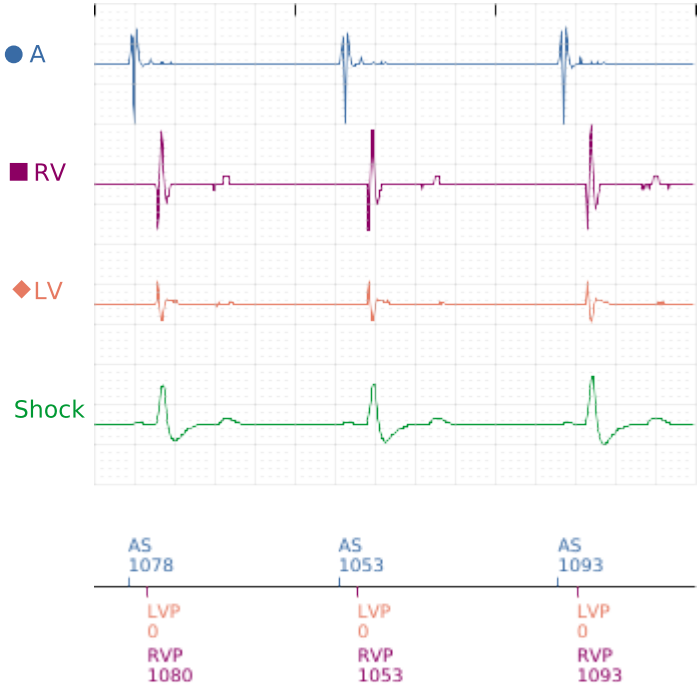


Presenting EGM (25 Sep 2023)

EGM displayed at 25mm per second







All Events Since Last Reset (17 May 2022)

24 Sep 2023 05:05	LV Auto
24 Sep 2023 05:03	RA Auto
24 Sep 2023 05:02	RV Auto
13 Sep 2023 17:04	LV Auto
13 Sep 2023 17:02	RA Auto
13 Sep 2023 17:01	RV Auto
25 Jun 2023 05:06	LV Auto
25 Jun 2023 05:04	RA Auto
25 Jun 2023 05:02	RV Auto
26 Mar 2023 05:07	LV Auto
26 Mar 2023 05:06	RA Auto
26 Mar 2023 05:04	RV Auto
18 Dec 2022 05:08	RA Auto
18 Dec 2022 05:07	RV Auto
18 Dec 2022 05:06	LV Auto

Battery (Continued)

Last Delivered Shock	N/R	Time Since Implant	55 months
Energy	N/R	Charge Remaining	1.35 ampere-hours
Charge Time	N/R	Power Consumption	49 µW
Shock Impedance	N/R	(Measured with programmed parameters)	
Beep when Explant is Indicated	On	This device is using 98% 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