Sustain™ XL DR PM2136 (#4543534 pr9.7) FastPath™ Summary

Note:

1 Alert
High Ventricular Rate Detected

Battery
Voltage: **2.78** V

ERI (2.5 V)

Remaining Longevity:
2.25 - 3 years

Magnet Rate
98.5 bpm

Impedance
2.2 kΩ

Current
14 µA

Current Parameters

Mode	**VVIR**
Base Rate	60 bpm
	V
Pulse Amplitude (V)	1.250 A
Pulse Width (ms)	0.4
Sensitivity (mV)	2.0

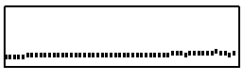
Episodes

New EGMs	**4**
Total Episodes	**4**

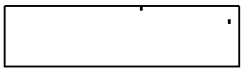
Test Results (Last Session: Apr 8, 2022)

Ventricle

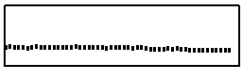
Capture
Today: **1.0** V @ 0.4 ms (Uni) A



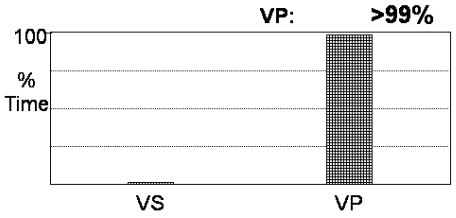
Sense
May 25: **8.6 - > 9.4** mV (Bi) A



Lead Impedance
Today: **329** Ω (Uni) A



Events



Initial Parameters
Diagnostics Read

Basic Operation

Mode	**VVIR**	Sensor	On
Magnet Response	Battery Test	Threshold	Auto (+0.0)
		Measured Avg	2.6
		Slope	Auto (+2)
		Measured Auto	15
		Max Sensor Rate	130 bpm
		Reaction Time	Fast
		Recovery Time	Medium

Rates

Base Rate	60 bpm	Hysteresis Rate	50 bpm
Rest Rate	50 bpm	Search Interval	Off
Max Sensor Rate	130 bpm	Cycle Count	1
		Intervention Rate	Off

Capture & Sense

	A	V
V. AutoCapture	n/a	On
Backup Pulse Config		Bipolar
Search Frequency		8 Hours
Pulse Amplitude		1.250 A
Pulse Width		0.4 ms
Amplitude Monitoring		On
Sensitivity		2.0

Leads

	A	V
Lead Type	Uni/Bi	Uni/Bi
Pulse Config		Unipolar
Sense Config		Bipolar
Lead Monitoring		Monitor
Lower Limit		200 Ω
Upper Limit		2000 Ω

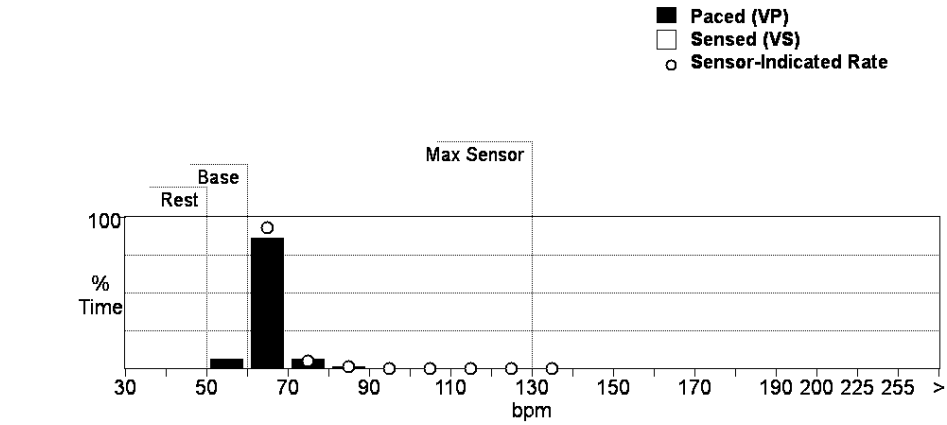
Refractories & Blanking

Ventricular Refractory	250 ms
Rate Resp. V. Refr.	Low
Shortest Ventricular Refractory	170 ms

Patient Data

Patient Name
Patient ID
Implant Date May 15, 2015
A LEAD: MODEL SN:
MANUFACT: DATE: / /
V LEAD: MODEL SN:
MANUFACT: DATE: / /
ADAPTOR:
OTHER:

Heart Rate Histogram



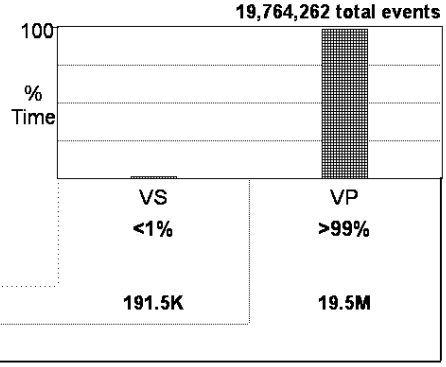
	30	50	70	90	110	130	150	170	190	200	225	255	>
VS %	0	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	0
VP %	0	<1	5.5	86	5.5	1.4	<1	<1	<1	<1	0	0	0	0	0	0	0	0	0
Total %	0	<1	5.5	86	5.6	1.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	0
Sensor				93	5.2	1.3	<1	<1	<1	<1	0								

>225d 3h 35m 54s Sampled since (Frozen)*

*Sensor-Indicated Rate (Frozen)

Events

VP Counts	>99%



>225d 3h 35m 54s Sampled since (Frozen)

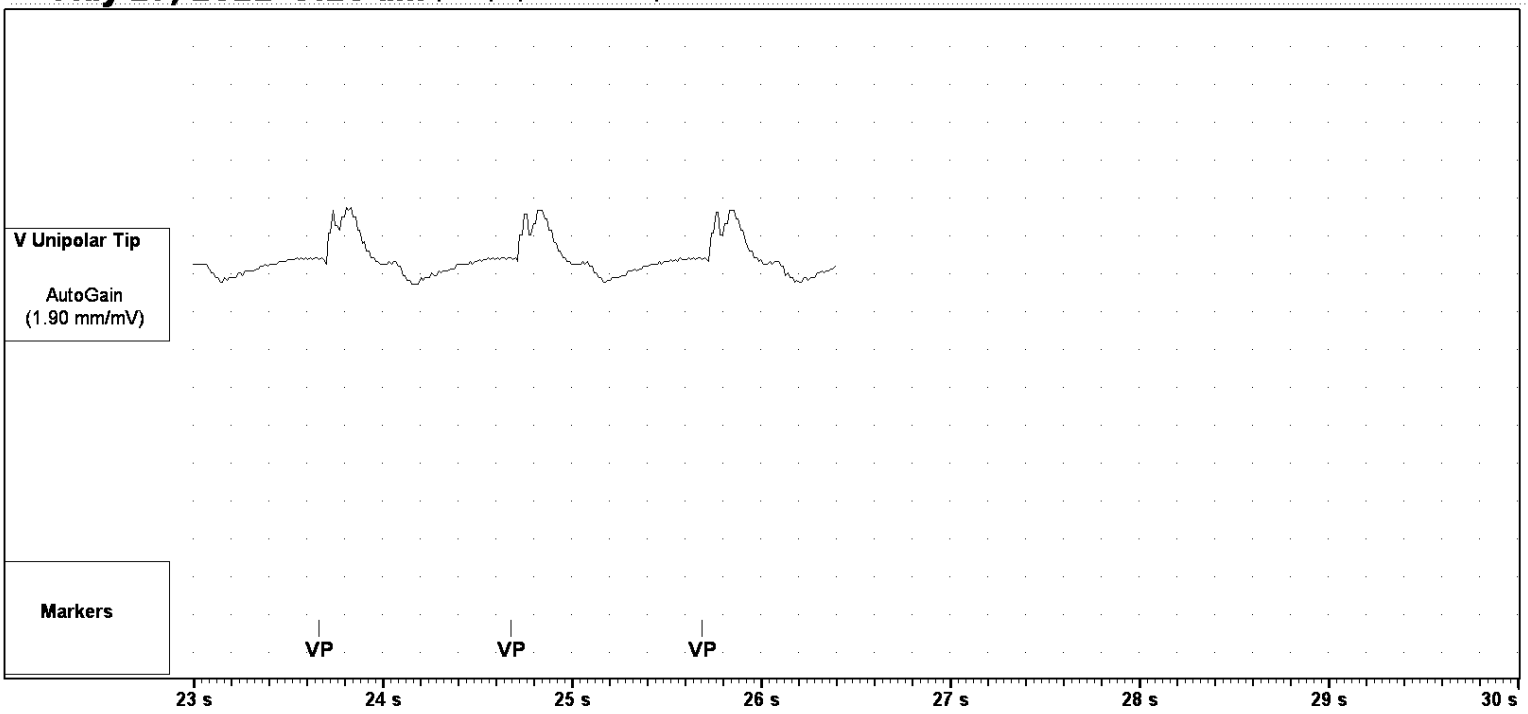
AMS Summary

AMS Histograms are not supported in VVIR Mode.

Sustain™ XL DR PM2136 (#4543534 pr9.7)

Freeze Capture

A May 27, 2022 9:26 am (Sweep Speed: 25 mm/s)



Key Parameters

Mode	**VVIR**	Max Sensor Rate	130 bpm	Rate Responsive Ventricular	Low
Base Rate	60 bpm	Hysteresis Rate	50 bpm		
Rest Rate	50 bpm	V. AutoCapture	On		

A **(Sweep Speed: 0 mm/s)**

Key Parameters

Mode	**VVIR**	Max Sensor Rate	130 bpm	Rate Responsive Ventricular	Low
Base Rate	60 bpm	Hysteresis Rate	50 bpm		
Rest Rate	50 bpm	V. AutoCapture	On		

Trigger Counts

Trigger	Count	EGMs
High Ventricular Rate	4	4
150 bpm		
5 consecutive cycles		

Episode Directory

Date	Time	Type
⚠ May 25, 2022	8:57pm	High Ventricular Rate
⚠ May 25, 2022	8:47pm	High Ventricular Rate
⚠ May 25, 2022	8:45pm	High Ventricular Rate
⚠ May 25, 2022	8:41pm	High Ventricular Rate

Stored EGM Configuration

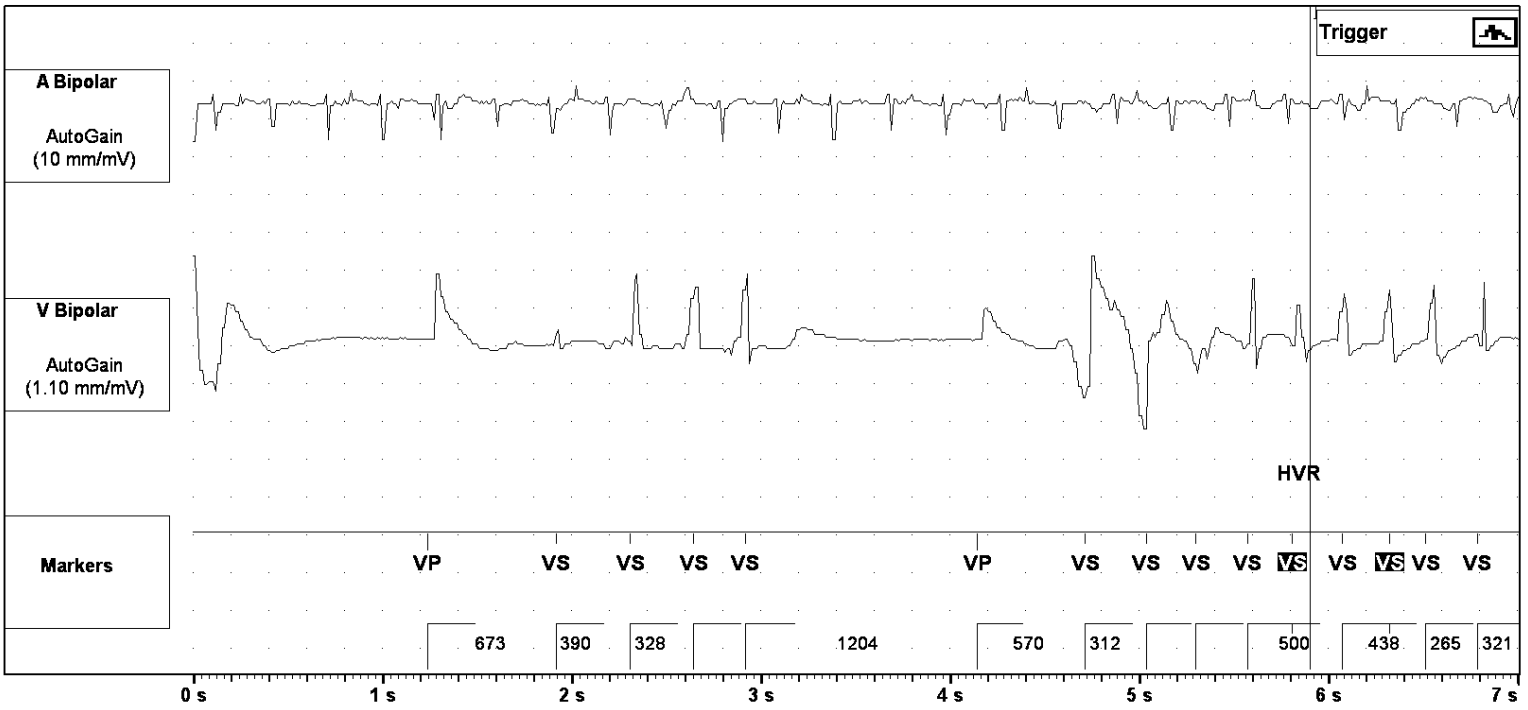
Sampling Option	Freeze
Number of Stored Episodes	4
Channel	Dual
A. EGM Configuration	A Bipolar
A. EGM Recording Range	± 3.0 mV
V. EGM Configuration	V Bipolar
V. EGM Recording Range	± 15.0 mV
EGM Configuration	n/a
EGM Recording Range	n/a

Episode

High Ventricular Rate May 25, 2022 8:57 pm

Episode 4 of 4

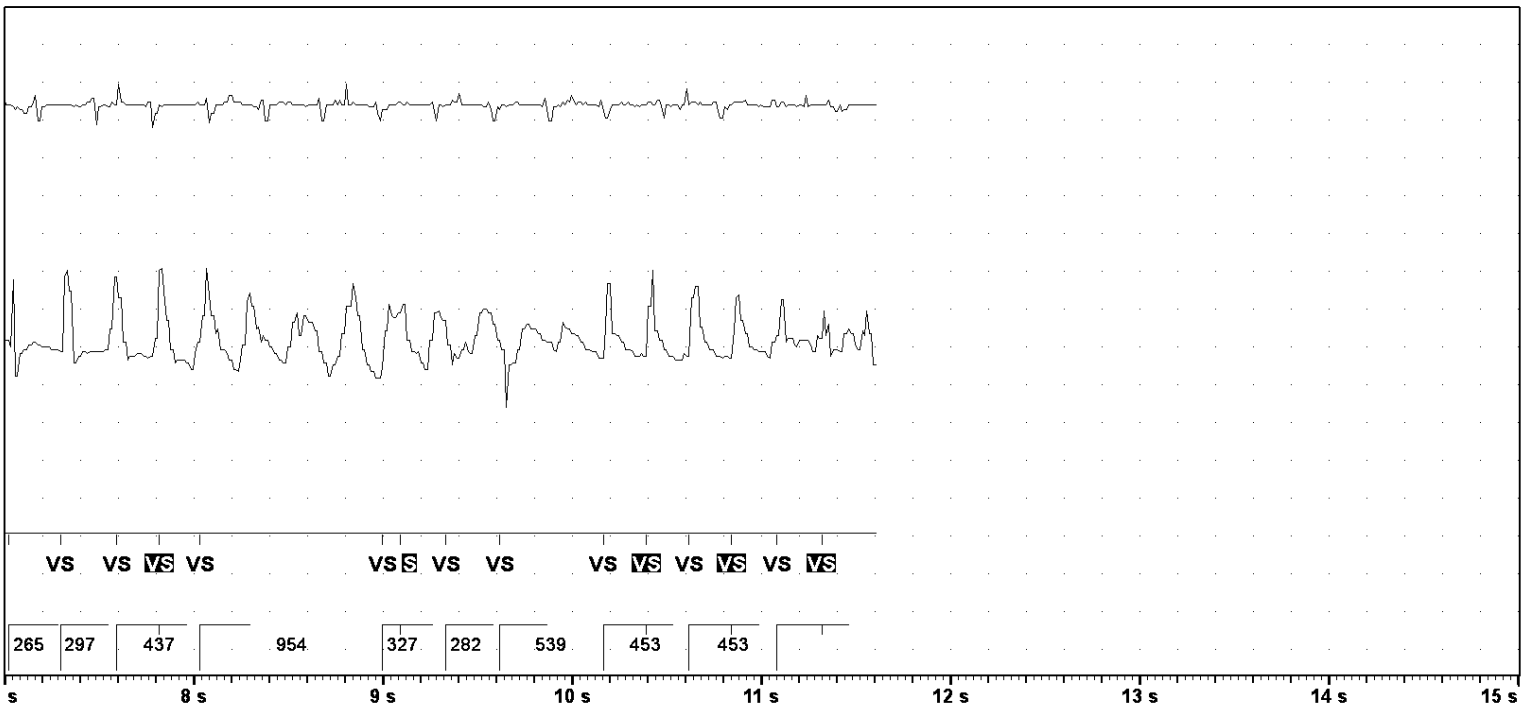
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:57 pm

Episode 4 of 4

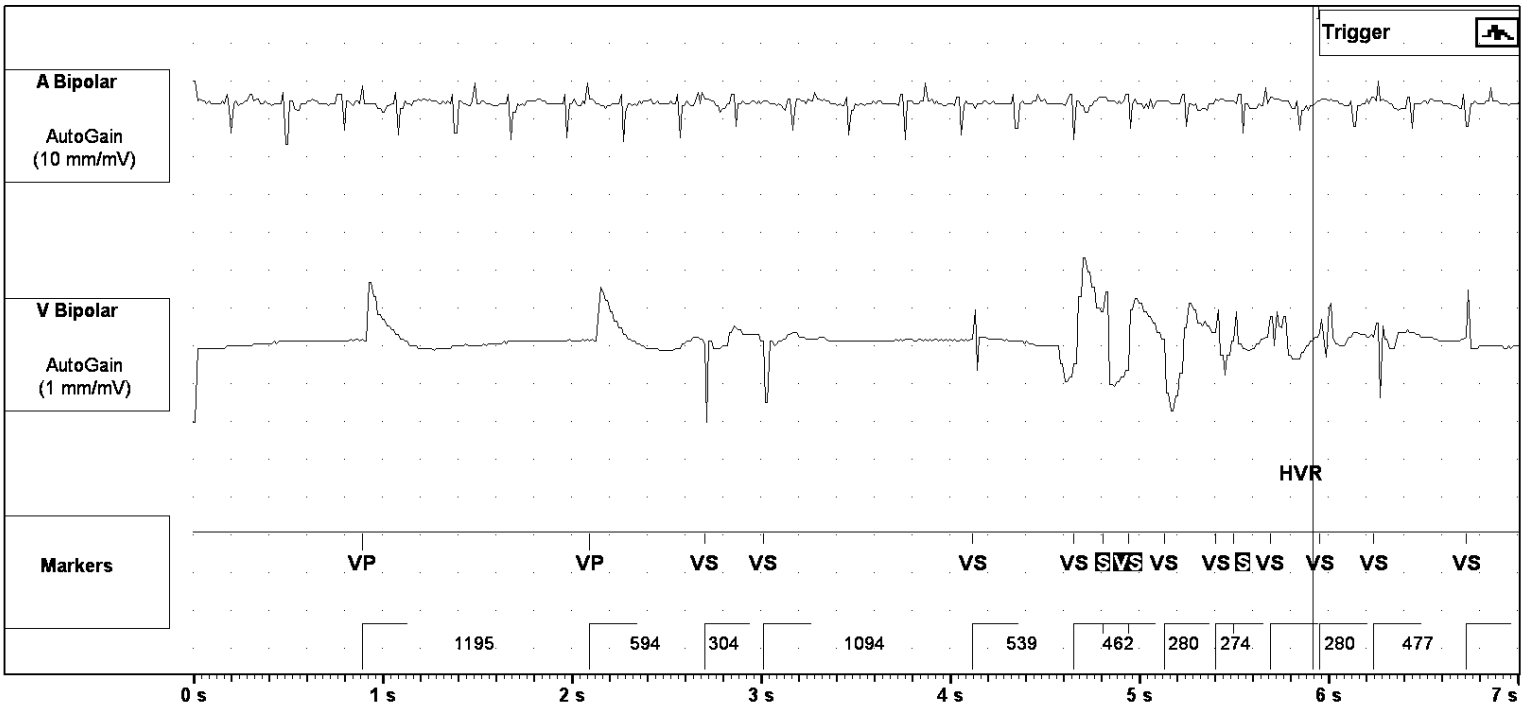


Sweep Speed: 25 mm/s

High Ventricular Rate May 25, 2022 8:47 pm

Episode 3 of 4

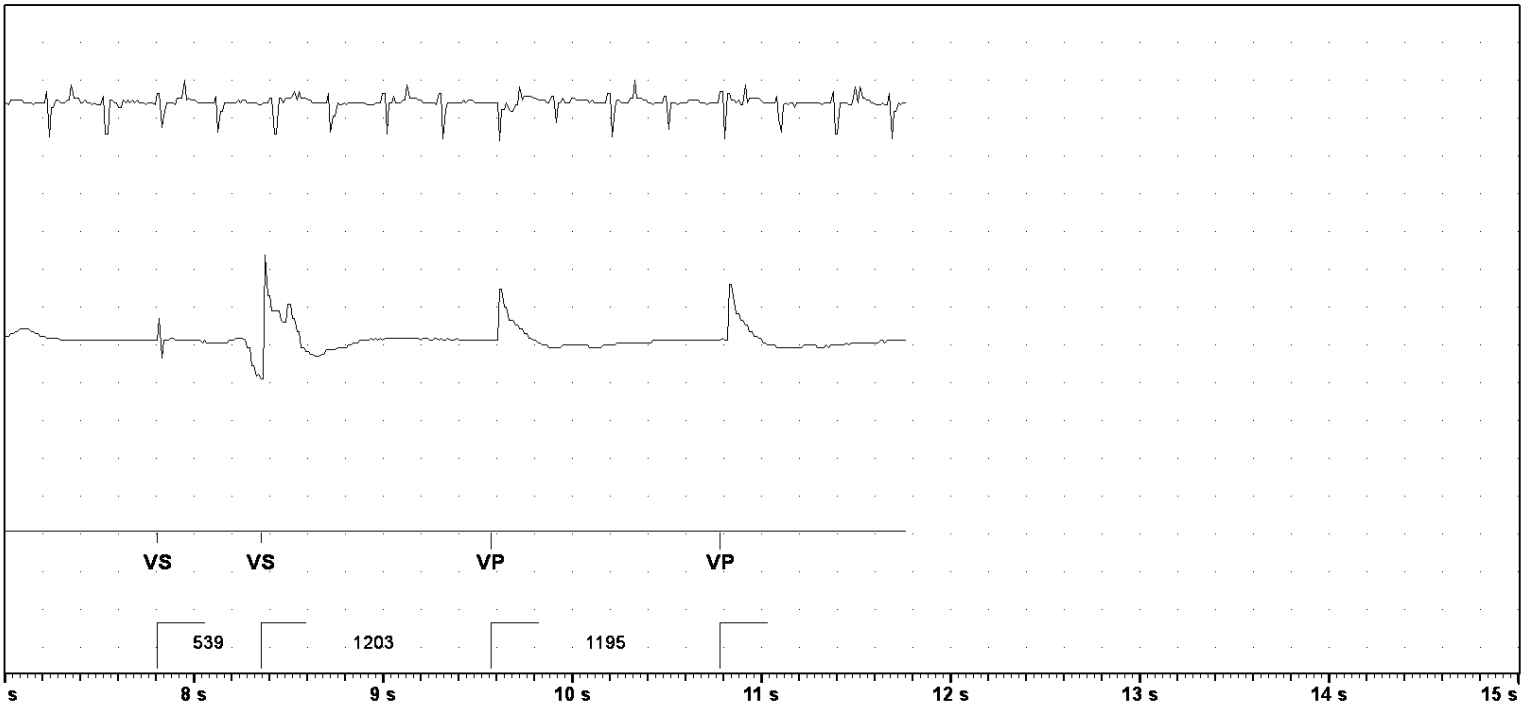
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:47 pm

Episode 3 of 4

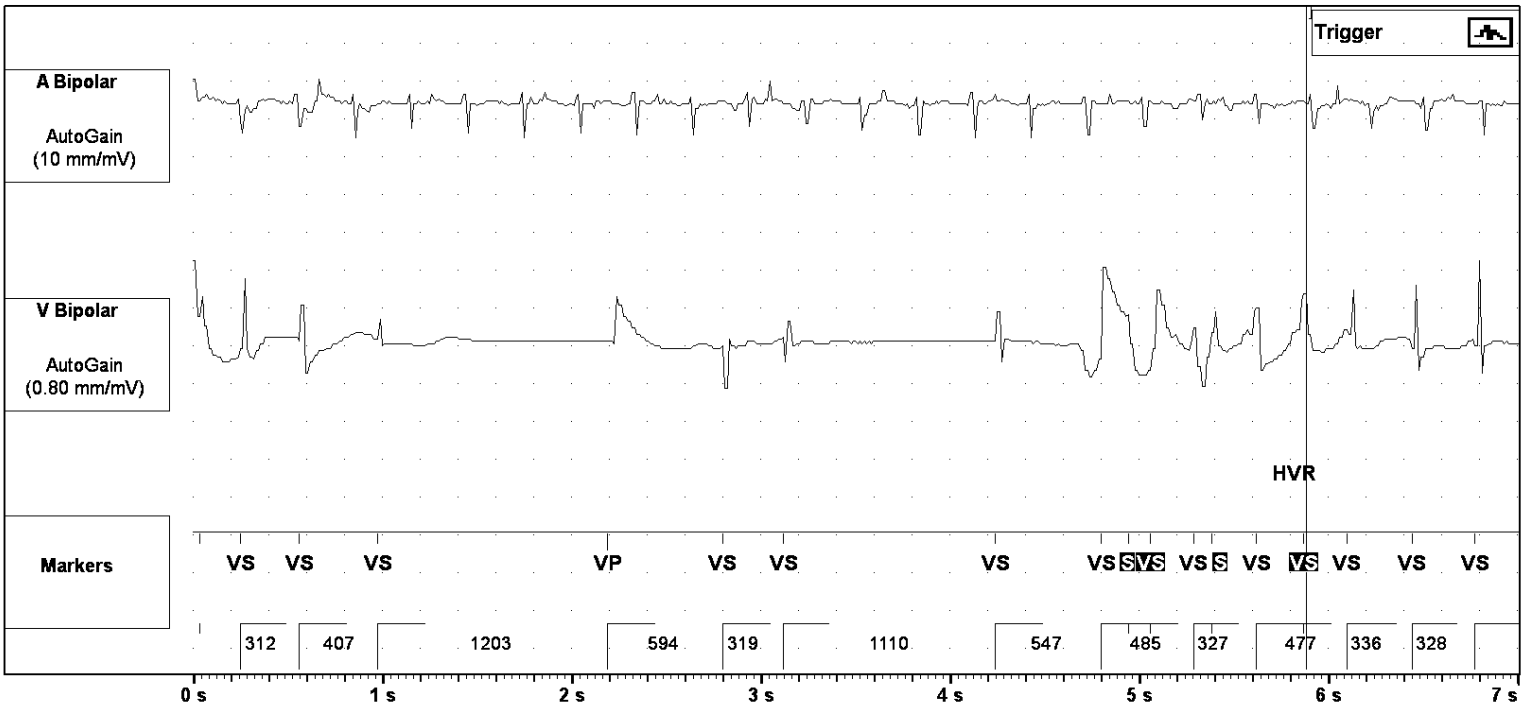


Sweep Speed: 25 mm/s

High Ventricular Rate May 25, 2022 8:45 pm

Episode 2 of 4

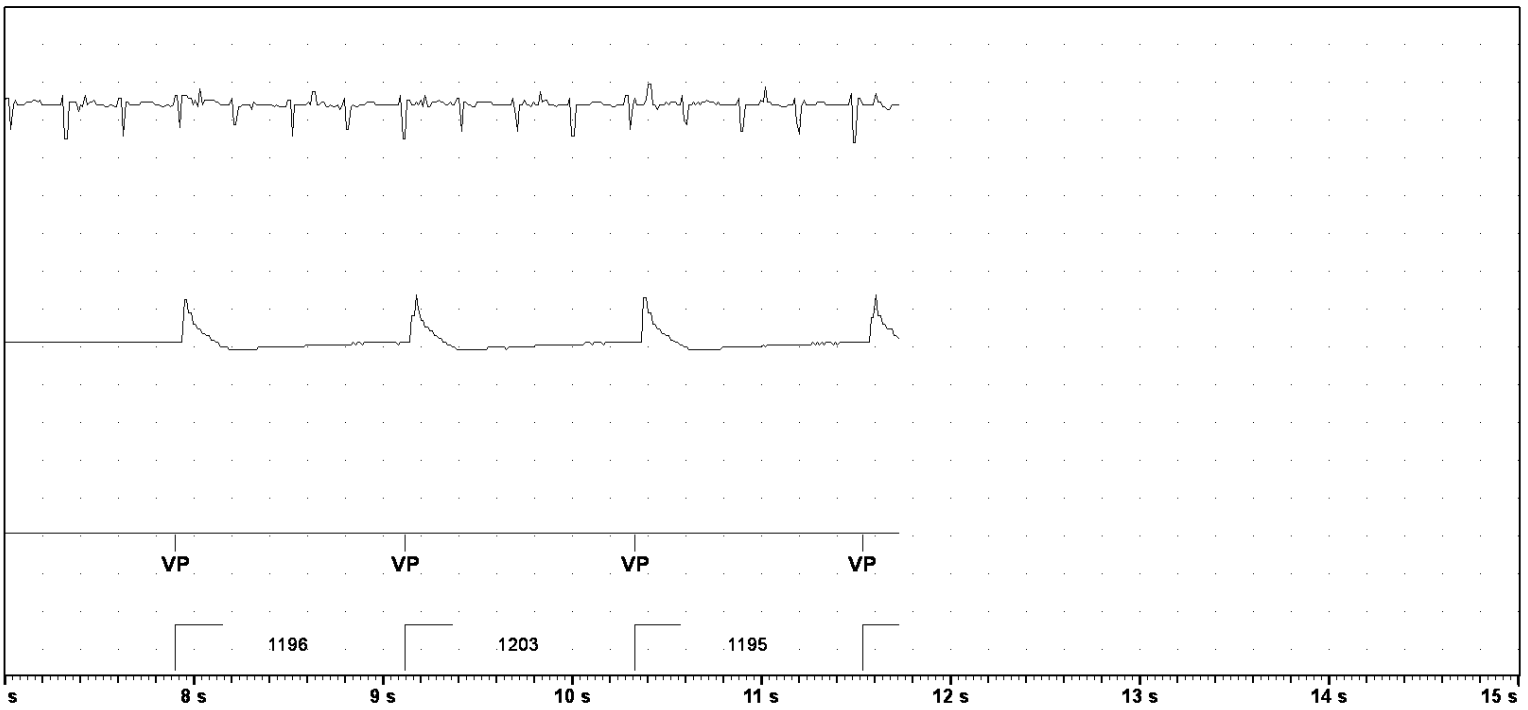
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:45 pm

Episode 2 of 4



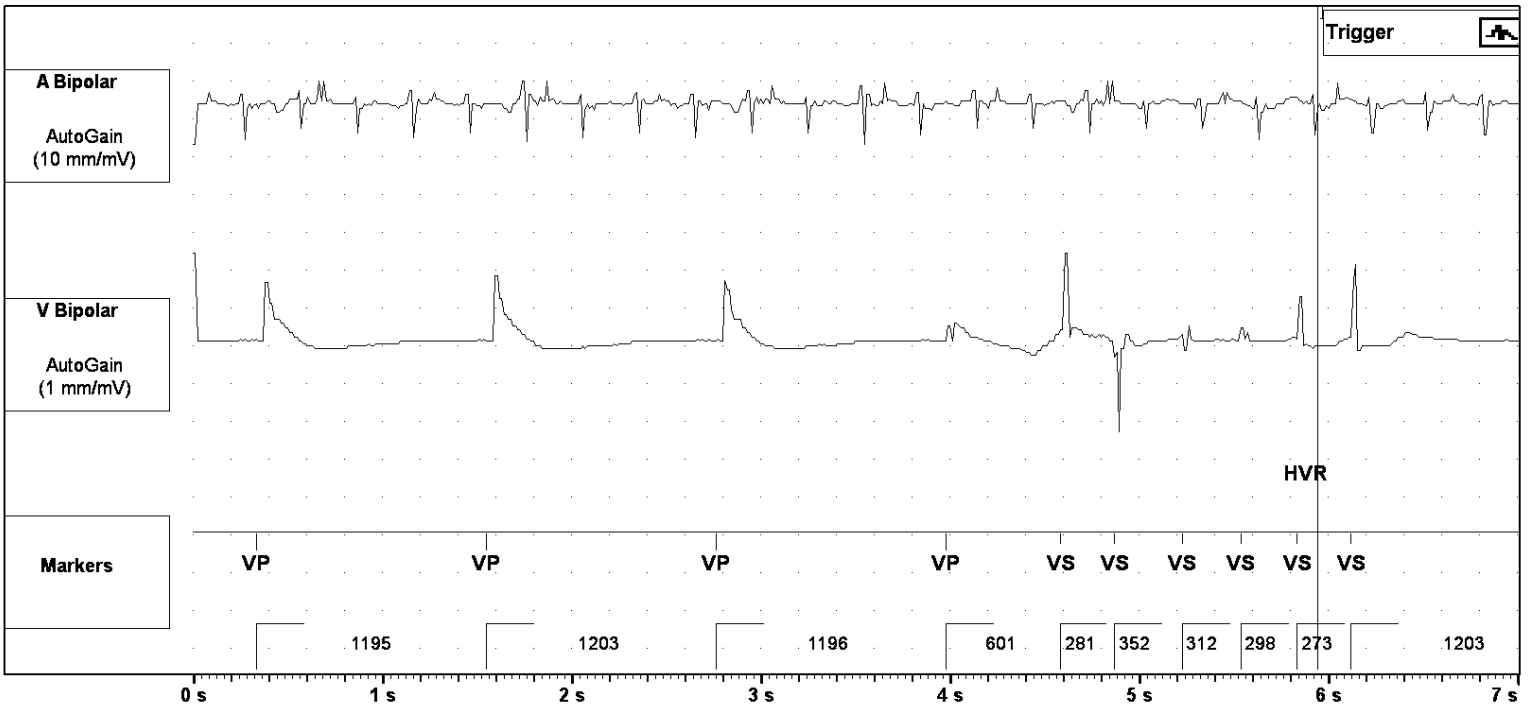
Sweep Speed: 25 mm/s

Episode

High Ventricular Rate May 25, 2022 8:41 pm

Episode 1 of 4

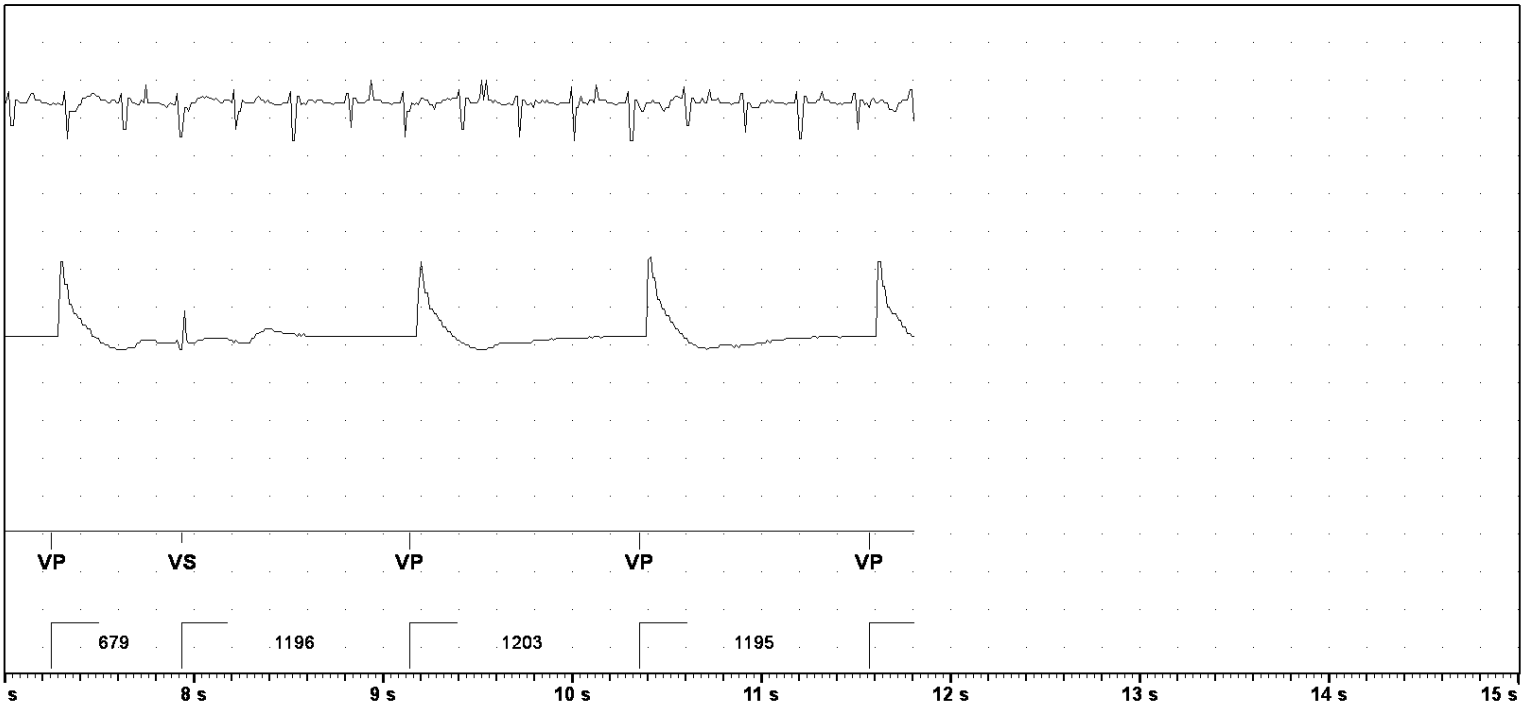
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:41 pm

Episode 1 of 4



Sweep Speed: 25 mm/s

Sustain™ XL DR PM2136 (#4543534 pr9.7)

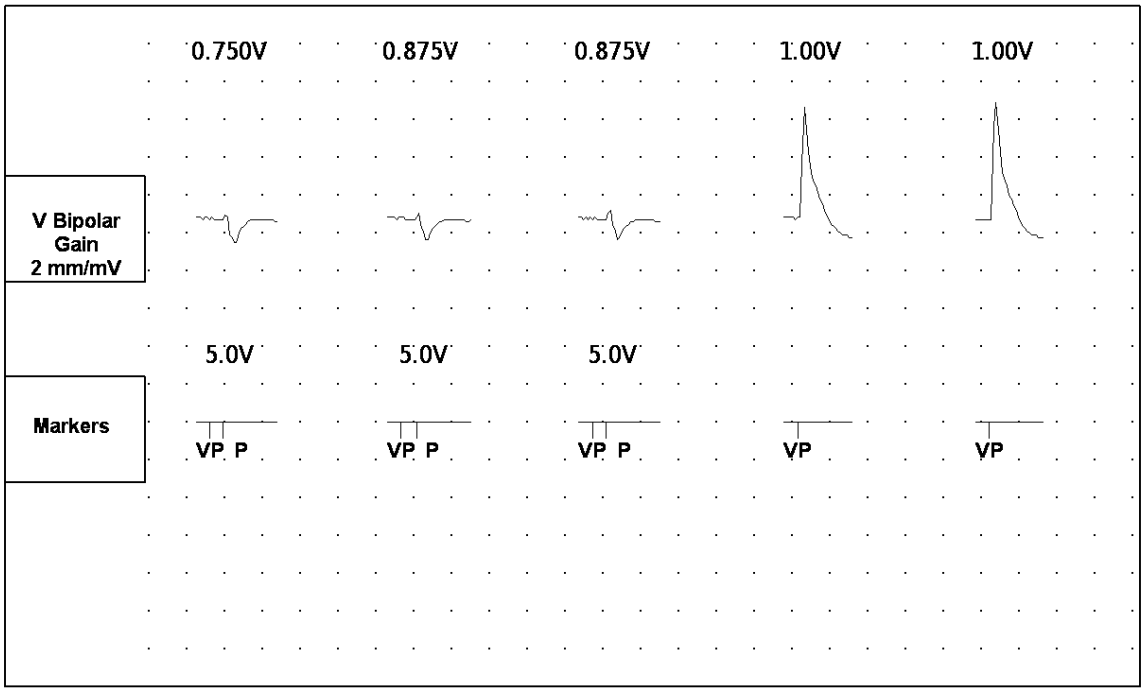
Ventricular Capture Test

Today: **1.0** V @ 0.4 ms(Uni) A

Last Session: 1.0 V @ 0.4 ms (Uni)

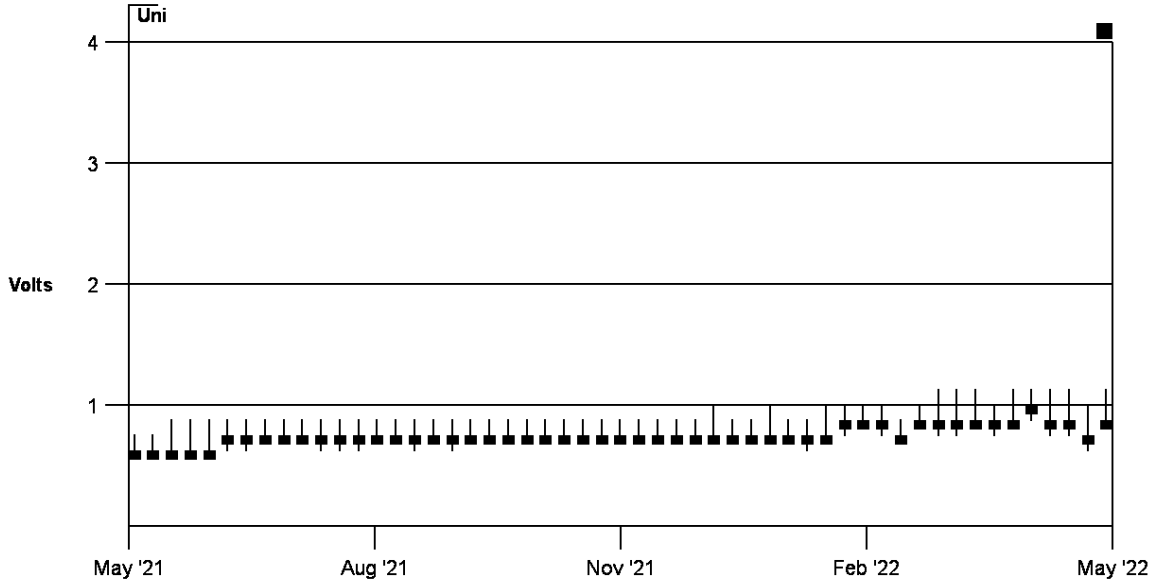
First Measurement(May 18, 2015) : 0.50 V @ 0.4ms (Uni)

Today (Sweep Speed: 25 mm/s)



V. AutoCapture Trend (weekly)

■ Out of range
P Pulse Width Change



Sustain™ XL DR PM2136 (#4543534 pr9.7)

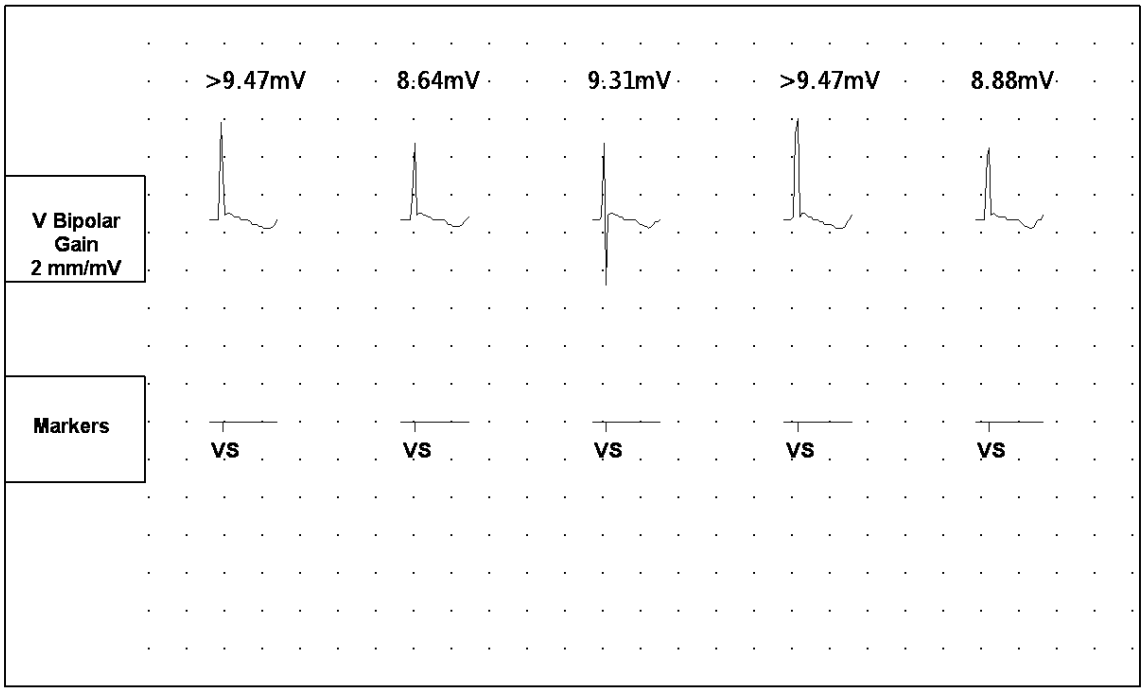
Ventricular Sense Test

May 25, 2022: **8.6 - > 9.4** mV (Bi) A

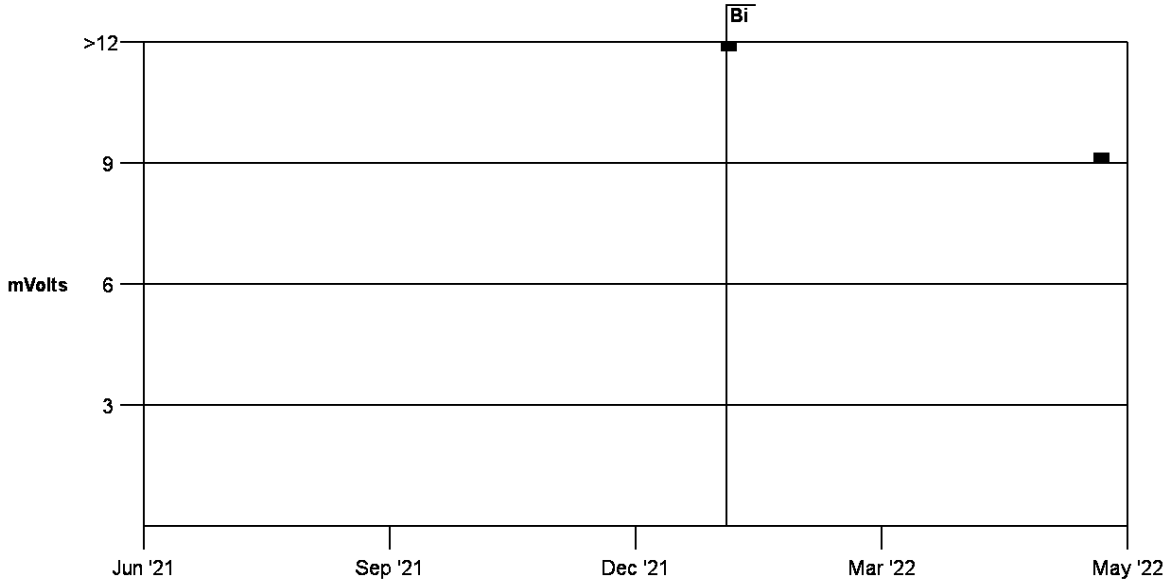
Safety Margin: 4.3 : 1 @ 2.0 mV

May 25, 2020 : > 12.0 mV (Bi)

May 25, 2022 5:50 am (Sweep Speed: 25 mm/s)



Ventricular Amplitude Trend (weekly)



Sustain™ XL DR PM2136 (#4543534 pr9.7)

Test Results

Battery

Voltage: **2.78** V

ERI (2.5 V)

Remaining Longevity	**2.25 - 3** years
Magnet Rate	**98.5** bpm
Current	**14** µA
Impedance	**2.2** kΩ

Sustain™ XL DR PM2136 (#4543534 pr9.7)

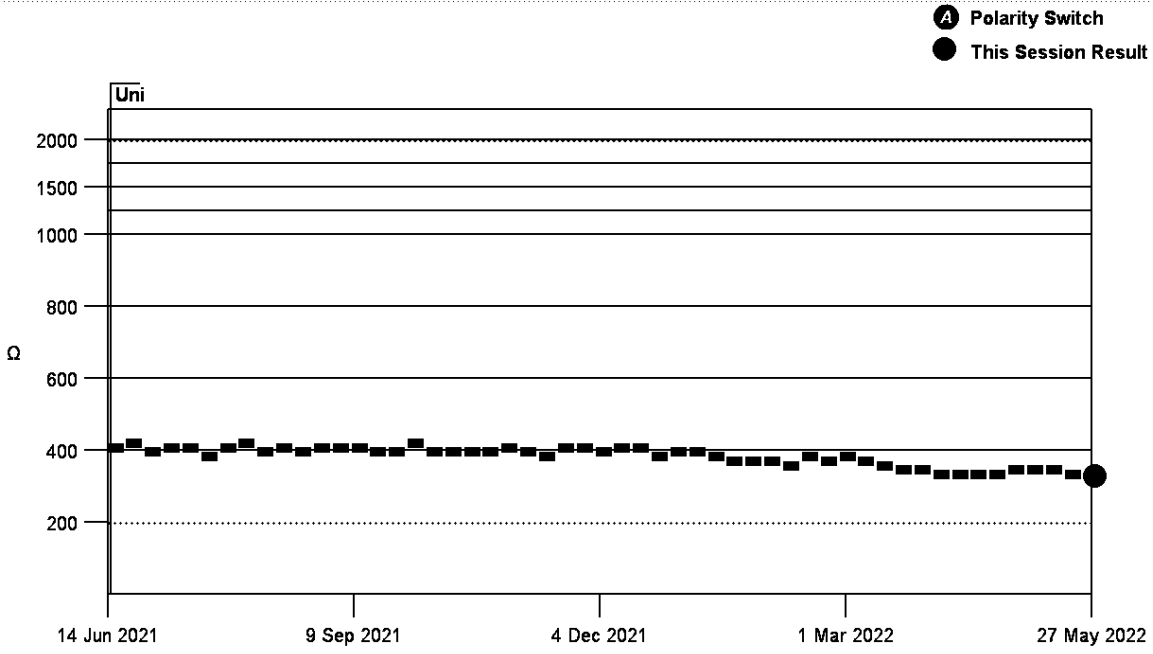
Ventricular Lead Impedance

Impedance: 329 Ω (Uni)

Last Session	**353** Ω (Uni)
First Measurement	**779** Ω (Bi)
Lifetime Range (Bi)	**558 - 845** Ω *
Lifetime Range (Uni)	**321 - 463** Ω *

*** Does not include in-clinic measurements**

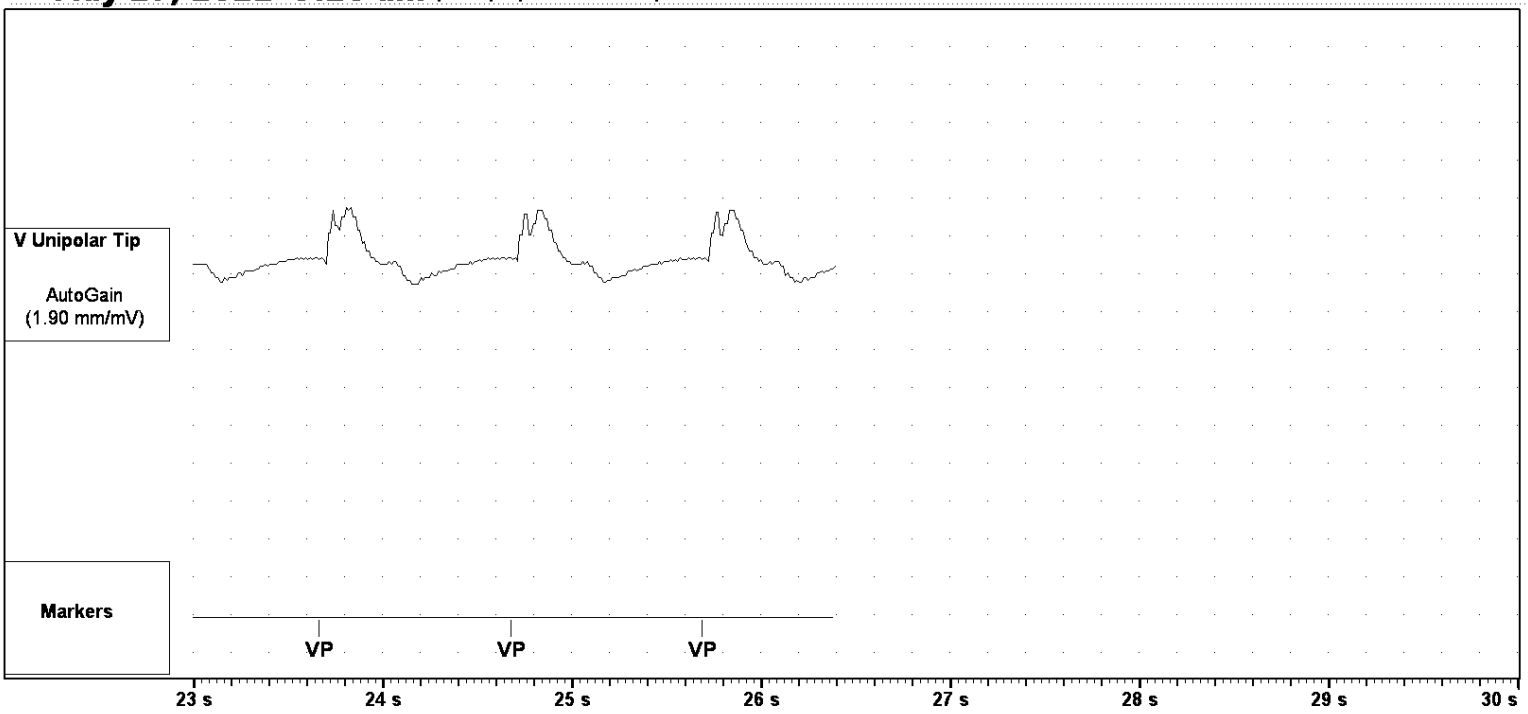
Lead Impedance Trend (weekly)



Sustain™ XL DR PM2136 (#4543534 pr9.7)

Freeze Capture

A May 27, 2022 9:26 am (Sweep Speed: 25 mm/s)



Key Parameters

Mode	**VVIR**	Max Sensor Rate	130 bpm	Rate Responsive Ventricular	Low
Base Rate	60 bpm	Hysteresis Rate	50 bpm		
Rest Rate	50 bpm	V. AutoCapture	On		

Sustain™ XL DR PM2136 (#4543534 pr9.7)

Wrap-up™ Overview

Battery

Voltage: **2.78** V

Remaining Longevity	**2.25 - 3** years
Magnet Rate	**98.5** bpm
Current	**14** µA
Impedance	**2.2** kΩ

Patient Data

Patient Name
Patient ID
Implant Date May 15, 2015
A LEAD: MODEL SN:
MANUFACT: DATE: / /
V LEAD: MODEL SN:
MANUFACT: DATE: / /
ADAPTOR:
OTHER:

Tests

	Ventricle
Capture	**1.0** V @ 0.4 ms (Uni) A
Sense	**8.6 - > 9.4** mV (Bi) A
Lead Impedance	**329** Ω (Uni) A

Programming Changes

Parameter	Initial	Present

No changes this session

Basic Operation

	Initial	Present
Mode	**VVIR**	
Magnet Response	Battery Test	
Sensor	On	
Threshold	Auto (+0.0)	
Measured Avg	2.6	
Slope	Auto (+2)	
Measured Auto	15	
Max Sensor Rate	130 bpm	
Reaction Time	Fast	
Recovery Time	Medium	

Rates

Base Rate	60 bpm
Rest Rate	50 bpm
Max Sensor Rate	130 bpm
Hysteresis Rate	50 bpm
Search Interval	Off
Cycle Count	1
Intervention Rate	Off

Refractories & Blanking

Ventricular Refractory	250 ms
Rate Resp. V. Refr.	Low
Shortest Ventricular Refractory	170 ms

Capture & Sense

	Atrium		Ventricle	
	Initial	Present	Initial	Present
ACap™ Confirm/V. AutoCapture	n/a		On	
Backup Pulse Configuration	n/a		Bipolar	
Search Frequency	n/a		8 Hours	
Pulse Amplitude			1.250 V A	
Pulse Width			0.4 ms	
Amplitude Monitoring			On	
Sensitivity			2.0 mV	

Leads

Lead Type	Uni/Bi	Uni/Bi
Pulse Configuration		Unipolar
Sense Configuration		Bipolar
Lead Monitoring		Monitor
Lower Limit		200 Ω
Upper Limit		2000 Ω

Stored EGM Configuration

	Initial	Present
Sampling Option	Freeze	
Number of Stored Episodes	4	
Channel	Dual	
A. EGM Configuration	A Bipolar	
A. EGM Recording Range	± 3.0 mV	
V. EGM Configuration	V Bipolar	
V. EGM Recording Range	± 15.0 mV	

Episode Triggers

High Ventricular Rate Trigger	150 bpm	
Consecutive Cycles	5	
Magnet Placement Trigger	Off	

Sustain™ XL DR PM2136 (#4543534 pr9.7)

Wrap-up™ Overview

Battery

Voltage: **2.78** V

Remaining Longevity	**2.25 - 3** years
Magnet Rate	**98.5** bpm
Current	**14** µA
Impedance	**2.2** kΩ

Patient Data

Patient Name
Patient ID
Implant Date May 15, 2015
A LEAD: MODEL SN:
MANUFACT: DATE: / /
V LEAD: MODEL SN:
MANUFACT: DATE: / /
ADAPTOR:
OTHER:

Tests

	Ventricle
Capture	**1.0** V @ 0.4 ms (Uni) A
Sense	**8.6 - > 9.4** mV (Bi) A
Lead Impedance	**329** Ω (Uni) A

Programming Changes

Parameter	Initial	Present

No changes this session

Basic Operation

	Initial	Present
Mode	**VVIR**	
Magnet Response	Battery Test	
Sensor	On	
Threshold	Auto (+0.0)	
Measured Avg	2.6	
Slope	Auto (+2)	
Measured Auto	15	
Max Sensor Rate	130 bpm	
Reaction Time	Fast	
Recovery Time	Medium	

Rates

Base Rate	60 bpm
Rest Rate	50 bpm
Max Sensor Rate	130 bpm
Hysteresis Rate	50 bpm
Search Interval	Off
Cycle Count	1
Intervention Rate	Off

Refractories & Blanking

Ventricular Refractory	250 ms
Rate Resp. V. Refr.	Low
Shortest Ventricular Refractory	170 ms

Capture & Sense

	Atrium		Ventricle	
	Initial	Present	Initial	Present
ACap™ Confirm/V. AutoCapture	n/a		On	
Backup Pulse Configuration	n/a		Bipolar	
Search Frequency	n/a		8 Hours	
Pulse Amplitude			1.250 V A	
Pulse Width			0.4 ms	
Amplitude Monitoring			On	
Sensitivity			2.0 mV	

Leads

Lead Type	Uni/Bi	Uni/Bi
Pulse Configuration		Unipolar
Sense Configuration		Bipolar
Lead Monitoring		Monitor
Lower Limit		200 Ω
Upper Limit		2000 Ω

Stored EGM Configuration

	Initial	Present
Sampling Option	Freeze	
Number of Stored Episodes	4	
Channel	Dual	
A. EGM Configuration	A Bipolar	
A. EGM Recording Range	± 3.0 mV	
V. EGM Configuration	V Bipolar	
V. EGM Recording Range	± 15.0 mV	

Episode Triggers

High Ventricular Rate Trigger	150 bpm	
Consecutive Cycles	5	
Magnet Placement Trigger	Off	

Note:

2 Alerts

Atrial Lead Impedance Out of range
High Ventricular Rate Detected

Battery

Voltage: **2.78** V

ERI (2.5 V)

Remaining Longevity:
2.25 - 3 years

Magnet Rate
98.5 bpm
Current
14 µA

Impedance
2.2 kΩ

Data from last read

Test Results (Last Session: Apr 8, 2022)

	Atrium	Ventricle
Capture	Today: **2.00** V @ 0.5 ms (Bi) Apr 24, 2017: 3.75 V @ 0.5 ms (Bi)	Today: **1.0** V @ 0.4 ms (Uni) A
Sense	Today: **Not Performed** Apr 16, 2018: 0.4 - 0.5 mV (Bi)	May 25: **Not Performed** A
Lead Impedance	Today: **Not Performed** A No trend data	Today: **329** Ω (Uni) A

Initial Parameters

Diagnostics Read

Basic Operation

Mode	**VVIR**	Sensor	On
Magnet Response	Battery Test	Threshold	Auto (+0.0)
		Measured Avg	2.6
		Slope	Auto (+2)
		Measured Auto	15
		Max Sensor Rate	130 bpm
		Reaction Time	Fast
		Recovery Time	Medium

Rates

Base Rate	60 bpm	Hysteresis Rate	50 bpm
Rest Rate	50 bpm	Search Interval	Off
Max Sensor Rate	130 bpm	Cycle Count	1
		Intervention Rate	Off

Refractories & Blanking

Ventricular Refractory	250 ms
Rate Resp. V. Refr.	Low
Shortest PVARP/VREF	170 ms

Current Parameters

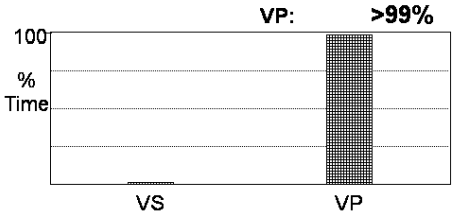
Mode	**DDDR**
Base Rate	60 bpm
Max Track Rate	130 bpm
Paced/Sensed AV Delay	225/200 ms

	A	V
Pulse Amplitude (V)	5.00	1.250 A
Pulse Width (ms)	0.8	0.4
Sensitivity (mV)	0.2	2.0

Episodes

New EGMs	**4**
Total Episodes	**4**

Events



Capture & Sense

	A	V
V. AutoCapture	n/a	On
Backup Pulse Config		Bipolar
Search Frequency		8 Hours
Pulse Amplitude		1.250 A
Pulse Width		0.4 ms
Amplitude Monitoring		On
Sensitivity		2.0

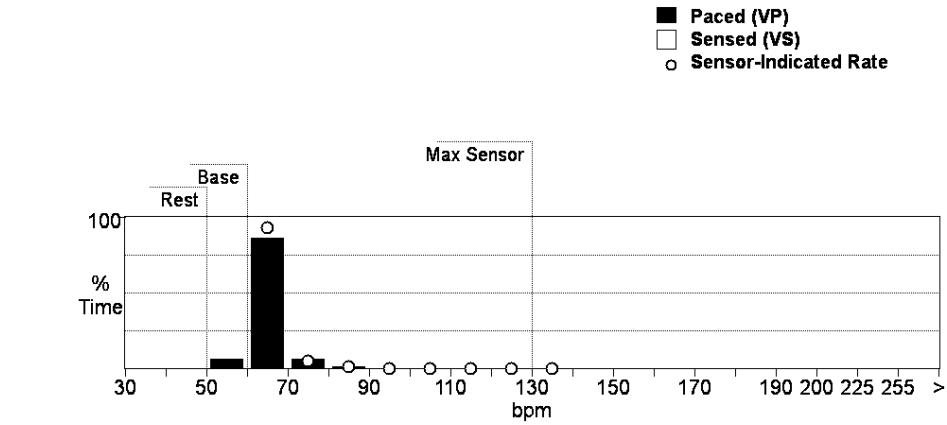
Leads

	A	V
Lead Type	Uni/Bi	Uni/Bi
Pulse Config		Unipolar
Sense Config		Bipolar
Lead Monitoring		Monitor
Lower Limit		200 Ω
Upper Limit		2000 Ω

Patient Data

Patient Name
Patient ID
Implant Date May 15, 2015
A LEAD: MODEL SN:
MANUFACT: DATE: / /
V LEAD: MODEL SN:
MANUFACT: DATE: / /
ADAPTOR:
OTHER:

Heart Rate Histogram



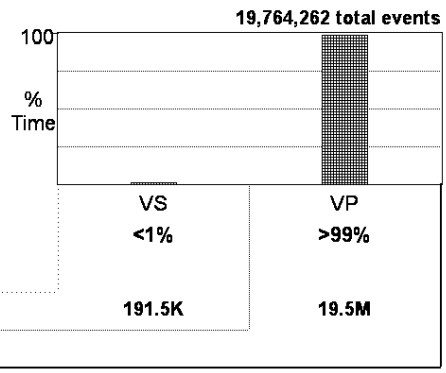
VS %	0	0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	0
VP %	0	<1	5.5	86	5.5	1.4	<1	<1	<1	<1	0	0	0	0	0	0	0	0	0
Total %	0	<1	5.5	86	5.6	1.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0	0	0
Sensor				93	5.2	1.3	<1	<1	<1	<1	0								

>225d 3h 35m 54s Sampled since (Frozen)*

*Sensor-Indicated Rate (Frozen)

Events

VP Counts **>99%**



>225d 3h 35m 54s Sampled since (Frozen)

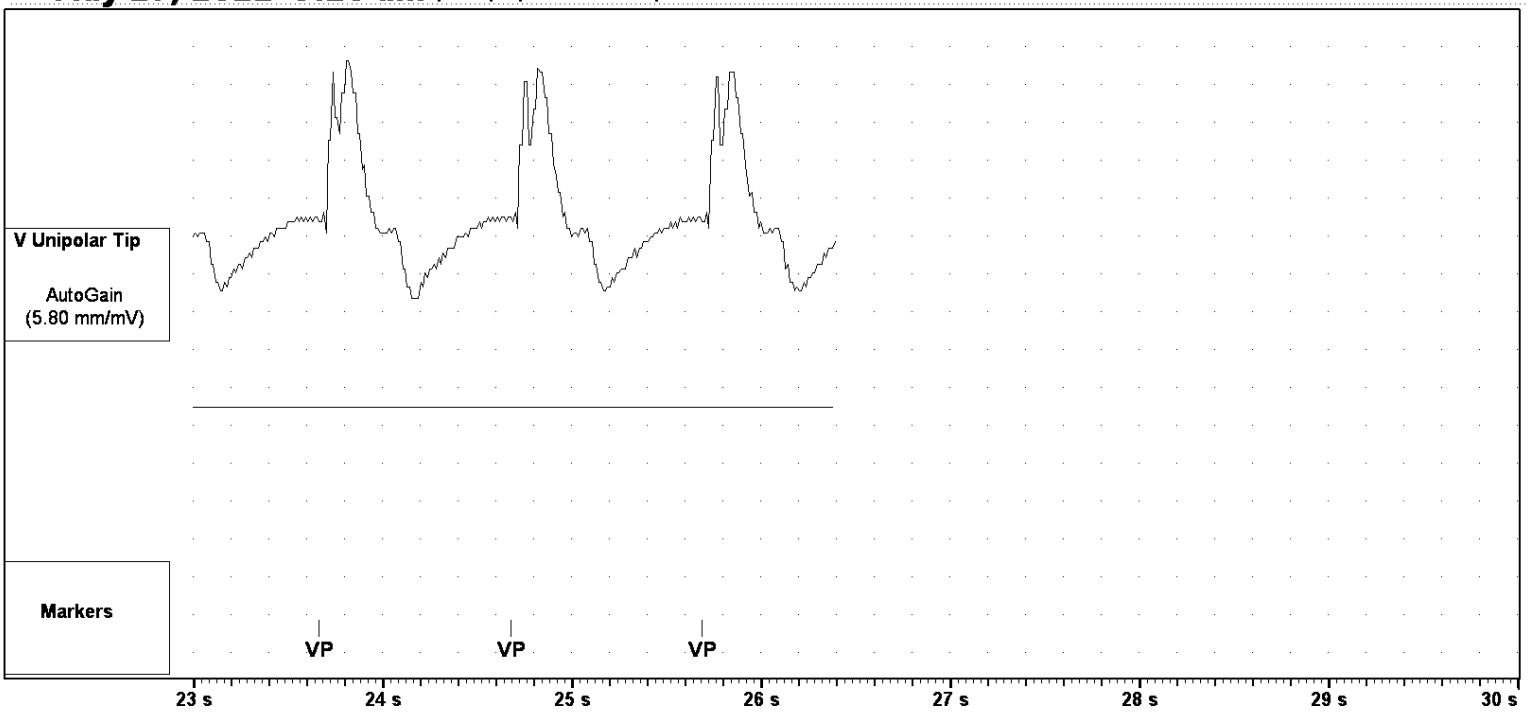
AMS Summary

AMS Histograms are not supported in VVIR Mode.

Sustain™ XL DR PM2136 (#4543534 pr9.7)

Freeze Capture

A May 27, 2022 9:26 am (Sweep Speed: 25 mm/s)



Key Parameters

Mode	**VVIR**	Max Sensor Rate	130 bpm	Rate Responsive Ventricular	Low
Base Rate	60 bpm	Hysteresis Rate	50 bpm		
Rest Rate	50 bpm	V. AutoCapture	On		

A **(Sweep Speed: 0 mm/s)**

Key Parameters

Mode	**VVIR**	Max Sensor Rate	130 bpm	Rate Responsive Ventricular	Low
Base Rate	60 bpm	Hysteresis Rate	50 bpm		
Rest Rate	50 bpm	V. AutoCapture	On		

Trigger Counts

Trigger	Count	EGMs
High Ventricular Rate	4	4
150 bpm		
5 consecutive cycles		

Episode Directory

Date	Time	Type
⚠ May 25, 2022	8:57pm	High Ventricular Rate
⚠ May 25, 2022	8:47pm	High Ventricular Rate
⚠ May 25, 2022	8:45pm	High Ventricular Rate
⚠ May 25, 2022	8:41pm	High Ventricular Rate

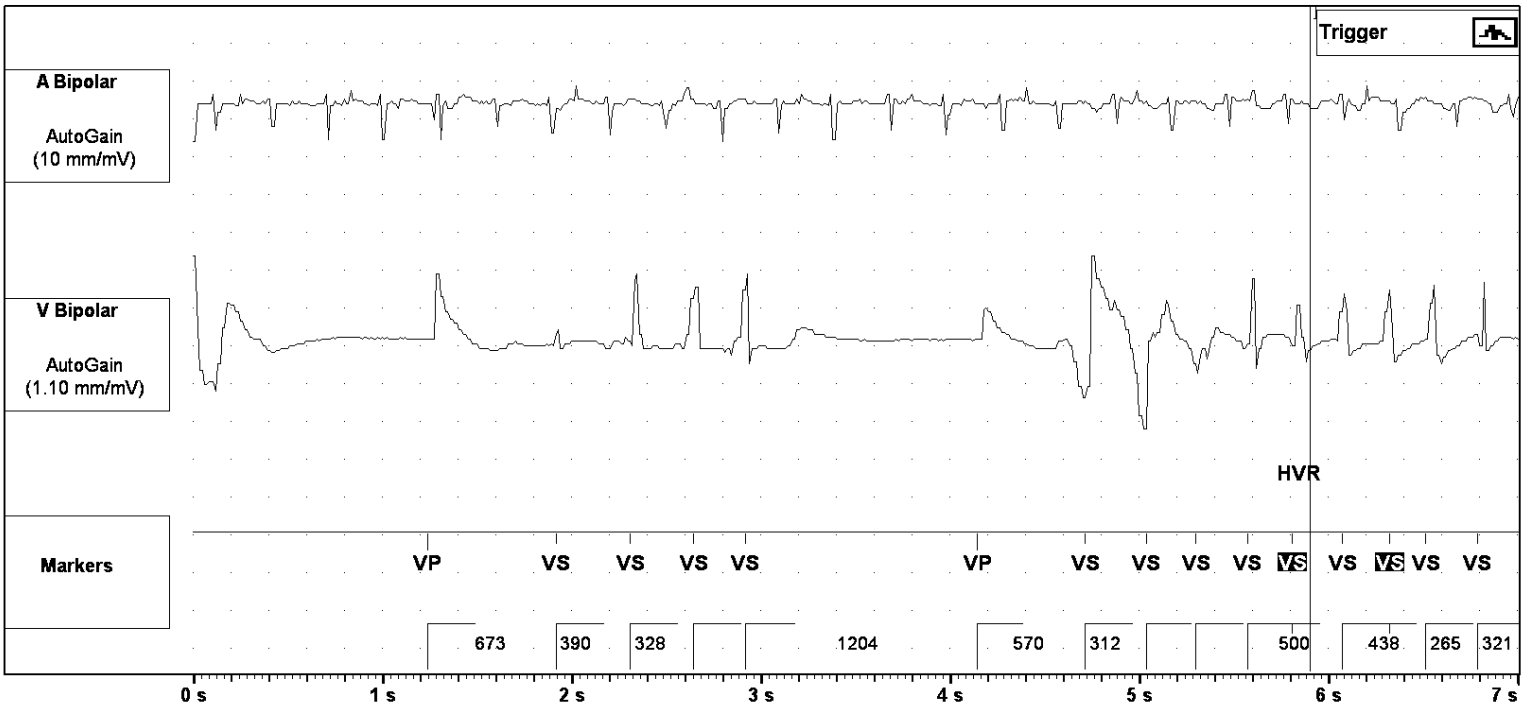
Stored EGM Configuration

Sampling Option	Freeze
Number of Stored Episodes	4
Channel	Dual
A. EGM Configuration	A Bipolar
A. EGM Recording Range	± 3.0 mV
V. EGM Configuration	V Bipolar
V. EGM Recording Range	± 15.0 mV
EGM Configuration	n/a
EGM Recording Range	n/a

High Ventricular Rate May 25, 2022 8:57 pm

Mode VVIR

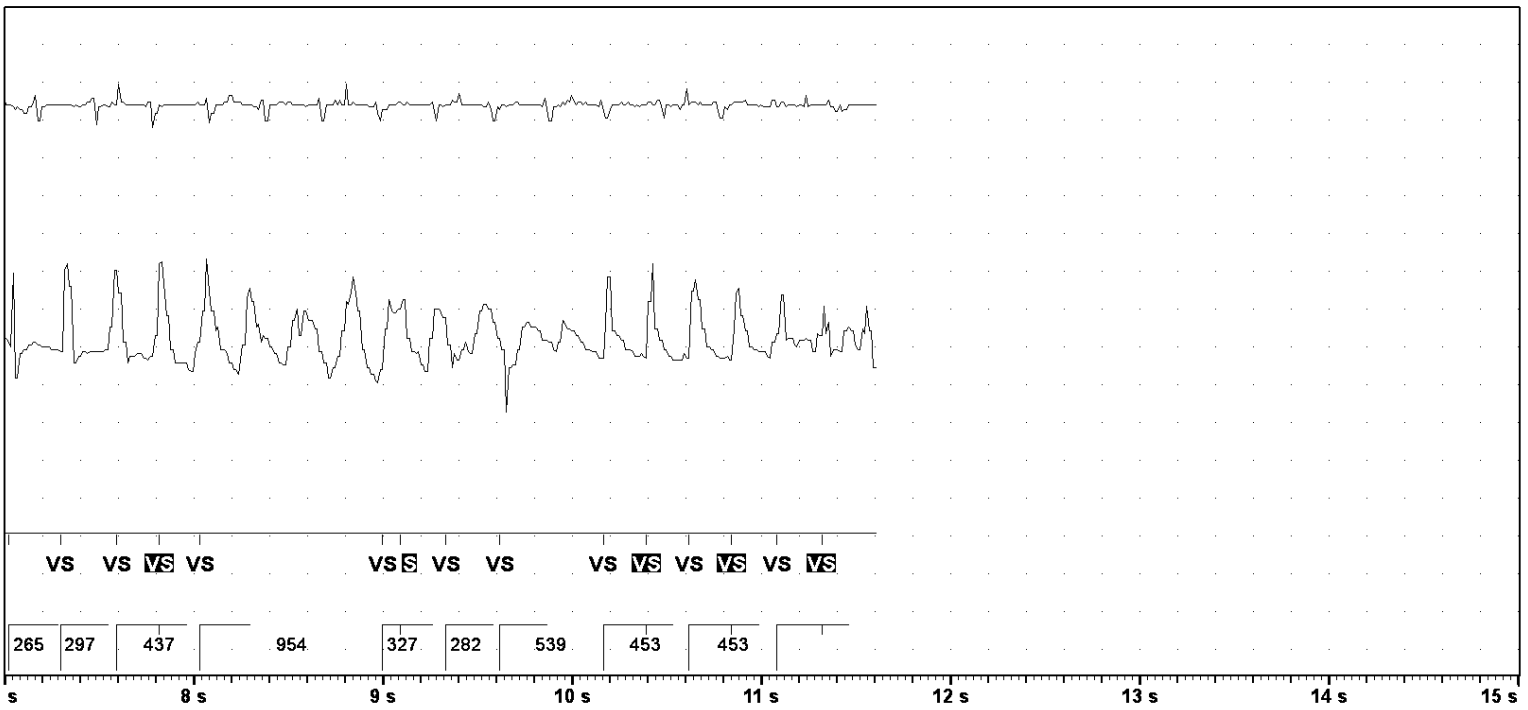
Episode 4 of 4



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:57 pm

Episode 4 of 4

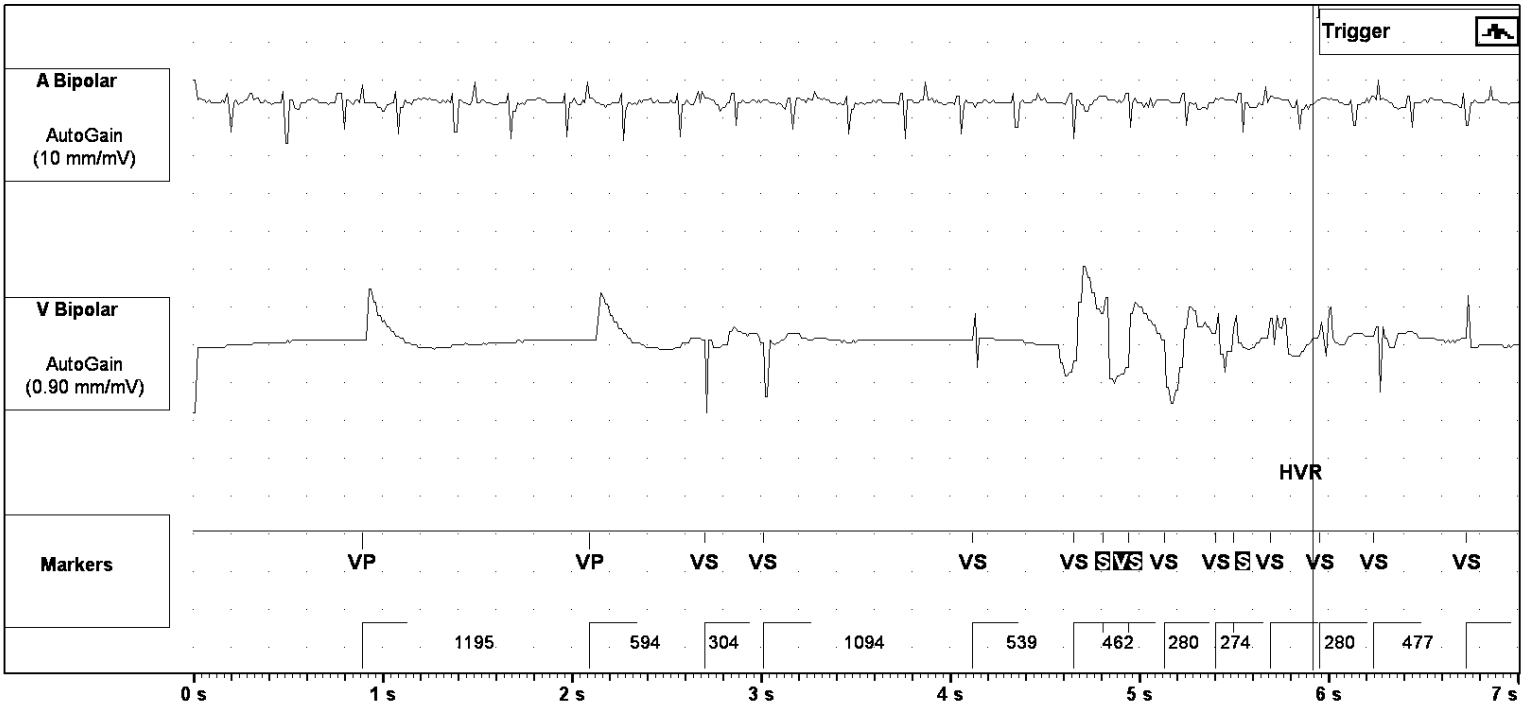


Sweep Speed: 25 mm/s

High Ventricular Rate May 25, 2022 8:47 pm

Episode 3 of 4

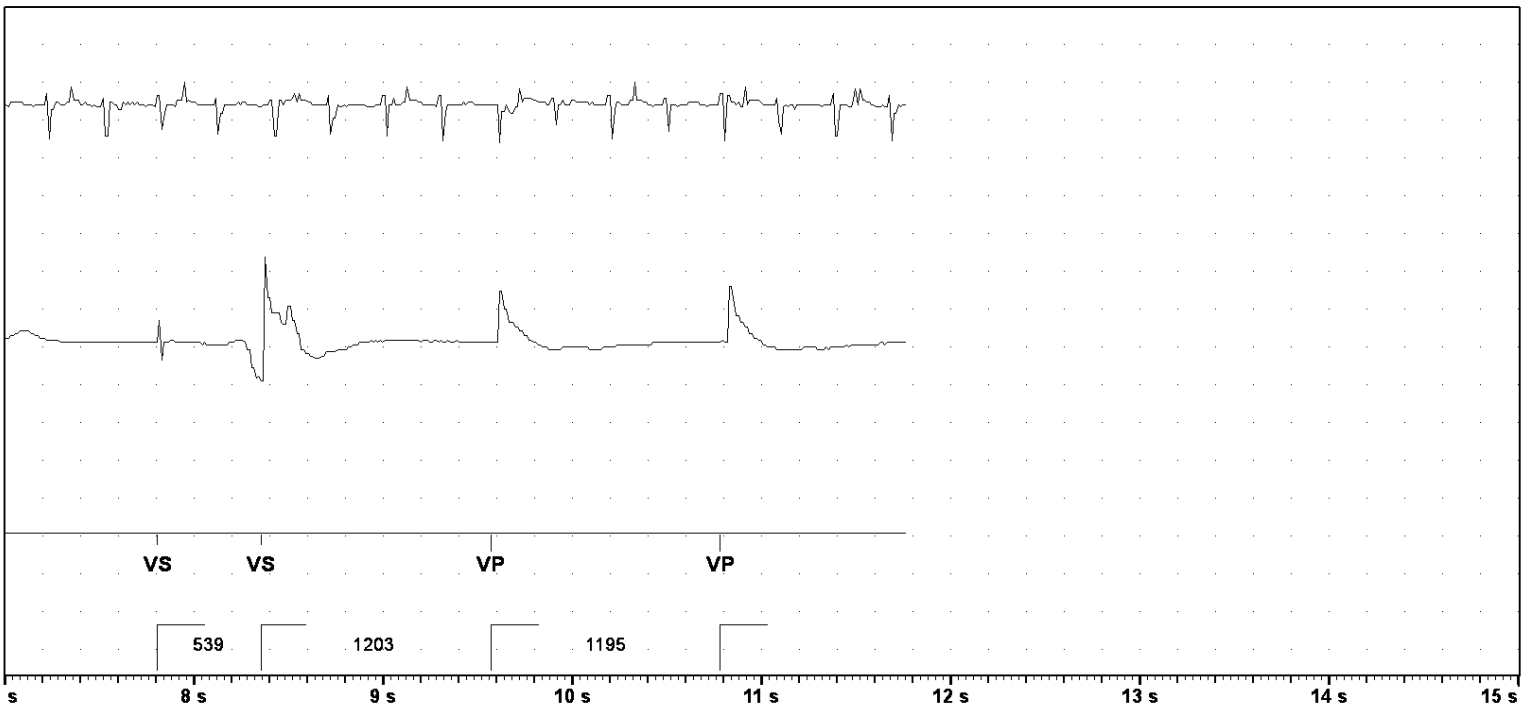
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:47 pm

Episode 3 of 4

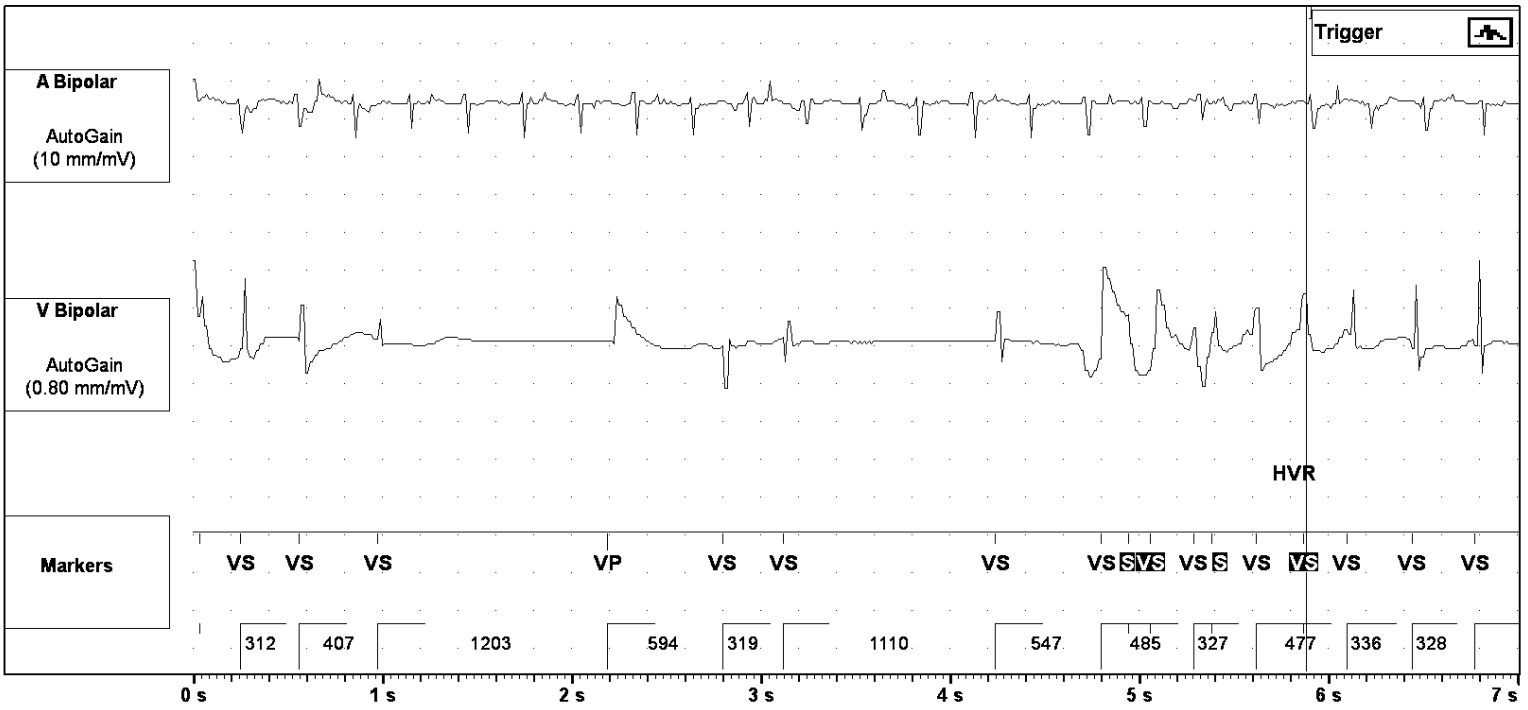


Sweep Speed: 25 mm/s

High Ventricular Rate May 25, 2022 8:45 pm

Episode 2 of 4

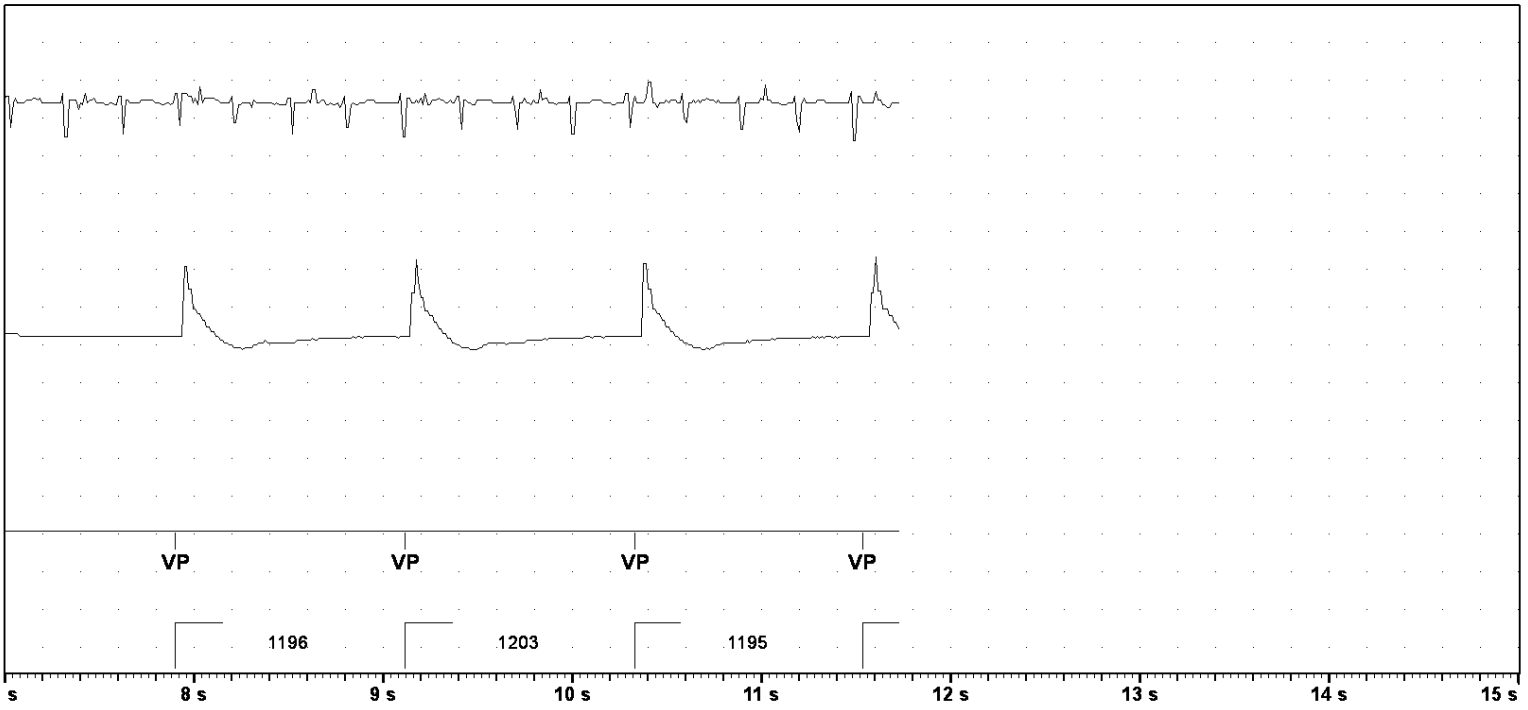
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:45 pm

Episode 2 of 4

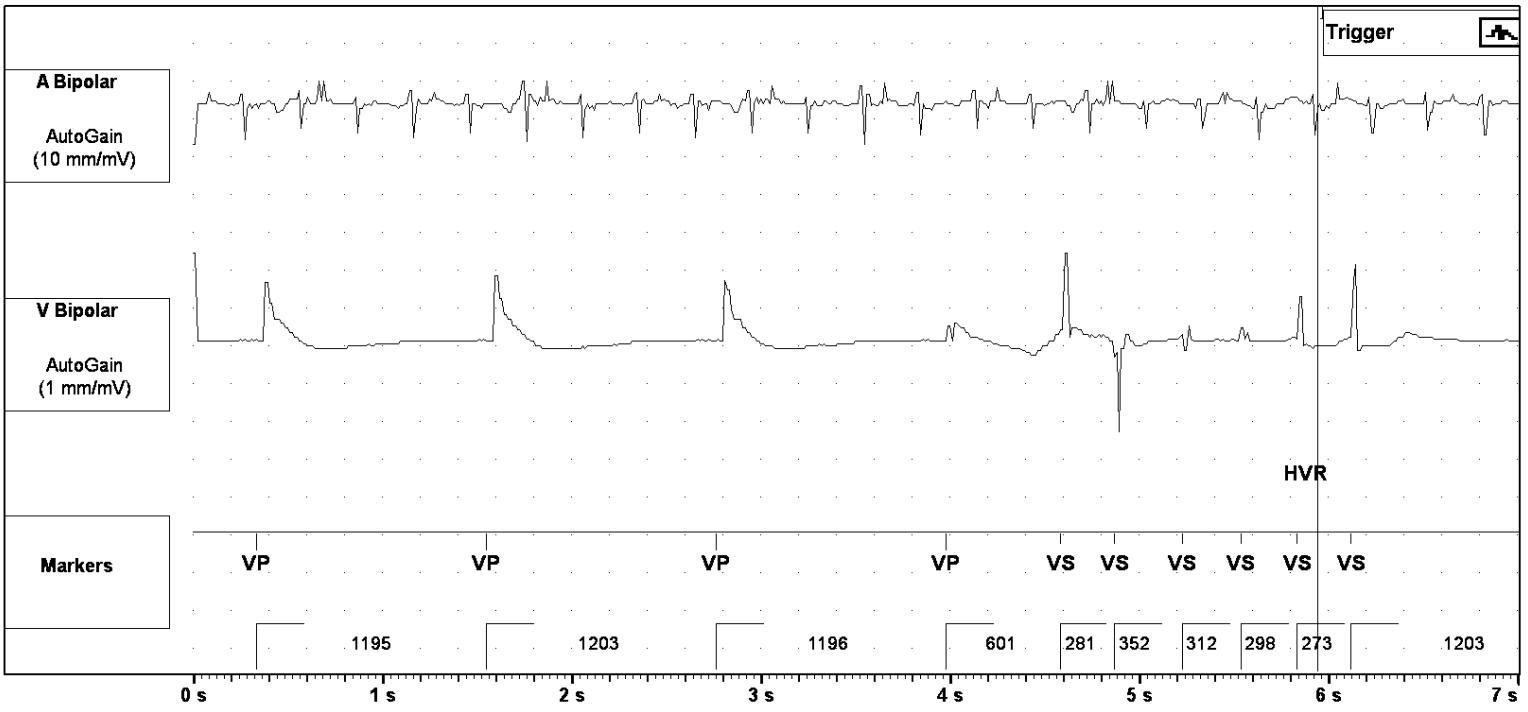


Sweep Speed: 25 mm/s

High Ventricular Rate May 25, 2022 8:41 pm

Episode 1 of 4

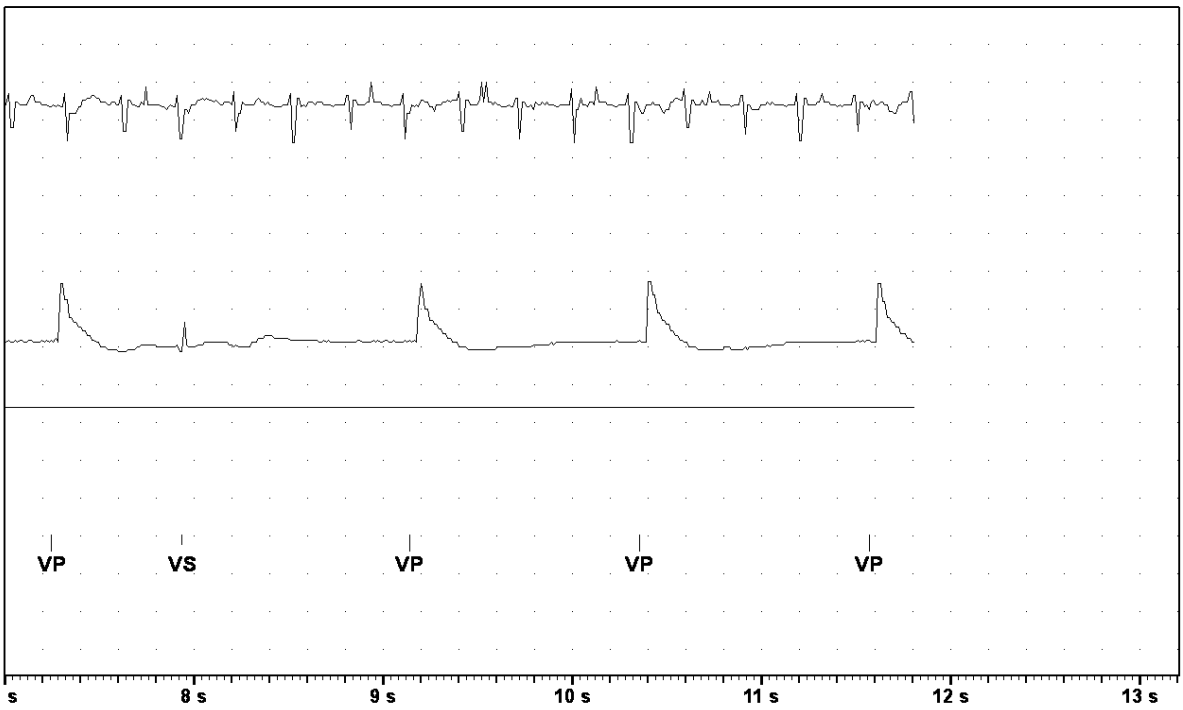
Mode VVIR



Sweep Speed: 25 mm/s

(Continued) High Ventricular Rate May 25, 2022 8:41 pm

Episode 1 of 4



Sweep Speed: 25 mm/s

Sustain™ XL DR PM2136 (#4543534 pr9.7)

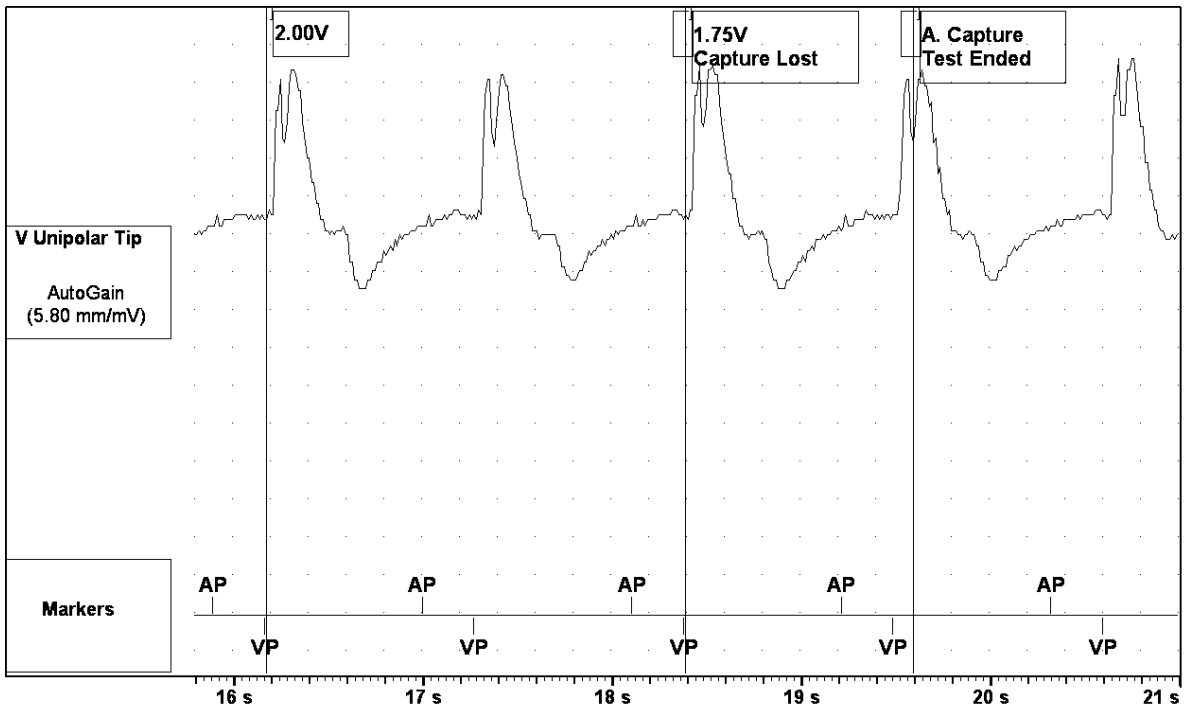
Atrial Capture Test

This Session: **2.00** V @ 0.5 ms(Bi)

Safety Margin: 2.5 : 1 @ 5.00 V

Apr 24, 2017 : 3.75 V @ 0.5 ms (Bi)

May 27, 2022 9:31 am (Sweep Speed: 25 mm/s)



Sustain™ XL DR PM2136 (#4543534 pr9.7)

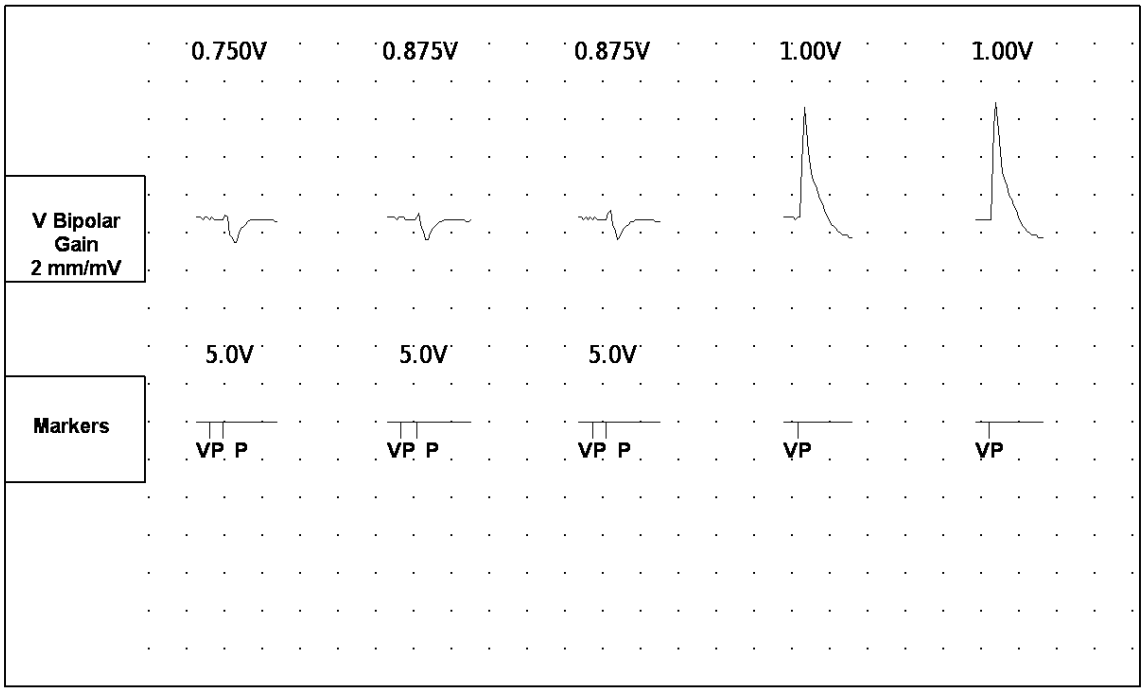
Ventricular Capture Test

Today: **1.0** V @ 0.4 ms(Uni) A

Last Session: 1.0 V @ 0.4 ms (Uni)

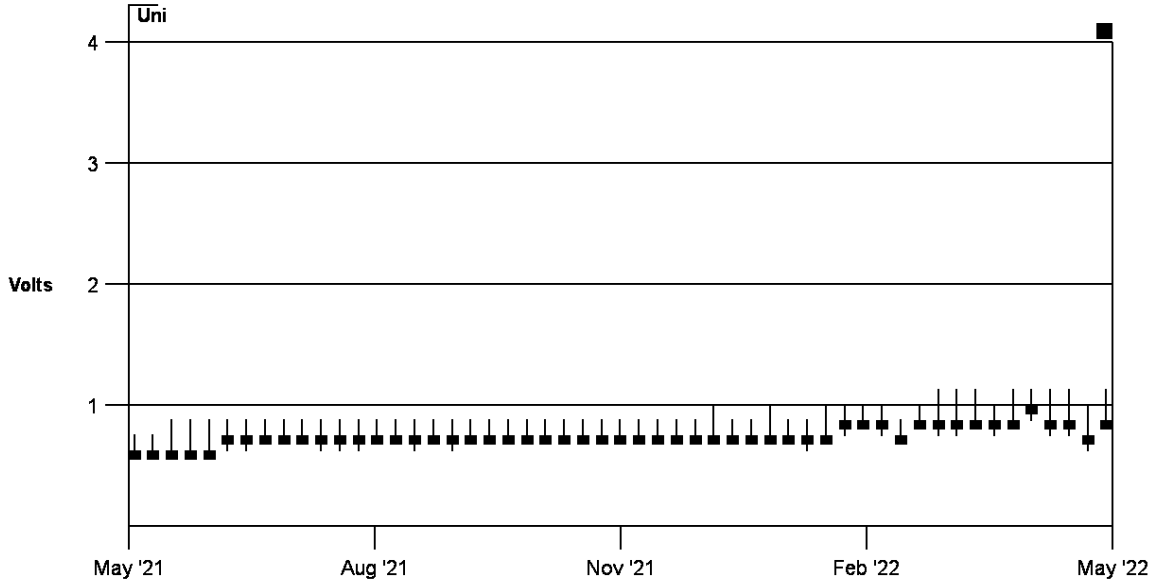
First Measurement(May 18, 2015) : 0.50 V @ 0.4ms (Uni)

Today (Sweep Speed: 25 mm/s)



V. AutoCapture Trend (weekly)

■ Out of range
P Pulse Width Change



Sustain™ XL DR PM2136 (#4543534 pr9.7)

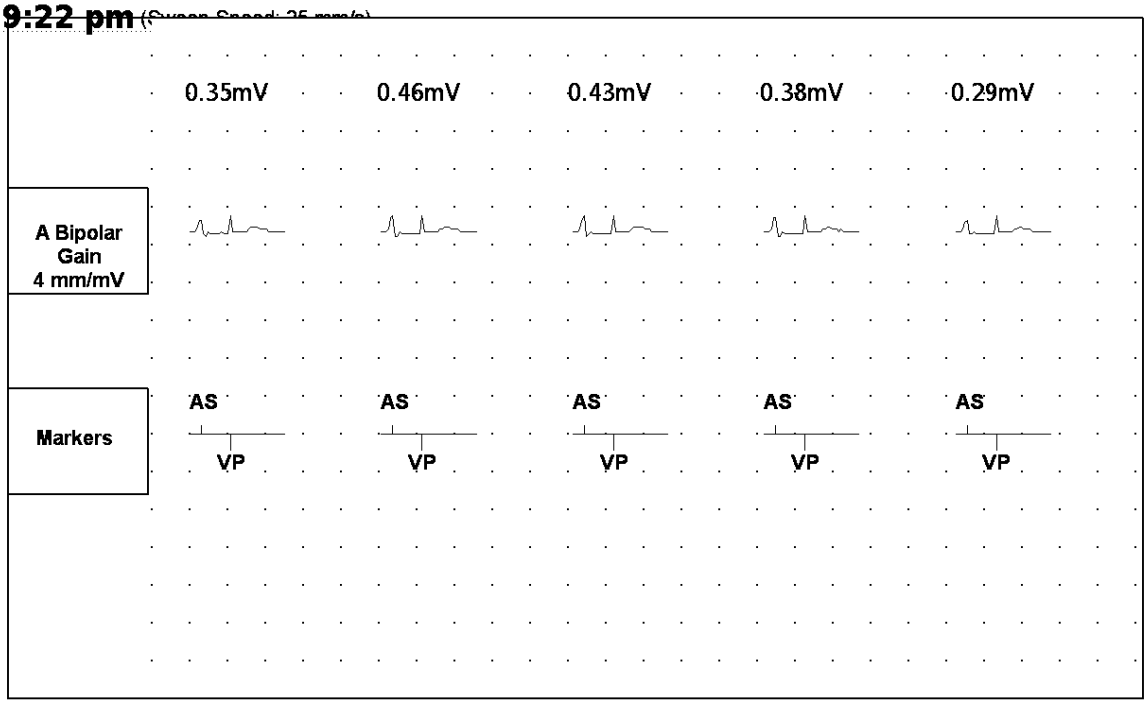
Atrial Sense Test

Jun 28, 2015: **0.2 - 0.4** mV (Bi) A

Safety Margin: 2.4 : 1 @ 0.2 mV

Apr 16, 2018 : 0.4-0.5 mV (Bi)

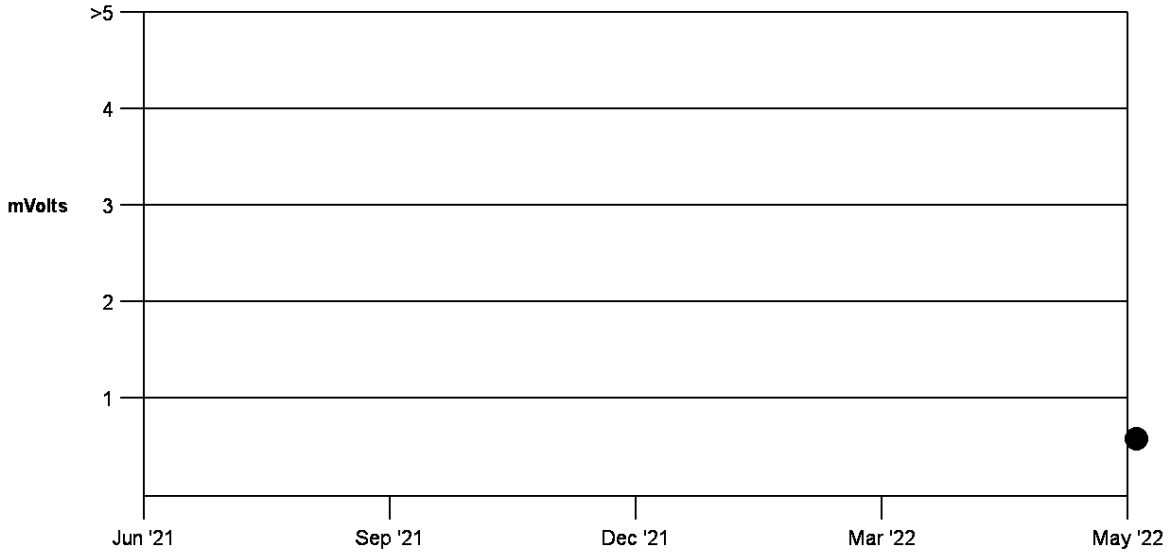
Jun 28, 2015 9:22 pm (Sweep Speed: 25 mm/s)



Atrial Amplitude Trend (weekly)

This Session Result

No trend data



Sustain™ XL DR PM2136 (#4543534 pr9.7)

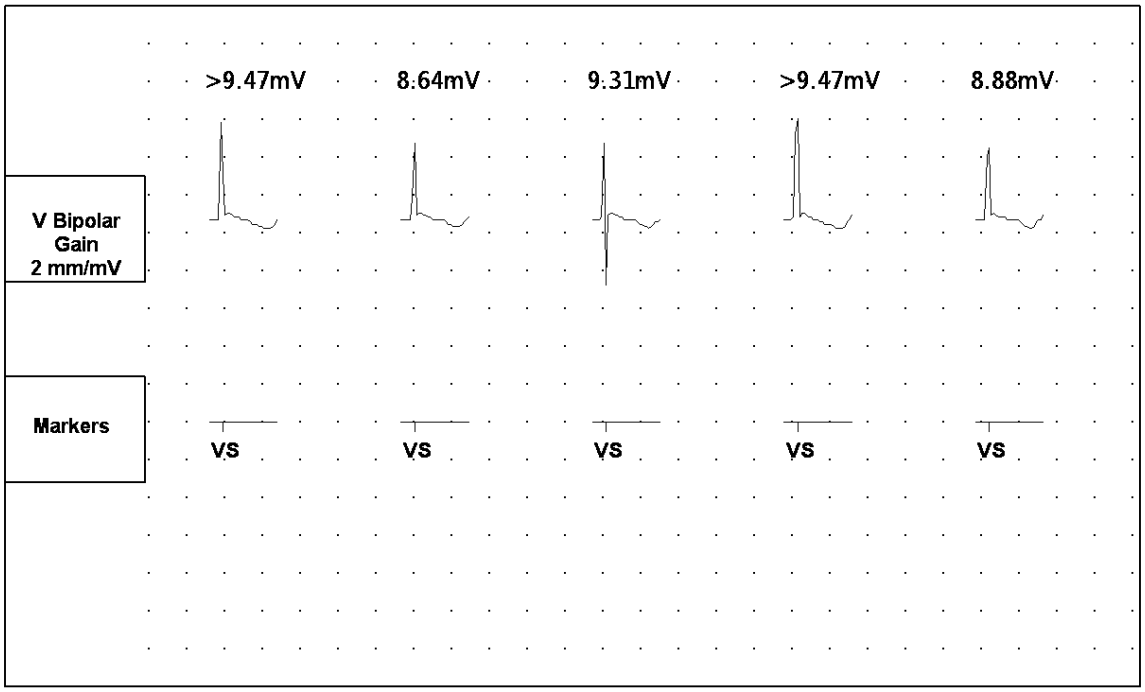
Ventricular Sense Test

May 25, 2022: **8.6 - > 9.4** mV (Bi) A

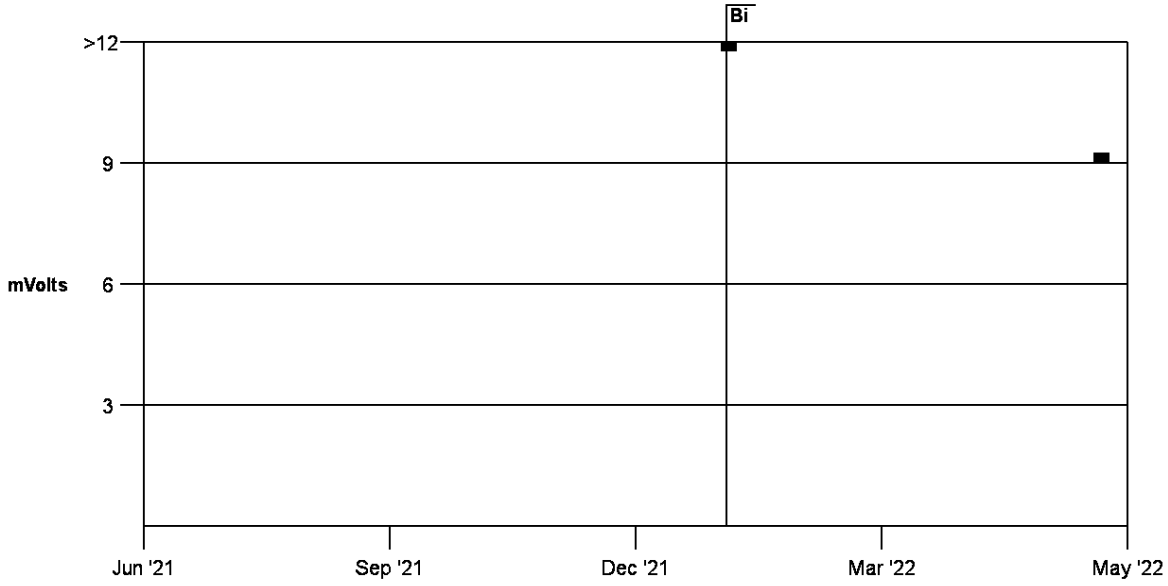
Safety Margin: 4.3 : 1 @ 2.0 mV

May 25, 2020 : > 12.0 mV (Bi)

May 25, 2022 5:56 am (Sweep Speed: 25 mm/s)



Ventricular Amplitude Trend (weekly)



Sustain™ XL DR PM2136 (#4543534 pr9.7)

Test Results

Battery

Voltage: **2.78** V

ERI (2.5 V)

Remaining Longevity	**2.25 - 3** years
Magnet Rate	**98.5** bpm
Current	**14** µA
Impedance	**2.2** kΩ

Data from last read

Sustain™ XL DR PM2136 (#4543534 pr9.7)

Atrial Lead Impedance

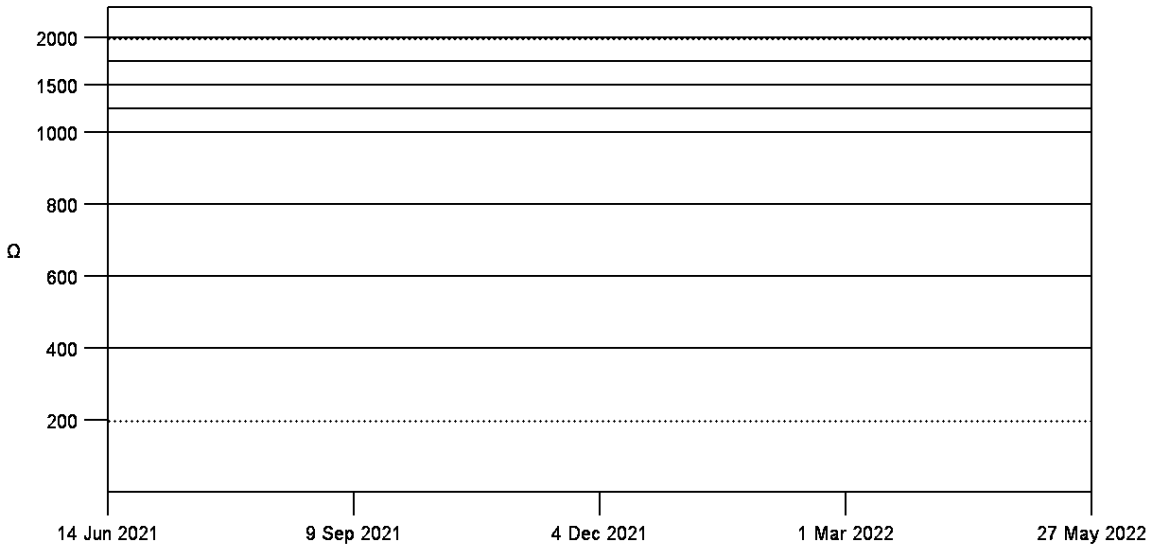
Impedance: Ω (Uni)	
Last Session	**No previous results**
First Measurement	**532** Ω (Bi)
Lifetime Range (Bi)	**400 - 769** Ω *
Lifetime Range (Uni)	**No Measurement** *

*** Does not include in-clinic measurements**

Lead Impedance Trend (weekly)

Ⓐ **Polarity Switch**

No trend data



Sustain™ XL DR PM2136 (#4543534 pr9.7)

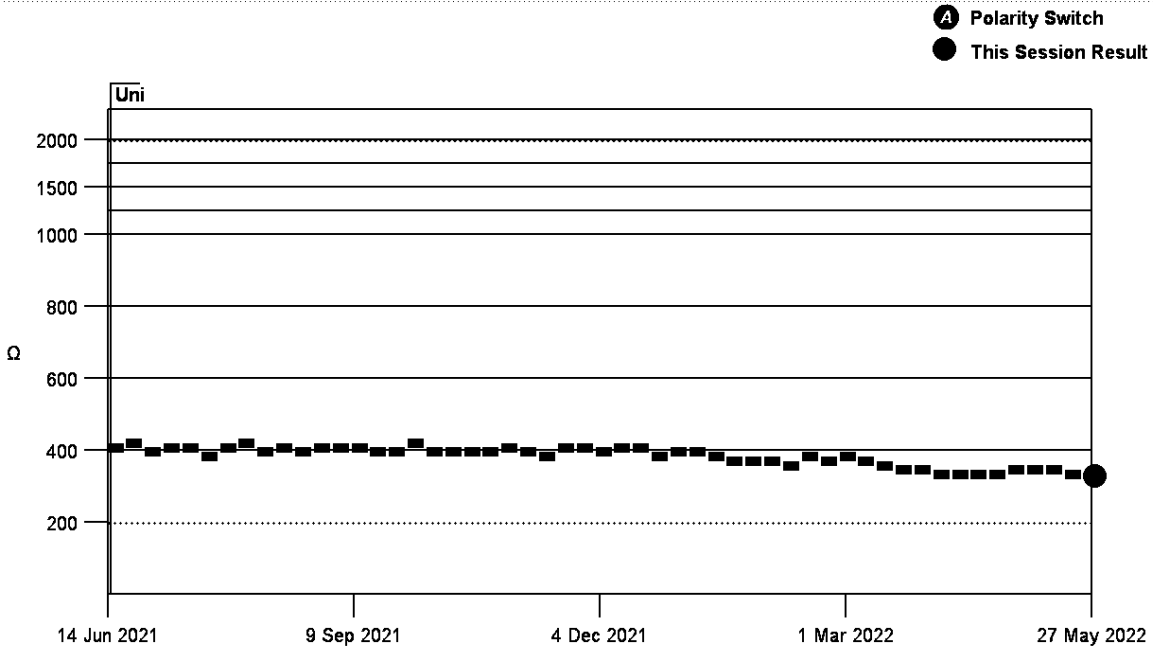
Ventricular Lead Impedance

Impedance: 329 Ω (Uni)

Last Session	**353** Ω (Uni)
First Measurement	**779** Ω (Bi)
Lifetime Range (Bi)	**558 - 845** Ω *
Lifetime Range (Uni)	**321 - 463** Ω *

*** Does not include in-clinic measurements**

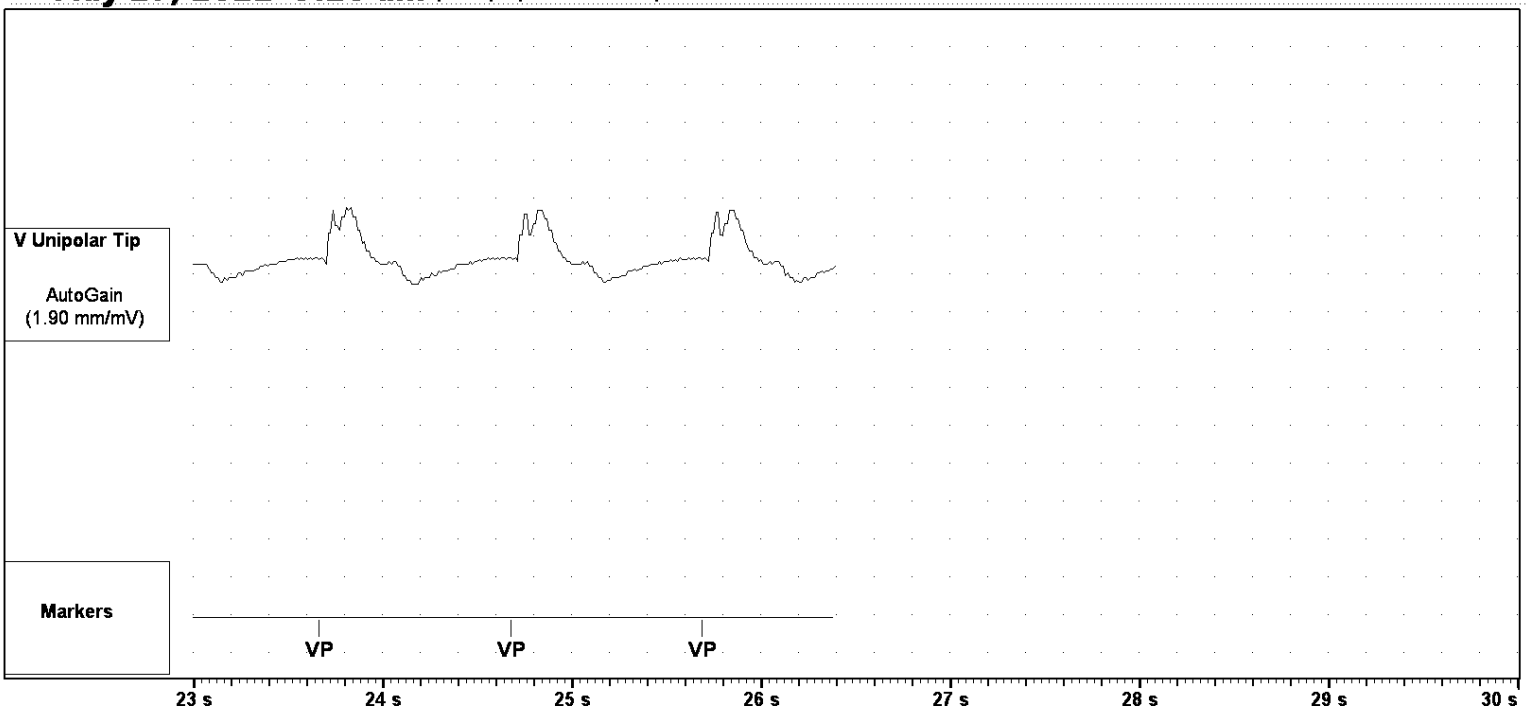
Lead Impedance Trend (weekly)



Sustain™ XL DR PM2136 (#4543534 pr9.7)

Freeze Capture

A May 27, 2022 9:26 am (Sweep Speed: 25 mm/s)



Key Parameters

Mode	**VVIR**	Max Sensor Rate	130 bpm	Rate Responsive Ventricular	Low
Base Rate	60 bpm	Hysteresis Rate	50 bpm		
Rest Rate	50 bpm	V. AutoCapture	On		