



Dual-stage PVC Burden Algorithm: A Real-world Patient Example*

The novel PVC Burden dual-stage algorithm provides a daily burden percentage, advanced programming, and the first and only actionable PVC burden alert from an insertable cardiac monitor (ICM).** In this example, a patient was inserted with a LUX-Dx II+™ ICM for palpitations. They had a known history of PVCs.



- 1 Upon insertion, the **PVC Burden algorithm** was enabled to **Continuous** monitoring duration and set to alert after 3 days above a 10% PVC burden threshold.

PVC Burden On

Monitoring Duration: **Continuous**

Cardiac monitor battery life will be reduced. Select Short-term to minimize battery impact.

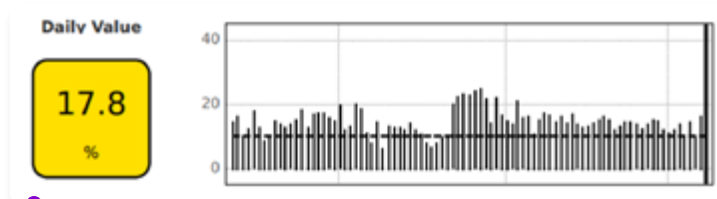
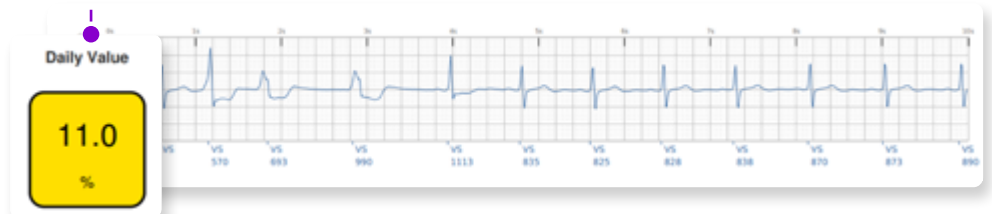
☒ Alert for PVC Burden ≥ Threshold

Yellow Alert

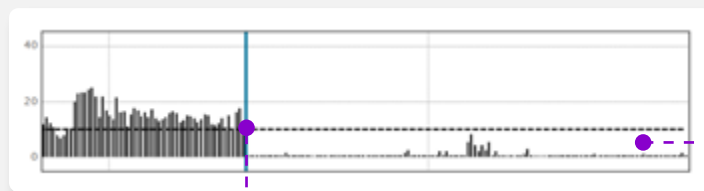
Threshold per day: **10** %

Send alert after **3** day(s) ≥ Threshold

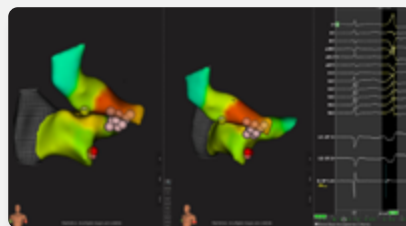
- 2 Shortly after insertion, a **yellow alert** was sent through the LATITUDE Clarity™ Data Management System. Visual PVCs were observed on **presenting S-ECG**.



- 3 The **PVC burden daily trend** was used to assess pharmaceutical intervention. After no considerable stabilization of the burden, a PVC ablation was scheduled.



- 4 The patient underwent a **successful PVC ablation** with procedure mapping provided by the OPAL HDx™ Mapping System.



- 5 Post-ablation, **monitoring duration** was changed to **Short-Term** where PVC burden was monitored for 7 consecutive days each month.

PVC Burden On

Monitoring Duration: **Short-term**

for **7** days

Repeat every: **month**

☒ Alert for PVC Burden ≥ Threshold

Yellow Alert

Threshold per day: **10** %

Send alert after **3** day(s) ≥ Threshold



Advanced programming capabilities

To learn more about the dual-stage PVC Burden algorithm and its programmability, scan the QR code to view the PVC Burden Algorithm Programming Guide.

A PVC Burden algorithm that's focused on what matters

The novel algorithm monitors for changes in R-R intervals and R-wave amplitude during the detection stage to detect potential PVCs. A patient-specific morphology assessment in the verification stage verifies the potential PVC sequence types like couplets and triplets. The advanced programmability of the LUX-Dx II+ PVC Burden algorithm lets clinicians customize settings to meet the needs of each patient. Whether you are looking for a new diagnosis or focused on long-term monitoring, the daily burden percentage, advanced programming, and unique actionable PVC burden alert help care teams **focus on what matters**.

The LUX-Dx II+ ICM PVC Burden algorithm demonstrated strong performance



when identifying patients with a PVC burden $\geq 10\%$.^{1†}

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*Results from case studies are not necessarily predictive of results from other cases. Results in other cases may vary.

**As of 4.1.2025: Reveal LINQ™ Clinician Manual, LINQ II™ Clinician Manual, BIOMONITOR III™ Technical Manual, BIOMONITOR III™ Technical Manual, BIOMONITOR IV™ Technical Manual, Merlin Patient Care System for SJM Confirm™ ICM, Confirm Rx™ ICM and Jot Dx™ ICM Help Manual, and Merlin Patient Care System Assert-IQ™ ICM Help Manual.

1. Siejko KZ, Kupfer M, Rajan A, Herrmann K, Nair D. Premature ventricular contraction detection and estimation of daily burden by an insertable cardiac monitor. *Heart Rhythm O2*. 2025. doi: <https://doi.org/10.1016/j.hroo.2025.01.004>

†In silico testing of algorithm performance on 12-lead Holter data.



**LUX-Dx II™ and LUX-Dx II+™ Insertable Cardiac Monitor Systems
Indications, Safety and Warnings**

Cardiology

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