



## MASSACHUSETTS

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# Medical Policy Surgical Ventricular Restoration

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### Policy Number: 544

BCBSA Reference Number: 7.01.103 (For Plan internal use only)  
NCD/LCD: N/A

### Related Policies

None

### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

Surgical ventricular restoration is **INVESTIGATIONAL** for the treatment of ischemic dilated cardiomyopathy.

### Prior Authorization Information

#### Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

#### Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

|                                       | Outpatient                            |
|---------------------------------------|---------------------------------------|
| Commercial Managed Care (HMO and POS) | This is <b>not</b> a covered service. |
| Commercial PPO and Indemnity          | This is <b>not</b> a covered service. |
| Medicare HMO Blue <sup>SM</sup>       | This is <b>not</b> a covered service. |
| Medicare PPO Blue <sup>SM</sup>       | This is <b>not</b> a covered service. |

### CPT Codes / HCPCS Codes / ICD Codes

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.*

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following CPT code is considered investigational for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

| CPT codes: | Code Description   |
|------------|--|
| 33548      | Surgical ventricular restoration procedure, includes prosthetic patch, when performed (e.g., ventricular remodeling, SVR, SAVER, Dor procedures) |

### Description

Surgical ventricular restoration (SVR) is also known as surgical anterior ventricular endocardial restoration, left ventricular reconstructive surgery, endoventricular circular plasty, or the Dor procedure. Named after the surgeon who pioneered the expansion of techniques for ventricular reconstruction and is credited with treating heart failure patients with SVR and coronary artery bypass grafting.

Surgical ventricular restoration is usually performed after coronary artery bypass grafting and may precede or be followed by mitral valve repair or replacement and other procedures such as endocardectomy and cryoablation for treatment of ventricular tachycardia. A key difference between SVR and ventriculectomy (ie, for aneurysm removal) is that, in SVR, circular “purse string” suturing is used around the border of the aneurysmal scar tissue. Tightening of this suture is believed to isolate the akinetic or dyskinetic scar, bring the healthy portion of the ventricular walls together, and restore a more normal ventricular contour. If the defect is large (ie, an opening >3 cm), the ventricle may also be reconstructed using patches of autologous or artificial material to maintain the desired ventricular volume and contour during closure of the ventriculotomy. In addition, SVR is distinct from partial left ventriculectomy, which does not attempt specifically to resect akinetic segments and restore ventricular contour.

### Summary

Surgical ventricular restoration is designed to restore or remodel the left ventricle to its normal, spherical shape and size in patients with akinetic segments of the heart, secondary to ischemic dilated cardiomyopathy.

For individuals who have ischemic dilated cardiomyopathy who receive surgical ventricular restoration (SVR) as an adjunct to coronary artery bypass grafting (CABG), the evidence includes a large randomized controlled trial (RCT) (another RCT reported results, but most trial enrollees overlapped with those in the larger trial) and uncontrolled studies. Relevant outcomes are overall survival, symptoms, quality of life, hospitalizations, resource utilization, and treatment-related morbidity. The RCT, the Surgical Treatment of Ischemic Heart Failure trial, did not report significant improvements in quality-of-life outcomes for patients undergoing SVR as an adjunct to standard CABG surgery. Several uncontrolled studies have suggested that SVR can improve hemodynamic functioning in selected patients with ischemic cardiomyopathy; however, these studies are considered lower quality evidence. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

### Policy History

| Date   | Action   |
|--------|--|
| 4/2024 | Annual policy review. References updated. Policy statements unchanged.                           |
| 4/2023 | Annual policy review. Description, summary, and references updated. Policy statements unchanged. |

|                |   |
|----------------|---|
| 3/2022         | Annual policy review. Description, summary, and references updated. Policy statements unchanged.                              |
| 4/2021         | Annual policy review. Description, summary, and references updated. Policy statements unchanged.                              |
| 4/2020         | Annual policy review. Description, summary, and references updated. Policy statements unchanged.                              |
| 4/2019         | Annual policy review. Description, summary, and references updated. Policy statements unchanged.                              |
| 3/2018         | Annual policy review. Description, summary, and references updated. Policy statements unchanged.                              |
| 4/2017         | Annual policy review.<br>Policy clarified, deleted "or postinfarction left ventricular aneurysm" from the statement. 4/1/2017 |
| 4/2015         | Clarified coding information.   |
| 7/2014         | Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.   |
| 12/2013        | Annual policy review. New references added.   |
| 11/2011-4/2012 | Medical policy ICD 10 remediation: Formatting, editing and coding updates.<br>No changes to policy statements.                |
| 1/1/2012       | New policy, effective 1/1/2012, describing ongoing non-coverage.  |

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

## References

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