

PHILIPS

**Bridge Plus
Occlusion Balloon**

Bridge
to surgery



When an SVC tears, every second counts¹

SVC tears during lead extraction are very rare, occurring in less than 0.5% of procedures.¹

When they do occur, the Bridge Plus Occlusion Balloon maintains acceptable hemostasis for at least 30 minutes,² giving you time to stabilize your patient and transition to surgery.



Deploys

< 2 minutes³



Stops

90% blood loss⁴



Provides

30 minutes hemostasis²



Stage early. Save lives.

Protect what matters most—your patient. Proactive procedural preparation and planning with prophylactic balloon set up can be the difference.

**Patients with
prophylactic balloon
support are more
likely to survive⁷**

(compared to those with some
or no prep during SVC tear)

Bridge to control

Maintain control and transition to surgery

- Quick deployment in >2 minutes³
- Clear radiopaque markers for accurate balloon placement

Bridge to safety

Reduce blood loss and save lives

- Facilitates rapid occlusion to dramatically stop 90% blood loss⁴
- Accommodates the full length and diameter of the SVC in 90% of patients⁶

Bridge to confidence

Empower your lab with an evidence-based solution built on the success of Bridge

- Trusted low pressure, compliant balloon, trusted in 50,000 cases^{8†}
- No procedure-related deaths with Bridge usage vs. 12 deaths prior to Bridge in market^{9‡}
- Stabilizes your patient and smoothly transition to surgery with 30 minutes of acceptable hemostasis²

*When staging the Bridge Balloon versus when no Bridge balloon is used

† Cases performed in United States since Bridge launch in 2016

‡ Prospective data published in Heart Rhythm—covering nearly 5,000 patients



Enhancing confidence in lead extraction

Philips constantly innovates for safety in lead management procedures with innovative solutions and trainings.

Bridge Plus provides the control, safety and confidence to stabilize the patient and transition to surgery.

**With proper
Bridge Plus utilization,
SVC tear survival
has gone from
56.9% to 88.2%^{5*}**

Bridge Plus Occlusion Balloon specifications

Catalog number	590-002
Catheter length	90 cm
Balloon diameter (nominal)	20 mm
Balloon length (nominal)	80 mm
Maximum OD (crossing profile)	4 mm/0.157"
Minimum tip ID	0.9 mm/0.035"
Maximum inflation volume	60 cc

Bridge Plus Prep Kit specifications

Catalog number	591-001
Description	Compatible guidewire, introducer sheath sets, syringe and stopcock

Important safety information

The Bridge Plus Occlusion Balloon is indicated for temporary vessel occlusion of the superior vena cava and inferior vena cava in applications including perioperative occlusion and emergency control of hemorrhage. Use of the Bridge Plus Occlusion Balloon in procedures other than those indicated is not recommended.

The adverse events associated with an occlusion balloon procedure include, but are not limited to allergic reactions, death, embolization, hematoma, hemorrhage, sepsis/infection, short-term hemodynamic deterioration, thromboembolic episodes, vascular thrombosis, vessel dissection, vessel perforation, vessel spasm.

Prior to initiating the procedure, a Bridge Plus Occlusion Balloon Catheter compatible guidewire should be placed through a venous access site and across the length of the superior or inferior vena cava. Attempting to place the guidewire after a tear has occurred may:

- Result in an inability to traverse the superior or inferior vena cava with the guidewire
- Result in the guidewire exiting the vasculature at the tear site
- Result in an inability to place the Bridge Plus Occlusion Balloon catheter
- Delay or prevent the ability to achieve occlusion

This information is not intended to replace a discussion with your healthcare provider on the benefits and risks of this procedure to you.

References

1. Roger G. Carrillo, MD; Darren C. Tsang, BS; Ryan Azarrafiy, BA; Thomas A. Boyle, BS. Multi-Year Evaluation of Compliant Endovascular Balloon in Treating Superior Vena Cava Tears During Transvenous Lead Extraction. EHRA late-breaking trial, March 19, 2018.
2. Document on file, D026197 & animal study - NGX028-IS17 - All animals had biological metrics measured for up to 45 minutes during occlusion and 15 minutes post device deployment.
3. Document on file D002023609_A_Bridge M&M Marketing Claims Test Report. Average timed deployment for commercial Bridge was 74.33 seconds and Bridge Plus was 58.33 seconds.
4. Document on File, D027561 Marketing claims blood loss report for Bridge project 1338 - When deployed, the Bridge Occlusion Balloon reduces blood loss of an SVC tear by 89.7% ($\alpha=0.10$), on average, in an animal model.
5. Compliant endovascular balloon reduces the lethality of superior vena cava tears during transvenous lead extractions. Bruce L. Wilkoff, MD, FHRS, Roger G. Carrillo, MD, MBA, FHRS, Ryan Azarrafiy, BA, Darren C. Tsang, BS, Thomas A. Boyle, BS.
6. Document on file, D026203 Engineering Translation Rationale For Bridge, Project #1338 – PR00. The balloon will cover the length and diameter of the SVC in 90% of the population as determined by analysis of 52 patients.
7. Document on file. LT-002750 REF-00804 Bridge Rescue Data.
8. Document on file. LT-002760 Bridge Sales Customers Raw Data.
9. Watfa, A., Younis, A., Mdaihy, M., Demian, J., Callahan, et.al A.A. (2025, June 26). Role of the Bridge Balloon in Improving Safety of Transvenous Lead Extraction Procedures. Heart rhythm. <https://doi.org/10.1016/j.hrthm.2025.06.038>.

