Angio-Seal®

Vascular Closure Device

THE INSIDE ADVANTAGE™

Bioabsorbable + Dual Security

TERUMO
INTERVENTIONAL SYSTEMS

PUSHING BOUNDARIES

Terumo Interventional Systems **broadens your reach** with new tools and techniques in interventional medicine.

We're relentlessly seeking new ways to help you apply effective solutions and achieve **better outcomes for more patients**.

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INTERVENTIONAL
SYSTEMS

Angio-Seal®
Vascular Closure Device

HELP ENSURE
SUCCESSFUL HEMOSTASIS

The ANGIO-SEAL active closure anchor gives you the inside advantage. The anchor creates a mechanical seal from the inside out—here's how:

- **The anchor supports proper location for a reliable seal and collagen positioning[1,2]:**

  99.7% deployment success[3]

  97.8% hemostasis by device[3]

- **The anchor and seal are bioabsorbed:**
  - Fibrin coats the anchor within hours and becomes totally encapsulated in 7-14 days[4]
  - Anchor begins to hydrate and soften 24-36 hours after deployment[4]
  - Anchor is absorbed 95% at 42 days[5]
  - All components are absorbed within 60-90 days[1, 2, 6, 7]
- Arterial flow is not compromised, no evidence of chronic scar tissue or inflammation[5,6]

RELY ON
DUAL SECURITY

The bioabsorbable ANGIO-SEAL anchor + collagen provides dual security, ensuring it is positioned correctly and stays in place[1,2]

- **Bioabsorbable Anchor**
  Designed to fit closely against the arterial wall, leaving blood flow undisturbed with no residual stenosis[5]
- **Bioabsorbable Collagen**
  Designed to conform to the arteriotomy for confident closure[2]
- **Bioabsorbable Suture**
  Tethers the anchor and collagen together, providing a secure seal[2]

ANGIO-SEAL® VIP

ANGIO-SEAL® Evolution™

PERFORM RESTICK WITH CONFIDENCE

Clinical data supports the safety of restick following an initial ANGIO-SEAL deployment[7]

- Restick can be performed without device dislodgement or any significant vascular complications
- Arterial closure can be achieved with a second ANGIO-SEAL Vascular Closure Device

Vascular Complications Following Restick

COMPLICATIONS		PROPORTION	95% CONFIDENCE INTERVAL
Large Hematoma (≥ 10cm)	3	0.0166	0.0043 – 0.0515
Vessel Occlusion	0	0	0 – 0.0259
Pseudoaneurysm	0	0	0 – 0.0259
AV Fistulae	0	0	0 – 0.0259
Major Bleeding	0	0	0 – 0.0259
Vascular Repair	0	0	0 – 0.0259
Death	0	0	0 – 0.0259

A clinical study of 181 patients evaluated safety and efficacy of a restick of the same artery following an initial ANGIO-SEAL device deployment. Patients were included in the study if they had an ANGIO-SEAL device deployment and subsequently underwent arterial access using the same artery that had previously been closed with an ANGIO-SEAL device within 90 days of the original device placement.

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ORDERING INFORMATION

ANGIO-SEAL VIP		
PRODUCT CODE	FRENCH SIZE	GUIDEWIRE DIAMETER (in)
610130	6	0.035
610131	8	0.038

ANGIO-SEAL EVOLUTION™		
PRODUCT CODE	FRENCH SIZE	GUIDEWIRE DIAMETER (in)
C610134	6	0.035
C610135	8	0.038

Contents: Vascular Closure Device, Insertion Sheath, Arteriotomy Locator and 70 cm Guidewire with "J" Straightener (10 units per box).

FIND OUT MORE

Phone: 800.862.4143 terumois.com Fax: 800.411.5870

Indications

The Angio-Seal Vascular Closure Device product family, including the VIP and Evolution platforms, is indicated for use in closing and reducing time to hemostasis of the femoral arterial puncture site in patients who have undergone diagnostic angiography procedures or interventional procedures using an 8 French or smaller procedural sheath for the 8 F Angio-Seal device and a 6 French or smaller procedural sheath for the 6 F Angio-Seal device. The Angio-Seal VIP and Evolution platform devices are also indicated for use to allow patients who have undergone diagnostic angiography to safely ambulate as soon as possible after sheath removal and device placement, as well as to allow patients who have undergone an interventional procedure to safely ambulate after sheath removal and device placement.

Important Safety Information

Possible adverse events for vascular closure devices include, but are not limited to: bleeding or hematoma, AV fistula or pseudoaneurysm, infection, allergic reaction, foreign body reaction, inflammation or edema. This device should only be used by a licensed physician (or other health care professional authorized by or under the direction of such physician) possessing adequate instruction in the use of the device, e.g., participation in an Angio-Seal physician instruction program or equivalent.

RX ONLY. Refer to the product labels and package insert for complete warnings, precautions, potential complications, and instructions for use.

References:

1. Kussmaul WG 3rd, Buchbinder M, Whitlow PL, et al. Rapid arterial hemostasis and decreased access site complications after cardiac catheterization and angioplasty: results of a randomized trial of a novel hemostatic device. *J Am Col Cardiol.* 1995;25(7):1685-92.

2. Nash JE, Evans DG. The Angio-Seal™ hemostatic puncture closure device. Concepts and experimental results. *Herz.* 1999;24(8):597-606.

3. Applegate RJ, Turi Z, Sachdev N, et al. The Angio-Seal Evolution Registry: outcomes of a novel automated Angio-Seal vascular closure device. *J Invasive Cardiol.* 2010;22(9):420-6.

4. Data on file.

5. Tellez A, Cheng Y, Yi GH, et al. *In vivo* intravascular ultrasound analysis of the absorption rate of the Angio-Seal™ vascular closure device in the porcine femoral artery. *EuroIntervention.* 2010;5(6):731-6.

6. Aker UT, Kensey KR, Heuser RR, Sandza JG, Kussmaul WG 3rd. Immediate arterial hemostasis after cardiac catheterization: initial experience with a new puncture closure device. *Catheter Cardiovasc Diagn.* 1994;31(3):228-32.

7. Applegate RJ, Rankin KM, Little WC, Kahl FR, Kutcher MA. Restick following initial Angioseal use. *Catheter Cardiovasc Interv.* 2003;58(2):181-184.

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