As the market leader for more than a decade, the Angio-Seal device has been extensively studied, providing physicians with confidence in its clinical performance.

**Instant Hemostasis**

1. Angio-Seal Evolution Instructions for Use

**Improved Patient Satisfaction**


**Low Complication Rates**


**Safer Restick**


**Earlier Ambulation**

1. Angio-Seal Evolution Instructions for Use (Results of a clinical study demonstrate that patients who have undergone diagnostic angiography and have received a 6 F Angio-Seal device can safely and effectively ambulate in less than 20 minutes).

**Improved Clinical Efficacy and Productivity**


**Proven Efficacy**


**Safer Restick**


**St. Jude Medical is focused on reducing risk by continuously finding ways to put more control into the hands of those who save and enhance lives.**

**Ordering Information**

<table>
<thead>
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<th>Reorder Number</th>
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</tr>
<tr>
<td>CB003.95</td>
<td>8 F</td>
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</tbody>
</table>

**Rx Only**

**Brief Summary:** Please review the Instructions for Use prior to using these devices for a complete listing of indications, contraindications, warnings, precautions, potential adverse events and directions for use.

**Indications:** St. Jude Medical Angio-Seal Vascular Closure Devices are indicated for use in adult patients who have undergone percutaneous diagnostic or interventional procedures to achieve early and effective hemostasis at the femoral arterial puncture site. The Angio-Seal STS Plus, VIP and Evolution platforms 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 interventional procedures to safely ambulate after sheath removal and device placement. 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.

**Rx Only**

**ATRIAL FIBRILLATION**

**CARDIAC RHYTHM MANAGEMENT**

**CARDIOVASCULAR**

**NEUROMODULATION**

**important information:**

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4. +1 512 732 7400
5. +1 512 732 2418 Fax

**St. Jude Medical**

1. www.JMIprofessional.com
Intra-arterial Conformance:
The bioabsorbable anchor fits closely against the inner vessel wall while the suture allows the collagen to compact and create broad coverage over the arteriotomy.

Fully Bioabsorbable:
The suture, collagen and anchor components completely bioabsorb in 60–90 days.

The Active Closure System
Angio-Seal Evolution features the fully bioabsorbable Active Closure System with an innovative intra-arterial anchor, suture and collagen seal. Designed to hold the system in place, the anchor provides rapid, safe and reliable hemostasis.

Compressive Sealing Force Comparison*:
Compressive sealing force is the predetermined force between the collagen and the anchor at the arteriotomy after completion of the Angio-Seal deployment. All measured forces are less than 1 lb.

The Most Advanced Angio-Seal Device Ever
Angio-Seal Evolution, the eighth generation of the proven Angio-Seal vascular closure device platform, features improvements designed for added reliability and ease of use.

Standardized Deployment: Automated deployment provides more control throughout the deployment process, which may reduce procedural variables and accommodate more cases.

Instant Compaction: Controlled deployment instantly initiates consistent collagen compaction, providing control of the arteriotomy and enabling an optimal seal.

The Active Closure System
Rapid, Effective Hemostasis: Immediate compression and broad coverage of the collagen seal over the arteriotomy provides virtually instantaneous hemostasis.1

Improved Patient Satisfaction: Patients report significantly less discomfort during and after closures with the Angio-Seal device.2

Clinical Efficiency and Productivity: Early patient ambulation and discharge can dramatically enhance the overall cost-effectiveness and productivity of the cath lab.3

Low Complication Rates: Studies have shown that the Angio-Seal device may reduce the risk of access-site complications in both diagnostic and interventional patients.4,5

Early Ambulation: Anchored placement of the collagen seal provides reliable hemostasis and promotes earlier patient ambulation.6

Easy Deployment: Single-handed, standardized deployment reduces risk of procedural variables.

Safe Restick: Immediate arterial restick can be performed safely without increased vascular complications.7

Proven Efficacy: More than 325 studies have proven that the Angio-Seal device is safe and effective in a broad range of patients and procedures.8,9

Compared to Manual Compression
Compared to Other Mechanical Closure Devices

Compressive Sealing Force Comparison*:
Evolution Deployed to Marker
Previous Angio-Seal Platform

Intra-arterial Conformance: The bioabsorbable anchor fits closely against the inner vessel wall while the suture allows the collagen to compact and create broad coverage over the arteriotomy.

Fully Bioabsorbable: The suture, collagen and anchor components completely bioabsorb in 60–90 days.

Early Ambulation: Anchored placement of the collagen seal provides reliable hemostasis and promotes earlier patient ambulation.6

Easy Deployment: Single-handed, standardized deployment reduces risk of procedural variables.

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Proven Efficacy: More than 325 studies have proven that the Angio-Seal device is safe and effective in a broad range of patients and procedures.8,9

The Angio-Seal Evolution device features design improvements that may increase confidence in the number of cases where use of a mechanical seal is possible. The innovative standardized deployment system is designed to assist in overcoming procedural variables and deliver a virtually instantaneous seal of the arteriotomy, making Evolution the most advanced Angio-Seal device ever.
Intra-arterial Conformance: The bioabsorbable anchor fits closely against the inner vessel wall while the suture allows the collagen to compact and create broad coverage over the arteriotomy.

Fully Bioabsorbable: The suture, collagen and anchor components completely bioabsorb in 60–90 days.

BIOABSORPTION RATE OF ANCHOR

The Active Closure System

Angio-Seal Evolution features the fully bioabsorbable Active Closure System with an innovative intra-arterial anchor, suture and collagen seal. Designed to hold the system in place, the anchor provides rapid, safe and reliable hemostasis.

Controlled Deployment for Confident Closure in More Patients.

The Angio-Seal™ Evolution™ device features a standardized deployment system that is designed to assist in overcoming many procedural variables and deliver a virtually instantaneous seal of the arteriotomy. It may also support increased confidence in the number of cases where use of a mechanical seal is possible.

Standardized Deployment: Automated deployment provides more control throughout the deployment process, which may reduce procedural variables and accommodate more cases.

Instant Compaction: Controlled deployment instantly initiates consistent collagen compaction, providing control of the arteriotomy and enabling an optimal seal.

The Most Advanced Angio-Seal Device Ever

Angio-Seal Evolution, the eighth generation of the proven Angio-Seal vascular closure device platform, features improvements designed for added reliability and ease of use.

Compressive Sealing Force Comparison*

Compressive sealing force is the predetermined force between the collagen and the anchor at the arteriotomy after completion of the Angio-Seal deployment. All measured forces are less than 1 lb.

Internal bench test shows consistency in the compressive sealing force with the Angio-Seal Evolution device in comparison to the variability in previous Angio-Seal platforms.

Compressive Sealing Force Comparison*

Evolution Deployed

Evolution Deployed to Marker

Previous Angio-Seal Platform

Compressive Sealing Force

Rapid, Effective Hemostasis: Immediate compression and broad coverage of the collagen seal over the arteriotomy provides virtually instantaneous hemostasis.

Improved Patient Satisfaction: Patients report significantly less discomfort during and after closures with the Angio-Seal device.

Clinical Efficiency and Productivity: Early patient ambulation and discharge can dramatically enhance the overall cost-effectiveness and productivity of the cath lab.

Low Complication Rates: Studies have shown that the Angio-Seal device may reduce the risk of access-site complications in both diagnostic and interventional patients.

Controlled Deployment for Confident Closure in More Patients.

Compared to Manual Compression

Compared to Other Mechanical Closure Devices

Early Ambulation: Anchored placement of the collagen seal provides reliable hemostasis and promotes earlier patient ambulation.

Easy Deployment: Single-handed, standardized deployment reduces risk of procedural variables.

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Evolution Deployed

Evolution Deployed to Marker

Previous Angio-Seal Platform

Compressive Sealing Force

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Compressive Sealing Force Comparison*

Evolution Deployed to Marker
Previous Angio-Seal Platform

Compressive Sealing Force

The Active Closure System

Angio-Seal Evolution features the fully bioabsorbable Active Closure System with an innovative intra-arterial anchor, suture and collagen seal. Designed to hold the system in place, the anchor provides rapid, safe and reliable hemostasis.

Rapid, Effective Hemostasis: Immediate compaction and broad coverage of the collagen seal over the arteriotomy provides virtually instantaneous hemostasis.†

Improved Patient Satisfaction: Patients report significantly less discomfort during and after closures with the Angio-Seal device.‡

Clinical Efficiency and Productivity: Early patient ambulation and discharge can dramatically enhance the overall cost-effectiveness and productivity of the cath lab.§

Low Complication Rates: Studies have shown that the Angio-Seal device may reduce the risk of access-site complications in both diagnostic and interventional patients.¶,'||

Early Ambulation: Anchored placement of the collagen seal provides reliable hemostasis and promotes earlier patient ambulation.¶

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Evolution Deployed to Marker

Compressive Sealing Force is the predetermined force between the collagen and the anchor at the arteriotomy after completion of the Angio-Seal deployment. All measured forces are less than 1 lb.†

Internal bench test shows consistency in the compressive sealing force with the Angio-Seal Evolution device in comparison to variability in previous Angio-Seal platforms.

Compressive Sealing Force Comparison*

Evolution Deployed to Marker
Previous Angio-Seal Platform

Compressive Sealing Force

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The Angio-Seal™ Evolution™ device features a standardized deployment system that is designed to assist in overcoming many procedural variables and deliver a virtually instantaneous seal of the arteriotomy. It may also support increased confidence in the number of cases where use of a mechanical seal is possible.
As the market leader for more than a decade, the Angio-Seal device has been extensively studied, providing physicians with confidence in its clinical performance.

**Instant Hemostasis**
- Angio-Seal Evolution Instructions for Use.

**Improved Patient Satisfaction**

**Improved Clinical Efficacy and Productivity**

**Low Complication Rates**

**Safer Restick**

**Earlier Ambulation**
- A meta-analysis of the risk of vascular complications after cardiac catheterization procedures with the use of vascular closure devices. *Heart*. 2007;103(8):606-11.

**Proven Efficacy**

**Safer Restick**

**Ordering Information**
- Reorder Number
  - C610134 6 F
  - C610135 8 F

**ATRIAL FIBRILLATION**
- CARDIAC RHYTHM MANAGEMENT
- CARDIOVASCULAR
- NEUROMODULATION

**Angio-Seal Evolution™**

**Vascular Closure Device**

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**Instant Hemostasis**

1. As the market leader for more than a decade, the Angio-Seal device has been extensively studied, providing physicians with confidence in its clinical performance.

**Improved Patient Satisfaction**


**Low Complication Rates**


**Improved Clinical Efficacy and Productivity**


**Low Complication Rates**


**Earlier Ambulation**

6. Angio-Seal Evolution Instructions for Use (Results of a clinical study demonstrate that patients who have undergone diagnostic angiography and have received a 6F Angio-Seal device can safely and effectively ambulate in less than 20 minutes).

**Safer Restick**


**Proven Efficacy**


**ATRIAL FIBRILLATION**


**Ordering Information**

Reorder Number | French Size
--- | ---
C60334 | 6 F
C60335 | 8 F

**ATRIAL FIBRILLATION**

**CARDIAC RHYTHM MANAGEMENT**

**CARDIOVASCULAR**

**NEUROMODULATION**

**SAFER, EASIER, FASTER**

**Angio-Seal Evolution™**

**Vascular Closure Devices**

**St. Jude Medical is focused on reducing risk by continuously finding ways to put more control into the hands of those who save and enhance lives.**