Cordis.

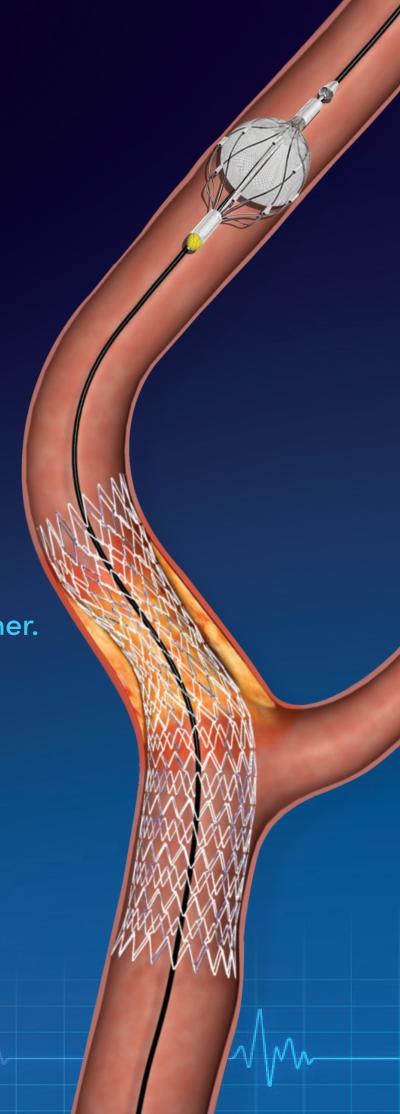
Cordis Carotid Portfolio

PRECISE PRO RX™ Carotid Stent

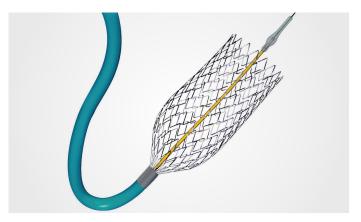
ANGIOGUARD™ RX Emboli Capture Guidewire

AVIATOR™ Plus PTA Dilatation Catheter

Conformability like no other. Design matters.



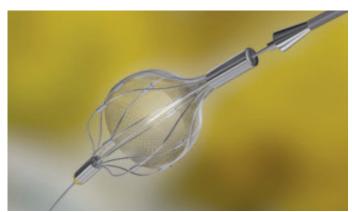
Cordis carotid portfolio is designed to suit challenges of carotid artery stenting procedures.¹



PRECISE PRO RX™ CAROTID STENT

A unique design for enhanced contourability, increased longitudinal stability and uniform scaffolding.

- 36 struts / 6 alternating bridges
- 1 mm flare at stent end
- Peak-to-valley design



ANGIOGUARD™ RX EMBOLIC PROTECTION DEVICE (EPD)

The short landing zone and small pore size work in unique combination with the PRECISE PRO RXTM Stent to offer greater control and ease of use.



AVIATOR™ PLUS PTA DILATATION CATHETER

Built for speed with enhanced deliverability and crossability. Indicated for carotid and renal peripheral endovascular interventions.

Carotid Artery Stenting

A procedure like no other requires a proven solution.

The art of stenting complex carotid vessels requires a skill like no other. It also requires products specifically designed for this tortuous region. Rigid stents may cause kinking and unnatural wall apposition, potentially posing an increased risk of complications.

Choose the stent that conforms to the supra-aortic anatomy and preserves the angulation between the Common Carotid Artery (CCA), the Internal Carotid Artery (ICA).

The Cordis **PRECISE PRO RXTM** Carotid Stent, with its multi-segmented, auto-tapering design, offers one of the best combinations of conformability and wall apposition.

The PRECISE PRO RX™

Carotid Stent, coupled with

the short landing zone of

the ANGIOGUARD™ RX

EPD, creates a combination

that's suitable for virtually

any CAS procedure.*

Cordis carotid portfolio, a proven choice

CHALLENGES OF CAROTID ARTERY STENTING PROCEDURES³

- Complex carotid anatomy
- Abrupt changes in vessel diameter
- Severe angulations
- Arch type degree variances
- Bifurcation challenges

WHY CORDIS CAROTID PORTFOLIO?

- Ideal for challenging arterial landscapes
- Durable outcomes
- Unique autotapering
- Self centering emobilic design protection basket



https://www.cms.gov/medicare-coverage-database/view/ncacal-decision-memo.aspx?proposed=N&NCAld=157

1. Safety and effectiveness have not been established for patients with known tortuosity precluding the use of catheter-based techniques

2. Conformity of Carotid Stents with Vascular Anatomy: Evaluation in Carotid Models, AJNR Am J Neuroradiol 25:604-607, April 2004

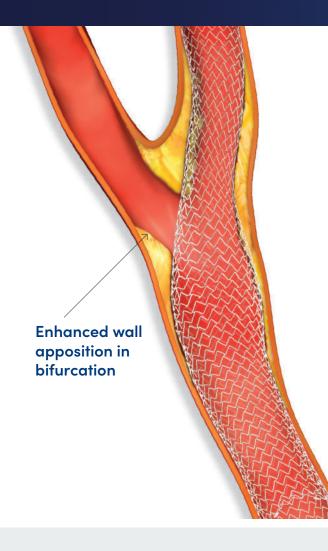
^{3.} Technical challenges in a program of carotid artery stenting H. Michael Choi, MD,a Robert W. Hobson II, MD,a,b Jonathan Goldstein, MD,b Elie Chakhtoura, MD,b Brajesh K. Lal, MD,a aul B. Haser, MD,a,b Salvador A. Cuadra, MD,a Frank T. Padberg, Jr, MD,a and Zafar Jamil, MDa,b Newark, NJ; (J Vasc Surg 2004;40:746-51.)

PRECISE PRO RXTM Carotid Stent

Simplicity of use, precision placement, and proven outcomes.

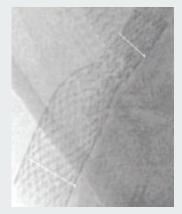
With its unique peak-to-valley design and segmented micromesh geometry, the PRECISE PRO RXTM Carotid Stent provides simplicity of use, autotapering and excellent flexibility through tortuous anatomical challenges.¹

Feature	Benefit
Multi-segment design	Auto tapering
Micromesh geometry	Enhanced wall apposition
Peak-to-Valley design	Conformability



Unique autotapering design enhances conformability in bifurcation

Autotapering design follows the vessel wall for enhanced conformability and wall apposition in the bifurcation, preserving complex angulations, and maintaining original wall anatomy.*



2mm segments act as individual stents.



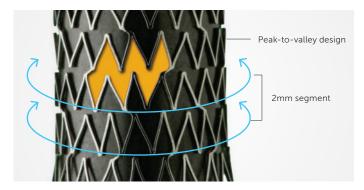
Excellent wall apposition.



Before and after use of PRECISE PRO RXTM Carotid Stent, showing enhanced conformability to original anatomy.

^{1.} Conformity of Carotid Stents with Vascular Anatomy: Evaluation in Carotid Models, AJNR Am J Neuroradiol 25:604-607, April 2004

^{*} Stents in Bifurcation Aid Test Report, March 4, 2007



The Design Difference

Unique design reduces fish scaling and kinking in the bend, preserving the complex angulation between the CCA and ICA.

PRECISE PRO RX™ Carotid Stent offers:

SIMPLICITY OF USE

- Autotapering provides precision guidance and remarkable placement accuracy
- Excellent flexibility
- Rapid exchange technology permits a single operator procedure

MICRO-MESH MULTI-SEGMENTED DESIGN

- Each 2mm segment acts as its own stent to contour against the original wall anatomy
- Peak-to-valley micromesh design reduces recoil and kinking in the bends
- Maintains best-in-class wall apposition with gentle, consistent outward force on the vessel wall

ANGIOGUARD™ RX Embolic Protection Device (EPD)

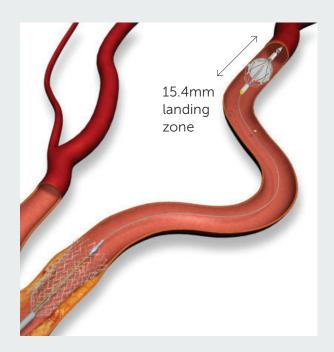
OFFERING ONE OF THE SHORTEST LANDING ZONES

- Self-centering basket design facilitates wall apposition and ease of use
- 100 micron pore size captures emboli, while maintaining continuous blood flow
- Excellent crossability (3.2F to 3.9F)
- Available in medium and extra support configurations

AVIATOR™ Plus PTA Dilatation Catheter

FEATURING DURALYN™ BALLOON MATERIAL

- Rapid inflation (avg. 3s) and deflation (avg. 5s) Times
- Low crossing profile*
- Flexible, manicured tip
- 4F sheath fit**
- Carotid artery indication





Time After Time, Cordis Delivers Proven Results in Carotid Artery Stenting

An extensive body of clinical evidence is yet another advantage of the Cordis CAS system. From SAPPHIRE, the first randomized high-risk trial, to the SAPPHIRE WW registry, Cordis continues to deliver improved outcomes.

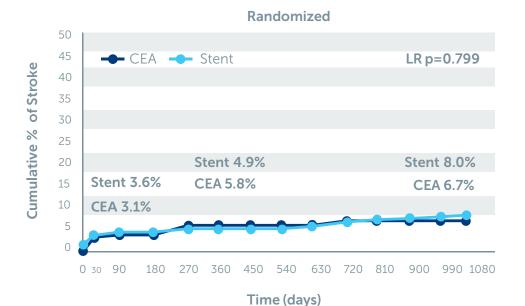
30 Day Outcomes	SAPPHIRE (167 patients)	CASES-PMS* (1492 patients)	SAPPHIRE WW (21,008 patients)
Major Ipsilateral Stroke	0.6%	1.2%	1.2%
Minor Ipsilateral Stroke	2.4%	1.9%	1.4%
Death or Stroke	4.2%	4.5%	4.1%



No statistical differences for CAS vs. CEA at 3 years.⁴

The Cordis PRECISE™ Carotid Stent and ANGIOGUARD™ EPD Guidewire System deliver durable, consistent outcomes out to 3 years.

CAS is a durable procedure out to 3 years, with similar long-term risk of stroke as CEA (8.0% vs. 6.7%, LR p=0.799) respectively.



SAPPHIRE

Cumulative % of Stroke to 30 days and Ipsilateral Stroke from 31 to 1080 Days

^{*}Data for CASES-PMS included patients in the Continued Access Study. SAPPHIRE twice published in NEJM^{1,4} • CASES-PMS and SAPPHIRE WW published in Catheterization and Cardiovascular Interventions^{2,3}

^{1.} Yadav JS, Wholey MH, Kuntz RE, Fayad P, Katzen BT, Mishkel G, et al. Protected Carotid-Artery Stenting Versus Endarterectomy in High-Risk Patients. N Engl J Med 2004; 351: 493-1501

Katzen BT, Criado FJ, Ramee SR, Massop DW, Hopkins LN, et al. Carotid Artery Stenting with Emboli Protection Surveillance Study: Thirty-Day Results of the CASES-PMS Study Catheterization and Cardiovascular Interventions 70:316–323 (2007).
 Massop DW, Dave R, Metzger CD, Bachinsky W, Solis M, Shah R, Schultz G, Schreiber T, Ashchi M, Hibbard R, et al. Stenting and Angioplasty with Protection in Patients at High-

Massop DW, Dave R, Metzger CD, Bachinsky W, Solis M, Shah R, Schultz G, Schreiber T, Ashchi M, Hibbard R, et al. Stenting and Angioplasty with Protection in Patients at High Risk for Endarterectomy: SAPPHIRE Worldwide Registry First 2,001 Patients Catheterization and Cardiovascular Interventions Published Online 15 Oct 2008.

^{4.} GurmHS, Yadav JS, Fayad P, Katzen BT, Mishkel GJ, Bajwa TK, et al. Long-term Results of Carotid Stenting Versus Endarterectomy in High-Risk Patients. N Engl J Med 2008; 358: 1572-1579.

Conformability like no other. Design matters.

ORDERING INFORMATION

PRECISE PRO RX™ CAROTID STENT

Stent Configuration Stent Ø x Length (mm)	Unconstrained Stent Ø (mm)	Unconstrained Stent Length (mm)	Min-Max vessel diameter (mm)	Catalogue Number Length of delivery system 135 cm
5 x 20	5	20	3-4	PC0520XCE
5 x 30	5	30	3-4	PC0530XCE
5 x 40	5	40	3-4	PC0540XCE
6 x 20	6	20	4-5	PC0620XCE
6 x 30	6	30	4-5	PC0630XCE
6 x 40	6	40	4-5	PC0640XCE
7 x 20	7	20	5-6	PC0720XCE
7 x 30	7	30	5-6	PC0730XCE
7 x 40	7	40	5-6	PC0740XCE
8 x 20	8	20	6-7	PC0820XCE
8 x 30	8	30	6-7	PC0830XCE
8 x 40	8	40	6-7	PC0840XCE
9 x 20	9	20	7-8	PC0920XCE
9 x 30	9	30	7-8	PC0930XCE
9 x 40	9	40	7-8	PC0940XCE
10 x 30	10	30	8-9	PC1030XCE
10 x 40	10	40	8-9	PC1040XCE

5mm-8mm stents 0.065" and 9mm-10mm stents 0.078" crossing profile. 135cm catheter working length. 0.014" guidewire acceptance.

ANGIOGUARD™ RX EMBOLI CAPTURE GUIDEWIRE

Filter Basket Size (mm)	Vessel Diameter (mm)	Product Code (Extra Support)	Product Code (Medium Support)
5	$3.5 \text{ to} \leq 4.5$	501814RE	
6	$4.5 \text{ to } \leq 5.5$	601814RE	601814RM
7	$5.5 \text{ to} \leq 6.5$	701814RE	
8	$6.5 \text{ to } \leq 7.5$	801814RE	

Eight Nitinol struts. Available in medium and extra support. 100 micron basket pore size.

Conformability like no other. Design matters.

ORDERING INFORMATION

AVIATOR™ PLUS PTA DILITATION CATHETER

Balloon OD x Length (mm x cm)	Nominal Pressure (atm)	Rated Burst Pressure (atm)	Sheath Fit (F)	Guiding Catheter Fit (F)	Catalogue Number
4 x 1.5	10	14	4	6	424-4015 W
4 x 2	10	14	4	6	424-4020 W
4 x 3	10	14	4	6	424-4030 W
4 x 4	10	14	4	6	424-4040 W
4.5 x 1.5	10	14	4	6	424-4515 W
4.5 x 2	10	14	4	6	424-4520 W
4.5 x 3	10	14	4	6	424-4530 W
4.5 x 4	10	14	4	6	424-4540 W
5 x 1.5	10	14	4	6	424-5015 W
5 x 2	10	14	4	6	424-5020 W
5 x 3	10	14	4	6	424-5030 W
5 x 4	10	14	4	6	424-5040 W
5.5 x 1.5	10	14	4	6	424-5515 W
5.5 x 2	10	14	4	6	424-5520 W
5.5 x 3	10	14	4	6	424-5530 W
5.5 x 4	10	14	4	6	424-5540 W
6 x 1.5	10	14	4	6	424-6015 W
6 x 2	10	14	4	6	424-6020 W
6 x 3	10	14	4	6	424-6030 W
6 x 4	10	14	4	6	424-6040 W
7 x 1.5	10	12	5	6	424-7015 W
7 x 2	10	12	5	6	424-7020 W
7 x 3	10	12	5	6	424-7030 W
7 x 4	10	12	5	6	424-7040 W



