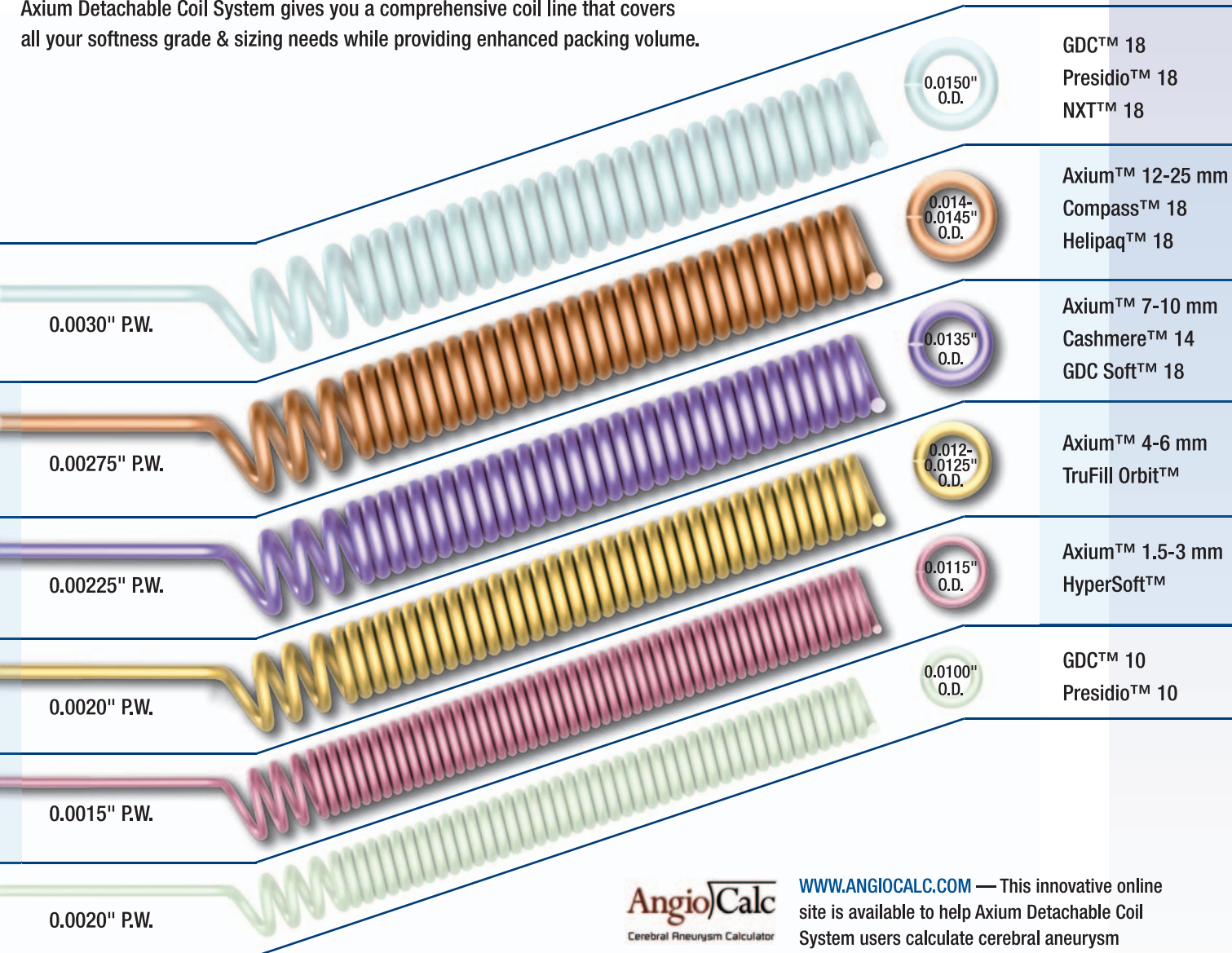


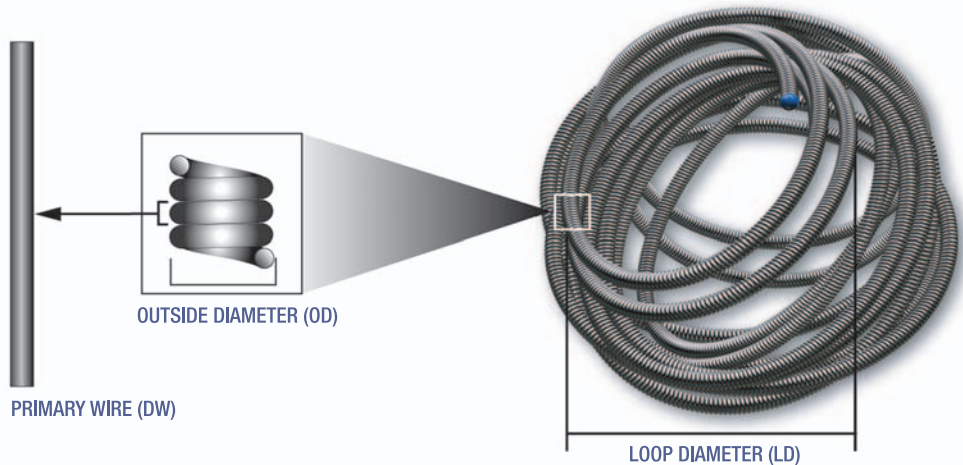
## Maximizing Packing Volume and Angiographic Hemostasis

In aneurysm treatment, where there is an array of overlapping coil lines, Axiom Detachable Coil System gives you a comprehensive coil line that covers all your softness grade & sizing needs while providing enhanced packing volume.



[WWW.ANGIOCALC.COM](http://WWW.ANGIOCALC.COM) — This innovative online site is available to help Axiom Detachable Coil System users calculate cerebral aneurysm packing based on embolization coil selection.

$$k \propto \frac{(\text{Primary Wire Diameter})^x}{\text{Outside Diameter}^y (\text{Loop Diameter})^z}$$



### k-Factor: Optimizing softness, stability and volume

The Axiom Detachable Coil System was designed using the k-Factor algorithm to optimize the relationship of primary wire, outer diameter, and loop diameter to achieve a balance of softness, stability and volume through the entire coil line.<sup>3</sup>

### Axiom™ Helical Detachable Coil

Order Number	Diameter (mm)	Length (cm)	Coil O.D.	Volume (mm <sup>3</sup> )
QC-1.5-2-HELIX	1.5	2	0.0115"	1.34
QC-2-1-HELIX	2	1	0.0115"	0.67
QC-2-2-HELIX	2	2	0.0115"	1.34
QC-2-3-HELIX	2	3	0.0115"	2.01
QC-2-4-HELIX	2	4	0.0115"	2.68
QC-2-6-HELIX	2	6	0.0115"	4.02
QC-2-8-HELIX	2	8	0.0115"	5.36
QC-3-4-HELIX	3	4	0.0115"	2.68
QC-3-6-HELIX	3	6	0.0115"	4.02
QC-3-8-HELIX	3	8	0.0115"	5.36
QC-4-8-HELIX	4	8	0.0125"	6.83
QC-4-10-HELIX	4	10	0.0125"	7.92
QC-4-12-HELIX	4	12	0.0125"	9.50
QC-5-15-HELIX	5	15	0.0125"	11.88
QC-5-20-HELIX	5	20	0.0125"	15.83
QC-6-20-HELIX	6	20	0.0125"	15.83
QC-7-30-HELIX	7	30	0.0135"	27.70
QC-8-30-HELIX	8	30	0.0135"	27.70
QC-9-30-HELIX	9	30	0.0135"	27.70
QC-10-30-HELIX	10	30	0.0135"	27.70
QC-12-30-HELIX	12	30	0.0145"	31.96
QC-14-30-HELIX	14	30	0.0145"	31.96
QC-16-30-HELIX	16	30	0.0145"	31.96
QC-16-40-HELIX	16	40	0.0145"	42.61
QC-18-40-HELIX	18	40	0.0145"	42.61
QC-20-40-HELIX	20	40	0.0145"	42.61
QC-20-50-HELIX	20	50	0.0145"	53.27

Instant Detacher Model number ID-1-5

### Axiom™ 3D Detachable Coil

Order Number	Diameter (mm)	Length (cm)	Coil O.D.	Volume (mm <sup>3</sup> )
QC-2-2-3D	2	2	0.0115"	1.34
QC-2-4-3D	2	4	0.0115"	2.68
QC-2-6-3D	2	6	0.0115"	4.02
QC-3-4-3D	3	4	0.0115"	2.68
QC-3-6-3D	3	6	0.0115"	4.02
QC-3-8-3D	3	8	0.0115"	5.36
QC-4-8-3D	4	8	0.0125"	6.33
QC-4-12-3D	4	12	0.0125"	9.50
QC-5-10-3D	5	10	0.0125"	7.92
QC-5-15-3D	5	15	0.0125"	11.88
QC-6-15-3D	6	15	0.0125"	11.88
QC-6-20-3D	6	20	0.0125"	15.83
QC-7-20-3D	7	20	0.0135"	18.47
QC-7-30-3D	7	30	0.0135"	27.70
QC-8-20-3D	8	20	0.0135"	18.47
QC-8-30-3D	8	30	0.0135"	27.70
QC-9-20-3D	9	20	0.0135"	18.47
QC-9-30-3D	9	30	0.0135"	27.70
QC-10-20-3D	10	20	0.0135"	18.47
QC-10-30-3D	10	30	0.0135"	27.70
QC-12-40-3D	12	40	0.0145"	42.61
QC-14-40-3D	14	40	0.0145"	42.61
QC-16-40-3D	16	40	0.0145"	42.61
QC-18-40-3D	18	40	0.0145"	42.61
QC-20-50-3D	20	50	0.0145"	53.27
QC-22-50-3D	22	50	0.0145"	53.27
QC-25-50-3D	25	50	0.0145"	53.27

Bare Platinum Configurations

Indications, contraindications, warnings and instructions for use can be found in the product labeling supplied with each device. CAUTION: Federal (USA) law restricts this device to sale by or on the order of a physician. Axiom Detachable Coils are intended for the endovascular embolization of intracranial aneurysms. Axiom Detachable Coils are also intended for the embolization of other neurovascular abnormalities such as arteriovenous malformations and arteriovenous fistulae. Axiom is a trademark of ev3 Inc. Other names appearing in this document are the property of their respective owners.

- The relation between packing and reopening in coiled intracranial aneurysms: a prospective study. Marjan J. Slob, Menno Skuzewski, Willem Jan van Rooij. *Neuroradiology* (2005) 47: 942-945.
- Complex shaped Platinum Coils for Brain Aneurysm: Higher Packing Density, Improved Biomechanical Stability, and Midterm Angiographic Outcome. A.K. Weirholes, M.J. Cousins, J.S. Sandhu, N. Akkawi, A.E. Schenck, J. Lafortite. *AJNR* 28: 1395-400, Aug 2007.
- Coils in a nutshell: A Review of Coil Physical Properties. J.B. White, C.G.M. Ken, H.J. Cloft, D.F. Kallmes. Published June 12, 2008 as 10.3174/ajnr.A1067.

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Axiom™  
Detachable Coil System

Success starts with  
packing volume

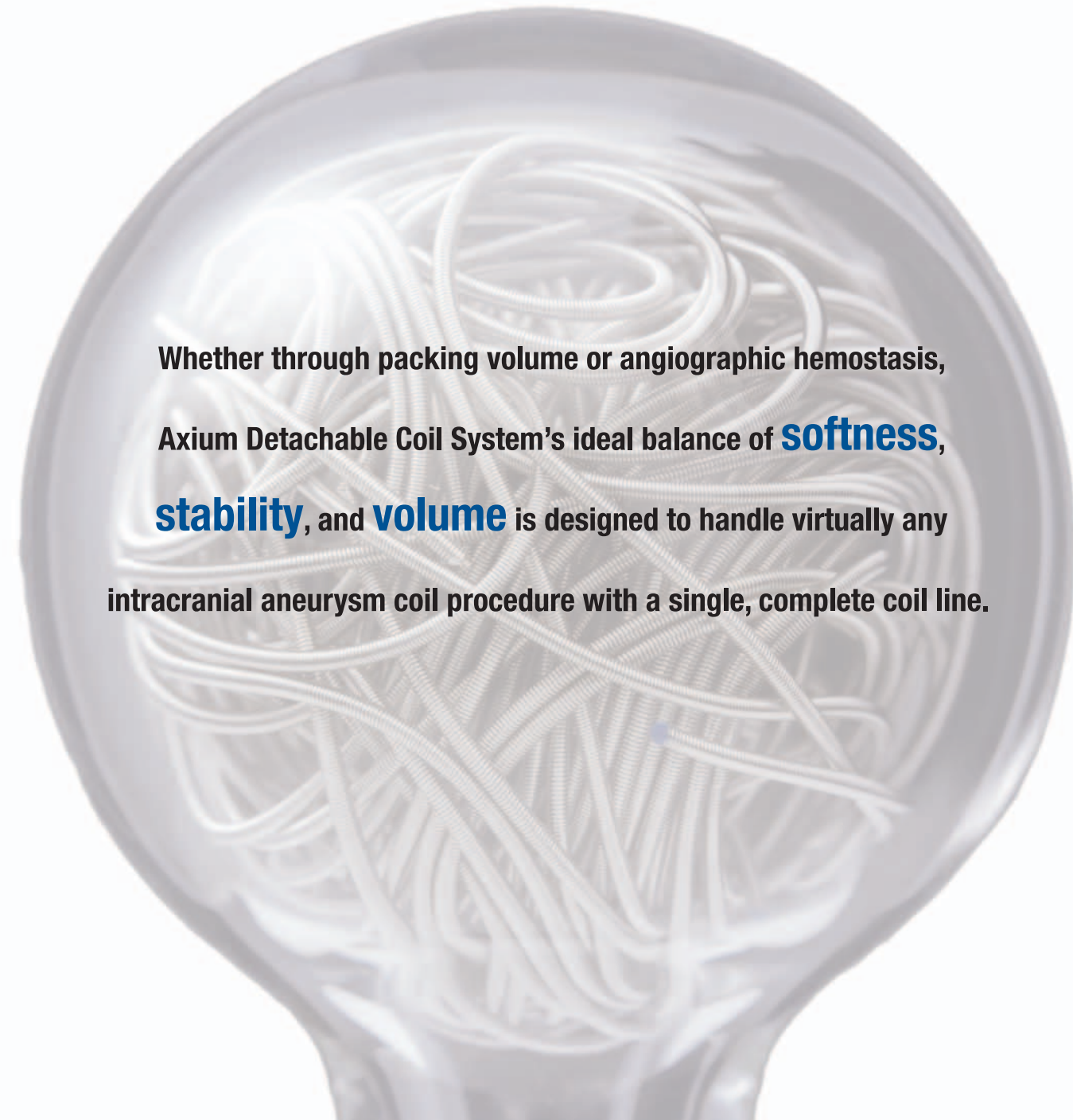


www.ev3.net

ev3™ Your endovascular company.™

# Axium™ Detachable Coil System

Optimizing acute occlusion in aneurysm embolizations



Whether through packing volume or angiographic hemostasis, Axium Detachable Coil System's ideal balance of **softness**, **stability**, and **volume** is designed to handle virtually any intracranial aneurysm coil procedure with a single, complete coil line.

## Published Literature Regarding Aneurysm Coiling States

1. "In conclusion, in coiled intracranial aneurysms high packing densities protect against reopening by compaction, in non-thrombosed aneurysms." — Marjan J. Slob, Menno Sluzewski, Willem Jan van Rooij.<sup>1</sup>
2. "The use of complex-shaped coils allows higher packing density, which may improve the recanalization rate." — A.K. Wakhloo, M.J. Gounis, J.S. Sandhu, N. Akkawi, A.E. Schenck, I. Linfante.<sup>2</sup>

## Bringing Softness, Stability and Volume Together

In a single, complete line with stretch resistance, Axium™ Detachable Coil System ranges from the largest 3D (25 mm) to the smallest helical (1.5 mm) available. The system offers the optimal balance with the softness of a "10" coil and the stability/volume of an "18" coil.

### Axium™ Detachable Coil System

Soft articulation zone improves stability and minimizes kick-out

- Freely rotating ball-and-socket mechanism
- Unique floating eyelet

Superior stretch resistance enables responsive placement and repositioning

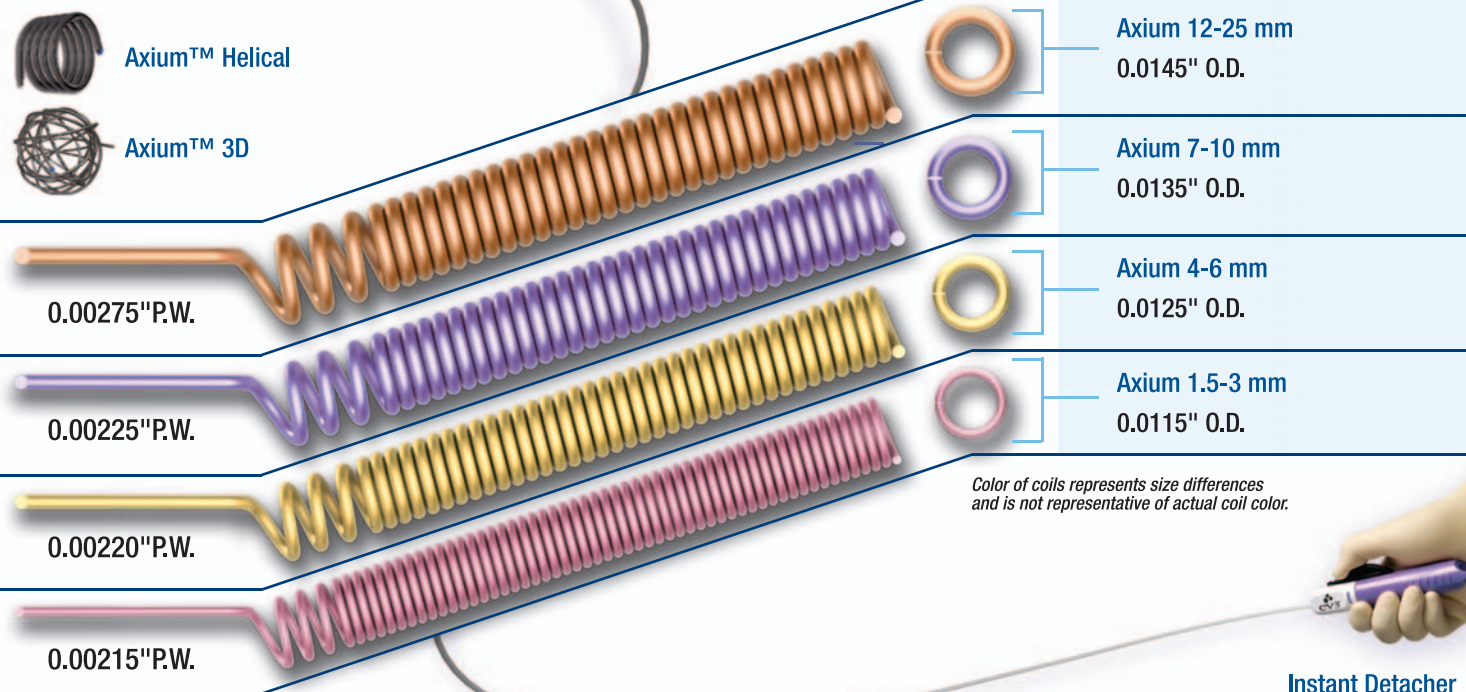
- Robust polypropylene strand(s)

Unique 3D design for enhanced conformability and lay up

- Large loop-to-sphere ratio
- Small first loop diameter

### Single coil line

Comprehensive coverage, from the largest 3D (25 mm) to the smallest finishing helical (1.5 mm).



Color of coils represents size differences and is not representative of actual coil color.

**Axium™**  
Detachable Coil System

## Clinical Success Using the Axium Detachable Coil System — Giant Aneurysm with 31% Packing Volume

### W.J. van Rooij

Professor of Interventional Neuroradiology  
Chief and Director of Brabant Catholic Aneurysm Therapy Centre

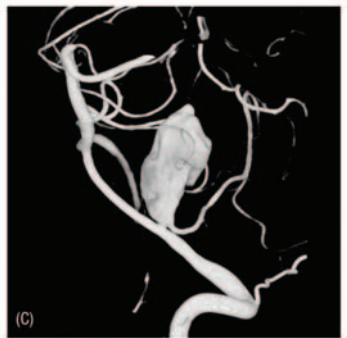
### M. Sluzewski, J. Peluso

St. Elisabeth Ziekenhuis, Tilburg, The Netherlands

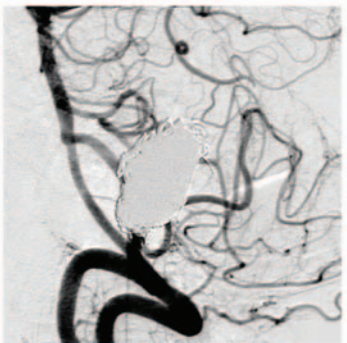
### Case Presentation

A 57 year-old woman presented with a 28 mm, partially thrombosed PICA aneurysm symptomatic by mass-effect on the brain stem. She was treated with 17 Axium coils, with a total length of 405 cm. All 17 coils went in smoothly and detached immediately. Procedure time was only 50 minutes. Packing volume was calculated as 31%.

Axium Detachable Coil System	% VOLUME:	31
	# COILS:	17



- 20 mm X 50 cm 3D
- 18 mm X 40 cm 3D
- 18 mm X 40 cm 3D
- 16 mm X 40 cm 3D
- 16 mm X 40 cm 3D
- 8mm X 30 cm 3D
- 7mm X 30 cm 3D
- 7mm X 30 cm 3D
- 6mm X 20 cm 3D
- 6mm X 15 cm 3D
- 5mm X 20 cm 3D
- 6mm X 15 cm 3D
- 6mm X 15 cm 3D
- 6mm X 15 cm 3D
- 6mm X 15 cm 3D
- 6mm X 15 cm 3D
- 6mm X 15 cm 3D



## Acom Bi-lobed Aneurysm — Packing Volume & Angiographic Hemostasis

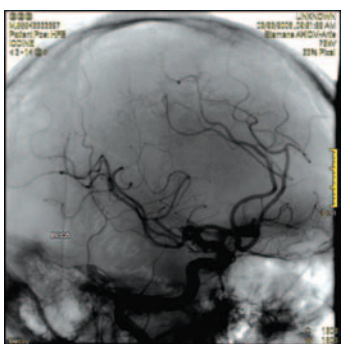
### Blaise Baxter, M.D.

Erlanger Hospital  
Chattanooga, TN  
Department of Radiology

### Case Presentation

Patient presented with a 7 mm X 5 mm anterior communicating artery aneurysm and was treated with 6 Axium coils. Two loops of the initial framing coil were placed in the small secondary lobe while the remainder of the coil established a nice basket. At the end of the procedure, the aneurysm was no longer opacified and no arterial stenosis was noted.

Axium Detachable Coil System	% VOLUME:	35.4
	# COILS:	6



- 7mm X 20 cm 3D
- 5mm X 15 cm 3D
- 4mm X 8 cm 3D
- 3mm X 4 cm 3D
- 2mm X 6 cm Helix
- 2mm X 3 cm Helix