



BIG

Coil

Advantages

Penumbra Coil 400™

Big Coils

Big Advantages

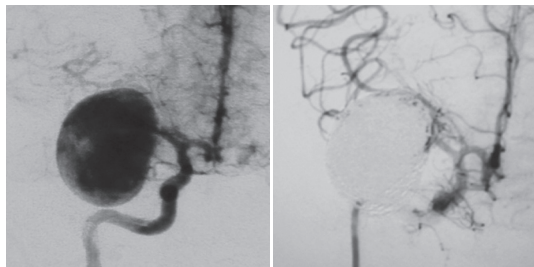
Less Radiation^{1,10}

Faster Procedure^{2,10} **25%**

Dense Occlusion^{2,3,4,5,6,7,8}

67% Cost Effective^{8,9,10}

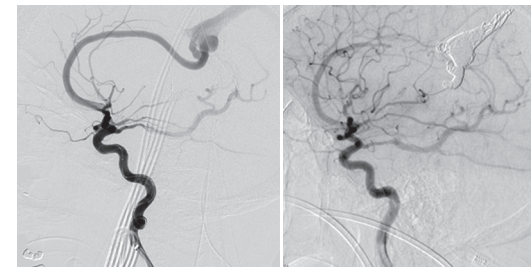
Large Middle Cerebral Artery Aneurysm



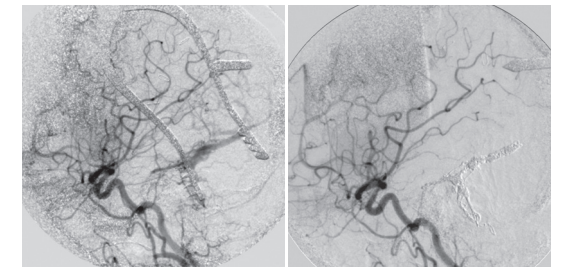
Internal Carotid Artery Sacrifice



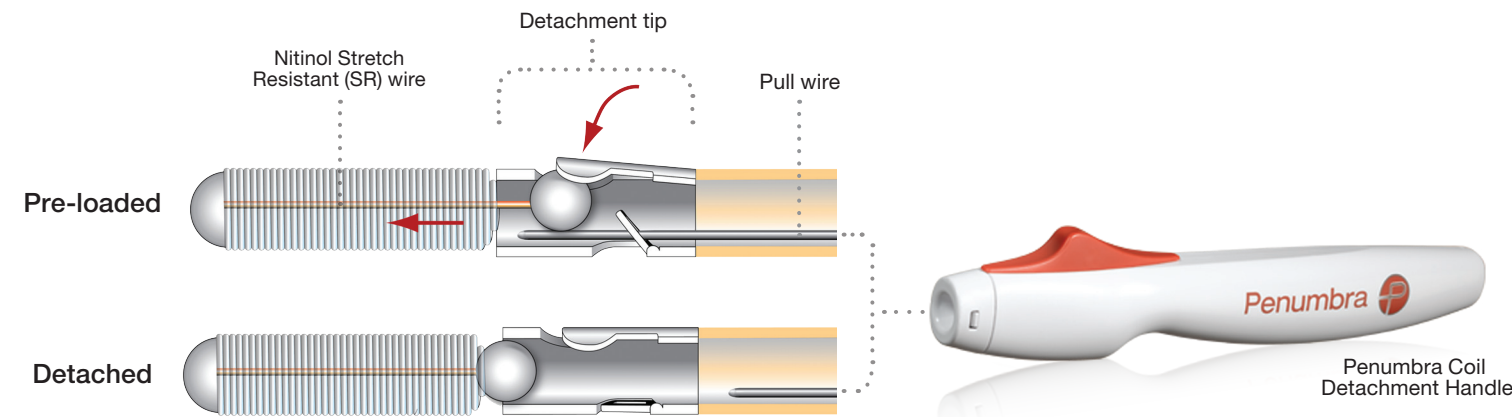
Vein of Galen



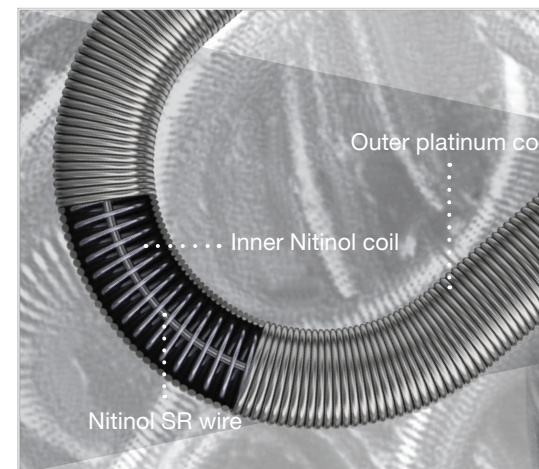
Transverse Sinus Embolization



Reliable, Instant Detachment



Stable, Multi-layer Metal Structure



1. Chowdhary A, Baxter B, Zaidat O, et al. Multicenter analysis of radiation exposure in large and giant aneurysms with the Penumbra Coil 400 System: A comparison. Presented at: 13th Congress of the World Federation of Interventional and Therapeutic Neuroradiology (WFITN); November 9-13, 2015; Gold Coast, Australia.
2. Mascitelli JR, Patel AB, Polykarpou MF, Patel AA, Moyle H. Analysis of early angiographic outcome using unique large diameter coils in comparison with standard coils in the embolization of cerebral aneurysms: A retrospective review. J NeuroIntervent Surg. 2015;7:126-130. doi:10.1136/neurintsurg-2013-11008.
3. Kaesmacher J, Müller-Leisse C, Huber T, et al. Volume versus standard coils in the treatment of intracranial aneurysms [Published online October 21, 2015]. J NeuroIntervent Surg. doi:10.1136/neurintsurg-2015-012014.
4. Baxter B, Quarfordt S, Patel A, et al. Initial multicenter clinical experience with treating small aneurysms (<5mm) with the Penumbra PC400 large volume coil: Improving the treatment of small aneurysms at 4 high volume US centres. J NeuroIntervent Surg. 2013;5(suppl 2) A20. doi:10.1136/neurintsurg-2013-010870.33.
5. Kulcsár Z, Wanke I, Rufenacht D, et al. Safety and effectiveness of large volume coils in the treatment of small aneurysms [Published online January 20, 2016]. J NeuroIntervent Surg. doi:10.1136/neurintsurg-2015-012100.
6. Dörfler A, Struffert T, Doltz P, et al. Early clinical experience of the Penumbra Coil 400 in Europe. Intervent Neuroradiol. 2011;17(suppl 1):141-146.
7. Alexander M, Chowdhary A, Baxter B, et al. Initial U.S. multi-center experience with Penumbra Coil 400™: A series of 30 cases. Intervent Neuroradiol. 2011;17(suppl 1):141-146.
8. Milburn J, Pansara AL, Vidal G, et al. Initial experience using the Penumbra Coil 400: Comparison of aneurysm packing, cost effectiveness, and coil efficiency [Published online: 15 March, 2013]. J NeuroIntervent Surg. doi:10.1136/neurintsurg-2012-010587.
9. Villwock M, Singla A, Padalino DJ, Deshaies EM. The Penumbra Coil 400 system for treatment of wide-necked intracranial aneurysms: Initial single-center experience. Acta Neurochir Suppl. 2015;120:191-195. doi:10.1007/978-3-319-04981-6_33.
10. Berge J, Gariel F, Marnat G, Dousset V. PC400 volumetric coils minimize radiation, reduce procedure time and optimize packing density during endovascular treatment in medium sized cerebral aneurysms. J Neuroradiol. 2016 Feb;43(1):37-42. doi:10.1016/j.neurad.2015.10.002.

Frame			Fill			Fill/Finish					
COMPLEX STANDARD			COMPLEX SOFT			COMPLEX EXTRA SOFT			CURVE EXTRA SOFT		



Catalog Number	Secondary Diameter (mm)	Length (cm)	Catalog Number	Secondary Diameter (mm)	Length (cm)	Catalog Number	Secondary Diameter (mm)	Length (cm)	Catalog Number	Secondary Diameter (mm)	Length (cm)
4002C0306	3	6	4004C0303	3	3	4006C0202	2	2	4006U0201	2	1
4002C0310	3	10	4004C0304	3	4	4006C0203	2	3	4006U0202	2	2
4002C0408	4	8	4004C0306	3	6	4006C0204	2	4	4006U0203	2	3
4002C0412	4	12	4004C0310	3	10	4006C0303	3	3	4006U0204	2	4
4002C0506	5	6	4004C0404	4	4	4006C0304	3	4	4006U0302	3	2
4002C0510	5	10	4004C0406	4	6	4006C0305	3	5	4006U0303	3	3
4002C0610	6	10	4004C0408	4	8	4006C0306	3	6	4006U0304	3	4
4002C0615	6	15	4004C0412	4	12	4006C0308	3	8	4006U0305	3	5
4002C0710	7	10	4004C0509	5	9	4006C0310	3	10	4006U0306	3	6
4002C0715	7	15	4004C0513	5	13	4006C0404	4	4	4006U0308	3	8
4002C0720	7	20	4004C0610	6	10	4006C0406	4	6	4006U0310	3	10
4002C0815	8	15	4004C0615	6	15	4006C0408	4	8	4006U0404	4	4
4002C0820	8	20	4004C0620	6	20	4006C0410	4	10	4006U0406	4	6
4002C0830	8	30	4004C0710	7	10				4006U0408	4	8
4002C0915	9	15	4004C0715	7	15				4006U0410	4	10
4002C0925	9	25	4004C0720	7	20						
4002C0935	9	35	4004C0815	8	15						
4002C1020	10	20	4004C0820	8	20						
4002C1030	10	30	4004C0830	8	30						
4002C1040	10	40	4004C0925	9	25						
4002C1135	11	35	4004C0935	9	35						
4002C1145	11	45	4004C1020	10	20						
4002C1235	12	35	4004C1030	10	30						
4002C1245	12	45	4004C1040	10	40						
4002C1335	13	35	4004C1135	11	35						
4002C1348	13	48	4004C1145	11	45						
4002C1450	14	50	4004C1235	12	35						
4002C1557	15	57	4004C1245	12	45						
4002C1660	16	60	4004C1335	13	35						
4002C1857	18	57	4004C1348	13	48						
4002C2060	20	60	4004C1440	14	40						
4002C2260	22	60	4004C1450	14	50						
4002C2457	24	57	4004C1645	16	45						
4002C2860	28	60									
4002C3260	32	60									

Fill	Penumbra Coil Detachment Handle
J SOFT	

Catalog Number	Length (cm)	Catalog Number	Description
4004J7	7	DH1	Detachment Handle
4004J10	10		
4004J15	15		
4004J25	25		

PX SLIM™
Delivery Microcatheter

Catalog Number	Tip Shape	ID	Distal and Proximal OD	Guidewire Compatibility	Tip Markers	Length
PXSLIMSTR	Straight	.025"	2.6/2.95F	.020"	2	150 cm
PXSLIM045	45°	.025"	2.6/2.95F	.020"	2	150 cm
PXSLIM090	90°	.025"	2.6/2.95F	.020"	2	150 cm
PXSLIM130	130°	.025"	2.6/2.95F	.020"	2	150 cm



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Indication For Use

The Penumbra Coil System is indicated for the endovascular embolization of:

- Intracranial aneurysms
- Other neurovascular abnormalities such as arteriovenous malformations and arteriovenous fistulae
- Arterial and venous embolizations in the peripheral vasculature

Contraindications

There are no known contraindications.

Warnings

- The Penumbra Coil System should only be used by physicians who have received appropriate training in neuro-interventional techniques.

Precautions

- The device is intended for single use only. Do not resterilize or reuse. Resterilization and/or reuse may compromise the structural integrity of the device or increase the risk of contamination or infection leading to device failure and/or cross-infection and potential patient injury, illness or death.
- Do not use kinked or damaged devices. Do not use opened or damaged packages. Return all damaged devices and packaging to the manufacturer/distributor.
- Use prior to the "Use By" date.
- Use device in conjunction with fluoroscopic guidance.
- Do not advance or retract the device against resistance without careful assessment of the cause using fluoroscopy.
- Moving or torquing the device against resistance may result in damage to the vessel or device.
- Maintain a constant infusion of an appropriate flush solution.

Potential Adverse Events

Possible complications include, but are not limited to:

- acute occlusion
- air embolism
- death
- distal embolization
- emboli
- false aneurysm formation
- hematoma or hemorrhage at puncture/access site/site of entry
- infection
- intracranial hemorrhage
- ischemia
- neurological deficits including stroke
- vessel spasm, thrombosis, dissection, or perforation
- thromboembolic episodes
- neurological deficits including stroke and possibly death
- vascular thrombosis
- post-embolization syndrome
- revascularization
- recanalization
- inadequate occlusion
- aneurysm rupture
- parent artery occlusion
- incomplete aneurysm filling

Product availability varies by country.