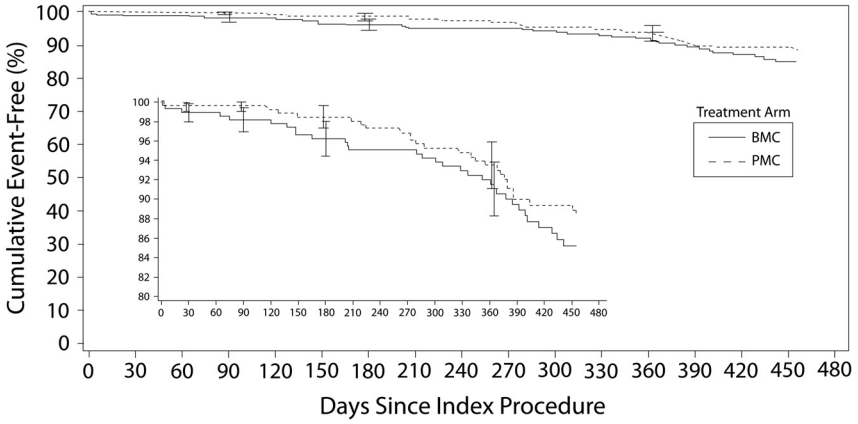

ON-LINE FIG 1. Kaplan-Meier curve showing freedom from TAR to 455 days, per protocol population ($n = 568$).

On-line Table 1. No. of patients treated by investigator

Clinical Site	GDC	Matrix	Total
Oregon Health and Science University	30	30	60
Hospital General Universitario de Alicante	23	24	47
Hospital Donostia	18	21	39
University of Massachusetts Worcester	18	17	35
CHRU Gui de Chauliac	15	17	32
The University of Iowa Hospital and Clinics	17	15	32
Montreal Neurological Institute	15	16	31
Medical University of South Carolina	16	14	30
St. Joseph's Hospital	14	13	27
Chicago Institute of Neurosurgery and Neuroresearch	11	10	21
St. Joseph's Hospital Barrow Neurological Institute	11	10	21
Fort Sanders Regional Center	10	10	20
The Walton Centre	9	9	18
Massachusetts General Hospital	9	8	17
Xuan Wu Hospital	9	7	16
Newcastle General Hospital	7	8	15
Barnes Jewish Hospital	7	7	14
University of Maryland	7	7	14
Providence Hospital and Medical Centers	6	5	11
Rikshospitalet University Hospital	5	6	11
Istanbul University Cerrahpasa	6	4	10
Sacred Heart Medical Center	5	5	10
Methodist Hospital	5	4	9
Tucson Medical Center	5	4	9
Universitaetsklinikum des Saarlandes	5	4	9
University of Wisconsin-Madison	3	5	8
University of Washington Harborview Medical Center	3	4	7
Carolina Neurosurgery and Spine Associates-PA	3	3	6
Universitaetsklinikum Freiburg	2	4	6
Asklepios Klinik Altona	2	3	5
Mercy Health Center	2	3	5
University of New Mexico Health Sciences Center	3	2	5
Royal Melbourne Hospital	3	1	4
Instituto Nacional de Neurología y Neurocirugía	2	1	3
Klinikum Augsburg Stenglinstrasse 2	1	2	3
Stony Brook University Medical Center	2	1	3
Sunrise Hospital and Medical Center	0	3	3
Clinica de Nuestra Señora del Rosario Ruber Internacional	2	0	2
Hospital Clinic i Provincial de Barcelona	1	1	2
University of Texas Southwestern Medical Center	1	1	2
Yale University-New Haven Hospital	1	1	2
Cleveland Clinic Foundation	0	1	1
Saint Luke's Hospital-Kansas City-Missouri	1	0	1
Total	315	311	626

Note:—GDC indicates Guglielmi detachable coil: CHRU, Centre Hospitalier Régional Universitaire.

On-line Table 2. Target aneurysm assessment before the procedure[a]

	BMC (n = 315)	PMC (n = 311)	Relative Risk (95% CI)	Difference (95% CI)	P Value
Target aneurysm location (anterior)	273 (86.7%)	270 (86.8%)	1.00 (0.94–1.06)	−0.2% (−5.5–5.2)	.9559
Rupture status (ruptured)	119 (37.8%)	109 (35.0%)	1.08 (0.88–1.33)	2.7% (−4.8–10.3)	.4780
Aneurysm size[b] (mm)	7.6 ± 3.1	7.5 ± 3.0	NA	0.0 (−0.4–0.5)	.8637
Aneurysm size[b] of ≥10 mm	68 (21.6%)	62 (19.9%)	1.08 (0.80–1.47)	1.7% (−4.7–8.0)	.6105
Aneurysm neck (mm)	3.7 ± 1.6	3.6 ± 1.5	NA	0.1 (−0.1–0.3)	.4063
Aneurysm neck ≥4 mm	118 (37.5%)	110 (35.4%)	1.06 (0.86–1.30)	2.1% (−5.4–9.6)	.5868
Wide-neck aneurysm[c]	264 (83.8%)	245 (78.8%)	1.06 (0.99–1.15)	5.0% (−1.1–11.1)	.1064
Parent artery vessel diameter (mm)	3.0 ± 1.0	3.0 ± 0.9	NA	0.0 (−0.1–0.2)	.7113
Aneurysm volume (mm^3)	222.0 ± 328.9	207.3 ± 348.1	NA	14.6 (−38.5–67.7)	.5900
Plan to use adjunctive devices (yes)	145 (46.0%)	147 (47.3%)	0.97 (0.82–1.15)	−1.2 (−9.1–6.6)	.7568
Neuroform stent	76 (52.4%)	78 (53.1%)	0.99 (0.79–1.23)	−0.6% (−12.1–10.8)	.9118
Other	73 (50.3%)	78 (53.1%)	0.95 (0.76–1.18)	−2.7 (−14.2–8.7)	.6423

Note:—AP indicates anteroposterior; PMC, polymer-modified coils.

[a] Values are presented as mean ± SD for continuous variables and No. (%) for categoric variables. The denominator used for rates (%) can be smaller than the number of subjects in each group due to missing values.

[b] Aneurysm size was the maximum length among the width on the AP plane, the width on the lateral plane, and height.

[c] Neck size ≥ 4 mm or dome-to-neck ratio of <2, with the dome size calculated as a minimum of the 2 widths (AP plane, lateral plane).

[d] Aneurysm volume was calculated by statisticians at the Stryker Corporation (Michigan), using the site-reported measurements, based on the equation below: Aneurysm Volume = (4 / 3) × 3.141593 × (Width on AP Plane / 2) × (Width on Lateral Plane / 2) × (Height / 2).

On-line Table 3. Procedural characteristics of target aneurysms[a]

	BMC (n = 315)	PMC (n = 311)	Relative Risk (95% CI)	Difference (95% CI)	P Value
Procedure time (min)	122.3 ± 71.5	120.4 ± 60.8	NA	1.9 (−8.5–12.3)	.7246
Packing density (%)[b] (coil volume/aneurysm volume)	23.3 ± 11.7	26.4 ± 11.7	NA	−3.1 (−4.9-−1.2)	.0013
No. of coils implanted/patient[b]	6.9 ± 5.2	5.5 ± 4.3	NA	1.4 (0.6–2.1)	.0003
Use of Neuroform stent	73 (23.2%)	72 (23.2%)	1.00 (0.75–1.33)	0.0% (−6.6–6.6)	.9944
Technical success	307 (97.5%)	301 (96.8%)	1.01 (0.98–1.03)	0.7% (−1.9–3.3)	.6130
If no, failure due to inability to access the target aneurysm	3 (42.9%)	5 (50.0%)	0.86 (0.30–2.46)	−7.1% (−55.1–40.9)	>.9999
Device malfunction	12 (3.9%)	12 (3.9%)	1.00 (0.46–2.20)	0.0% (−3.0–3.1)	.9935
Product nonconformity	3 (1.0%)	4 (1.3%)	0.75 (0.17–3.34)	−0.3% (−2.0–1.4)	>.9999
AEs during procedure	47 (15.0%)	46 (14.8%)	1.02 (0.70–1.48)	0.2% (−5.4–5.8)	.9371

Note:—AEs indicates adverse events; NA, not applicable; PMC, polymer-modified coils.

[a] Values are presented as mean ± SD for continuous variables and No. (%) for categoric variables. The denominator used for rates (%) can be smaller than the number of subjects in each group due to missing values.

[b] Only coils successfully implanted were included in the calculation.

On-line Table 4. Subgroup analysis of TAR[a]

	BMC	PMC	Relative Risk (95% CI)	Difference (95% CI)	P Value
Aneurysm size[b]					
<10 mm	7.7% (19/247)	8.8% (22/249)	0.87 (0.48–1.57)	−1.1% (−6.0–3.7)	.6439
10–20 mm	23.5% (16/68)	19.4% (12/62)	1.22 (0.63–2.36)	4.2% (−9.9–18.3)	.5631
Neck size					
<4 mm	7.6% (15/197)	7.0% (14/201)	1.09 (0.54–2.20)	0.6% (−4.5–5.8)	.8033
≥4 mm	16.9% (20/118)	18.2% (20/110)	0.93 (0.53–1.64)	−1.2% (−11.1–8.7)	.8068
Dome-to-neck ratio[c]					
<2	10.4% (26/251)	10.2% (24/235)	1.01 (0.60–1.72)	0.1% (−5.3–5.5)	.9578
≥2	14.1% (9/64)	13.2% (10/76)	1.07 (0.46–2.47)	0.9% (−10.5–12.3)	.8763
Wide/non-wide-neck					
Wide-neck[d]	11.7% (31/264)	11.0% (27/245)	1.07 (0.66–1.73)	0.7% (−4.8–6.2)	.7978
Non-wide-neck	7.8% (4/51)	10.6% (7/66)	0.74 (0.23–2.39)	−2.8% (−13.2–7.7)	.7540
Rupture status					
Ruptured aneurysm	14.3% (17/119)	13.8% (15/109)	1.04 (0.55–1.98)	0.5% (−8.5–9.5)	.9094
Unruptured aneurysm	9.2% (18/196)	9.4% (19/202)	0.98 (0.53–1.80)	−0.2% (−5.9–5.5)	.9391

Note:—AP indicates anteroposterior; PMC, polymer-modified coils.

[a] Values are presented as % (x/N).

[b] Aneurysm size was the maximum length among the width on the AP plane, the width on lateral plane, and height.

[c] Dome size was calculated as a minimum of the 2 widths (AP plane-lateral plane).

[d] Neck size ≥ 4 mm or dome-to-neck ratio < 2, with the dome size calculated as a minimum of the 2 widths.

On-line Table 5: Clinical Events Committee–adjudicated safety events[a]

Event	BMC (*n* = 315)	Matrix^2 (*n* = 311)	Relative Risk (95% CI)	Difference (95% CI)	*P* Value
Ischemic Stroke					
Periprocedural	12 (3.8%)	9 (2.9%)	1.32 (0.56–3.08)	0.9% (−1.9–3.7)	.5247
30-Day	16 (5.1%)	15 (4.8%)	1.05 (0.53–2.09)	0.3% (−3.1–3.7)	.8826
455-Day	21 (6.7%)	17 (5.5%)	1.22 (0.66–2.27)	1.2% (−2.5–4.9)	.5294
Hemorrhagic stroke[b]					
Periprocedural	3 (1.0%)	4 (1.3%)	0.74 (0.17–3.28)	−0.3% (−2.0–1.3)	.7235
30-Day	3 (1.0%)	5 (1.6%)	0.59 (0.14–2.46)	−0.7% (−2.4–1.1)	.5026
455-Day	4 (1.3%)	7 (2.3%)	0.56 (0.17–1.91)	−1.0% (−3.0–1.1)	.3503
Target aneurysm rupture/rerupture[c]					
Periprocedural	1 (0.3%)	1 (0.3%)	0.99 (0.06–15.71)	0.0% (−0.9–0.9)	>.9999
30-Day	2 (0.6%)	1 (0.3%)	1.97 (0.18–21.67)	0.3% (−0.8–1.4)	>.9999
455-Day	2 (0.6%)	2 (0.6%)	0.99 (0.14–6.97)	0.0% (−1.3–1.2)	>.9999
All causes of death					
Periprocedural	0 (0.0%)	1 (0.3%)	0.00 (undef-undef)	−0.3% (−1.0–0.3)	.4968
30-day	3 (1.0%)	12 (3.9%)	0.25 (0.07–0.87)	−2.9% (−5.3-−0.5)	.0174
455-day	9 (2.9%)	15 (4.8%)	0.59 (0.26–1.33)	−2.0% (−5.0–1.0)	.2002
Neurologic death[d]					
Periprocedural	0 (0.0%)	1 (0.3%)	0.00 (undef-undef)	−0.3% (−1.0–0.3)	.4968
30-Day	1 (0.3%)	11 (3.5%)	0.09 (0.01–0.69)	−3.2% (5.4–1.1)	.0033
455-Day	1 (0.3%)	13 (4.2%)	0.08 (0.01–0.58)	−3.9% (−6.2-−1.6)	.0011
Non-neurologic death					
Periprocedural	0 (0.0%)	0 (0.0%)	undef (undef-undef)	0.0% (NA-NA)	>.9999
30-Day	2 (0.6%)	1 (0.3%)	1.97 (0.18–21.67)	0.3% (−0.8–1.4)	>.9999
455-Day	8 (2.5%)	2 (0.6%)	3.95 (0.85–18.45)	1.9% (−0.1–3.8)	.1066

Note:—undef indicates undefined.

[a] Values are presented as mean ± SD for continuous variables and No. (%) for categoric variables. The denominator used for rates (%) can be smaller than the number of subjects in each group due to missing values.

[b] Hemorrhagic strokes due to rupture/rerupture are not included.

[c] Target aneurysm rupture excludes those that occurred during the index procedure.

[d] One unknown death is included in the neurologic death.