# BYCROSS

Rotational Atherectomy and Thrombectomy

**SMART. EASY.**
**EFFECTIVE.**





BYCROSS



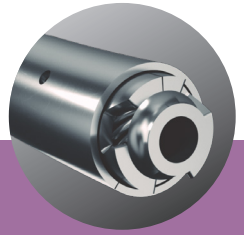
# ROTATIONAL ATHERECTOMY AND THROMBECTOMY

BYCROSS is a 6F rotational atherectomy and thrombectomy device used in the peripheral arterial vascular system to restore flow in native arteries from acute to calcified CTOs and occluded stents, stent grafts or grafts.

The BYCROSS catheter is a coaxial, battery powered, rotating shaft with an expandible cutting wing. The occlusive material is aspirated via an integrated pump and discharged into a collecting bag.

WATCH VIDEO

- No capital equipment required
- Can be used without guidewire passage through the occlusion
- Unique catheter tip configuration for removal of calcified material



**Crossing**

**Multiple Chisel Edge Spinning Top Rotation**

**Front Drilling**



**Atherectomy**

**Expandible Nitinol Wing**

**Enlarging & Luminal Gain**



**Thrombectomy**

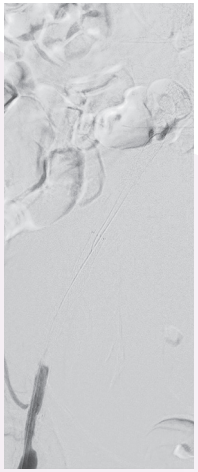
**Active Pump Archimedes' Screw**

**Aspiration & Transportation**

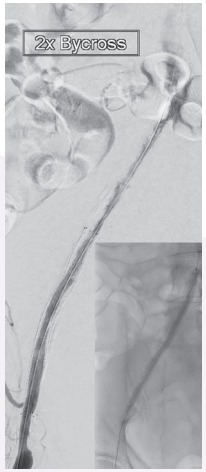
# CASE REPORT 1

**Long Chronic In-Stent Occlusion in Common Iliac artery. Debulking with BYCROSS by MD Jörg Teßarek**

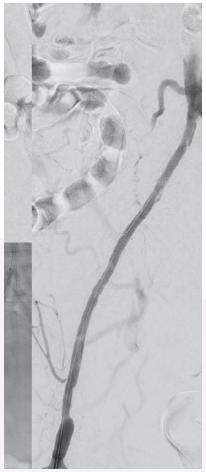
Case description: Clinical symptoms started 4 months ago, the index procedure was performed in 2021. After 8F sheath placement and wire passage BYCROSS passed the lesion two times with open wing showing a residual stenosis of 40 % in a 7–8 mm stent size. After prolonged POBA (3 minutes) with a 7 × 150 mm balloon, a DCB of the same size was inflated for 3 minutes.



Common Iliac In-Stent Occlusion




Post-BYCROSS result

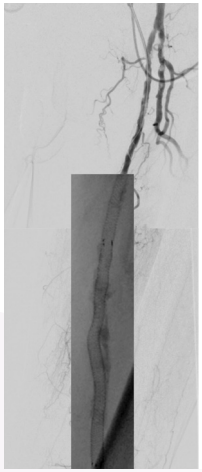


Final result after POBA and DCB

# CASE REPORT 2

**SFA In-Stent Occlusion management with BYCROSS by MD Bruno Migliara**

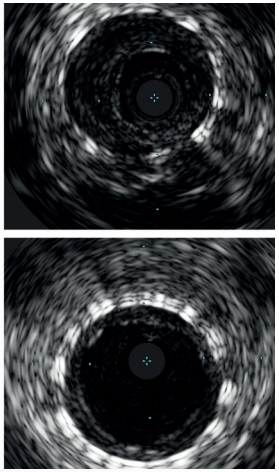
Case description and rational: 81 yo patient treated with long SFA stent 4 y ago presented with rest pain 20 days prior. BYCROSS allows to open the wing to reach 4.7 mm in diameter and has active aspiration. Hence, treatment with BYCROSS and successive DCB was decided: (1) as most recent papers show that debulking and DCB are the treatment of choice in complex ISR, Tosaka 2 and 3; (2) to achieve higher luminal gain in presence of SFA scaffold; (3) to increase drug uptake into the vessel wall; (4) to reduce risk of distal embolization.



Occlusion of the stented SFA



Final Result

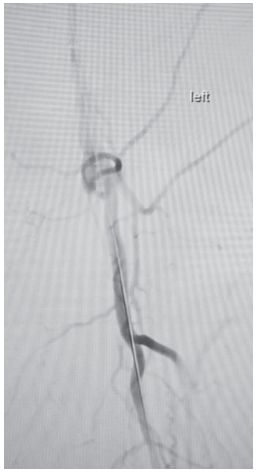


IVUS pre BYCROSS
IVUS post BYCROSS

# CASE REPORT 3

**Long SFA CTO treated with contralateral approach with BYCROSS by MD Matthias Mende**

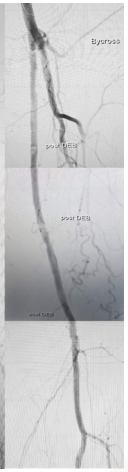
Case description: 71 yo patient, ex smoker, 43 py, Claudicant, RF 3 has been treated with BYCROSS in contralateral approach. 6Fr × 90 cm reinforced introducer was attached to the device and 8 Fr × 45 was used for the contralateral approach. Endoluminal recanalization of the CTO followed by a total of 4 passages, 2 with closed and 2 with open wing. Procedure has been completed with DCB avoiding stent implantation.




SFA CTO




Post-BYCROSS result



Final result after DCB without stent

SEE ALL CASE REPORTS

*“Meanwhile vessel preparation with BYCROSS and adjunctive POBA and DCB is our first-choice treatment option for de novo and recurrent complex occlusive lesions.”*

Dr. Jörg Teßarek

*“My preferred atherectomy device, especially for long, calcified CTOs in the SFA or popliteal region.”*

Dr. Matthias Mende

*“4.7 mm of reach with open wing for a larger luminal gain in the debulking of In-Stent occlusions! I think it’s great!”*

Dr. Bruno Migliara

## PRODUCT SPECIFICATIONS

| Art. No. | Description | PU |
|---|---|---|
| BC213-50 | BYCROSS 6F 50 CM | 1 |
| BC213-70 | BYCROSS 6F 70 CM | 1 |
| BC213-95 | BYCROSS 6F 95 CM | 1 |
| BC213-135 | BYCROSS 6F 135 CM | 1 |

In combination with other devices / not included:

| Device | Description |
|---|---|
| Guidewire | Any wire ≤ 0.035"<br>Guidewire in appropriate length |
| Syringe | Standard-Luer-Syringe |
| Guiding Sheath | Any reinforced sheath ≥ 6F<br>Guiding Sheath in appropriate length |


plusmedica

**Germany**
plus medica GmbH & Co. KG
Willstätterstraße 13
40549 Düsseldorf
Germany
Tel: +49 211 54 59 08 80
kundenservice@plusmedica.de
info@plusmedica.de
www.plusmedica.de

TARYAG

**TARYAG Medical Ltd.**
14 Ha’Ilan St.
Or Akiva
3065101 Israel
Tel: +972.4.6776929
Fax: +972.77.3180728
info@taryag-medical.com
www.taryag-medical.com

**Austria**
info@plusmedica.at
www.plusmedica.at

**Netherlands**
info@plusmedica.nl
www.plusmedica.nl

**Switzerland**
info@plusmedica.ch
www.plusmedica.ch

**Nordics**
gzivkovic@plusmedica.se
www.plusmedica.se


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