A 66-year-old female presenting with lower left extremity rest pain was referred with Category 3 Rutherford intermittent claudication. Previous treatment of the target lesion included balloon angioplasty and drug eluting stent (DES) implantation. Diagnostic angiography revealed an ISR CTO of the left SFA extending into the P1 segment.

Performed Intervention
- Baseline angiographic diagnosis of ISR
- Crossing of the CTO utilizing a 0.035 Trailblazer and soft-angled Glidewire
- Directional atherectomy using the OCT-guided Pantheris atherectomy system
- Drug eluting stent placement at the distal-, mid-, and proximal-SF

Take Home Message
- This case report demonstrates a novel revascularization of a long ISR CTO
- OCT-guided atherectomy enabled identification of lesion extension beyond stent boundaries, thrombus burden within ISR, acute strut mal-apposition, and disease burden assessment without the need for excessive contrast and fluoroscopy
- The Pantheris catheter assisted to safely and effectively revascularize a complex ISR SFA CTO lesion

Exemplary Case

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<tr>
<th>Pre-Intervention</th>
<th>Post-Pantheris</th>
<th>Post-DCB</th>
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Figure 1. Design of the Pantheris catheter and real-time OCT visualization while revascularizing an in-stent restenosis case (Permission granted from Avinger, Redwood City, CA).

Figure 2. OCT of the SFA through the Pantheris system. (A) OCT imaging visualizes proximal and distal disease, stent struts, and thrombus burden; (B) Inner lumen is debulked against the stent struts, demonstrating efficiency and safety.