

The logo for LINC (Lifestyle Institute for Non-Cardiovascular) features the letters 'LINC' in a white, sans-serif font. The letters are positioned over a stylized graphic of three curved, overlapping brushstrokes in shades of blue, red, and yellow, suggesting movement and energy.

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# XTRACT as a Potential Frontline Treatment in Peripheral Arterial Thromboembolism: Results from the Multicenter PRISM trial

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# Disclosure

Speaker name:

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I have the following potential conflicts of interest to report:

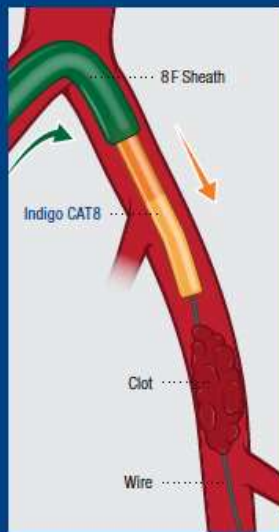
- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
  
- I do not have any potential conflict of interest

# INTRODUCTION

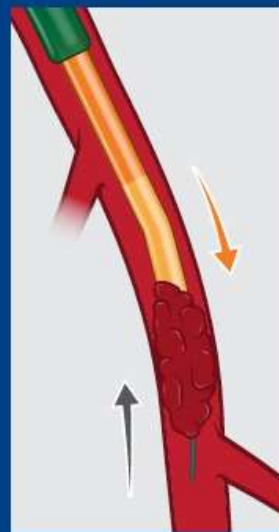
- Acute Limb Ischemia frequently requires immediate revascularization
- Conventional methods for revascularization include catheter directed thrombolysis and surgical embolectomy
- Power Aspiration based extraction (XTRACT) using the Penumbra Indigo System provides an alternative therapeutic option for these patients



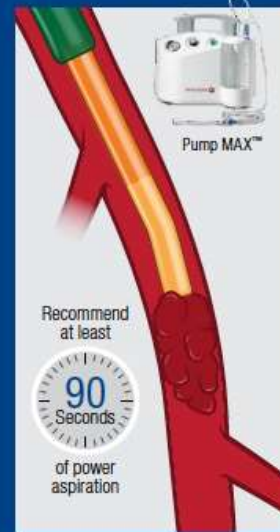
# XTRACT TECHNIQUE USED IN PRISM



The contralateral sheath with RHV/Tuohy is positioned as close to the lesion as possible and the Indigo CAT8 is advanced through sheath over a wire.



The Indigo CAT8 is placed just proximal to the face of the clot and wire is retracted.



Aspiration is applied to Indigo CAT8 via Pump MAX until CAT8 becomes occlusive (recommend waiting at least 90 seconds).



The Indigo CAT8 is removed under aspiration to ensure clot remains engaged in catheter tip and clot is extracted out of the body.

# PRISM OVERVIEW AND METHODS

- PRISM was a single arm, retrospective analysis of patients in whom XTRACT was performed with the Penumbra/Indigo System
- A total of 79 patients were included
- The optimal technique and implementation of this system, including its utility with and without adjunctive thrombolytic therapy

# INDICATIONS AND SELECTION CRITERIA

## ➤ Indications

- Failed thrombolysis
- Acute limb ischemia
- Distal emboli from preceding intervention

## ➤ Inclusion Criterion

- Evidence of peripheral arterial occlusion – TIMI 0-1

## ➤ Exclusion Criterion

- Participation in other trials that may confound the study outcome

# OUTCOME MEASURES

## ➤ Efficacy

- TIMI 2-3 revascularization
- TIMI scores were assessed at:
  - Presentation
  - Prior to Indigo System thrombectomy
  - Post Indigo System thrombectomy
  - Post all interventions

## ➤ Safety

- Incidence of procedure related serious adverse events (SAEs) within 24h of intervention

# BASELINE CHARACTERISTICS

Patient Demographics	N
Number of patients, N	79
Age (years), mean $\pm$ SD	68.5 $\pm$ 12.5
Female, % (n/N)	41.8%

Patient Medical History	%
Peripheral vascular disease	86.1%
Hypertension	82.9%
Diabetes	33.3%
Atrial fibrillation	15.6%
Smoking	74.3%
Stroke	16.0%
Coronary artery disease	37.3%
Dyslipidemia	69.7%



# OCCLUSION SITES

Target vessel location N=79	
Popliteal	35.4%
Peroneal	7.6%
Posterior tibial	5.1%
Anterior tibial	6.3%
Tibial-peroneal trunk	3.8%
Superficial femoral	29.1%
Profunda femoris	6.3%
Common Femoral	1.3%
Brachial	1.3%
External iliac	1.3%
Common iliac	1.3%
Persistent Sciatic Artery	1.3%

# PROCEDURAL CHARACTERISTICS

Procedural Metrics	Median [IQR]
Median time from puncture to completion of XTRACT	67.5 [50-81]
Median duration of study device use	22 [10-26]

Treatment Modality	%
Study device used frontline	49.4%
Study device after thrombolytics	15.2%
Study device after other mechanical therapy	19.0%
Study device after both thrombolytics and mechanical	16.5%

# REVASCULARIZATION BY TREATMENT MODE

Treatment Mode	N	TIMI 2-3 Post Penumbra/Indigo	TIMI 2-3 Post All Interventions
Study device used frontline	39	79.5%	94.9%
Study device after thrombolytics	12	97.1%	No Change
Study device after other mechanical therapy	15	86.7%	100%
Study device after both thrombolytics and mechanical	13	100%	No Change

**Total = 79 87.2% (68/78)\* 96.2% (76/79)**

**TIMI 3 was achieved in 77.2% (61/79) post all interventions**

\*One patient had missing data after initial intervention and before final assessment.

# SAFETY OUTCOME

Serious Adverse Events	% of Patients
Procedure related SAE within 24h <sup>§</sup>	8.9%
<b>Device related SAE</b>	<b>0</b>

<sup>§</sup>13 SAEs occurred within 24 h of intervention in 7 patients

# DISCUSSION

- The XTRACT technique is a versatile, **safe** and **effective** method to treat acute occlusions in the lower extremities
  - Effective either a primary modality or after failed thrombolysis/thrombectomy
    - **87.2%** reperfusion (TIMI 2-3) as initial therapy
    - **96.2%** post all intervention
- **No device-related SAEs**

# DISCUSSION

## ➤ Potential applications

- Primary therapy in treating acute arterial thrombosis
- Primary therapy in treating embolic occlusions in the lower extremities
- Primary therapy for iatrogenic emboli during endovascular procedures
- Failed or incomplete thrombolysis
- Prior to thrombolysis to initiate flow
- Does not burn bridges for other therapies



**THANK YOU!**

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