

### Modifications Of The TReO-FIT Endograft For EVAR That Make It Suitable For Physician Modification (PMEGs) For Use In Emergent And Ruptured Juxtarenal AAAs



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### Disclosures

- Terumo Aortic- Expert Consulting

### PMEG Long Term Results

ASA PAPER

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Long-Term Results of Physician-Modified Endografts for the Treatment of Elective, Symptomatic, and Ruptured Juxtarenal Abdominal Aortic Aneurysms

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**Objectives:** The objective of this study was to report long-term results of an elective physician-modified, open surgical approach using a physician-modified endograft (PMEG) for the treatment of juxtarenal abdominal aortic aneurysms.

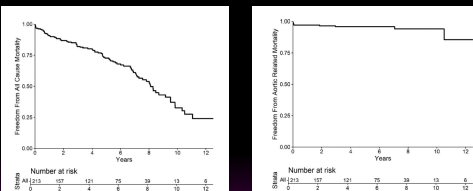
**Methods:** This study was a retrospective, propensity score-matched study of 100 patients who underwent elective juxtarenal AAA repair with a PMEG between April 1, 2011, and June 30, 2023, with comparison against 100 patients who underwent elective juxtarenal AAA repair with a standard endograft between April 1, 2011, and June 30, 2023. The study and patient care were detailed in the preoperative planning and informed consent process. The primary endpoint was freedom from all-cause mortality. Secondary endpoints included freedom from aortic-related mortality, freedom from type I and II endoleaks, need for reintervention, and overall survival. All statistical analyses were performed using R software.

**Results:** Over the course of the study, 200 patients were enrolled into the study. The study was registered on NCT02428633 (DOI: 10.1186/1745-2974-12-101).

**Keywords:** physician modified endografts, juxtarenal abdominal aortic aneurysm, treatment.

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### PMEG Long Term Results



**FIGURE 2.** Kaplan-Meier survival curve; freedom from all-cause mortality.

**FIGURE 3.** Kaplan-Meier survival curve; freedom from aortic-related mortality.

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### Baseline Subject Demographics

- 228 Subjects Consented / 217 Completed Screening Process
  - 167 Male (77.0%)
    - 216 Non-Hispanic or Latino (99.5%)
    - 209 White or Caucasian (96.3%)
    - 2 Black or African American (0.9%)
    - 4 Asian (1.8%), 1 American Indian (0.5%), 1 Pacific Islander (0.5%)
  - Mean Age 75.6 years (range 59-93 years)

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### Baseline Lesion Characteristics

Baseline Lesion Characteristics	Mean mm (Range)
Maximum Aneurysm Diameter	67.5 (49-124)
Proximal Neck Length	5.4 (2-27)
Final Proximal Seal Zone Length	41.6 (18.9-92.9)

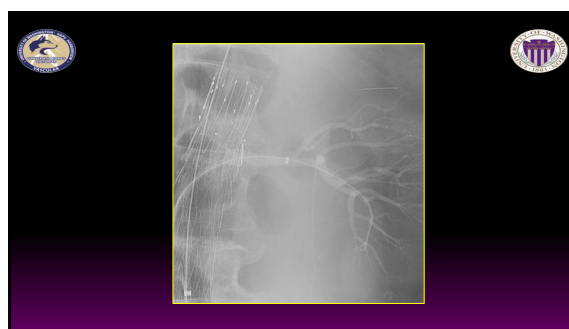
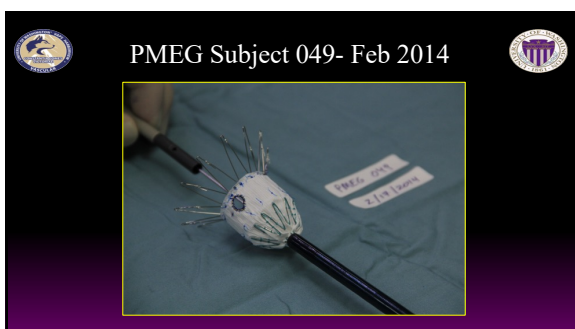
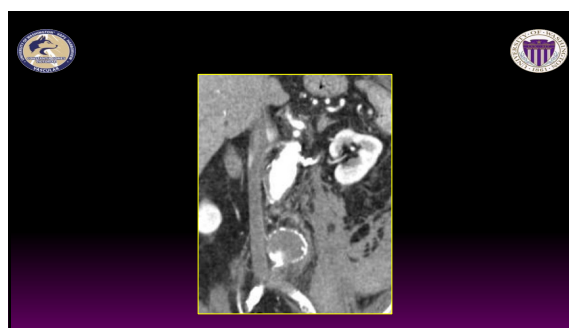
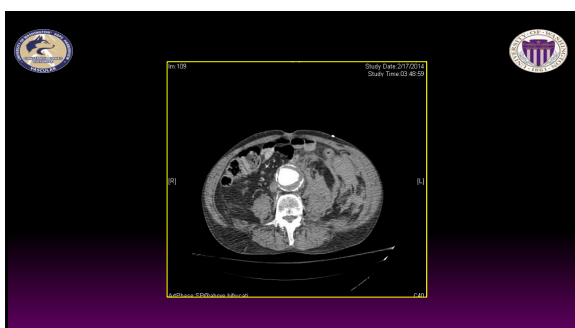
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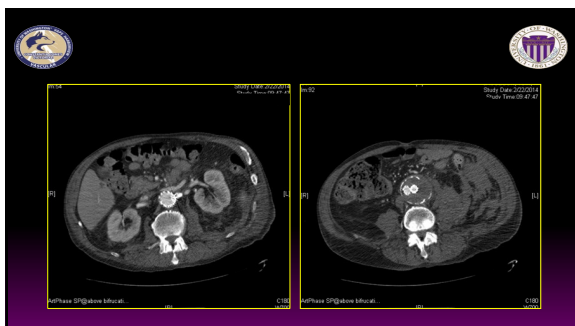
### Procedural Details and Lengths of Stay

Procedural Detail	Mean (Range)
Device Modification Time (minutes)	48.7 (16-78)
Length of Anesthesia (minutes)	198.2 (90-488)
Length of Procedure (minutes)	137.7 (56-427)
Fluoroscopy Time (minutes)	33.8 (8.9-164)
Volume of Contrast (cc's)	93.0 (15-214)
Estimated Blood Loss (cc's)	118.8 (20-1,000)
Length of ICU Stay (days)	1.6 (0.5-15.9)
Total Length of Hospital Stay (days)	3.7 (1.0-87.3)

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### What about Emergent and Rupture Cases?

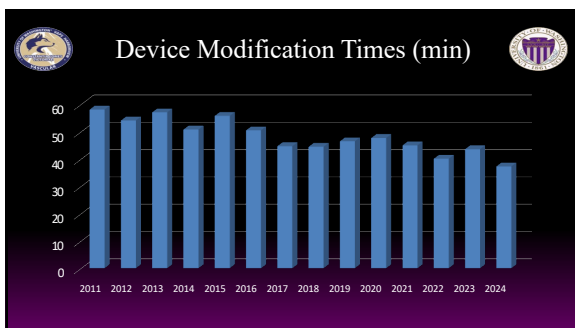




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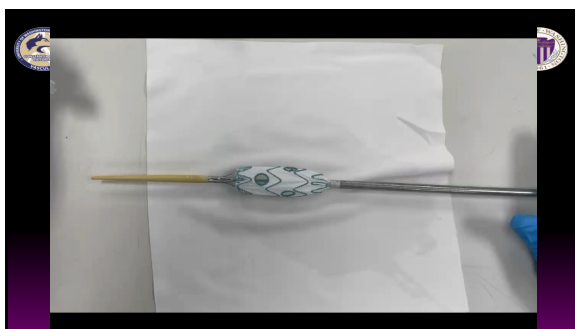
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### TREO FIT TOOLS

- Software generated 3-D Templates
- 4-0 Tevdek suture material
- Fenestration Rings
- Reloading Tools

TREO FIT Template (Physician Specific) & Fenestrated TREO are available in United States via PS-IDE



### October 3, 2024

- First TREO-FIT Implant, Seattle
- First Fenestrated TREO in US, Seattle
- FDA Protocol: How to Decide Who Gets What Device?
  - TREO-FIT
    - Symptomatic / Urgent
    - Male > 6.5 cm
    - Female > 6.0 cm
  - Fenestrated TREO
    - Asymptomatic
    - Male < 6.5 cm
    - Female < 6.0 cm

TREO FIT Template & Fenestrated TREO are available in United States via PS-IDE

