

### U.S. Studies and the Status of the CGuard and CGuard Prime Micromesh Stents: Can They Be Used in TCAR and Are They Making a Difference

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### Conflicts

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| <ul style="list-style-type: none"> <li>• InspireMD</li> <li>• MedAlliance/Cordis</li> <li>• Aveera</li> <li>• Protexa</li> <li>• Pulse Therapeutics</li> </ul> | <p><i>Research Funding (Co-PI)</i></p> <p><i>Advisory Board, Equity</i></p> <p><i>Advisory Board, Equity</i></p> <p><i>Advisory Board, Equity</i></p> <p><i>Advisory Board, Equity</i></p> |
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### C-Guardians II and III Trials

- C-Guard Prime micromesh stent / Switchguard flow reversal
- C-Guardians I trial demonstrated superb TF-CAS results through one year
- Abluminal micromesh traps plaque particulates against the artery wall
- Facilitates appropriate post-dilation after stent deployment



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### C-Guard Prime Stent with MicroNet Mesh



- Fine meshwork prevents plaque prolapse
- Optimal pore size (165µ) for maximal plaque protrusion prevention



### CGuard™ Prime Stent: MicroNet™ Technology

#### The Micronet™

- Bio-stable mesh woven
- 20µm single strand
- Polyethylene Terephthalate (PET)
- The MicroNet™ covers the stent and is sutured to both the distal and proximal crowns of the stent platform

#### The MicroNet™ is designed to:

- Trap and seal thrombus and plaque against the vessel wall, preventing embolization
- Optimal pore size (average 165µ) to avoid embolization



### Pre-Clinical: Histopathology in Carotid Artery

Micronet™ doesn't compromise endothelialization

Images taken at 30 days post-implantation by InspireMD

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### CGuard Prime/SwitchGuard Regulatory Strategy

- C-GUARDIANS**
  - CGuard Prime 135cm w/commercially available EPDs (NAV6 and MOWMA)
  - 3-year primary endpoint results presented (1.95% MAE rate)
  - Modular PMA Submission filed; anticipated H1'25 FDA approval
- CGUARDIANS II**
  - CGuard Prime 80cm w/ commercially available NPS
  - 50 patients at 12 centers
  - IDE approved, first enrollment expected December '24
  - Will support PMA-S of CGuard Prime 90cm
- CGUARDIANS III**
  - CGuard Prime 80cm w/ proprietary SwitchGuard NPS
  - IDE submission planned December '24
  - Will support S10k filing of SwitchGuard NPS

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### The Promise of TCAR with CGuard

DW MRI study of recently symptomatic patients - Professor Nadha Loal at LINC 2024

**"Transcarotid Flow Reversal and MicroNET Covered Stent for Carotid Revascularization in Recently Symptomatic Patients: A DW MRI-Based Prospective Evaluation"**

- 14 **recently symptomatic** (<14 days) patients were treated with CGuard using flow-reversal (TCAR)
- All patients remained patent with no major adverse events through 30 days **0% TLR MAE**
- Post-procedural DW-MRI lesion found in only one patient (6.7%); complete resolution in follow-up imaging at 30 days

**Conclusions:**

- (TCAR) combined with a MicroNET stent performed within 1.8 days of **remarkably low incidence of new ischemic brain infarcts detected by DW MRI studies**
- **may improve the safety of CAS, and has the potential to produce results at least comparable to that of carotid endarterectomy.**

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### C-Guardians II Trial

- Single arm study, 12 sites
- Patrick Muck, MD and Patrick Geraghty, MD
- 50 patients at high risk for CEA
- Lesion length < 36 mm
- Artery diameter 4.8- 9.0 mm

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### C-Guardians II Trial

- **High Risk Comorbid Conditions**
- Age 70-80, unstable angina, NYHA class III-IV heart failure, recent MI, LVEF < 35%, severe COPD, planned CABG or AAA repair, contralateral cranial nerve injury, restenosis after prior CEA

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### C-Guardians II Trial

- **High Risk Anatomic Conditions**
- Contralateral carotid occlusion, prior radiation therapy or radical neck dissection or laryngectomy, lesion above C2, severe tandem lesions, inability to extend neck

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### C-Guardians II Trial- Endpoints

- Acute device success (introduction, deployment, removal)
- Technical success (less than 30% residual after post-dilation)
- 30 day hierarchical death/stroke/myocardial infarction
- 30 day hierarchical death/stroke
- Major/minor stroke
- Stroke through one year



### C-Guardians II Trial

- Protocol approved
- DSMB, CEC, screening committee
- Angiographic and duplex ultrasound core labs
- Site initiation visits are underway
- Anticipate first enrollment in December



### Stay Tuned... C-Guardians III Trial

- TCAR using C-Guard Prime Stent + SwitchGuard NPS

