#### Gore VIPER Clinical Study One-Year Results





Product with radiopaque markers planned for European availability in 2016.

#### Gore VIPER Clinical Study Centers and Principal Investigators

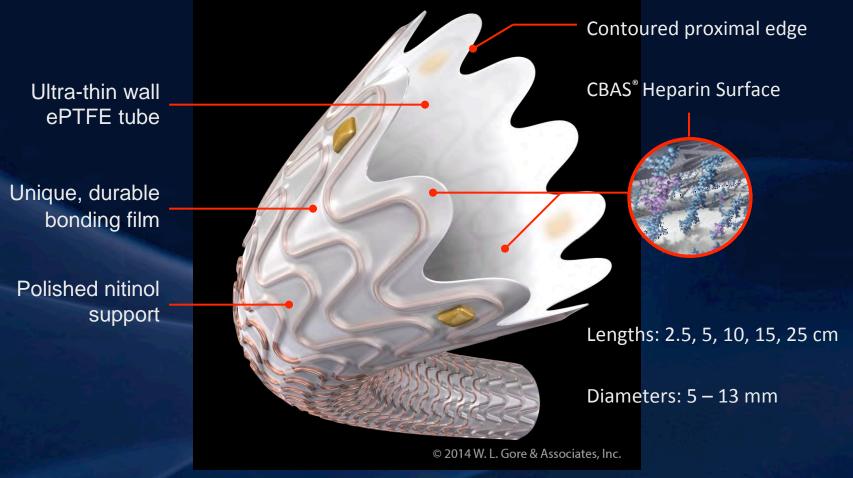
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#### **Gore VIPER Clinical Study Overview**

GORE<sup>®</sup> VIABAHN<sup>®</sup> Endoprosthesis with PROPATEN Bioactive Surface for treatment of long SFA disease

Objective	Evaluate the performance of GORE <sup>®</sup> VIABAHN <sup>®</sup> Endoprosthesis with PROPATEN Bioactive Surface (W. L. Gore & Associates, Inc.) in treating long-segment SFA disease (> 5 cm in length)
Design	Single-arm, prospective, 12 sites, 120 limbs
Primary Endpoints	<ul> <li>Primary patency at 12 months</li> <li>No evidence of restenosis or occlusion within the originally treated lesion based on CDUS; PSVR &lt; 2.5;</li> <li>No angiographic evidence of stenosis &gt; 50% if CDUS is uninterpretable or unavailable</li> <li>Proportion of subjects experiencing major procedure related adverse events within 30 days of procedure</li> </ul>
Secondary Endpoints	Primary assisted patency Secondary patency Device-related major adverse events at 12 months

#### **Endoprosthesis Description**



Product with radiopaque markers planned for European availability in 2016.

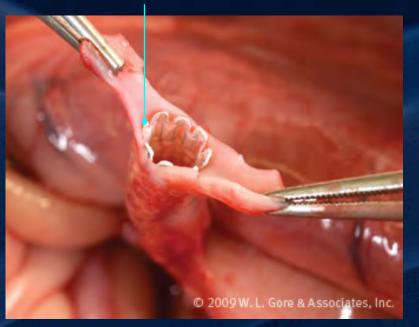
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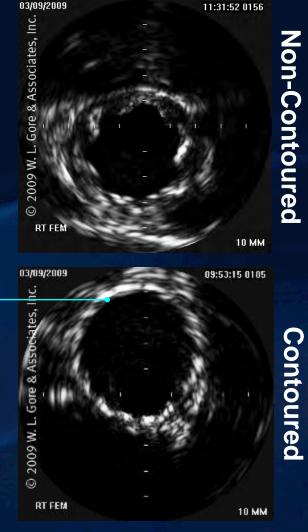
# **Contoured Proximal Edge**

#### Manufacturing change during study

IVUS demonstrates device apposition to – artery in canine model

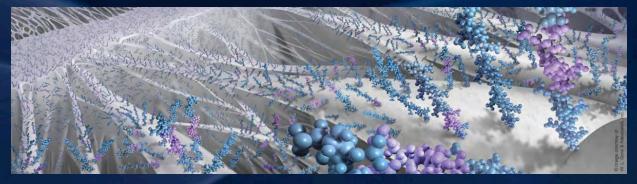
Post-mortem dissection demonstrates device apposition to artery





# **CBAS®** Heparin Surface

- End-point covalent bonding
  - CBAS<sup>®</sup> Heparin Surface technology allows for retention of bioactivity.
- Sustained bioactivity<sup>1</sup>
  - Active site catalytically facilitates antithrombin-thrombin complex formation and then becomes available to repeat the reaction.
- Intended to provide a thromboresistant surface
  - Clinical history: Long-term activity and safety.<sup>2</sup>



- 1. P.C. Begovac, R.C. Thomson, J.L. Fisher, A. Hughson, A. Gallhagen. Improvements in GORE-TEX<sup>®</sup> vascular graft performance by Carmeda<sup>®</sup> bioactive surface heparin immobilization. *European Journal of Vascular & Endovascular Surgery* 2003, 25(5): 432-437.
- Lindholt JS, Gottschalksen B, Johannesen N, et al. The Scandinavian Propaten<sup>®</sup> Trial 1-year patency of PTFE vascular prostheses with heparin-bonded luminal surfaces compared to ordinary pure PTFE vascular prostheses – a randomised clinical controlled multi-centre trial. European Journal of Vascular & Endovascular Surgery 2011;41(5):668-673.

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#### **Lesion Characteristics**

	Gore VIPER Clinical Study
Limbs Enrolled	119
Treated Occlusions	56%
Lesion Length	19 cm
Lesion Calcification	
none-mild	39%
moderate-severe	61%
Tibial Runoff	· 김정식·소리 첫 사이
One vessel	21%
Two vessel	33%
Three vessel	46%
TASC II Lesion Classification	
Туре А	14%
Туре В	25%
Туре С	29%
Type D	31%

# Safety – Major Adverse Events

• Primary Endpoint: 30-day procedure-related MAE

One event, (0.8%): surgical bypass after target lesion occlusion

Secondary Endpoint: One-year device-related MAE

Zero events

 Major Adverse Events (MAE): require significant therapy, including unplanned increase in the level of care, permanent sequelae, hospitalization, or death. Repeat interventions, stenosis, and occlusions are not adverse events.

## **One-Year Patency**

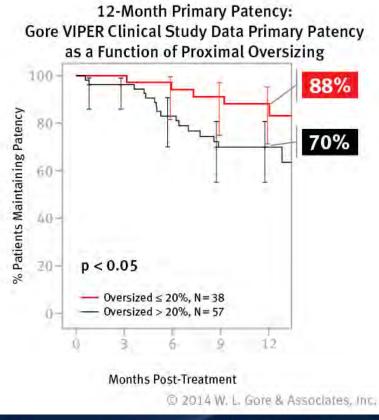
12-Month Patency: Gore VIPER Clinical Study Data 100 92% % Patients Maintaining Patency 80 73% 60 40 20 **Primary Patency** Secondary Patency 0 12 Q. 6 Months Post-Treatment © 2014 W. L. Gore & Associates, Inc.

103 / 119 limbs available for follow-up at 12 months

#### **One-Year Primary Patency by Subgroup**

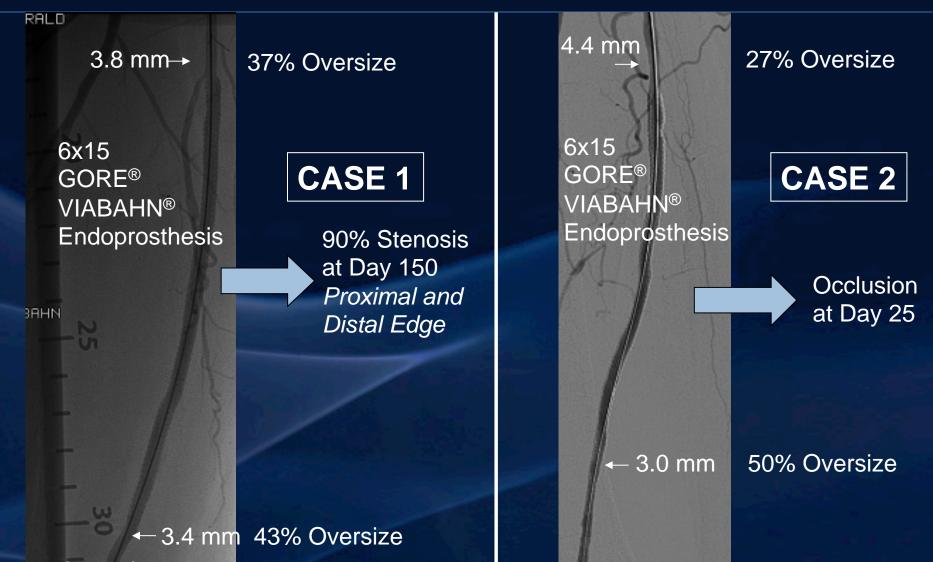
	Primary Patency
Overall	73%
Device Diameter	
5 mm (n= 23)	79%
6 mm (n= 85)	69%
7 mm (n= 8)	100%
Lesion Length	
≤ 20 cm (n= 68)	75%
> 20 cm (n= 51)	70%

#### **Effects of Device Sizing: Proximal**



Device oversizing assessed by independent Core Lab, data on file

#### Oversizing



# Conclusions

- The GORE<sup>®</sup> VIABAHN<sup>®</sup> Endoprosthesis with PROPATEN Bioactive Surface Exhibits 73% Patency in Long SFA Lesions
  - Patency is independent of lesion length
    - Long lesions (> 20 cm) equivalent to medium lesions (5–20 cm)
  - 5 mm device patency is equivalent to other sizes
    - Appears to have no dependence on device diameter in contrast to previous experience<sup>1</sup>

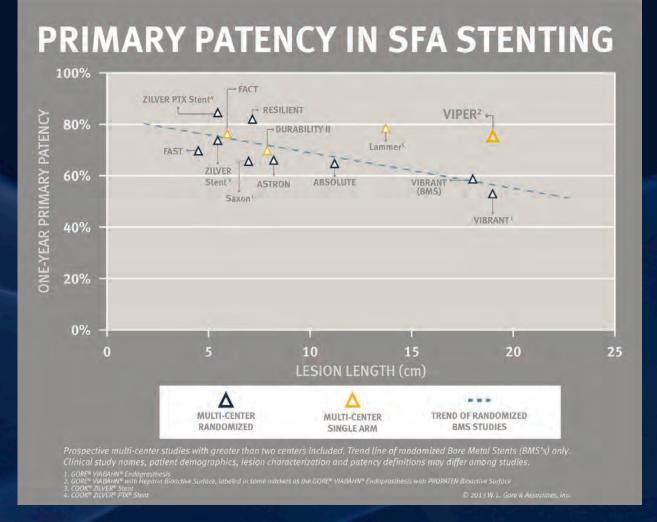
#### Sizing is Critical

 Primary patency is significantly better when IFU sizing is not exceeded at the proximal edge

- 88% versus 70% at 12 months (p < .05, sizing by Core Lab)</li>
- European VIASTAR Trial adds more Comparative Data
  - Randomized trial of Bare Nitinol Stents versus the GORE<sup>®</sup> VIABAHN<sup>®</sup>
     Endoprosthesis with PROPATEN Bioactive Surface for long SFA lesions

<sup>1.</sup> Saxon RR, Coffman JM, Gooding JM, Ponec DJ. Long-term patency and clinical outcome of the Viabahn Stent-Graft for femoropopliteal artery obstructions. *Journal of Vascular & Interventional Radiology* 2007;18(11):1341-1350.

#### **Primary Patency in SFA Stenting**



Bosiers M, Deloose K, Callaert J, et al. Results of the Protégé EverFlex 200-mm-long nitinol stent (ev3) in TASC C and D femoropopliteal lesions. *Journal of Vascular Surgery* 2011;54(4):1042-1050.



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The GORE® VIABAHN® Endoprosthesis with PROPATEN Bioactive Surface is known in some markets as the GORE® VIABAHN® Endoprosthesis with Heparin Bioactive Surface.

Products listed may not be available in all markets.

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