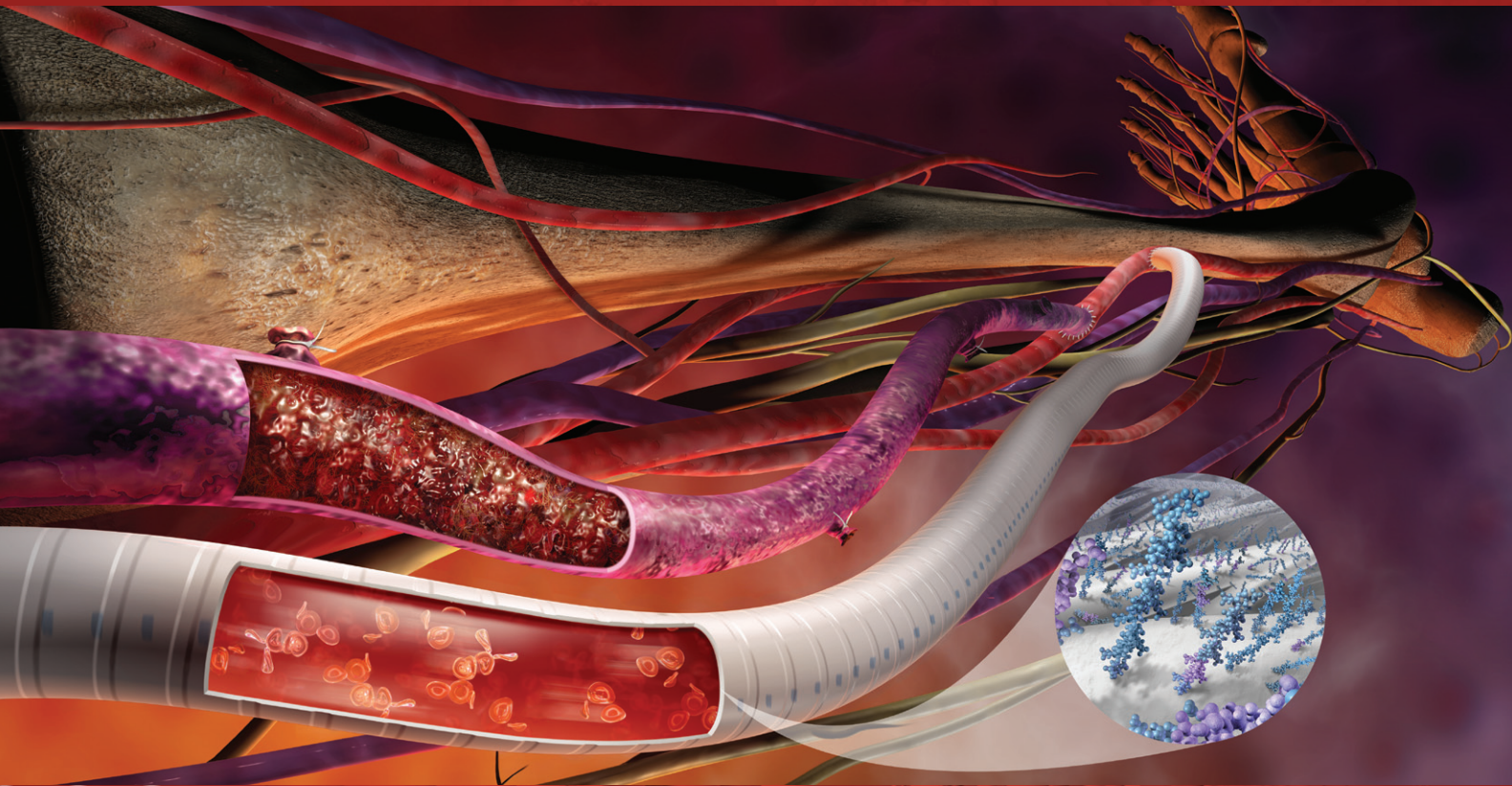


# The Combination

*that lasts*



PERFORMANCE through collaboration

Now Available  
with  
**INTEGRATED  
RINGS**



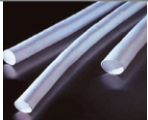
**PROPATEN®**

VASCULAR GRAFT



Transcending  
Mechanical Solutions

## Mechanical Solutions



**1975**  
First GORE-TEX®  
Vascular Graft



**1981**  
FEP Ringed



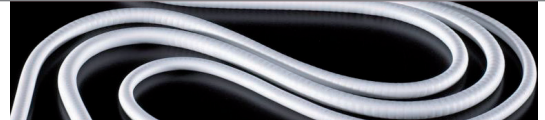
**1983**  
Thin-walled



**1992**  
Stretch Technology  
Thin-walled



**2002**  
GORE INTERING®  
Vascular Graft



**GORE PROPATEN® Vascular Graft**

# *A NEW CATEGORY* in Vascular Bypass.

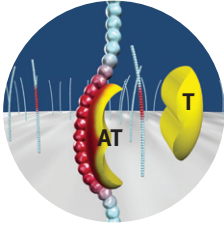
Gore is the first company to introduce a new category in vascular bypass built on proven elements you can trust — a combination of innovation and a history of clinical success.

- **More than 30,000** successful GORE PROPATEN® Vascular Graft implants worldwide.
- **More than 200** scientific papers including numerous clinical studies have demonstrated the safety, efficacy and performance of the end-point covalent heparin bonding technology.
- **More than 25 million** Gore clinical ePTFE implants worldwide.
- **More than 30 years** of experience in medical device implants.

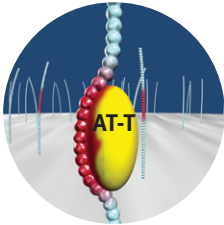
## PROPRIETARY END-POINT COVALENT BONDING

➤ Only the end of the heparin molecule is bonded to the graft surface

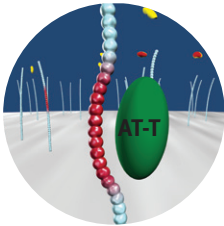
- The heparin bioactive site remains free to interact with the blood



- Heparin molecules are bonded to the graft's luminal surface
- Bioactive site of the heparin molecule binds to antithrombin (AT)



- Antithrombin binds to thrombin (T) – a neutral AT-T complex is formed
- Thrombin loses its ability to catalyze the conversion of fibrinogen to fibrin



- Neutral AT-T complex detaches from the heparin molecule
- Heparin bioactive site becomes available to again bind antithrombin

➤ End-point covalent bonding keeps heparin anchored to the graft surface over time

➤ Proprietary Gore technology



## HEPARIN

➤ A proven anticoagulant

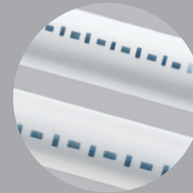
➤ Derived from heparin sourced in North America

➤ Reduced molecular weight heparin of porcine origin

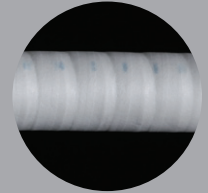


## ePTFE

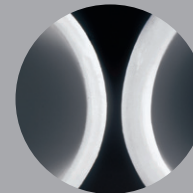
➤ Unchanged GORE-TEX® Vascular Graft handling properties



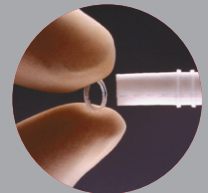
Stretch Technology



Integrated Rings



Thin and standard-walled



Removable Rings

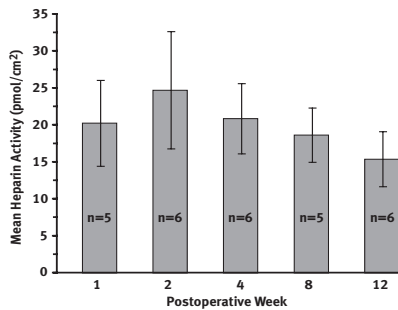




# GORE PROPATEN® Vascular Graft

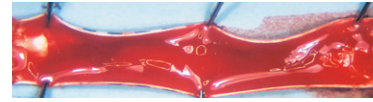
## Sustained bioactivity<sup>1</sup>

- Anchored to the graft surface
- Heparin active sites are not compromised



Sustained Heparin Activity on GORE PROPATEN® Vascular Grafts (in vivo canine aorto-iliac bypasses)

## Thromboresistant luminal graft surface that retains the intrinsic bioactive properties of heparin<sup>1</sup>



Control ePTFE Graft

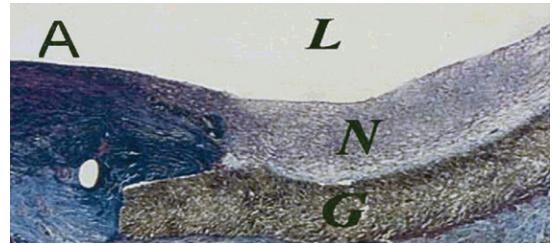


GORE PROPATEN® Vascular Graft

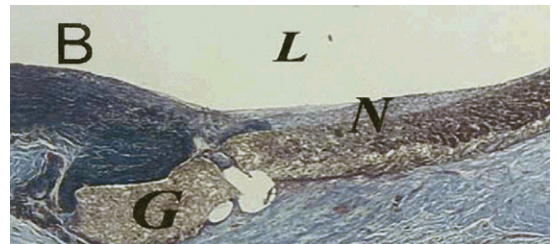
The bioactive luminal surface of a 3 mm diameter GORE PROPATEN® Vascular Graft (below) remains free of thrombus, while the non-bioactive surface of a control graft (top; 3 mm diameter) is covered with thrombus. Grafts were explanted after two hours in a challenging carotid shunt canine model.

## Intimal Hyperplasia Reduction

— Lin, et al.<sup>2</sup>



Control ePTFE Graft



GORE PROPATEN® Vascular Graft

Neointimal hyperplasia at the distal anastomoses of an aortoiliac bypass graft model in baboons. Statistically significant reduction in neointimal hyperplasia at the distal anastomosis was observed for the GORE PROPATEN® Vascular Graft as compared to untreated control ePTFE.

A) Distal anastomosis of untreated control ePTFE graft B) Distal anastomosis of the GORE PROPATEN® Vascular Graft. L: Lumen; N: Neointima; G: ePTFE Graft. Collagens are blue, elastin is black, others are red. (Verhoeff-Masson stain; original magnification X40) Images reproduced with permission from Elsevier.



GORE PROPATEN® Vascular Graft explant after 239 days (~ 8 months)

- Femoral to anterior tibial bypass
- Substantial heparin bioactivity detected
- In same range as that shown previously in a canine study



GORE PROPATEN® Vascular Graft explant after 1111 days (> 3 years)

- Below-knee femoral to tibioperoneal trunk bypass
- Outflow vessel (peroneal artery) occluded
- Substantial heparin bioactivity detected

## Bonded — Does not elute

- No systemic heparinization
- Thromboresistance remains over time

# PERFORMANCE as Nature Intended.

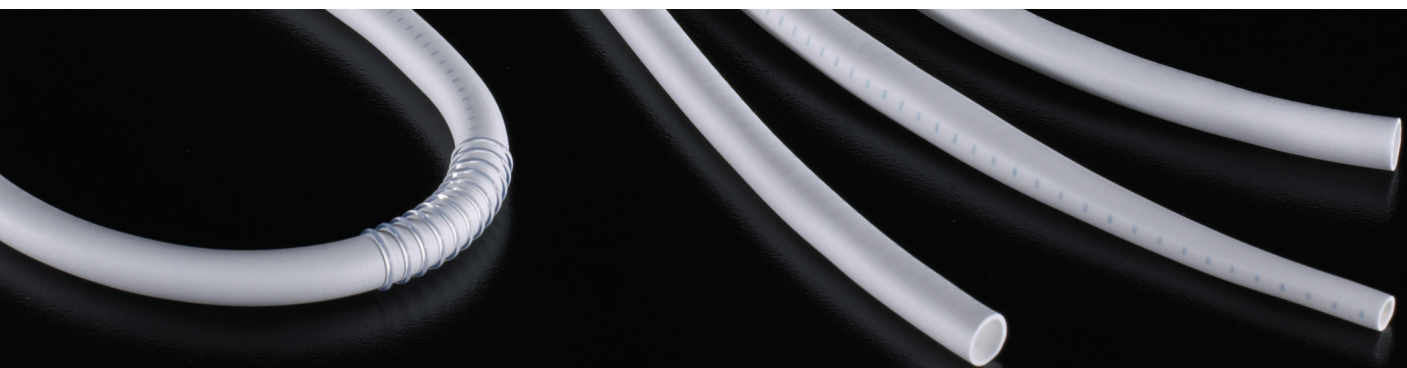
*Anything better below-knee would be a vein.*

		82%	75%	68% <sup>3</sup>
		1 year	2 years	3 years
<b>TOTAL</b>	<b>N = 494<sup>a</sup></b>			
<b>BK Fem-Pop</b>	<b>N = 264<sup>b</sup></b>	83%	81%	75%
<b>BK Infrapopliteal</b>	<b>N = 199<sup>c</sup></b>	79%	69%	60%

N = Number of Bypasses

Overall weighted average<sup>†</sup> primary patency based on GORE PROPATEN<sup>®</sup> Vascular Graft literature

**Remember GORE-TEX<sup>®</sup> Suture;**  
*The Perfect Close to Your Vascular Procedures*







## References and Bibliography

$$\dagger \text{ Weighted Average} = \frac{(N_1 \times \text{Primary Patency}_1) + (N_2 \times \text{PP}_2) + \dots + (N_n \times \text{PP}_n)}{N_1 + N_2 + \dots + N_n}$$

- a. References 3 – 11 were used to calculate the number of patients and patency values.
- b. References 3 – 6 and 8 – 11 were used to calculate the number of patients and patency values. Note that references 5, 6 and 8 reported on clinical series that were predominantly BK Fem-Pop bypasses.
- c. References 3, 4, and 9 – 11 were used to calculate the number of patients and patency values.

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