FlowLine Bipore® HEPARIN

ePTFE Vascular Prosthesis

Ordering information

FlowLine Bipore® HEPARIN, the vascular prosthesis with the unique heparin bonding, used succesfully in cardio-vascular surgery for years, is available in various different configurations to ensure optimized patient care.
We can supply any vascular prosthesis in the FlowLine Bipore® programme with the biologically active heparin bonding – just ask!

Quick and reliable delivery of the standard products in Europe within 24 hours.
Call our central office: +49 (0) 74 71 / 922 - 0

		Thin Wall	Thin Wall with spiral reinforcement
Length (cm)	**Diameter** (mm)	**Catalogue No.**	**Catalogue No.**
40	5	15TW4005N	15TW4005S
50	6	15TW5006N	15TW5006S
50	7	15TW5007N	15TW5007S
50	8	15TW5008N	15TW5008S
70	5	15TW7005N	15TW7005S
80	6	15TW8006N	15TW8006S
80	7	15TW8007N	15TW8007S
80	8	15TW8008N	15TW8008S

		Standard Wall	Standard Wall with spiral reinforcement
Length (cm)	**Diameter** (mm)	**Catalogue No.**	**Catalogue No.**
20	6	15SW2006N	–
20	7	15SW2007N	–
40	5	15SW4005N	–
50	6	15SW5006N	15SW5006S
50	7	15SW5007N	15SW5007S
50	8	15SW5008N	15SW5008S
70	5	15SW7005N	–
80	6	–	15SW8006S
80	7	–	15SW8007S
80	8	–	15SW8008S

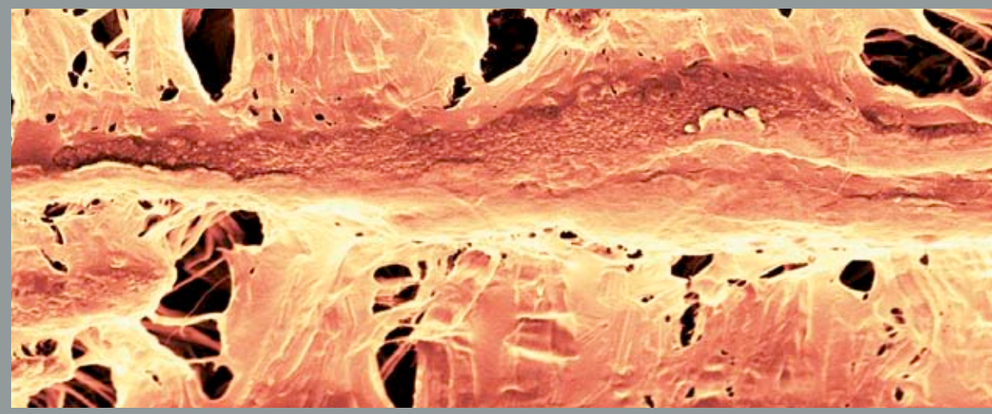
JOTEC®
SOLUTIONS FOR VASCULAR DISEASE

JOTEC GmbH
Lotzenäcker 23
D-72379 Hechingen
Tel. +49 (0) 74 71 / 922 - 0
Fax +49 (0) 74 71 / 922 - 100
www.jotec.net

JOTEC AG
Luzernerstr. 91
CH-5630 Muri
Tel. +41 (0) 56 670 91 - 00
Fax +41 (0) 56 670 91 - 02

CE 0124

JOTEC®
SOLUTIONS FOR VASCULAR DISEASE



FlowLine Bipore® HEPARIN

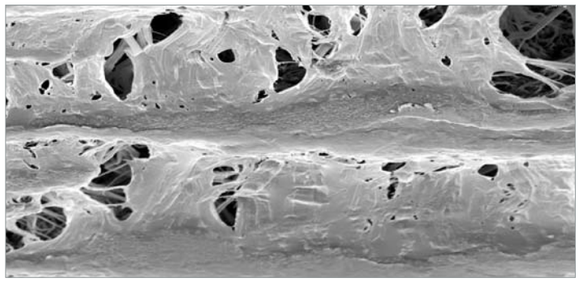
ePTFE Vascular Prosthesis

The antithrombogenic lumen surface prevents thrombus formation actively and permanently

FlowLine Bipore® HEPARIN

The alternative with a permanent antithrombogenic effect

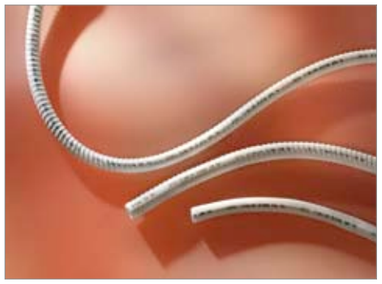
Conventional ePTFE prosthesis:
Thrombus formation after 2 hours of blood contact[1]



FlowLine Bipore® HEPARIN:
Thrombocyte adhesion to the heparin-bonded lumen surface is greatly reduced[1]

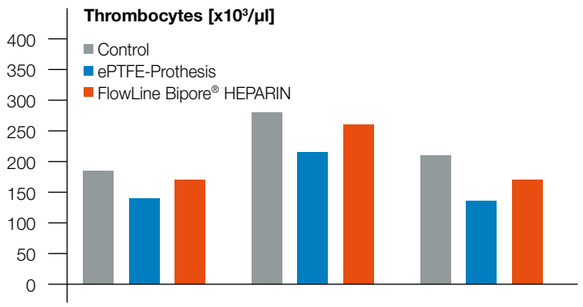
Decisive advantage by the biologically active heparin, bonded to the lumen surface of the ePTFE vascular prosthesis[1]

This bonding technology has been in clinical use in cardiovascular applications for over 10 years. Now this bonding technique is being used for the first time in vascular prosthesis. This microscopic image illustrates clearly the advantages over conventional ePTFE prostheses.



FlowLine Bipore® HEPARIN
helps vascular therapists provide better patient care, especially in peripheral vascular applications.

- The FlowLine Bipore® HEPARIN is very supple and smooth and its suturing properties are excellent.
- A thin layer of ePTFE film enhances suture retention strength and prevents dilatation.
- The unique, readily visible guideline provides the information about the type and diameter of the prosthesis at a glance.
- The version with a reinforcing outer spiral of PTFE monofilament which can be removed easily shows an especially high level of resistance to kinking and compression.



Dynamic blood tests confirm high level of hemocompatibility

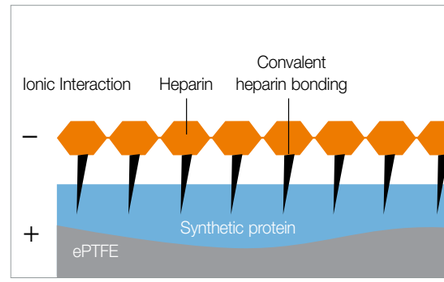
The number of free thrombocytes in the amount of blood to which the lumen surface of the Flowline Bipore® HEPARIN (H) was exposed is comparable to the control group (C) in a natural environment. In conventional ePTFE vascular prostheses (P) there is a decrease in the number of free thrombocytes due to thrombus formation on the lumen surface. [1]

The reliable antithrombogenicity of the new FlowLine Bipore® HEPARIN ePTFE vascular prosthesis provides the basis for a long-lasting therapeutic success.

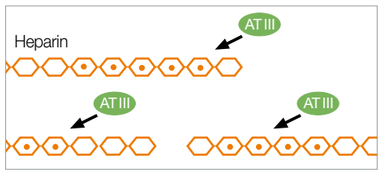
[1] In vitro studies / dynamic blood test in Chandler Loop by Dr. H.P. Wendel:
Clinical Research Laboratory, Clinic for Thoracic, Cardiac and Vascular Surgery, University Clinics, Tübingen

Long-lasting FlowPower: the special heparin bonding

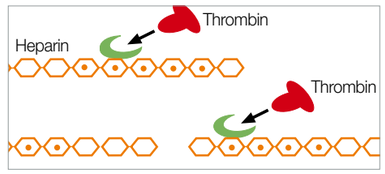
In the FlowLine Bipore® HEPARIN vascular prosthesis, biologically active heparin is attached to the lumen surface of the prosthesis by means of covalent bonding and ionic interactions, a stable and permanent method. This innovative bonding technique imitates the natural antithrombotic effect of heparan sulphate, thus presenting a „blood-friendly“ surface.



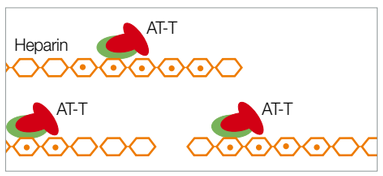
Schematic presentation of the active mechanism



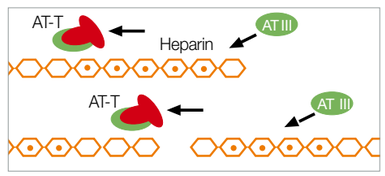
1. Antithrombin III binds to the biologically active sequences of the heparin.



2. Changes in conformation within the antithrombin III molecule facilitate its interaction with thrombin, whereby a stable antithrombin III-thrombin complex is formed.



3. The irreversible binding of thrombin to antithrombin III prevents blood coagulation and thrombus formation.



4. The antithrombin III-thrombin complex dissociates from heparin, which now in its original form is readily available for further reaction cycles.

Freely available biologically active heparin sequences on a permanent basis. The prosthesis retains its long-term, reliable effectiveness. More FlowPower for modern vascular therapy – FlowLine Bipore® HEPARIN.