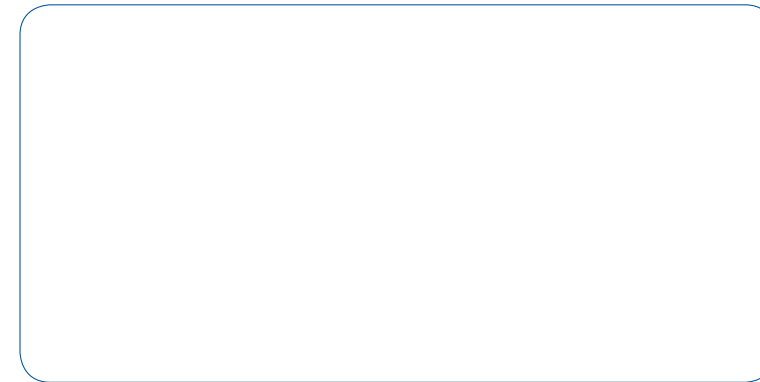




More information
Please contact our local Polyganics representative for more information



The information presented in this brochure is intended to inform and demonstrate the product. Always refer to the package insert, product label and/or user instructions before using this product. NEUROLAC® and VIVOSORB® are registered trademarks of Polyganics B.V., The Netherlands.

NEUROLAC® and VIVOSORB® are manufactured by Polyganics B.V., The Netherlands
NEUROLAC® is CE-approved under CE 0344 and filed at the FDA under number K0320115 and K050573
VIVOSORB® is CE-approved under CE 0344 and filed at the FDA under number K042811

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POLYGANICS
Bioresorbable Medical Device Solutions

Unique, synthetic
and bioresorbable solutions

NEUROLAC®
Comfortable peripheral nerve repair

VIVOSORB®
Optimal soft tissue support



● Peripheral Nerve Repair
● General Surgery

POLYGANICS
Bioresorbable Medical Device Solutions



NEUROLAC®

Safe and optimal peripheral nerve entubulation

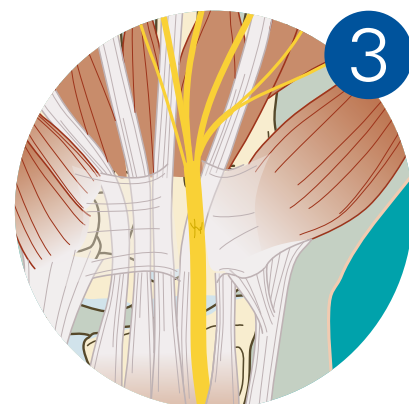
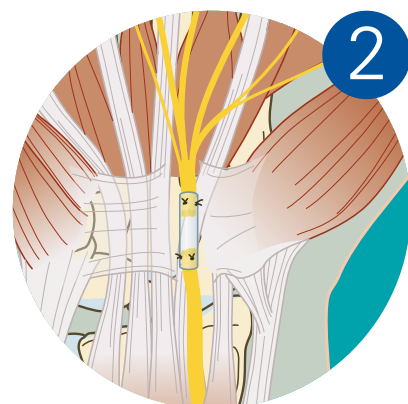
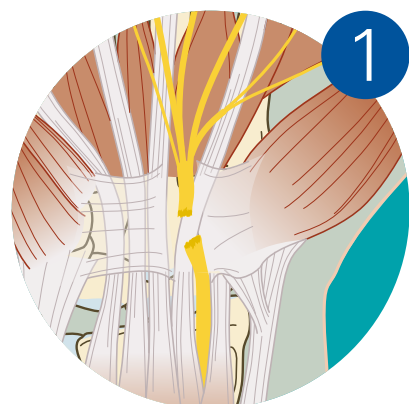
NEUROLAC® is a synthetic, bioresorbable and transparent nerve conduit. NEUROLAC® facilitates nerve regeneration after transection of peripheral nerves and improves nerve functional recovery.

The high transparency of NEUROLAC® allows for efficient nerve stump positioning and early detection of blood clots. By actively directing the axon growth, NEUROLAC® prevents neuroma formation and intervention of fibrous material at the wound surface. NEUROLAC® is made of a 100% synthetic polymer and is 100% biologically safe. Mechanical support is given to the healing nerve for a period of 10 weeks. Approximately 24 months after placement NEUROLAC® is resorbed.

NEUROLAC® Features

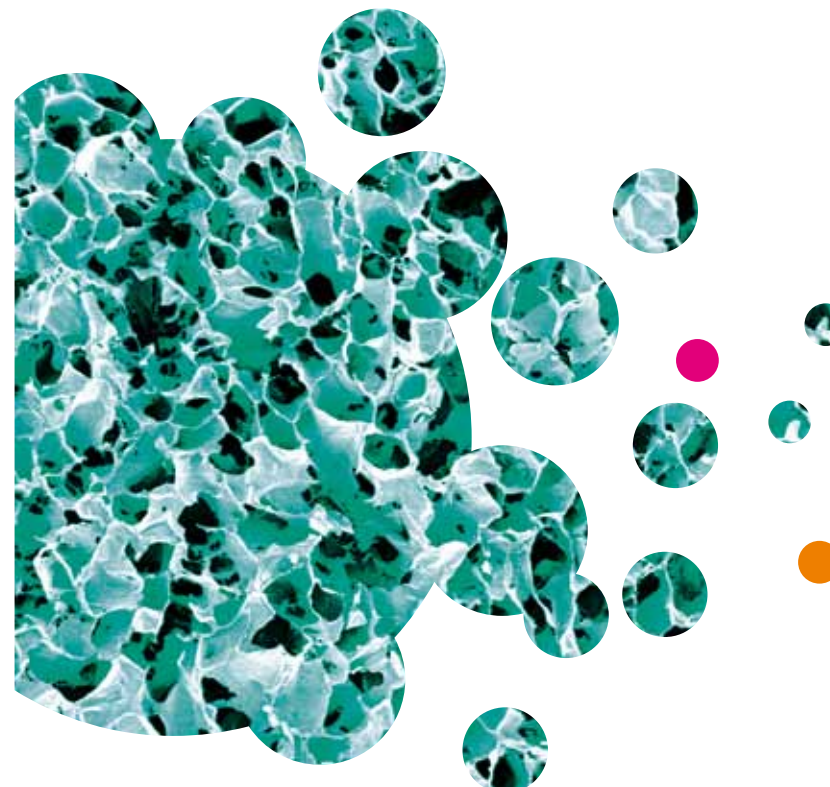
- Nerve repair without the need to harvest an autograft
- Significant reduction of operation time when compared with autografts procedures
- No morbidity or loss of sensation
- Reducing the risk of donor-site deficit, scarring, and neuroma formation
- Improved nerve-function recovery (with less adverse side effects)
- Designed not to kink or collapse
- High transparency to enable optimal positioning of nerve ends and detection of blood clots
- A tensionless repair for improved patient outcomes
- Semi-permeable – allows small-sized nutrients and neurotrophic factors to pass
- Fully synthetic - clinically proven to be biologically inert
- Metabolic breakdown products are resorbed via normal metabolic pathways
- Full resorption in approximately 24 months after implantation

● Peripheral Nerve Repair



Bioresorbable copolyesters

Bioresorbable co-polyesters are, as a result of their proven biological safety, widely used in a range of medical applications. Examples are found in bone plates and screws, guided tissue regeneration, resorbable sutures and biodegradable drug delivery systems.



Polyganics' co-polyester PLC

PLC, poly(DL-lactide-ε-caprolactone) co-polyester, is composed of lactide and ε-caprolactone. Both compounds are safe and approved for use in medical and pharmaceutical implants. Extensive research, including long-term animal and human implantation studies have proven the bio-safety, biocompatibility and complete resorbability of PLC^{1,2}.

1. Den Dunnen, W.F.A., et al. J. Biomed. Mater. Sci. 1997. 36: p. 337-346
2. Meek, M.F., et al. J Biomed Mater Res A. 2004. Jan 1;68(1):43-51

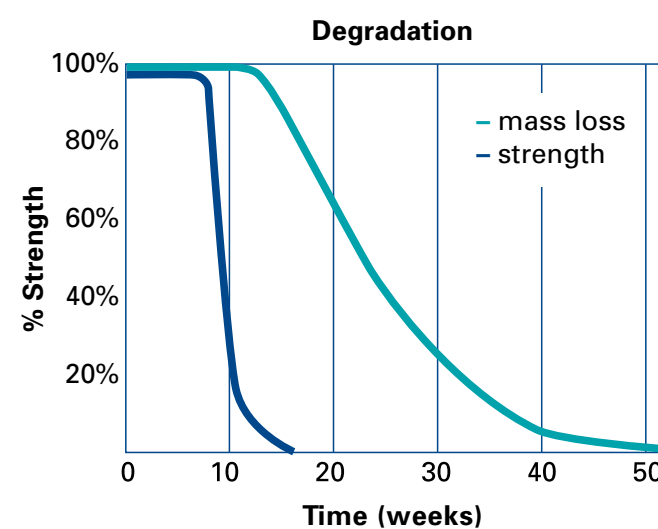
PLC becomes hydrophilic by water uptake, which increases the permeability of the polymer. This is important in the control of nutrient and other metabolite transport to the surrounding healing tissue. A few weeks after implantation, the mechanical strength gradually decreases and loss of molecular weight occurs as a result of the hydrolysis process. In approximately 24 months, PLC degrades into lactic acid and hydroxy caproic acid which are both safely metabolized into water and carbon dioxide and/or excreted through the urinary tract. In contrast to other biodegradable polymers, PCL does not generate an acidic micro-environment which is favorable to the surrounding tissue.

Polymers composed of lactide, glycolide and glycolactide are rigid materials, whereas the lactide caprolactone ester is a flexible, soft material at body temperature. This makes it highly suitable for soft tissue applications in the fields of general surgery, ENT surgery, plastic and reconstructive surgery, cosmetic surgery and oncology or in drug-delivery systems.

Unique properties of Polyganics' co-polyester PLC

- Completely safe
- Highly biocompatible
- Bioresorbable
- Flexible and soft at body temperature
- Completely transparent, offering full overview on covering tissue
- Strong, tensile strength up to a pressure of 100 MPa

PLC forms the basis of 2 of Polyganics' proprietary products: NEUROLAC® and VIVOSORB®.



VIVOSORB®

Synthetic bioresorbable surgical sheet

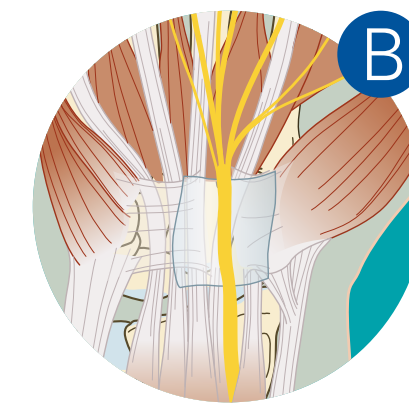
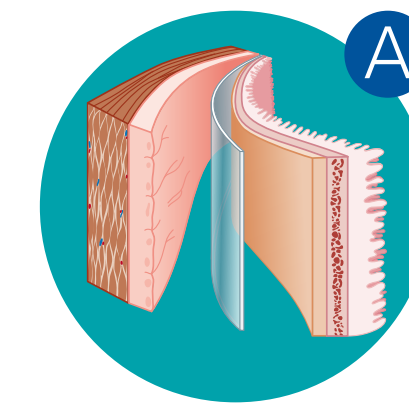
VIVOSORB® is a flexible bioresorbable polymer sheet which is indicated for the use of temporary wound support, to reinforce soft tissues, separate opposing tissues and to prevent the ingrowth of scar tissues and minimizes the formation or reformation of adhesions throughout the critical healing process.

It is very flexible facilitating the surgeon to optimally position it during surgery. VIVOSORB® is made of 100% micro-biologically safe synthetic bioresorbable and can be used in a variety of soft tissue surgery applications. VIVOSORB® retains its mechanical properties up to 10 weeks. Approximately 24 months after placement VIVOSORB® is resorbed via natural pathways.

VIVOSORB® Features

- Minimizes soft tissue adhesions
- Supports soft tissue repair
- Separates opposing tissues
- Fully synthetic
- Transparency and high flexibility allow for easy and optimal manipulation during surgery
- Retention of mechanical strength for up to 10 weeks throughout the critical healing period
- Bioresorbable character allows for safe encapsulation, metabolic breakdown and natural excretion
- Different sheet sizes available

● Peripheral Nerve Repair
● General Surgery



POLYGANICS

Bioresorbable Medical Device Solutions