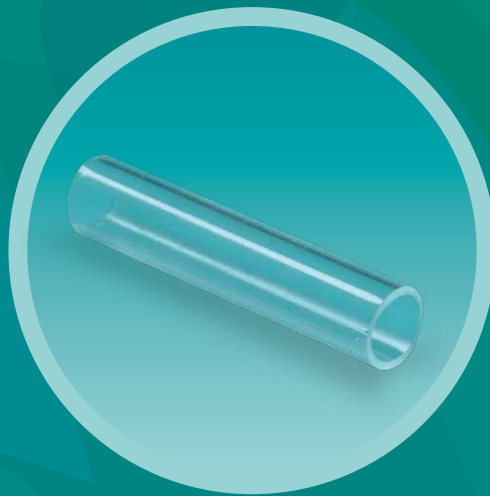


# NEUROLAC<sup>®</sup>

Peripheral Nerve Repair



**POLYGANICS**

TRANSFORMING PATIENT  
RECOVERY

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# NEUROLAC®

## Peripheral Nerve Reconstruction Up To 20 mm

### NEUROLAC® synthetic and transparent nerve guides

Polyganics offers 2 types of NEUROLAC® nerve guides: NEUROLAC® and NEUROLAC® TW. **NEUROLAC® TW is the thin-wall version of our unique transparent NEUROLAC® nerve tube concept. NEUROLAC® TW has a wall thickness that is 40% less than the current NEUROLAC® conduits, making it even easier to suture.** Both NEUROLAC® versions offer high flexibility, easy and comfortable suturing.

### User friendly

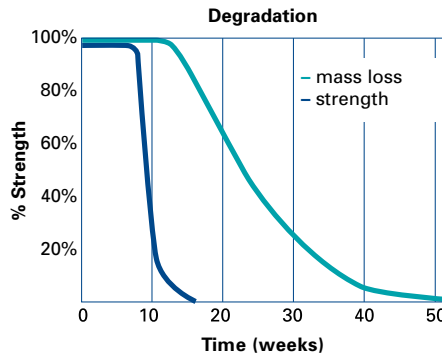
NEUROLAC® nerve guides are indicated for reconstruction of a peripheral nerve discontinuity up to 20 mm in patients with a complete division of a peripheral nerve. NEUROLAC® nerve guides provide guidance and protection to regenerated axons and prevent ingrowth of fibrous tissue into the nerve gap during nerve regeneration from the proximal to the distal nerve stump of the transected nerve.

Tension-less nerve repair offers optimal nerve healing. There is no need for autologous transplants which eliminates donor site morbidity. NEUROLAC® nerve guides are designed to prevent kinking and collapse and early flexion of joints is feasible.

NEUROLAC® performs similar to an autograft, has the added benefits of a conduit, and outperforms Neuragen in functional recovery.<sup>1</sup> In a randomized, multicenter study comparing NEUROLAC® to end-to-end repair and autologous grafting it was proven that NEUROLAC® was safe and suitable for the repair of transected peripheral nerves on the hand.<sup>2</sup>

### Bioresorbable

NEUROLAC® nerve guides are made of 100% synthetic material and are 100% biologically safe. They are non-immunogenic, in contrast to collagen based nerve tubes. Degradation of NEUROLAC® nerve guides occurs through hydrolysis leading to gradual reduction of molecular weight. NEUROLAC® nerve guides retain their initial mechanical properties up to 10 weeks providing support and protection to the healing nerve. After this period, rapid loss of mechanical strength and gradual reduction in mass occurs. The final degraded products, are resorbed, metabolized and excreted by the body.



These degradation products are less acidic, which, in contrast to nerve tubes of polyglycolid (PGA) origin, is favorable for the surrounding tissue.

Studies show that NEUROLAC® is resorbed within 16 months.<sup>2</sup>

1. Brian A. Crum, Allen T. Bishop, and Alexander Y. Shin. Treatment of a Segmental Nerve Defect in the Rat with Use of Bioabsorbable Synthetic Nerve Conduits: A Comparison of Commercially Available Conduits. *J Bone Joint Surg Am.* 2009;91:2194-2204.
2. Bertleff M, Meek M, Nicolai J; A Prospective Clinical Evaluation of Biodegradable Neurolac Nerve Guides for Sensory Nerve Repair in the Hand, *The Journal of Hand Surgery*, May 2005, Vol. 30A/No. 3, 513-518.

### Flexibility

- NEUROLAC® TW is available in 4 different internal diameters (1.5 - 3.0 mm). These are the smallest diameters for small nerves which need precise suturing in a small and defined area.
- NEUROLAC® is available in 6 formats (4.0 - 10.0 mm), facilitating entubulation where a thin-wall is not mandatory.

Please contact your local NEUROLAC® representative for more information

The standard length of 30 mm neatly covers the indication for reconstruction of complete peripheral nerve divisions up to 20 mm. NEUROLAC® and NEUROLAC® TW: an excellent combination of nerve regeneration tubes. **Flexibility at its best**

### Benefits

- Fully synthetic, biologically inert and clinically proven to be safe.
- High transparency enables optimal positioning of nerve ends and detection of blood clots.
- Mechanical properties retain up to 10 weeks enabling optimal support and protection for the healing nerve.
- Fully resorbs within 16 months, no removal needed.
- Thin wall allows easy suturing of (even the smallest) nerve stumps
- Prevents ingrowth of fibrous tissue
- Ideal for tension-less nerve repair
- Retains its form to prevent kinking and collapse.

### NEUROLAC® TW Product Description

Article number	Internal diameter	Length
NG02-015/03	1.5 mm	3 cm
NG02-020/03	2.0 mm	3 cm
NG02-025/03	2.5 mm	3 cm
NG02-030/03	3.0 mm	3 cm

### NEUROLAC® Product Description

Article number	Internal diameter	Length
NG01-040/03	4.0 mm	3 cm
NG01-050/03	5.0 mm	3 cm
NG01-060/03	6.0 mm	3 cm
NG01-070/03	7.0 mm	3 cm
NG01-080/03	8.0 mm	3 cm
NG01-100/03	10.0 mm	3 cm

All NEUROLAC®/NEUROLAC® TW products are available in boxes of 1 unit. They are packed in a plastic tray and a Tyvek pouch and subsequently placed in a aluminum pouch. NEUROLAC®/NEUROLAC® TW products are transparent, indicated for single-use and should be stored in a dark, dry place between -18°C (0°F) and 8°C (46°F). The shelf life is 24 months.

NEUROLAC® is FDA cleared under number K050573 (4.0-10mm), and NEUROLAC®-TW is cleared under K112267 (1.5-3.0mm). Both NEUROLAC® and NEUROLAC®-TW are CE-marked as a bioresorbable device for peripheral nerve injury treatment and management.

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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® is a registered trademark of and manufactured by Polyganics, The Netherlands.

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L-NG rev. 1