



NEUROSURGERY

# AESCULAP<sup>®</sup> Lyoplast<sup>®</sup> Onlay

ONLAY DURA SUBSTITUTION – FAST. EASY. VERSATILE. RELIABLE.

# AESCULAP® Lyoplant® Onlay

ONLAY DURA SUBSTITUTION – FAST. EASY. VERSATILE. RELIABLE.

## FAST

- Time-saving Onlay application<sup>1</sup>
- Familiar use<sup>2</sup>

## EASY

- Good handling<sup>1,2</sup>
- Thinner than comparable Onlay products<sup>2</sup>
- Elastic and flexible<sup>1,2</sup>
- Good adaptability to the defect and surrounding anatomical structures<sup>1,2</sup>

## VERSATILE

- Onlay or suturable application<sup>1,2</sup>
- Approved for cranial and spinal use<sup>2</sup>
- One dura substitute for various indications<sup>2</sup>

## RELIABLE

- High liquid tightness of the implant supports preventing CSF leakages<sup>1,2</sup>
- Integrates with the body's own connective tissue cells<sup>1</sup>
- High tensile strength of the implant prevents suture pull out<sup>2</sup>



Lyoplant® Onlay is a biological, absorbable dura substitution consisting of a bilayer membrane, designed to provide high ease of use.<sup>3</sup>

The product stands out due to the **fast** application, the **easy** handling, the **versatile** usage and the **reliable** treatment for the patient.

It allows for a simple Onlay application with the possibility to incorporate suture fixation if necessary.

<sup>1</sup> Neulen et al. Evaluation of efficacy and biocompatibility of a novel semisynthetic collagen matrix as a dural onlay graft in a large animal model. Acta Neurochir. 2011;153(11):2241-50.

<sup>2</sup> Data on file, Aesculap AG.

<sup>3</sup> In comparison to other dura substitution materials.

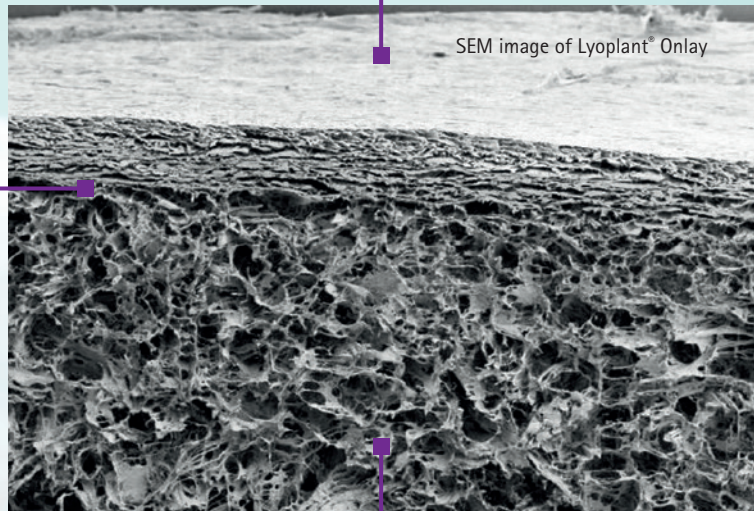
## BIOLOGICAL BILAYER MEMBRANE

The **first layer** is a highly purified collagen element that is produced from bovine pericardium. It is the same material used for our well-established suturable dura substitution Lyoplant®.

Selling more than 1,000,000 units of Lyoplant® over now many years shows the proven trust in this product.

The close connection between the two layers as well as the production of the materials itself are obtained by a very gentle lyophilisation (freeze-drying) process.

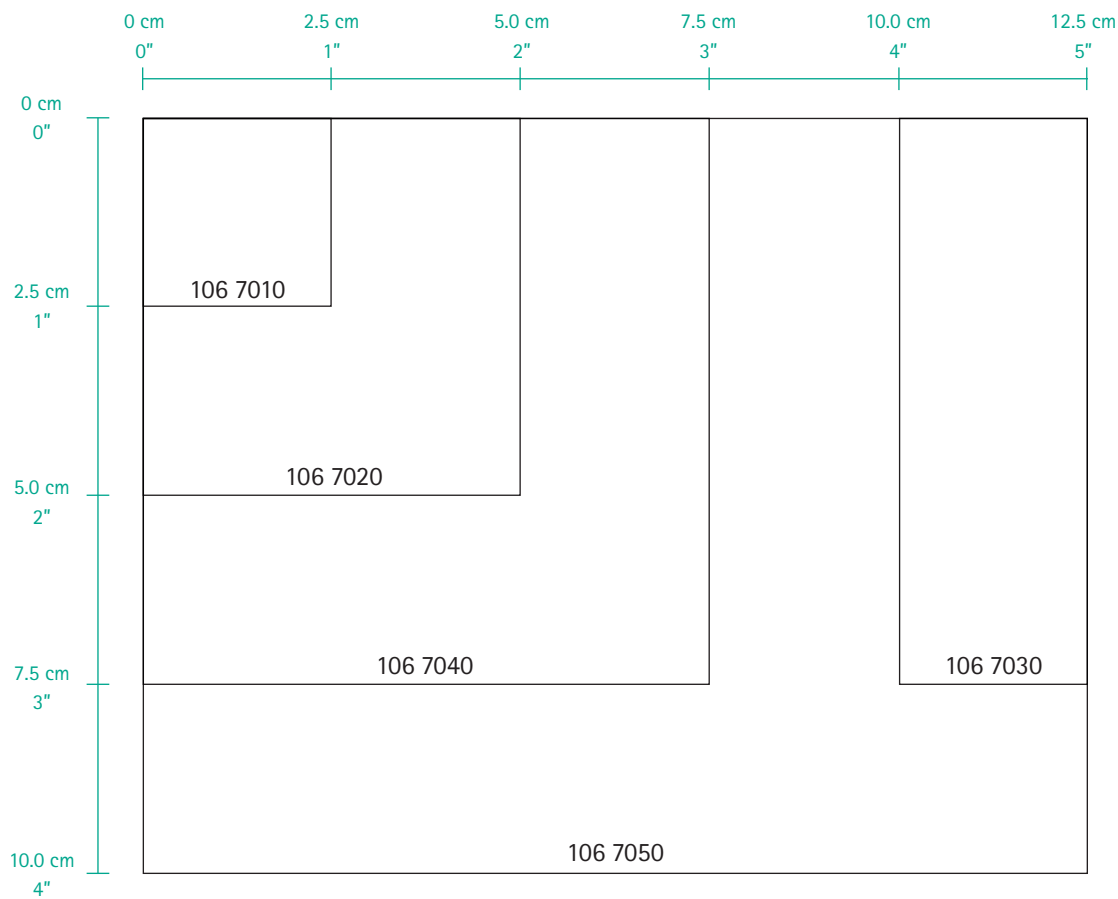
The **two layers** are not chemically crosslinked.



The **second layer** is also a highly purified collagen element, made from bovine split hide. The fleece-like spongy quality of this layer allows the implant to adhere to the dura around the defect. Thus, Lyoplant® Onlay can be applied as an Onlay simply by laying the implant on the dura. This possibility of a sutureless closure of the dura defect can save valuable OR time.

CONFIGURATIONS

Sizes		Content	Art.-No.
2.5 x 2.5 cm	1" x 1"	1 piece	106 7010
5.0 x 5.0 cm	2" x 2"	1 piece	106 7020
2.5 x 7.5 cm	1" x 3"	1 piece	106 7030
7.5 x 7.5 cm	3" x 3"	1 piece	106 7040 12 p.d.
10.0 x 12.5 cm	4" x 5"	1 piece	106 7050





## MODE OF APPLICATION



### CUT

- Lyoplant® Onlay can be cut into the required shape and size easily.
- **Onlay technique:**  
The implant should overlap the dura defect by approx. 1 cm to ensure a high level of adhesion and a liquid-tight seal.
- **Suturing:**  
The implant should be cut as closely as possible to the defect size.

### REHYDRATE

- Ensure that the fleece-like, porous side (labeled "DURA SIDE") is facing the dura. Which side has to face the dura should be identified before rehydration.
- Prior to implantation, Lyoplant® Onlay is placed in sterile saline solution or in another isotonic solution to ensure better suppleness and flexibility of the implant.

### APPLY

- **Onlay technique:**  
The implant has to be laid flat against the defect edges, ensuring that it is not taut.
- **Suturing:**  
If required and if considered necessary by the user, Lyoplant® Onlay can be sutured in place. The implant should be fixed with non-absorbable suture material (polyester, polypropylene), using atraumatic round-bodied needles.
- The implant can be sealed with fibrin glue.

# AESCULAP® – a B. Braun brand

Aesculap AG | Am Aesculap-Platz | 78532 Tuttlingen | Germany  
Phone +49 7461 95-0 | Fax +49 7461 95-2600 | [www.aesculap.com](http://www.aesculap.com)

The main product trademark "Aesculap" and the product trademark "Lyoplast" are registered trademarks of Aesculap AG.

Subject to technical changes. All rights reserved. This brochure may only be used for the exclusive purpose of obtaining information about our products. Reproduction in any form partial or otherwise is not permitted.