



NEUROSURGERY

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

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

# AESCULAP® Lyoplant® Onlay

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## 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>

<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.



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.

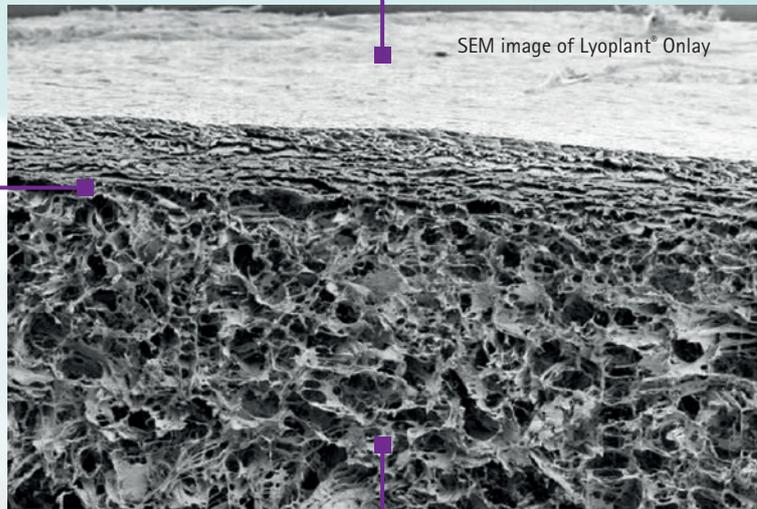
## BIOLOGICAL BILAYER MEMBRANE

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.

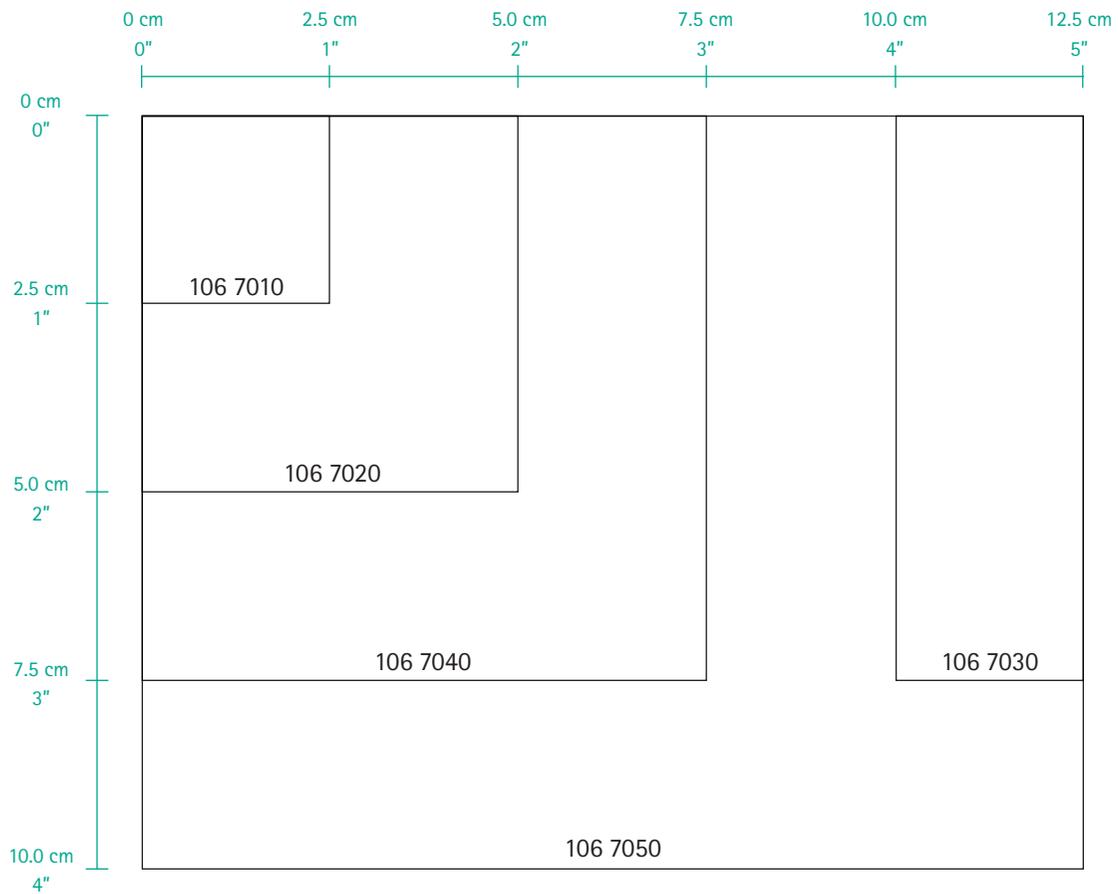


SEM image of Lyoplant® Onlay

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<sup>®</sup> – a B. Braun brand

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