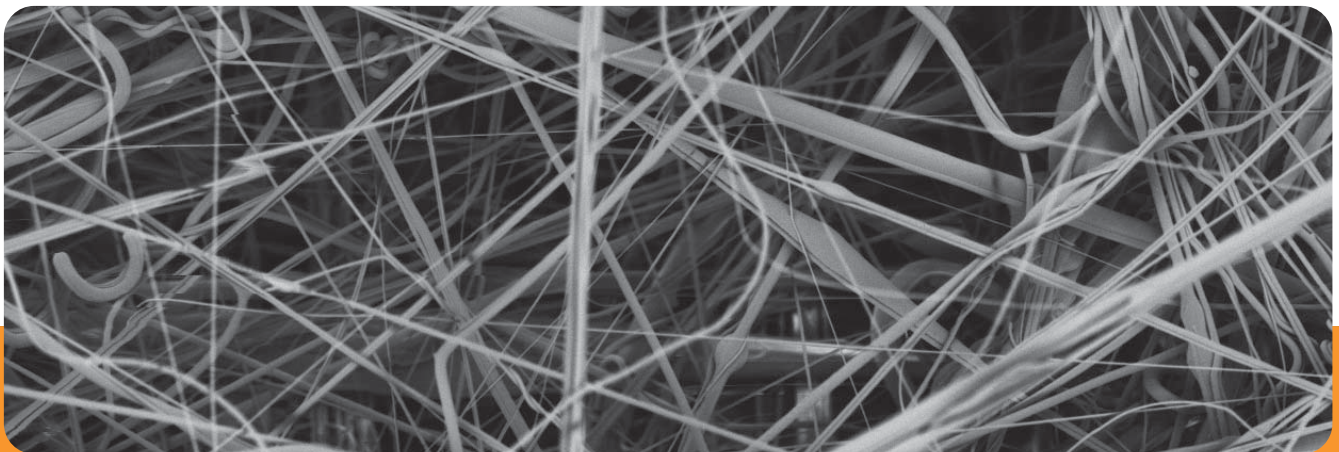


Tisseos[®]

Resorbable synthetic membrane



 **BIOMEDICAL
TISSUES**

Your partner for regenerative medicine

Next generation synthetic resorbable membrane

Tisseos[®] is a bi-layered, synthetic, biocompatible and fully resorbable membrane for Guided Bone Regeneration (GBR) and Guided Tissue Regeneration (GTR) applications.

Thanks to our unique patented production process and specialist know-how, the Tisseos[®] membrane's fully controlled resorption means it is perfect for all surgery.

Synthetic – today's alternative choice:

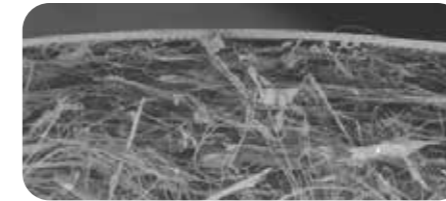


Intricate, non-woven synthetic microfibers **imitate the structure of human collagen** and serve as a 3D matrix for early cell colonization and vascularisation.

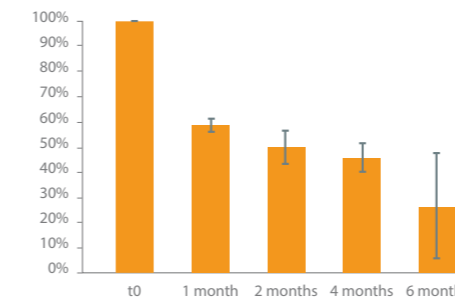
Unlike bovine or porcine derived membranes, Tisseos[®] is **free from animal derivatives**. Our biocompatible synthetic membrane avoids the risk of transmission of animal pathogens.

Widens treatable patient group: Tisseos[®] synthetic membranes are suitable for patients who avoid animal by-products for cultural reasons or lifestyle choices.

Biocompatible & bioresorbable



SEM micrograph of the Tisseos[®] membrane showing the bilayered structure (dense film and non-woven microfibers)



Graph shows the Tisseos[®] membrane resorption time over a 6 month period.

Medical-grade PLGA

Medical-grade Poly(lactic-glycolic acid) provides excellent **biocompatibility**. A 100% biodegradable polymer, PLGA has a long history of successful use in a variety of medical applications and devices such as resorbable sutures, pins, screws etc, and over many decades.

Bilayered structure

Specially designed **bilayered structure** prevents (gingival) epithelial tissue ingrowth on one side (smooth fascia of dense layer) while promoting cell infiltration and guided bone healing on the other (matt fascia with non-woven microfibers).

Exceptional tissue adhesion

Supple, strong and tear-resistant for tacking and suturing, Tisseos[®] is easy **to both handle** and cut to size. **Exceptional tissue adhesion** during surgery.

Unique shape memory

Unique shape-memory properties offer optimal membrane shaping and placement to fit defect anatomies.

Complete bio-resorption in 6 months

The barrier function of the Tisseos[®] membrane remains intact for the first 4 weeks. Optimal bone and tissue regeneration are both guaranteed thanks to the slow, fully controlled resorption over 6 months, avoiding any need for second stage surgery for membrane removal.

Clinical case -photographs courtesy of dental surgeon Dr Xavier Mezière, Rennes, France



Clinical situation after implant



Tisseos[®] placed in the buccal wall, defect filled with bone substitute



Final position of the Tisseos[®] membrane



Wound closure using sutures



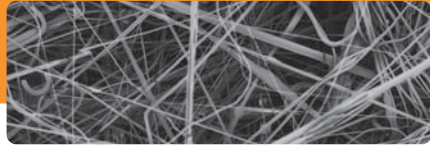
Sinus lift

Socket preservation

Periodontal defects

Ridge augmentation

Implant dehiscence



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Available in 3 different sizes

Bibliographic references:

1. Kulkarni RK, Pani KC, Neuman C, Leonard F. *Poly(lactic acid) for surgical implants*. Archives of Surgery 1966;93:839-843.
2. Postlewhaite RW. *Polyglycolic acid surgical suture*. Archives of Surgery 1970;101:489-494.
3. Athanasiou KA, Niederauer GG, Agrawal CM. *Sterilization, toxicity, biocompatibility and clinical applications of poly(lactic acid)/poly(glycolic acid) copolymers*. Biomaterials 1996;17:93-102.



Your partner for regenerative medicine

Our advanced tissue technology results in improved bioresorbable polymer-based implants for tissue regeneration.

Contact us to find out more about how Biomedical Tissues' ongoing research and development in regenerative medicine can help you better serve patients.

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