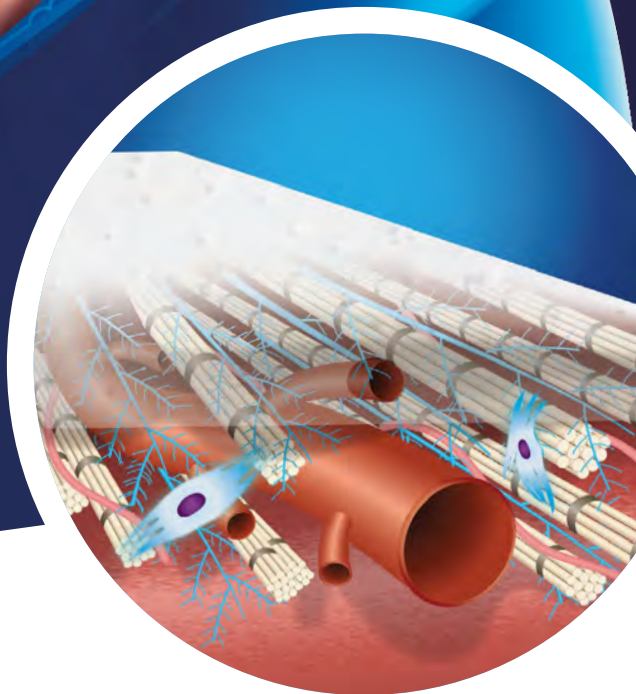




COLLAGEN MATRIX
FOR SOFT TISSUE

REPAIR



cellis[®]



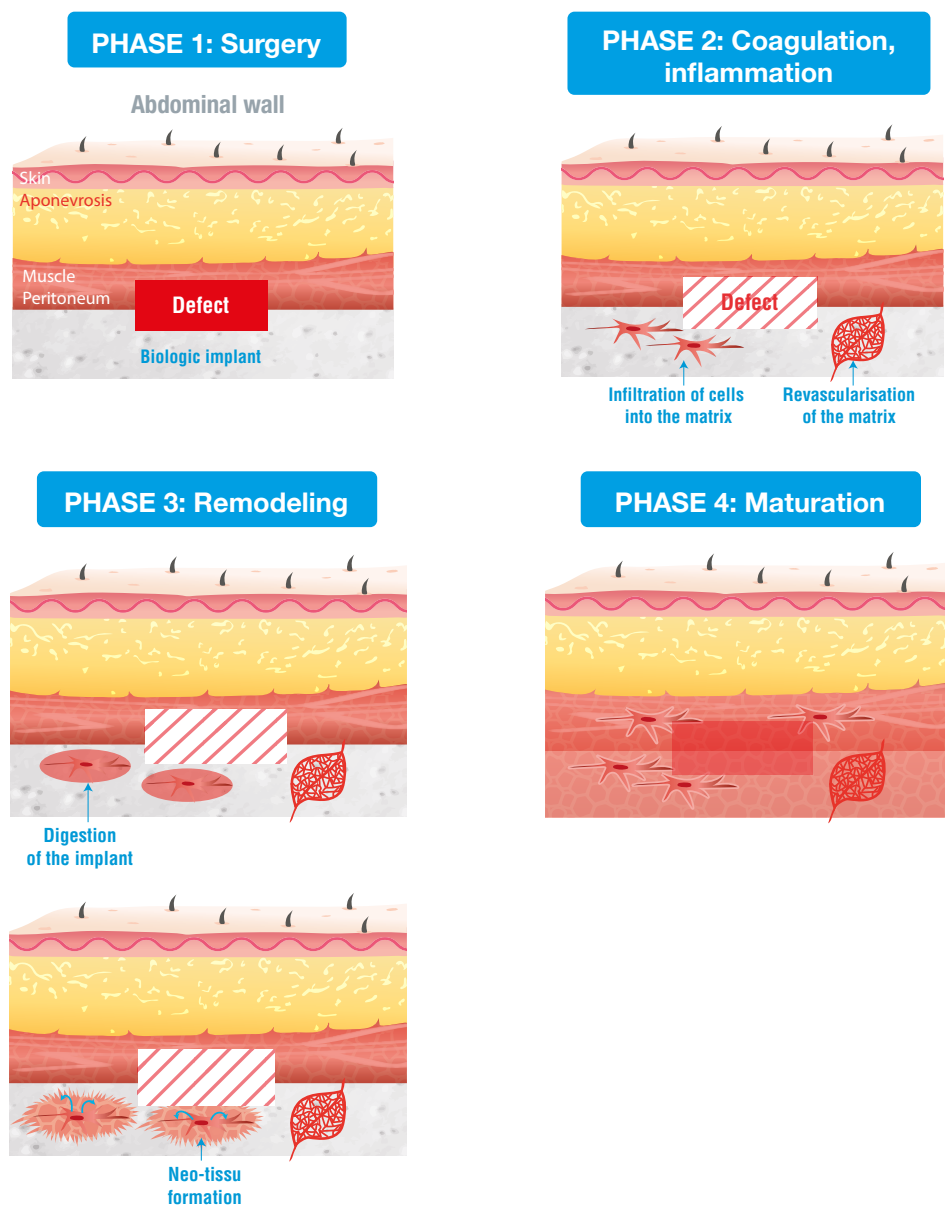
THE BEST OF
TISSUE REGENERATION
FOCUSED ON PATIENTS' NEEDS



Tissue regeneration is a natural process by which the body forms a functional neo-tissue to repair a wound. This process requires the patient's cells to colonize the wound and vascularize it¹.

The function of a biological implant is to act as a temporary support for the cells, which are naturally remodeled during the process of tissue regeneration².

Meccellis Biotech has concentrated all its know-how to make CELLIS[®], an efficient collagen matrix by allowing a gradual remodeling and leading to a physiological and healthy repair.





ACHIEVE POSITIVE OUTCOMES USING CELLIS® MATRIX FOR VENTRAL HERNIA REPAIR

- + Acellular
- + Easy to use
- + Quick hydration
- + Without chemical crosslinked agents
- + Freeze-dried and free from preservative
- + Upto 3 years preservation
- + Tissue structure close to human dermis³
- + Without any allergenic bovine proteins⁴⁻⁸
- + Without risk of TSE (Transmissible Spongiform Encephalopathy)^{9,10}

Performing Ventral Hernia repair is a challenge for even the highest experienced surgeons since multiples variables may affect the expected results of the surgery. Therefore the careful selection of the proper matrix and optimal surgical practices are really important to optimize the successfull outcome of the procedure.

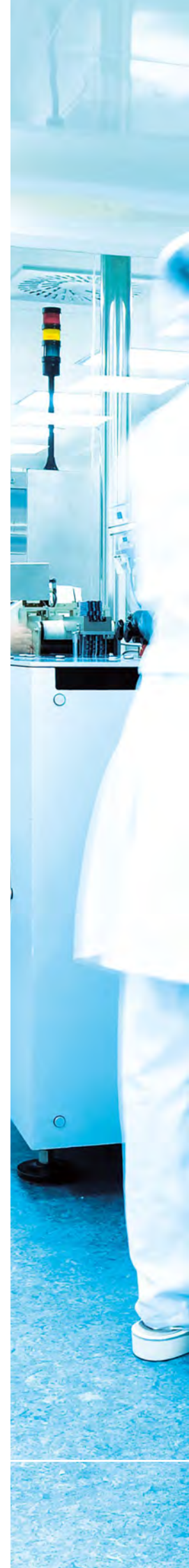
CELLIS® is one of the latest generation of the biological implant combining drastic selection of tissues, exclusive manufacturing process preserving the natural structure of the dermis, no preservatives and a moderate price.

CLASSIFICATION FROM THE VENTRAL HERNIA WORKING GROUP¹¹

Grade 1 Low risk	Grade 2 Comorbid	Grade 3 Potentially contaminated	Grade 4 Infected
Low risk of contaminations, No history of wound infection.	Smoker, Obese, Diabetic, Immunosuppressed.	Previous wound infection, Presence of ostomy, Violation of the gastrointestinal tract.	Grossly infected mesh, Septic dehiscence.

Synthetic meshes

Biological implants





EXCLUSIVE MANUFACTURING PROCESS

CELLIS® is manufactured with an exclusive process, based on our high experienced tissue acellularization. It has been developed with the aim of preserving the essential qualities of the best porcine dermis.

- **Naturally cross-linked:** the purification process of MECCELLIS BIOTECH enables to preserve the natural structure of the dermis and thus its natural crosslinking. This exclusive process avoids the addition of chemical crosslinking agents.
- **Preservative-free:** The CELLIS® matrix uses the freeze dry technology which allows long-term preservation in a double sterile packaging without preservatives.

BIOLOGICAL IMPLANT FOR RECONSTRUCTION, REBUILDING AND REGENERATION OF SOFT AND CONNECTIVE TISSUE



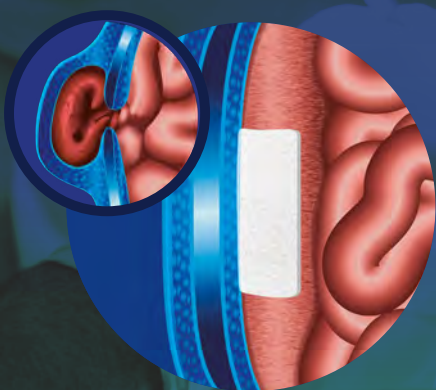
Complex abdominal wall surgery in infected or potentially infected field.
Replacement of contaminated mesh.
Abdominal parietectomy for surgical oncology.



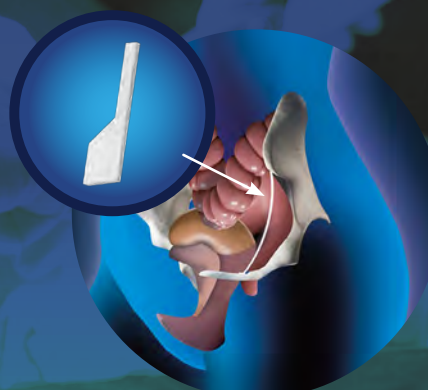
Stoma closure.
Parastomal hernia.



Hiatus Hernia treatment.



Strangulated hernia.



Rectal prolapse treatment.



OUR REFERENCES

Sizes	References	Thicknesses	Shapes
5 x 5 cm	C55E	1,4 mm	
8 x 8 cm	CS88F	0,9 mm	
10 x 10 cm	CS1010F	0,9 mm	
8 x 8 cm	CH88E	1,4 mm	
10 x 10 cm	CH1010E	1,4 mm	
10 x 15 cm	C1015E	1,4 mm	
15 x 20 cm	C1520E	1,4 mm	

Sizes	References	Thicknesses	Shapes
18 x 25 cm	C1825E	1,4 mm	
20 x 30 cm	C2030E	1,4 mm	
30 x 30 cm	C3030E	1,4 mm	
30 x 40 cm	C3040E	1,4 mm	



Sizes	References	Thicknesses	Shapes
6 x 18 x 3 cm	CR618EP	1,4 mm	

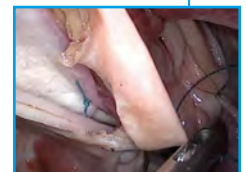
EXAMPLES OF CLINICAL CASES



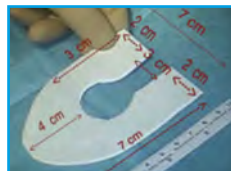
Abdominal compartment syndrome.



Granulation tissue formation following negative pressure therapy.



Rectal prolapse treatment.



Hiatus hernia treatment.

Complex abdominal wall surgery.

PROPHYLACTIC SURGERY PUBLICATION

Bioprosthetic mesh reinforcement during temporary stoma closure decreases the rate of incisional hernia: A blinded, case-matched study in 94 patients with rectal cancer

Leon Maggiori, MD,^a David Moszkowicz, MD,^a Magaly Zappa, MD,^b Cécile Mongin, MD,^a and Yves Panis, MD, PhD,^a *Clichy, France*

Background: The incidence of incisional hernia after temporary stoma closure is high. The aim of this study was to evaluate the effect of bioprosthetic mesh reinforcement on the rate of incisional hernia formation after temporary stoma closure in patients with rectal cancer.

Methods: A blinded, case-matched study was conducted in 94 patients with rectal cancer who underwent temporary stoma closure. The patients were divided into two groups: those who received bioprosthetic mesh reinforcement (n = 47) and those who did not (n = 47). The primary endpoint was the rate of incisional hernia formation at 12 months post-surgery.

Results: The rate of incisional hernia formation was significantly lower in the mesh reinforcement group (10.6%) compared to the control group (27.7%) (p = 0.03). There were no significant differences in other clinical outcomes between the two groups.

Conclusion: Bioprosthetic mesh reinforcement during temporary stoma closure significantly decreases the rate of incisional hernia formation in patients with rectal cancer.

Bioprosthetic mesh reinforcement during temporary stoma closure decreases the rate of incisional hernia.

A blinded, case-matched study in 94 patients with rectal cancer. Léon Maggiori, MD,^a David Moszkowicz, MD,^a Magaly Zappa, MD,^b Cécile Mongin, MD,^a and Yves Panis, MD, PhD,^a *Clichy, France*.

<http://dx.doi.org/10.1016/j.surg.2015.07.004>

REFERENCES

1. Atala, A., Irvine, D. J., Moses, M. & Shaunak, S. Wound Healing Versus Regeneration: Role of the Tissue Environment in Regenerative Medicine. *MRS Bull. Mater. Res. Soc.* 35, 10.1557/mrs2010.528 (2010).
2. Bryan, N. et al. The in vivo evaluation of tissue based biomaterials in a rat full thickness abdominal wall defect model. *J. Biomed. Mater. Res. B Appl. Biomater.* 102, 709–720 (2014).
3. Cornwell, K. G., Landsman, A. & James, K. S. Extracellular Matrix Biomaterials for Soft Tissue Repair. *Adv. Wound Bone Heal.* 26, 507–523 (2009).
4. Stegman, S. J., Chu, S. & Armstrong, R. C. Adverse Reactions to Bovine Collagen Implant: Clinical and Histologic Features. *J. Dermatol. Surg. Oncol.* 14, 39–48 (1988).
5. Siegle, R. J., McCoy, J. P., Schade, W. & Swanson, N. A. Intradermal implantation of bovine collagen: humoral immune responses associated with clinical reactions. *Arch. Dermatol.* 120, 183–187 (1984).
6. Mullins, R. J., Richards, C. & Walker, T. Allergic reactions to oral, surgical and topical bovine collagen: Anaphylactic risk for surgeons. *Aust. N. Z. J. Ophthalmol.* 24, 257–260 (1996).
7. Cooperman, L. & Michaeli, D. The immunogenicity of injectable collagen. I. A 1-year prospective study. *J. Am. Acad. Dermatol.* 10, 638–646 (1984).
8. Struck, H. Immunological investigations of antigenicity and specificity of soluble

collagen fractions. *Eur. Surg. Res.* 8, 243–249 (1976).

9. NF EN ISO 22442-1 2020.

10. Règlement (UE) N°722/2012.

11. Clayton C. Petro, Yuri W. Novitsky. *Classifications of hernias*. Springer. DOI 10.1007/978-3-319-27470-6_2 (2016).

PRODUCT DESCRIPTION

CELLIS® is a cell-free, non-pyrogenic collagen matrix (acellular dermal matrix ADM) obtained from porcine skin. CELLIS® is intended for use as a surgical membrane in soft tissue repairs and serves to support, cover or replace tissue. CELLIS® is available in various sizes, shapes and thicknesses. CELLIS® comes in double sterile packaging, is supplied dry and does not contain any preservatives. This surgical membrane is a resilient, biocompatible implant, which incorporates into the host tissue through cellular and microvascular infiltration, and should not require another surgical procedure due to removal.

COMPOSITION

Sterile, acellular, type I & III porcine dermis derived collagen matrix.

INDICATION

CELLIS® is intended for implantation to reinforce soft tissue where weakness exists and for surgical repair of damaged or ruptured soft tissue membranes.

Indications for use include the repair of hernias and/or body wall defects which require the use of reinforcing or bridging material to obtain the desired surgical outcome.

It's indicated to be used to reconstruct, to recontour and to reform the host's human soft connective tissue particularly where loss of tissue has occurred and as a supporting tissue in digestive surgical procedures such as ventral hernia repair, abdominal wall reconstruction, stoma closure, hiatal hernia repair, rectopexy and perineal reconstruction in colorectal diseases.

CONTRAINDICATIONS

The surgical membrane is made of porcine dermis and cannot be used in patients with known hypersensitivity to porcine materials. CELLIS® should not be used during pregnancy and breastfeeding. Furthermore, CELLIS® should be used only on adult.

STORAGE

- Store at room temperature as indicated on the label.
- Keep away from heat sources and direct sunlight.
- Store inside the original packaging.

Brochure is intended for healthcare professionals only.
The « Instructions for Use » attached to the packaging should be read carefully.

Visit
www.meccellis.com
and contact your sales representative for more information.



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