NATURAL. HEALING.

FlexHD®

ACELLULAR HYDRATED DERMIS

FlexHD® Acellular Hydrated Dermis

Natural like native tissue[1,2,3]

Unique minimally processed[4]

Innovative both strong and flexible[5]

MTF Musculoskeletal Transplant Foundation
the better approach

NATURAL. HEALING. UNIQUE PROCESS

Process protected by US Patent 7,723,108.

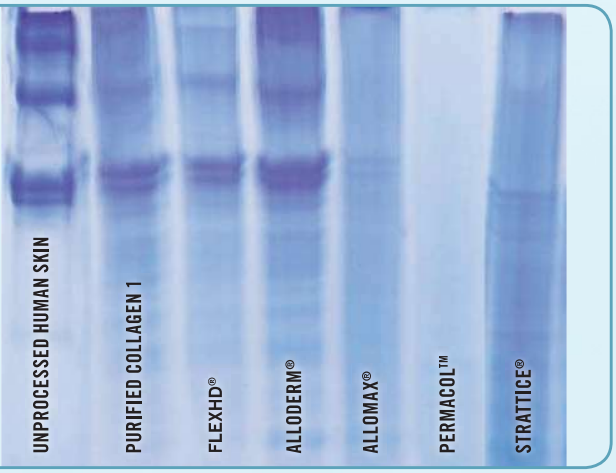
FlexHD® has unique processing that does not impact human skin properties.

FlexHD®[6]	Other Matrices[7-11]
■ high concentration sodium chloride ■ non-ionic detergent ■ peracetic acid	■ acetone ■ lyophilization ■ gamma irradiation ■ e-beam sterilization

MATRIX THAT IS CLOSEST TO NATURAL HUMAN TISSUE

FlexHD® retains the architectural elements of human unprocessed skin, allowing natural healing.[3,12]

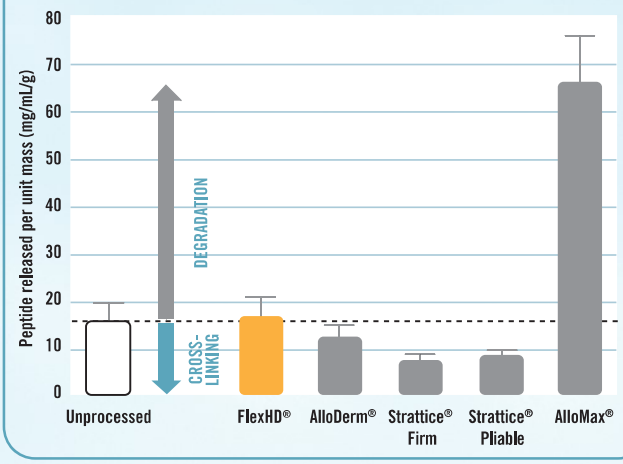
Minimal processing of FlexHD® maintains the natural characteristics of collagen.[1]



Collagen proteins separated by molecular weight through sodium dodecyl sulfate polyacrylamide gel electrophoresis (SDS-PAGE). Smaller, degraded proteins migrate lower in the gel, whereas larger, crosslinked proteins remain higher in the gel. Collagen in FlexHD® is similar to unprocessed human skin.

FlexHD® is most similar to unprocessed human tissue.[2]

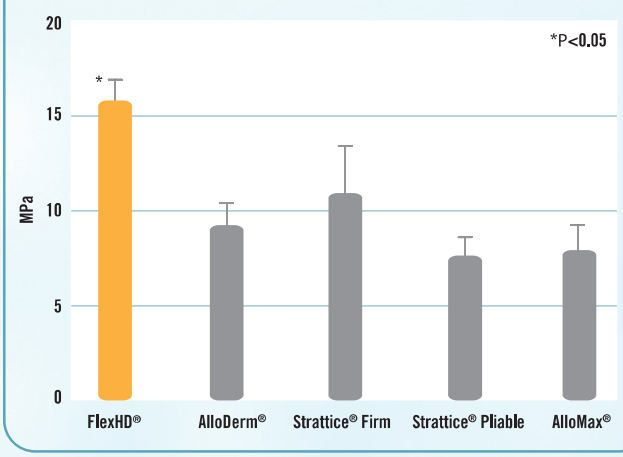
Enzyme Degradation and Crosslinking[2]



INNOVATIVE: STRONG AND FLEXIBLE

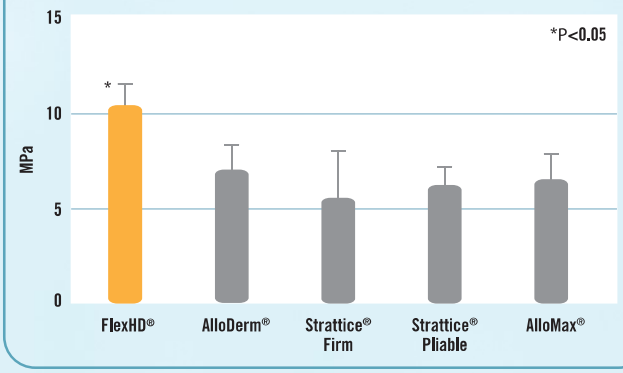
FlexHD® has the greatest tensile strength of all leading matrices.[5]

Tensile Strength



FlexHD® stands out with natural memory to resist excessive stretching.[5]

Modulus of Elasticity

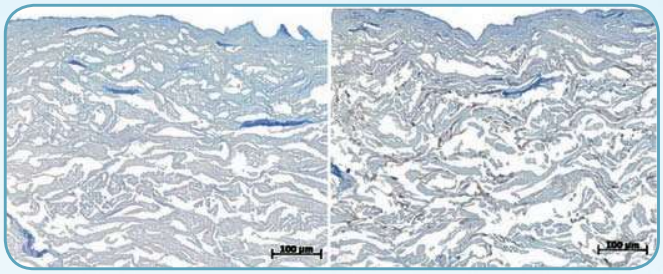


Images and charts based on preclinical data, unless otherwise stated.

NATURAL. HEALING. INTEGRATION WITH NATIVE TISSUE

FlexHD® has natural components and architecture that support cellular infiltration and revascularization.

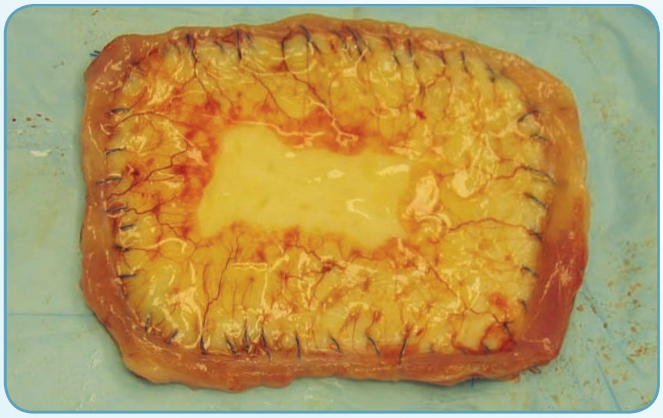
Hyaluronan is present in all living organisms and provides matrix structure, osmotic balance and assists with cell migration and differentiation. Vitronectin, an adhesive glycoprotein, binds to collagen and promotes cell attachment, proliferation and differentiation. Both hyaluronan and vitronectin are found in FlexHD®.[3]



Left: Immunohistochemical staining using Alcian Blue/PAS shows the presence of hyaluronan in FlexHD® as indicated by indigo staining.

Right: Immunohistochemical staining shows vitronectin in FlexHD® as indicated by brown staining. Histology courtesy of Premier Laboratory, LLC.

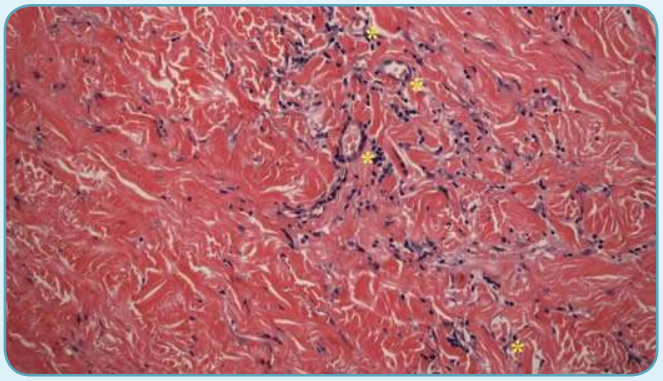
FlexHD® shows healthy revascularization after 8 weeks, without adhesions to internal organs.[13]



Rabbit abdominal wall

Clinical evidence of FlexHD® integration.

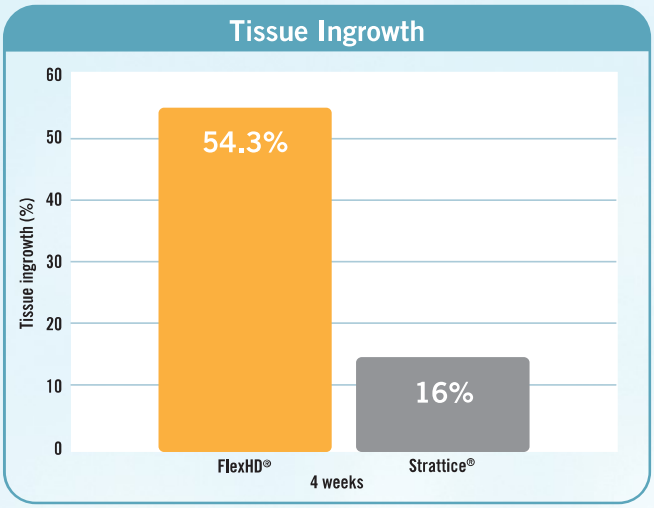
Shown here at 3 months after placement in patient.



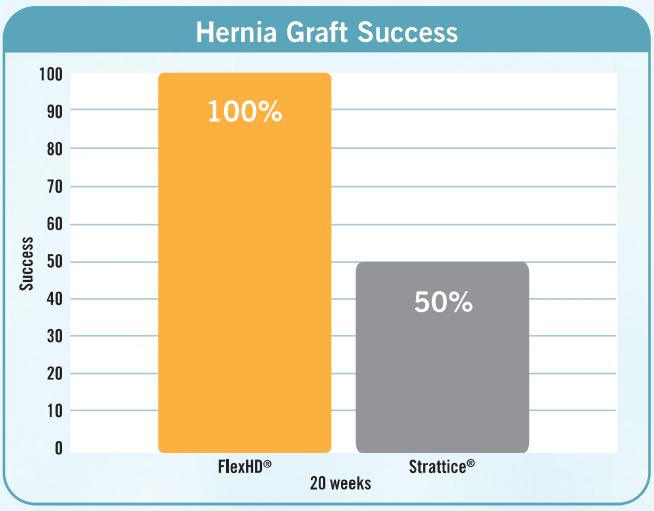
FlexHD® is visibly (40× magnification) populated with fibroblasts, indicating integration of the dermal matrix into soft tissues. Numerous red blood cells are also apparent in blood vessels within FlexHD®, demonstrating neovascularization. Images courtesy of Dr. John Y.S. Kim.

PROVEN PERFORMANCE

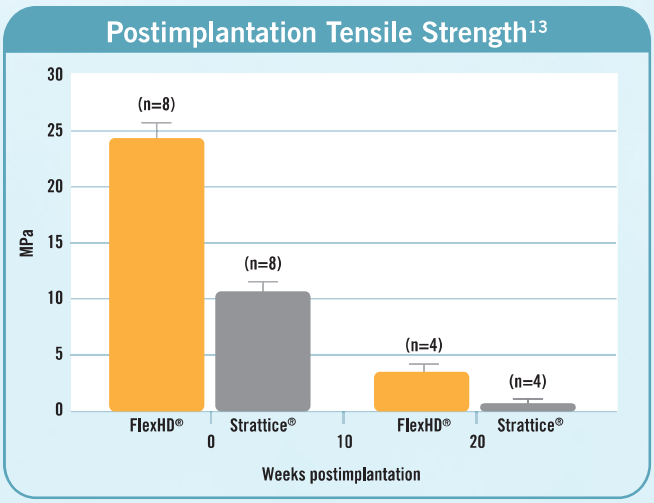
FlexHD® shows 3× greater tissue ingrowth than Strattice® in preclinical study.[13]



FlexHD® outperforms Strattice® in preclinical study.[13]



Preclinical studies indicate 50% graft resorption and thinning resulting in hernia defect or recurrence with Strattice®.[13]



Images and charts based on preclinical data, unless otherwise stated.
All FlexHD® demonstrated repair success.

NATURAL. HEALING.

STRINGENT QUALITY AND SAFETY STANDARDS.

FlexHD® is available through the Musculoskeletal Transplant Foundation (MTF).

- MTF adheres to quality and safety standards developed by leading physicians, transplant surgeons, and specialists in the fields of science and medicine
- Donor screening criteria are among the most stringent of any tissue bank
- MTF meets and exceeds the standards and regulations of the American Association of Tissue Banks (AATB) and the Food and Drug Administration (FDA)

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Tissue Code	Description	Thickness
	Ultra Thin	
479102	FlexHD® 1 cm x 2 cm	0.2 mm – 0.4 mm thick
479204	FlexHD® 2 cm x 4 cm	0.2 mm – 0.4 mm thick
479307	FlexHD® 3 cm x 7 cm	0.2 mm – 0.4 mm thick
479407	FlexHD® 4 cm x 7 cm	0.2 mm – 0.4 mm thick
	Thin	
470102	FlexHD® 1 cm x 2 cm	0.4 mm – 0.8 mm thick
470204	FlexHD® 2 cm x 4 cm	0.4 mm – 0.8 mm thick
470307	FlexHD® 3 cm x 7 cm	0.4 mm – 0.8 mm thick
470407	FlexHD® 4 cm x 7 cm	0.4 mm – 0.8 mm thick
470412	FlexHD® 4 cm x 12 cm	0.4 mm – 0.8 mm thick
	Thick	
471102	FlexHD® 1 cm x 2 cm	0.8 mm – 1.7 mm thick
471104	FlexHD® 1 cm x 4 cm	0.8 mm – 1.7 mm thick
471204	FlexHD® 2 cm x 4 cm	0.8 mm – 1.7 mm thick
471207	FlexHD® 2 cm x 7 cm	0.8 mm – 1.7 mm thick
471212	FlexHD® 2 cm x 12 cm	0.8 mm – 1.7 mm thick
471307	FlexHD® 3 cm x 7 cm	0.8 mm – 1.7 mm thick
471312	FlexHD® 3 cm x 12 cm	0.8 mm – 1.7 mm thick
471407	FlexHD® 4 cm x 7 cm	0.8 mm – 1.7 mm thick
471412	FlexHD® 4 cm x 12 cm	0.8 mm – 1.7 mm thick
471416	FlexHD® 4 cm x 16 cm	0.8 mm – 1.7 mm thick
471510	FlexHD® 5 cm x 10 cm	0.8 mm – 1.7 mm thick
471512	FlexHD® 5 cm x 12 cm	0.8 mm – 1.7 mm thick
471608	FlexHD® 6 cm x 8 cm	0.8 mm – 1.7 mm thick
471612	FlexHD® 6 cm x 12 cm	0.8 mm – 1.7 mm thick
471616	FlexHD® 6 cm x 16 cm	0.8 mm – 1.7 mm thick
471206	FlexHD® 6 cm x 20 cm	0.8 mm – 1.7 mm thick
471812	FlexHD® 8 cm x 12 cm	0.8 mm – 1.7 mm thick
471816	FlexHD® 8 cm x 16 cm	0.8 mm – 1.7 mm thick
471208	FlexHD® 8 cm x 20 cm	0.8 mm – 1.7 mm thick
471016	FlexHD® 10 cm x 16 cm	0.8 mm – 1.7 mm thick
471122	FlexHD® 12 cm x 12 cm	0.8 mm – 1.7 mm thick
471216	FlexHD® 12 cm x 16 cm	0.8 mm – 1.7 mm thick
471220	FlexHD® 12 cm x 20 cm	0.8 mm – 1.7 mm thick
471224	FlexHD® 12 cm x 24 cm	0.8 mm – 1.7 mm thick
471620	FlexHD® 16 cm x 20 cm	0.8 mm – 1.7 mm thick
471202	FlexHD® 20 cm x 20 cm	0.8 mm – 1.7 mm thick
471225	FlexHD® 20 cm x 25 cm	0.8 mm – 1.7 mm thick
	Ultra Thick	
472312	FlexHD® 3 cm x 12 cm	≥1.8 mm thick
472412	FlexHD® 4 cm x 12 cm	≥1.8 mm thick
472416	FlexHD® 4 cm x 16 cm	≥1.8 mm thick
472510	FlexHD® 5 cm x 10 cm	≥1.8 mm thick
472512	FlexHD® 5 cm x 12 cm	≥1.8 mm thick
472612	FlexHD® 6 cm x 12 cm	≥1.8 mm thick
472616	FlexHD® 6 cm x 16 cm	≥1.8 mm thick
472206	FlexHD® 6 cm x 20 cm	≥1.8 mm thick
472812	FlexHD® 8 cm x 12 cm	≥1.8 mm thick
472816	FlexHD® 8 cm x 16 cm	≥1.8 mm thick
472208	FlexHD® 8 cm x 20 cm	≥1.8 mm thick
472016	FlexHD® 10 cm x 16 cm	≥1.8 mm thick
472122	FlexHD® 12 cm x 12 cm	≥1.8 mm thick
472216	FlexHD® 12 cm x 16 cm	≥1.8 mm thick
472220	FlexHD® 12 cm x 20 cm	≥1.8 mm thick
472224	FlexHD® 12 cm x 24 cm	≥1.8 mm thick
472620	FlexHD® 16 cm x 20 cm	≥1.8 mm thick
472202	FlexHD® 20 cm x 20 cm	≥1.8 mm thick
472225	FlexHD® 20 cm x 25 cm	≥1.8 mm thick
	Breast Kit, Thick	
4B1416	FlexHD® 4 cm x 16 cm	0.8 mm – 1.7 mm thick
4B1612	FlexHD® 6 cm x 12 cm	0.8 mm – 1.7 mm thick
4B1616	FlexHD® 6 cm x 16 cm	0.8 mm – 1.7 mm thick
4B1816	FlexHD® 8 cm x 16 cm	0.8 mm – 1.7 mm thick
	Breast Kit, Ultra Thick	
4B1416	FlexHD® 4 cm x 16 cm	≥1.8 mm thick
4B1612	FlexHD® 6 cm x 12 cm	≥1.8 mm thick
4B1616	FlexHD® 6 cm x 16 cm	≥1.8 mm thick
4B1816	FlexHD® 8 cm x 16 cm	≥1.8 mm thick

The Musculoskeletal Transplant Foundation maintains an unrivaled safety record with over 4.2 million grafts distributed since 1987.[12]

Contact MTF Customer Service at 1-800-433-6576.

FlexHD®
ACELLULAR HYDRATED DERMIS

MTF Musculoskeletal Transplant Foundation
the better approach

HSC0001 Rev 12/10