

# Invengen® Bovine Pericardial Tissue Patch

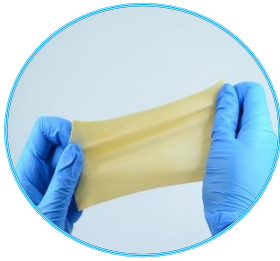
## Cardiothoracic Indications

- Atrial septal defect
- Closure of bronchial stumps
- Defects of the thoracic wall
- Mitral annulus repair
- Pericardial closure
- Pulmonary Stenosis
- Right ventricular outflow tract (RVOT)
- Ventricular septal defect



- Aortic Stenosis
- Atrium and ventricle repair
- Congenital chest wall defects
- Double Outlet Right Ventricle Surgery
- Intracardiac Defects
- Pulmonary valve repair & reconstruction
- Tetralogy of Fallot
- Ventricular septal defect

## elixP™ fixated patches excel in the 4 major categories



Ultimate Tensile Strength



Suture Retention



Burst Strength



Elasticity & Elongation

## Wide Variety of Sizes with Uniformity

Model	XM-04	XM-05*	XM-06	XM-07*	XM-08*	XM-09	XM-10*
Size (cm)	0.6 x 8	0.8 x 8	1 x 6	1 x 10	1 x 14	1.5 x 8	1.5 x 10
Model	XM-11	XM-12	XM-13	XM-14	XM-15	XM-16	XM-17
Size (cm)	1.5 x 16	2 x 9	2.5 x 15	4 x 4	4 x 6	4 x 16	5 x 6
Model	XM-18	XM-19	XM-20	XM-21	XM-22	XM-23	
Size (cm)	5 x 10	6 x 8	6 x 10	7 x 10	8 x 14	10 x 16	

\*Also available in tapered size.



1. Sperling, Veronika, et al. "Treatment of Aortic and Peripheral Prosthetic Graft Infections with Bovine Pericardium." *Journal of Vascular Surgery*, vol. 71, no. 2, 2020, pp. 592-598, doi:10.1016/j.jvs.2019.04.485.
2. Morris, Paul David, et al. "Inferior Vena Cava Resection and Reconstruction with Bovine Pericardium for Renal Cell Carcinoma: Complications and Outcomes." *Urology*, vol. 134, 2019, pp. 143-147, doi:10.1016/j.urol.2019.09.006.
3. Jara, Maximilian, et al. "Bovine Pericardium for Portal Vein Reconstruction in Abdominal Surgery: A Surgical Guide and First Experiences in a Single Center." *Digestive Surgery*, vol. 32, no. 2, 2015, pp. 135-141, doi:10.1159/000370008.
4. Kofidis, Theo, et al. "Hemopneumothorax Following Left Ventricular Aneurysm Repair." *Chest*, vol. 118, no. 5, 2000, pp. 1500-1503, doi:10.1378/chest.118.5.1500.
5. Weiss, S., et al. "Self Made Xeno-Pericardial Aortic Tubes to Treat Native and Aortic Graft Infections." *Journal of Vascular Surgery*, vol. 66, no. 6, 2017, p. 1914, doi:10.1016/j.jvs.2017.10.007.
6. Wiggins, Luke M., et al. "The Utility of Aortic Valve Leaflet Reconstruction Techniques in Children and Young Adults." *The Journal of Thoracic and Cardiovascular Surgery*, vol. 159, no. 6, 2020, pp. 2369-2378, doi:10.1016/j.jtcvs.2019.09.176.

## Salient Features

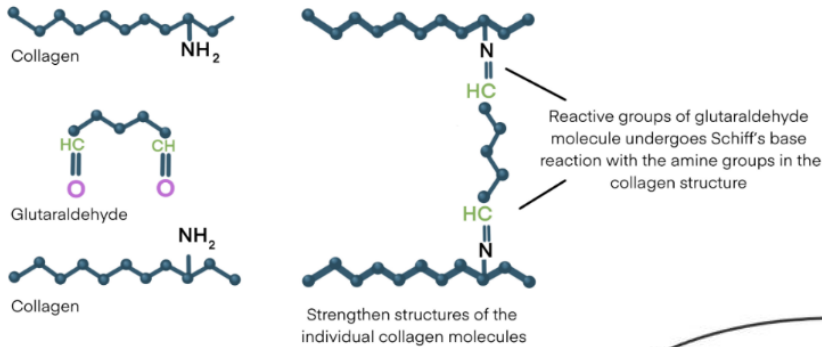
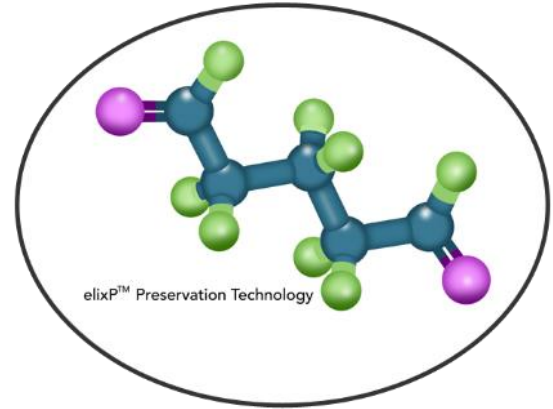
- ✔ 3-year shelf-life
- ✔ Plethora of applications
- ✔ Highly biocompatible
- ✔ Intact Matrix Membrane
- ✔ Minimal rinsing time
- ✔ Conforms to vasculature
- ✔ Easy to handle
- ✔ Cost-effective
- ✔ Uniform thickness
- ✔ Exceptional tensile strength
- ✔ Resists delamination
- ✔ Extremely elastic & Pliable
- ✔ Superior suture retention



## elixP™ Tissue Technology

### Next Generation Technology

Our bovine pericardial tissue patch, Invengen®, is fixed with our proprietary elixP™ Fixation Technology. This preserves the triple helical structure of the individual collagen molecules (intramolecular) and between collagen fibrils (intermolecular). This fixation process achieves complete reduction of antigenicity and preserves the natural collagen formation of the tissue.

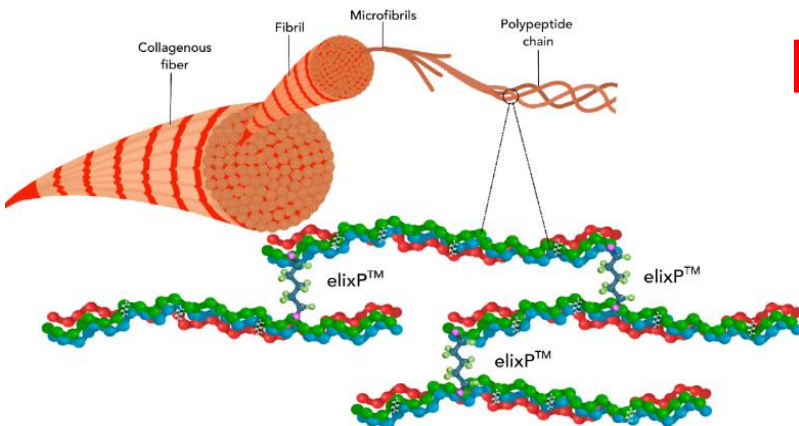
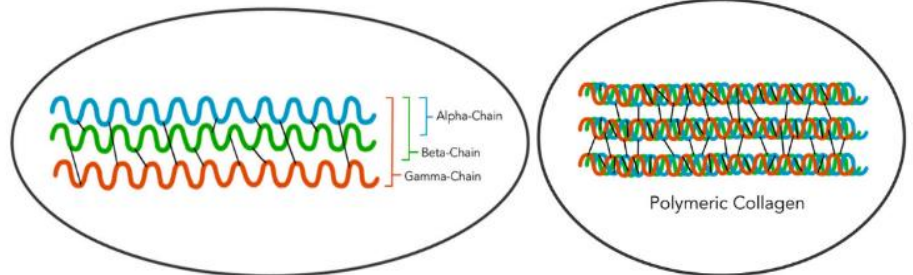


### Meets Surgeon's Needs

This treatment leads to 100% crosslinking of the tissue to prevent unwanted effects such as suture line bleeding, delamination, and inflammatory response.

### Prevents and Protects

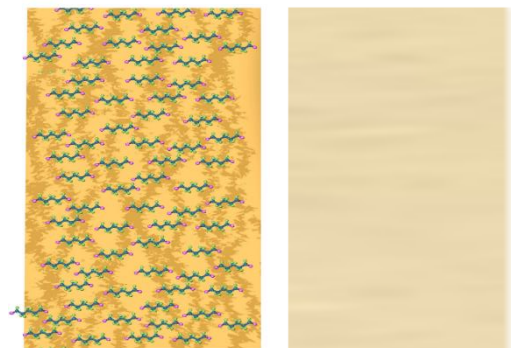
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### Designed for Durability

After fixation, our patches integrate seamlessly by supporting cell and tissue in-growth and maintains structural integrity and viability for longer than ever before possible.

### elixP™ Fixated Tissue



### Improved Healing

This advanced treatment leads to superior biocompatibility with the host tissue and prevents degradation to allow for a bovine pericardial tissue patch that can be trusted for a plethora of surgical applications.

