# Meeting the surgical challenge:

# **Chest wall reconstructions**



## Gore offers TWO great options for your chest wall soft tissue deficiency repairs.

The first is the GORE-TEX® Soft Tissue Patch, a specialty biomaterial constructed entirely of expanded polytetrafluoroethylene (ePTFE) designed to meet the needs of the most demanding soft tissue repairs with minimal complications. The second is GORE® DUALMESH® Biomaterial, which is the first dual-surface material constructed entirely of ePTFE that encourages host tissue ingrowth while minimizing tissue attachment in soft tissue reconstruction.

A key advantage of Gore ePTFE devices in chest wall reconstruction are their structures that inhibit the passage of fluid. This helps in re-establishing pulmonary function by restricting air leakage and preventing the transfer of pleural fluid across the chest wall. The material's high, balanced strength:

- Allows the tension needed for a firm reconstruction that minimizes paradoxical wall movement
- Provides dependable suture retention

Yet, the material remains soft and highly conformable, allowing:

- · Ease of handling
- Less irritation to surrounding tissues

Tissue ingrowth is encouraged by the structure of this unique material. This results in a significantly lower incidence of adhesion formation.<sup>2</sup> It combines strength with softness to provide unmatched performance and superior handling.



GORE-TEX® Soft Tissue Patch



GORE® DUALMESH® Biomaterial

### **GORE-TEX® Soft Tissue Patch**

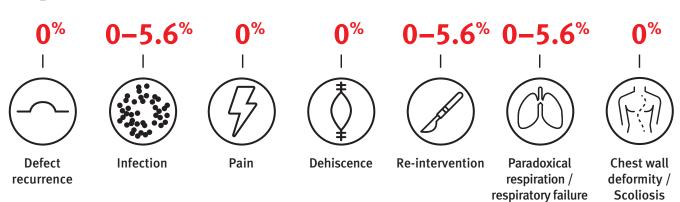
Five key studies demonstrate quality outcomes in chest wall soft tissue deficiencies.\*



# Literature Summary<sup>†,3-7</sup>

Follow-up 24-72.7 months | 114 patients, Gore devices

Case series population includes chest wall reconstruction in adults



<sup>\*</sup> Data on file 2020; W. L. Gore & Associates, Inc.; Flagstaff, AZ.

<sup>†</sup> These papers do not represent direct, head-to-head comparisons and may involve unique protocols, endpoints, enrollment criteria and other material differences.

### **GORE® DUALMESH® Biomaterial**

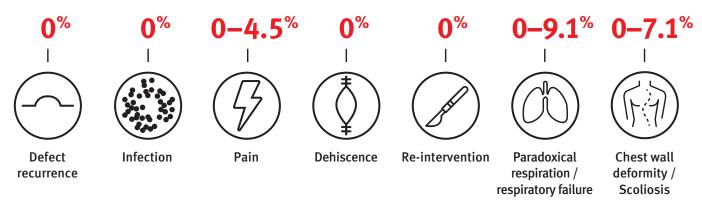
Five key studies demonstrate quality outcomes in chest wall soft tissue deficiencies.\*



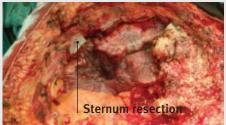
# Literature Summary<sup>†,8-12</sup>

Follow-up up to 36 months | 52 patients, Gore devices

Case series population includes pectus excavatum and chest wall reconstructions in pediatrics and adults









**Procedure:** Tumor and sternum resection including preparation of an abdominal flap. **GORE® DUALMESH® Biomaterial** is used to cover the osseous defect, site of the ribs and sternum. In this case, a 26 cm × 34 cm × 2 mm patch is used. *Images courtesy of Vassilios N. Vassiliadis, M.D, Ph.D.* © 2020

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- † These papers do not represent direct, head-to-head comparisons and may involve unique protocols, endpoints, enrollment criteria and other material differences.
- 1. Pairolero PC, Arnold PG. Chest wall tumors. Experience with 100 consecutive patients. Journal of Thoracic & Cardiovascular Surgery 1985;90(3):367-372.
- 2. Brown GL, Richardson JD, Malangon MA, Tobin GR, Ackerman D, Polk HC Jr. Comparison of prosthetic materials for abdominal wall reconstruction in the presence of contamination and infection. *Annals of Surgery* 1985;201(6):705-711.
- 3. Halm HFH, Hoffmann C, Winkelmann W. The use of a Gore-tex soft-tissue patch to repair large full-thickness defects after subtotal sternectomy. A report of three cases. *Journal of Bone & Joint Surgery American Volume* 2001;83A(3):420-423.
- 4. Huang H, Kitano K, Nagayama K, et al. Results of bony chest wall reconstruction with expanded polytetrafluoroethylene soft tissue patch. Annals of Thoracic & Cardiovascular Surgery 2015;21(2):119-124.
- Kang HJ, Lee SA, Park KS, Yang J, Yoo YB. Simultaneous chest wall reconstruction after sternectomy and modified radical mastectomy in locally advanced breast cancer with solitary sternal metastasis. *Journal of Breast Cancer* 2012;15(4):462-467.
- Tsushima T, Kowatari R, Kimura D, et al. Results of non-rigid prosthetic reconstruction with expanded polytetrafluoro-ethylene (ePTFE) soft tissue patch following chest wall resection for malignant tumors. [in Japanese]. Kyobu geka. Japanese Journal of Thoracic Surgery 2014;67(1):49-53.
- 7. Hasegawa S, Kondo N, Matsumoto S, et al. Surgical risk and survival associated with less invasive surgery for malignant pleural mesothelioma. Seminars in Thoracic & Cardiovascular Surgery 2020;31(2):301-309.
- 8. Kotoulas C, Papoutsis D, Tsolakis K, Laoutidis G. Surgical repair of pectus excavatum in young adults using the DualMesh 2-mm Gore-Tex®. Interactive Cardiovascular & Thoracic Surgery 2003;2(4):565-568.
- Lopez C, Correa A, Vaporciyan A, Austin M, Rice D, Hayes-Jordan A. Outcomes of chest wall resections in pediatric sarcoma patients. *Journal of Pediatric Surgery* 2017;52(1):109-114.
- OP817 Nagayasu T, Yamasaki N, Tagawa T, et al. Long-term results of chest wall reconstruction with DualMesh. Interactive CardioVascular & Thoracic Surgery 2010;11(5):581-584.
- 11. Akiba T, Marushima H, Nogi H, et al. Chest wall reconstruction using Gore-Tex® dual mesh. Annals of Thoracic & Cardiovascular Surgery 2012;18(2):166-169.
- 12. Collins AM, Granahan AM, Healy DG, Lawlor CA, O'Neill SP. Giant desmoid tumour of the thorax following latissimus dorsi and implant breast reconstruction: case report and review of the literature. Irish Medical Journal 2017;110(3):534.



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Products listed may not be available in all markets.

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