Phasix™ Mesh Peer Reviewed Clinical Compendium

- 265k patients impacted worldwide
- 85+ peer-reviewed clinical publications.
- 8 peer-reviewed articles with 5-year follow-up
- 12 peer-reviewed clinical articles with 3-year follow-up
- 19 peer-reviewed clinical articles with 2-year follow-up

Changing the standard of care since 2013

BD

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HEOR *Health, Economics, Outcomes, Research*
QOL *Quality of Life*
NR *Not Reported*
N/A *Not Applicable*

2 for 2 year/+ follow up
3 for 3 year/+ follow up
5 for 5 year/+ follow up
✓ Data reported

Authors, Article Title, Journal, Year	Product	Patients	Mean Follow-up (Months)	Recurrence	Seroma	Surgical Site Infections	QOL	HEOR
Ventral								
Messa CA 4th, Amro C, Niu EF, et al. Transversus abdominis release with biosynthetic mesh for large ventral hernia repair: a 5-year analysis of clinical outcomes and quality of life [published online ahead of print, 2023 Sep 27]. *Hernia.*	Phasix™ Mesh	29	60 5	6.9%	10.3%	17.2%	✓	✓
Buell JF. Flaris AN, et al. Long-Term Outcomes in Complex Abdominal Wall Reconstruction Repaired With Absorbable Biologic Polymer Scaffold (Poly-4-Hydroxybutyrate). *Ann Surg* 2021 ^	Phasix™ Mesh	**Phasix™ Mesh** 31 **Strattice™** 42	60 5	**Phasix™ Mesh** 12.9% **Strattice™** 38.1% (p = 0.017)	NR	**Phasix™ Mesh** 12.9% **Strattice™**31.0% (p = 0.071)		✓
Talwar, A. et al. Shifting the Goalpost in Ventral Hernia Care: 5-year Outcomes after Ventral Hernia Repair with Poly-4-hydroxybutyrate Mesh. *Hernia* 2022	Phasix™ Mesh	43	60 5	20.0%	5.9%	3.9%	✓	
Roth, JS et al. Long-Term, Prospective, Multicenter Study of Poly-4-hydroxybutyrate Mesh (Phasix Mesh) for Hernia Repair in Cohort at Risk for Complication: 60-Month Follow-Up. *Journal of the Am College of Surgeons* 2022 ^	Phasix™ Mesh	121	60 5	22.0%	NR	2.8%		
Van den Dop, L., Van Rooijen, M., Tollens, T., et. Al. Five-Year Follow-Up of a Slowly Resorbable Biosynthetic P4HB Mesh (Phasix) in VHWG Grade 3 Incisional Hernia Repair *Annals of Surgery Open* ^	Phasix™ Mesh	61	60 5	15.9%	11.5%	11.5%		
Morrison, B.G., Gledhill, K., Plymale, M.A., et al. 'Comparative Long-Term Effectiveness between Ventral Hernia Repairs with Biosynthetic and Synthetic Mesh'. *Surgical Endoscopy, 2023*	Phasix™ Mesh	101 Phasix, Synthetic: 338	up to 5 years 5	Phasix: 7.9% Synthetics: 9.2%	Phasix: 16.8%, Synthetics:9.2%	sSSI: Phasix: 6.9% Syn:7.4% dSSI: Phasix: 10.9% Syn: 9.8%		
Lemdani MS, Niu EF, Amro C, et al. Outcomes and Quality of Life After Resorbable Synthetic Ventral Hernia Repair in Contaminated Fields. *Ann Plast Surg.* 2024;92(4S Suppl 2):S156-S160.	Phasix™ Mesh	55	49 3	7.3%	1.8%	18.2%	✓	
Talwar AA, McGraw JR, Thrippleton S, Broach RB, Heniford BT, Fischer JP. Missing the Mark: Evaluating the Validity of the Ventral Hernia Screen in Detecting Recurrence. *Am Surg.* Published online January 10, 2024.	Phasix™ Mesh	68	43.2 3	NR	NR	NR		
Christopher, AN, et al. An evaluation of clinical and quality of life outcomes after ventral hernia repair with poly-4-hydroxybutyrate mesh. *Hernia* 2021	Phasix™ Mesh	71	43.1 3	12.7%	NR	7.1%	✓	
Fathi, Amir & Ladella, Joshua & Pooya, Shabnam & Slater, David & Bilello, John. (2021). Successful Utilization of Poly-4-Hydroxybutyrate Mesh in High Risk, Complex Abdominal Wall Reconstructions with Photo-Microscopic Analysis.. MEDICAL AND CLINICAL RESEARCH: OPEN ACCESS. 2. 10.52106/2766-3213.1031	Phasix™ Mesh	28	42 3	0				
Bueno-Lledó J, Porrero-Guerrero B, Ferreira F, et al. Long-term results with biosynthetic absorbable P4HB mesh in ventral abdominal wall repair: a multicentre analysis. *Hernia.* Published online March 13, 2024	Phasix™ Mesh	236	41 3	14.4%	10.1%-Grade 1	8.4%		
Layer, T., Benammi, S., Dubuisson, V., et al. Incisional Hernia Repair with a Slowly Absorbable P4HB Mesh: What Happens after the Mesh Disappears? A Retrospective Longitudinal Clinical Study, *Hernia, 2023*	Phasix™ ST Mesh & Phasix™ Mesh	108	41 3	22.20%	NR	24.1%		
Schecter, SC.et al. Single-stage abdominal wall reconstruction in contaminated and dirty wound is safe: a single center experience. *Surgical Endoscopy* 2022	Phasix™ Mesh	34	37 3	6.0%	17.6%	12.0%		

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Authors, Article Title, Journal, Year	Product	Patients	Mean Follow-up (Months)	Recurrence	Seroma	Surgical Site Infections	QOL	HEOR
Ventral								
Bueno-Lledó, J. et al. Abdominal wall reconstruction with biosynthetic absorbable mesh after infected prosthesis explanation: single stage is better than two-stage approach of chronic mesh infection. *Hernia* 2021	Phasix™ Mesh	**Phasix™ Mesh:** 30 **Synthetic:** 41	36.5 3	**Phasix™ Mesh** 6.6% **Synthetic** 10.7%	16.6%	**Phasix™ Mesh** 3.3% **Synthetic** 9.8%		
Bueno-Lledó J, Ceno M, Pérez-Alonso C, Martinez-Hoed J, Pous-Serrano S. Abdominal wall reconstruction with biosynthetic absorbable mesh after infected prosthesis explantation: single stage is better than two-stage approach of chronic mesh infection. *Hernia.* 2021;25(4):1005-1012. doi:10.1007/s10029-020-02309-0	Phasix™ Mesh	30 Phasix™ Mesh 71 permanent	36.5 3	6.6 % Phasix™ Mesh 7.2 % permanent	5 Phasix™ Mesh 9 permanent	0	NR	NR
Skoczek, A.C., Ruane, P.W., and Fernandez, D.L. 'Modifiable Comorbidities Impact on Ventral Hernia Recurrence Following Robotic Abdominal Wall Reconstruction Using Resorbable Biosynthetic Mesh: 36-Month Follow-Up', *Surgery Open Science, 2023*	Phasix™ Mesh	175	36 3	9.70%	NR	NR		
Levy, A. et al. Poly-4-hydroxybutyrate (Phasix™) mesh onlay in complex abdominal wall repair. *Surg Endoscopy* 2021	Phasix™ Mesh	105	36 3	17.0%	6.0%	5.0%		
Roth, JS. et al. Prospective, multicenter study of P4HB (Phasix™) mesh for hernia repair in cohort at risk for complications: 3-Year follow-up. *Ann Med Surg* (Lond) 2020 ^	Phasix™ Mesh	121	36 3	17.9%	6.6%	9.3%		
Bueno-Lledó, J et al. Biosynthetic Resorbable Prosthesis is Useful in Single-Stage Management of Chronic Mesh Infection After Abdominal Wall Hernia Repair. *World J Surgery* 2021	Phasix™ Mesh	32	34.5 2	3.3%	20.0%	3.3%		
Aldohayan, A. et al. Laparoscopic Ventral Hernia Repair with Poly-4-Hydroxybutyrate Absorbable Barrier Composite Mesh. *JSLS* 2021	Phasix™ ST Mesh	26	28 2	0.0%	15.4%	0.0%		
Mellia, JA. et al. Outcomes of Poly-4-hydroxybutyrate Mesh in Ventral Hernia Repair: A Systematic Review and Pooled Analysis. *Plat Reconstr Surg Global* (Open) 2020	Phasix™ Mesh	453	26.5 2	9.1%	NR	6.8%		
Faulkner, JD et al. Evaluation of Absorbable Mesh for Prophylactic Mesh Augmentation in High-Risk Patients. *Surg Technol Int* 2021	Phasix™ Mesh	50	26.4 2	8.0% (When Phasix™ Mesh was placed)	4.0%	4.0%		
Yu,D. et al. Comparison of Phasix, polypropylene, and primary closure of the abdominal donor site after bilateral free flap breast reconstruction: Long-term evaluation of abdominal hernia and bulge formation. *Microsurgery* 2020	Phasix™ Mesh	66	25.2 2	0.0%	**Phasix™ Mesh** 0% **Polypropylene mesh** 10 % **Primary closure** 16.7% (p<0.05	NR		
Amro, C., Ewing, J. N., Romeo, (2025). Onlay Resorbable Biosynthetic versus Underlay Biologic Mesh Ventral Hernia Repair in Contaminated Fields. *The Journal of surgical research online publication.*	Phasix™ Mesh	94	25.73 +/- 18.66 2	Biosynthetic 14.9% Biologic 30.4%	Biosynthetic 46.8% Biologic 72.3%	NR		
Othman S, et al. Comparative Effectiveness Analysis of Resorbable Synthetic Onlay and Biologic Intraperitoneal Mesh for Abdominal Wall Reconstruction: A 2-Year Match-Paired Analysis. *Plast Reconstr Surg* 2022	Phasix™ Mesh	**Phasix™ Mesh: 88 Biologics**: 44	24.5 2	**Phasix™ Mesh**: 4.5% **Biologics:** 22.7%	NR	**Phasix™ Mesh:** 18.2% **Biologics:** 25.6%		
Christopher AN, Morris et al. Resorbable Synthetic Ventral Hernia Repair in Contaminated Fields: Outcomes with Poly-4-Hydroxybutyrate Mesh. *Plast Reconstr Surg* 2021	Phasix™ Mesh	60	24.2 2	8.3%	NR	16.7%	✓	
Christopher AN, Fowler C, Patel V, et al. Bilateral transversus abdominis release: Complex hernia repair without sacrificing quality of life. *Am J Surg.* 2022;223(2):250-256. doi:10.1016/j.amjsurg.2021.03.020	Phasix™ Mesh	50	24 and 36 months	15.4 % RR 4.2 % TAR	3.9 % RR 12.5 % TAR	19.2 RR 20.8 TAR	✓	NR

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Authors, Article Title, Journal, Year	Product	Patients	Mean Follow-up (Months)	Recurrence	Seroma	Surgical Site Infections	QOL	HEOR
Ventral								
Hope WW, et al. A prospective, multicenter trial of a long-term bioabsorbable mesh with Sepra technology in cohort of challenging laparoscopic ventral or incisional hernia repairs (ATLAS trial). *Ann Med Surg* (Lond) 2021 ^	Phasix™ ST Mesh	120	24 2	31.7%	NR	0.0%	✓	
Van Rooijen, M.et al. Slowly resorbable biosynthetic mesh: 2-year results in VHWG grade 3 hernia repair. *Hernia* 2022 ^	Phasix™ Mesh	84	24 2	11.0%	8.3%	13.1%	✓	
Messa, C. 4th, et al. When the Mesh Goes Away: An Analysis of Poly-4-Hydroxybutyrate Mesh for Complex Hernia Repair. *Plast Reconstr Surg Global* (Open) 2019	Phasix™ Mesh	70	24 2	5.7%	8.0%	8.0%	✓	
Plymale, M. et al. Ventral hernia repair with poly-4-hydroxybutyrate mesh. *Surg Endosc* 2018 ^	Phasix™ Mesh	31	24 2	0.0%	12.9%	19.0%		
van Rooijen MMJ, Jairam AP, Tollens T, et al. A post-market, prospective, multi-center, single-arm clinical investigation of Phasix™ mesh for VHWG grade 3 midline incisional hernia repair: a research protocol. *BMC Surg.* 2018;18(1):104. Published 2018 Nov 20. doi:10.1186/s12893-018-0439-7	Phasix™ Mesh	85	24 2	NR	NFR	NR		NR
Pakula A, Skinner R. Outcomes of Open Complex Ventral Hernia Repairs With Retromuscular Placement of Poly-4-Hydroxybutyrate Bioabsorbable Mesh. *Surg Innov* 2020	Phasix™ Mesh	20	21.1	0.0%	10.0%	10.0%		
Claessen JJM, et al. Outcomes of mid-term and long-term degradable biosynthetic meshes in single-stage open complex abdominal wall reconstruction. *Hernia* 2021	Phasix™ Mesh	**Phasix™**: 40 **Bio-A**: 30	**Median:** 20 **Phasix™**: 35 **Bio-A**: 11	**Phasix™**:10% **Bio-A:** 10%	NR	**Phasix™**:25% **Bio-A:** 23.3%		
Tenzel, P., Williams, Z., McCarthy, R., Hope, W., Prophylactic mesh used in ileal conduit formation following radical cystectomy: a retrospective cohort. **Hernia 2018**	Phasix™ Mesh	**Phasix™:** 15 **Strattice™:** 3	21	0	0	0		
Christopher,A et al. Onlay Poly-4-Hydroxybutyrate (P4HB) Mesh for Complex Hernia: Early Clinical and Patient Reported Outcomes. *J Surg Res* 2021	Phasix™ Mesh	51	20	5.9%	NR	15.7%	✓	✓
Roth,JS. et al. Prospective evaluation of poly-4-hydroxybutyrate mesh in CDC class I/high-risk ventral and incisional hernia repair: 18-month follow-up. *Surg Endosc* 2018 ^	Phasix™ Mesh	121	18	9.0%	6.0%	9.0%		
Rognoni,C. et al. Clinical outcomes and quality of life associated with the use of a biosynthetic mesh for complex ventral hernia repair: analysis of the "Italian Hernia Club" registry. *Sci Rep* 2020	Phasix™ ST Mesh and Phasix™ Mesh	75	18	8.0%	17.0%	4.0%		
Wormer,B. et al. Reducing Postoperative Abdominal Bulge Following Deep Inferior Epigastric Perforator Flap Breast Reconstruction with Onlay Monofilament Poly-4-Hydroxybutyrate Biosynthetic Mesh. *J Reconstr Microsurg* 2017	Phasix™ Mesh	319	16 . 4 ±11.1	NR	**Phasix™ Mesh** 2.5% **No mesh** 3.1% (p = 0.75)	**Phasix™ Mesh** 1.3% **No mesh** 2.5% (p = 0.45)		
Fowler, C.C., Klifto, K.M., Wietlisbach, L.E., et al. Poly-4-Hydroxybutyrate Mesh for Ventral Hernia Repairs: A Single-Surgeon Experience *EPlasty: Open Access Journal of Plastic and Reconstructive Surgery*, 2023	Phasix™ Mesh	169	15	4.70%	1.80%	9.5%		
Kniepeiss,D. et al. Prevention of Incisional hernia after liver transplantation (PRINC trial): study protocol for a randomized controlled trial. *Trials* 2019	Phasix™ Mesh	178	12	NR	NR	NR		
Vauclair,E., et al. What results can be expected one year after complex incisional hernia repair with biosynthetic mesh? *J Visc Surg* 2021	Phasix™ Mesh	29	12	10.3%	NR	0.0%		

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Authors, Article Title, Journal, Year	Product	Patients	Mean Follow-up (Months)	Recurrence	Seroma	Surgical Site Infections	QOL	HEOR
Ventral								
Charleux-Muller,D et al. Slowly absorbable mesh in contaminated incisional hernia repair: results of a French multicenter study. *Hernia* 2021	Phasix™ ST Mesh and Phasix™ Mesh	**VHWG grade 3**: 170 **VHWG grade 2**: 45	12	12.4%	NR	22.3%	✓	✓
Charleux-Muller,D et al. Cost-effectiveness analysis of resorbable biosynthetic mesh in contaminated ventral hernia repair. *J Visc Surg* 2022	Phasix™ ST Mesh and Phasix™ Mesh	94	6	**Phasix:** 21% **Biologics:** 33%	NR	NR		
Bafitis, H., Arboleda, V., and Bernal, I. 'Component Separation: A Case Report of Hybrid and Synthetic Absorbable Mesh Use for Complex Large Ventral Hernia Reparation', *Cureus, 2023*	Phasix™ Mesh	1	10	N/A	N/A	N/A		
Köhler G, Fischer I, Kaltenböck R, Schrittwieser R. Minimal Invasive Linea Alba Reconstruction for the Treatment of Umbilical and Epigastric Hernias with Coexisting Rectus Abdominis Diastasis. *J Laparoendosc Adv Surg Tech A.* 2018;28(10):1223-1228.	Phasix™ Mesh	20	5	2	1	NR		
Lima,D. et al. Versatility of Poly-4-Hydroxybutyrate (Phasix) Mesh in Abdominal Wall Surgery. *Arq Gastroenterol* 2022	Phasix™ Mesh	51	3.5	6.0%	16.0%	NR		
van Rooijen, M, et al. Outcomes of a new slowly resorbable biosynthetic mesh (Phasix™) in potentially contaminated incisional hernias: A prospective, multi-center, single-arm trial. *Int J Surg* 2020 ^	Phasix™ Mesh	84	3	0.0%	8.3%	13.0%		
Skoczek AC, Ruane PW, Holland AB, Hamilton JK, Fernandez DL. Robotic transversus abdominis release (TAR) for ventral hernia repairs is associated with low surgical site occurrence rates and length of stay despite increasing modifiable comorbidities. *Hernia.* Published online May 1, 2024	Phasix™ Mesh	334	2	NR	1.2%	NR		
Morales-Conde S, Hernández-Granados P, Tallón-Aguilar L, Verdaguer-Tremolosa M, López-Cano M. Ventral hernia repair in high-risk patients and contaminated fields using a single mesh: proportional meta-analysis [published correction appears in Hernia. 2023 Feb;27(1):207.	Phasix™ Mesh	NR	1-36 months	9%	NR	14%		
Deeken CR, Rosen MJ, Poulose BK, et al. Early wound morbidity and clinical outcomes associated with P4HB mesh compared to permanent synthetic mesh in umbilical and small to medium, routine ventral hernia repairs. *Front Surg.* 2023 ^	Phasix™ Mesh	Umbilical: 122 Small/Medium: 235	1	0%	0%	Phasix Umbilical: 0% PP Umbilical: 0% Phasix S/M: 1.1% PP S/M: 0.5%		
Louis V, Diab S, Villemin A, et al. Do surgical drains reduce surgical site occurrence and infection after incisional hernia repair with sublay mesh? A non-randomised pilot study. *Hernia.* 2023;27(4):873-881. doi:10.1007/s10029-023-02768-1	Phasix™ Mesh	12 Phasix™ Mesh 92 synthetic	1	32.7 % Mixed mesh	NR	10.6 % dSSI (mixed) 3.8 % sSSI (mixed)	NR	NR
Morales-Conde, S., et al. Establishing Peer Consensus About the Use of Long-Term Biosynthetic Absorbable Mesh for Hernia (Grades 2–3) as the Standard of Care. *World Journal of Surgery* 2022 ^	Phasix™ ST Mesh and Phasix™ Mesh	255	N/A	N/A	N/A	N/A		
Buell JF, et al. Initial Experience With Biologic Polymer Scaffold (Poly-4-hydroxybuturate) in Complex Abdominal Wall Reconstruction. *Ann Surg* 2017	Phasix™ Mesh	73	NR	**Phasix™ Mesh** 6.5% **Strattice™**23.8% (p = 0.049)	Time to drain removal: **Phasix™ Mesh** 10 days **Strattice™** 14 days (p = 0.002)	**Phasix™ Mesh** 12.9% **Strattice™** 31.0% (p = 0.073)		✓
Wagner V, Levy BE, Castle JT, Plymale M, Roth JS, Totten C. Absorbable mesh in a contaminated field: hernia repair outcomes. *Updates Surg.* 2023	Phasix™ Mesh	112	NR	CDC I: 5.3% CDC II- IV: 8.3%	CDC I: 15.8% CDC II- IV: 8.3%	CDC I sSSI: 10.5% CDC I dSSI: 1.3% CDC II- IV: sSSI: 30.6% CDC II- IV: dSSI: 8.3%		
Ahmed A, Gandhi S, Ganam S, et al. Ventral hernia repair using bioresorbable poly-4-hydroxybutyrate mesh in clean and contaminated surgical fields: a systematic review and meta-analysis. *Hernia.* Published online February 12, 2024.	Phasix™ Mesh	391	N/A	Clean 8%, Cont, 4%	NR	Clean 2%, Cont. 9%		

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Ventral								
Deeken CR, C.D. Fully Resorbable Poly-4-Hydroxybutyrate (P4HB) Mesh for Soft Tissue Repair and Reconstruction: A Scoping Review. *Frontiers in Surgery, 2023* ^	P4HB (Phasix™ ST Mesh, Phasix™ Mesh, Galatea)	N/A	N/A	N/A	N/A	N/A		
Lambrecht M, Tollens T. Successful conservative treatment of a poly-4-hydroxybutyrate mesh infection: A case report. *Ann Med Surg (Lond)*. 2021;63:102162. Published 2021 Feb 17. doi:10.1016/j.amsu.2021.02.008	Phasix™ Mesh	1	NR	N/A	N/A	N/A		
Siddiqui UT, Gontarz B, Lewis RT, Wakefield DB, Scott RB. The utilization of an absorbable mesh after ostomy reversal does not decrease incisional hernia rates. *Am J Surg*. 2023;226(2):233-238. doi:10.1016/j.amjsurg.2023.04.013	Phasix™ Mesh	NR	NR		NR	NR		
Amro C, Ryan I, Lemdani MS, et al. Mesh exposure after ventral hernia repair with onlay biosynthetic mesh: a retrospective review of associated risk factors and management strategies. *Hernia*. 2024;28(6):2165-2176. doi:10.1007/s10029-024-03108-7	Phasix™ Mesh	346	NR	6.7%	NR	NR		
Hiatal								
McKay SC, Dunst CM, Davila-Bradley D, Reavis KM, DeMeester SR. Five-Year Outcomes from a Prospective Study on the Safety and Efficacy of Phasix-ST Mesh Use at the Hiatus During Paraesophageal Hernia Repair. *J Am Coll Surg*. Published online April 24, 2024	Phasix™ ST	50	60 5	25%	NR	0		
Panici Tonucci T, Aiolfi A, Bona D, Bonavina L. Does crural repair with biosynthetic mesh improve outcomes of revisional surgery for recurrent hiatal hernia?. Hernia. Published online March 29, 2024.	Phasix™ ST Mesh	104 (60- Phasix™ Mesh)	55 5	20.2%	NR	NR	✓	
Aiolfi A, et. al. Medium-term safety and efficacy profile of paraesophageal hernia repair with Phasix-ST mesh: a single-institution experience. *Hernia* 2022	Phasix™ ST Mesh	68	27 2	8.8%	NR	NR	✓	
Clapp, B., Kara, A., Nguyen-Lee, Paul, et.al. Does bioabsorbable mesh reduce hiatal hernia recurrence rates? A meta-analysis. Surge Endoscopy	Phasix™ ST Mesh	963 (73 Phasix™ ST)	27 2	8.0%	NR	NR	✓	
K S Viswanath, Yirupaiahgari. Giant Hiatal Hernia and P4HB Phasix TMST Mesh Hiatoplasty Outcomes. Clinical research and clinical trials, 2024	Phasix™ ST Mesh	44	24 2	9.1%				
Panici Tonucci et. al. Safety and Efficacy of Crura Augmentation with Phasix ST Mesh for Large Hiatal Hernia: 3-Year Single-Center Experience. *Laparoendosc Adv Surg Tech A* 2020	Phasix™ ST Mesh	73	17	3.2%	NR	0.0%		
Siemssen B, Dahlke PM, Behrens F, Hentschel F, Ibach MJ. Medium term (> 12 months) outcomes after laparoscopic hiatal hernia repair without conventional fundoplication using PH4B-mesh implant (Phasix™) in 176 reflux patients: experience and technique. *Hernia*. Published online April 8, 2024	Phasix™	176	22	3%	0		✓	

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Hiatal								
Aiolfi A., et. al. Laparoscopic posterior cruroplasty: a patient tailored approach. *Hernia* 2022	Phasix™ Mesh	**Phasix™ ST Mesh: 39** **No Mesh**: 102	21	2.1%	NR	NR		
Konstantinidis H, Charisis C. Surgical treatment of large and complicated hiatal hernias with the new resorbable mesh with hydrogel barrier (Phasix ST): a preliminary study. *J Robotic Surgery* 2022	Phasix ST™ Mesh	60	21	0.0%	NR	NR		
Fair, L., Ward, M., Adhikari, P., et al. Coated poly-4-hydroxybutyrate (Phasix ST™) mesh is safe and effective for hiatal hernia repair: our institutional experience and review of the literature. *Surgical Endoscopy 2023*	Phasix ST™ Mesh	230/221	20 +/- 14.6	4.8 %/ 8.8%	NR	NR	✓	
Aiolfi, A., Sozzi, A., Cavalli, M.et. Al. Patient-tailored algorithm for laparoscopic cruroplasty standardization: comparison with hiatal surface area and medium-term outcomes. *Langenback's Archives of Surgery 2022*	Phasix ST™ Mesh	**Phasix™ ST Mesh: 23** **No Mesh**: 27	18.6	12%	NR	NR	✓	
Panici Tonucci et. al. Safety and Efficacy of Crura Augmentation with Phasix ST Mesh for Large Hiatal Hernia: 3-Year Single-Center Experience. *Laparoendosc Adv Surg Tech A* 2020	Phasix ST™ Mesh	73	17	3.2%	NR	0.0%		
Abdelmoaty,W. Dunst, C., et. al. Combination of Surgical Technique and Bioresorbable Mesh Reinforcement of the Crural Repair Leads to Low Early Hernia Recurrence Rates with Laparoscopic Paraesophageal Hernia Repair. *J Gastrointest Surg* 2020 ^	Phasix ST™ Mesh	50	12	8.0%	NR	0.0%		
Ukegjini, K, Vetter, D, Dirr, V, Gutschow, C. Hiatus hernia repair with a new-generation biosynthetic mesh: a 4-year single-center experience. Surgical Endoscopy	Phasix ST™ Mesh	97	12	13.0%	NR	4.0%		
Salehi N, Marshall T, Christianson B, et al. Comparative anatomic and symptomatic recurrence outcomes of diaphragmatic suture cruroplasty versus biosynthetic mesh reinforcement in robotic hiatal and paraesophageal hernia repair. *Surg Endosc.*	Phasix™ ST	503	12	Phasix 8.8% Suture 14.6%	NR	NR		
Varsos, P., Seretis, F., Theodorou, A. (2024). Prophylactic Mesh Augmentation of Midline Closure in Patients Undergoing Resection for Upper Gastrointestinal Cancer Reduces the Rate of Incisional Hernia: Results of a Case-Series Study. *Journal of abdominal wall surgery*	Phasix™ Mesh	50	12	N/A	N/A	N/A		
Inguinal								
Aldohayan, A.et. al. A Novel Use of Fully Absorbable Phasix Mesh for Laparoscopic Inguinal Hernia Repair. JSLS 2020	Phasix™ Mesh	15	30	0.0%	NR	NR		
van Driel LJ, Miserez M, Aarts F, Tollens T. **Observational cohort study on the use of a slowly fully resorbable synthetic mesh (Phasix) in the treatment of complex abdominal wall pathology with different grades of contamination.** *Surg Technol Int. (2021)*	Phasix™ ST Mesh	47	48 days	12.8% overall	Phasix (0-9.5) Biologic (8.1-38	SeeTable ii.		✓

These articles are organized by longest to shortest term follow up.
^ BD funded

Phasix™ Mesh 265K+ patients impacted

85+ Peer Reviewed Clinical Publications

Changing the standard of care since 2013

LEGEND

HEOR *Health, Economics, Outcomes, Research*
QOL *Quality of Life*
NR *Not Reported*
N/A *Not Applicable*

2 for 2 year/+ follow up
3 for 3 year/+ follow up
5 for 5 year/+ follow up
✓ Data reported

Authors, Article Title, Journal, Year	Product	Patients	Mean Follow-up (Months)	Recurrence	Seroma	Surgical Site Infections	QOL	HEOR
Review Publications/All Corners								
Rognoni, C. **Budget Impact Analysis of a Biosynthetic Mesh for Incisional Hernia Repair**, *Clinical Therapeutics, 2018*	Phasix™ Mesh	N/A	18-60	N/A	N/A	N/A		
Lima DL, de Figueiredo SMP, Pereira X, et al. Hiatal hernia repair with biosynthetic mesh reinforcement: a qualitative systematic review. *Surg Endosc.* 2023;37(10):7425-7436. doi:10.1007/s00464-023-10379-1	Phasix™ Mesh grouped with others	1846	12-54 months	0.9-2.5%	NR	NR	✓	
Giuffrida M, Rossini M, Pagliai L, Del Rio P, Cozzani F. Laparoscopic Intraperitoneal Onlay Mesh (IPOM): Short- and Long-Term Results in a Single Center. *Surgeries.* 2023; 4(1):98-107. https://doi.org/10.3390/surgeries4010011	Phasix™ Mesh grouped with others	170	112 +/- 35.8 months	6.5%	8.7%	4.1%	NR	NR
Gokcal F, Morrison S, Kudsi OY. Robotic ventral hernia repair in octogenarians: perioperative and long-term outcomes. *J Robot Surg.* 2020;14(2):275-281. doi:10.1007/s11701-019-00979-2	Phasix™ Mesh grouped with others	21	23.5 month median	0	4.8%	9.5%	NR	NR
Perrone, G., Giuffrida, M., Bonati, E., et al. **Biosynthetic Meshes in Contaminated Fields: Where Are We Now? A Systematic Review and Meta-Analysis in Humans**, *Hernia, 2023*	Phasix™ Mesh	16199	23	11.50%	NR	17.30%		
Carrara A, Lauro E, Fabris L, Frisini M, Rizzo S. Endo-laparoscopic reconstruction of the abdominal wall midline with linear stapler, the THT technique. Early results of the first case series. *Ann Med Surg (Lond).* 2018;38:1-7. Published 2018 Dec 12. doi:10.1016/j.amsu.2018.12.002	Phasix™ Mesh grouped with others	14	6 months average	None	NR	NR	✓	NR
Gokcal F, Morrison S, Kudsi OY. Short-term comparison between preperitoneal and intraperitoneal onlay mesh placement in robotic ventral hernia repair. Hernia. 2019;23(5):957-967. doi:10.1007/s10029-019-01946-4	Phasix™ Mesh grouped with others	104	3 months	0	6.5% & 5.3% (3 wks) 1.6 (1 mnths)	4.3% & 1.1% (3 wks) NA (3 mths)	NR	NR
Tran DH, Rubarth C, Leeds SG, et al. **The use of poly-4-hydroxybutyrate (P4HB, Phasix™) mesh in ventral hernia repair: a systematic review and meta-analysis**. *Hernia.* Published online March 21, 2024.	Phasix™ Mesh	1858	1.6	9%, pooled	9%, pooled	**10%, pooled**		
Sahoo S, Haskins IN, Huang LC, et al. Early Wound Morbidity after Open Ventral Hernia Repair with Biosynthetic or Polypropylene Mesh. *J Am Coll Surg.* 2017;225(4):472-480.e1. doi:10.1016/j.jamcollsurg.2017.07.1067	Grouped biosynthetics vs polypropylene	2,051	30 days	NR	1.7% Grouped biosyn. 4% polypro	**22.4% : Grouped biosyn. 10.9%- polypro**	NR	NR
Kevin L Chow, Ellen C Omi, John Santaniello, Jane K Lee, David P McElmeel, Yalaunda M Thomas, Thomas J Cartolano, James C Doherty, Eduardo Smith-Singares - Traumatic abdominal wall hernias: a single-center case series of surgical management: Trauma Surgery & Acute Care Open 2020;5:e000495.	Phasix™ Mesh grouped with others	15	NR	8& mesh 33% suture	NR	NR	NR	NR
Tashkandi, Ahmad & Bueno Lledó, Jose & Durtette-Guzylack, Jules & Cayeux, A. & Bukhari, Razeena & Rhaeim, R. & Malinovski, J. & Kianmanesh, Reza & Renard, Yohann. (2021). Adjunct botox to preoperative progressive pneumoperitoneum for incisional hernia with loss of domain: no additional effect but may improve outcomes. Hernia. 25. 10.1007/s10029-021-02387-8.	Phasix™ Mesh grouped with others	450	NR	NR	7.1% grouped	14.3% sSSI grouped 10.7% dSSI grouped	NR	NR

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Revision Date: January 10, 2025

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