

Advancing Soft Tissue Reconstruction

Investor Presentation

May 2021

Forward Looking Statements

This presentation contains forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. All statements other than statements of historical facts contained in this document, including but not limited to statements regarding possible or assumed future results of operations, business strategies, development plans, regulatory activities, market opportunity competitive position, potential growth opportunities, and the effects of competition, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause TELA Bio, Inc.'s (the "Company") actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "aim," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions. The forward-looking statements in this presentation are only predictions. The Company has based these forward-looking statements largely on its current expectations and projections about future events and financial trends that it believes may affect the Company's business, financial condition and results of operations. These forward-looking statements speak only as of the date of this presentation and are subject to a number of risks, uncertainties and assumptions, some of which cannot be predicted or guantified and some of which are beyond the Company's control, including, among others: changes resulting from the finalization of the Company's financial statements for the year ended December 31, 2020, information or new changes in facts or circumstances that may occur prior to the filing of the Company's Annual Report on Form 10-K for the year ended December 31, 2020 that are required to be included in such annual report, the impact to the Company's business of the ongoing COVID-19 pandemic, including but not limited to any impact on the Company's ability to market its products, demand for the Company's products due to deferral of procedures using the Company's products or disruption in the Company's supply chain, the Company's ability to achieve or sustain profitability, the Company's ability to gain market acceptance for the Company's products and to accurately forecast and meet customer demand, the Company's ability to compete successfully, the Company's ability to enhance the Company's product offerings, development and manufacturing problems, capacity constraints or delays in production of the Company's products, maintenance of coverage and adequate reimbursement for procedures using the Company's products, product defects or failures. These and other risks and uncertainties are described more fully in the "Risk Factors" section and elsewhere in the Company's filings with the Securities and Exchange Commission and available at www.sec.gov. You should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in the Company's forward-looking statements may not be achieved or occur, and actual results could differ materially from those projected in the forward-looking statements. Moreover, the Company operates in a dynamic industry and economy. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties that the Company may face. Except as required by applicable law, we do not plan to publicly update or revise any forwardlooking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.





Redefining soft tissue reconstruction with a differentiated category of tissue reinforcement materials ~\$2B U.S Market Opportunity¹

in hernia repair, abdominal wall reconstruction and plastic and reconstructive surgery

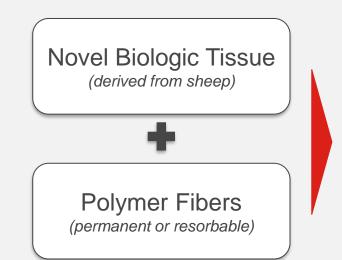


Compelling Clinical Evidence

Products Offer Attractive Value Proposition for Hospitals

Creating Advanced Biologic Materials

Purposefully designed to address shortcomings & unmet clinical needs



Innovative Textile Engineering

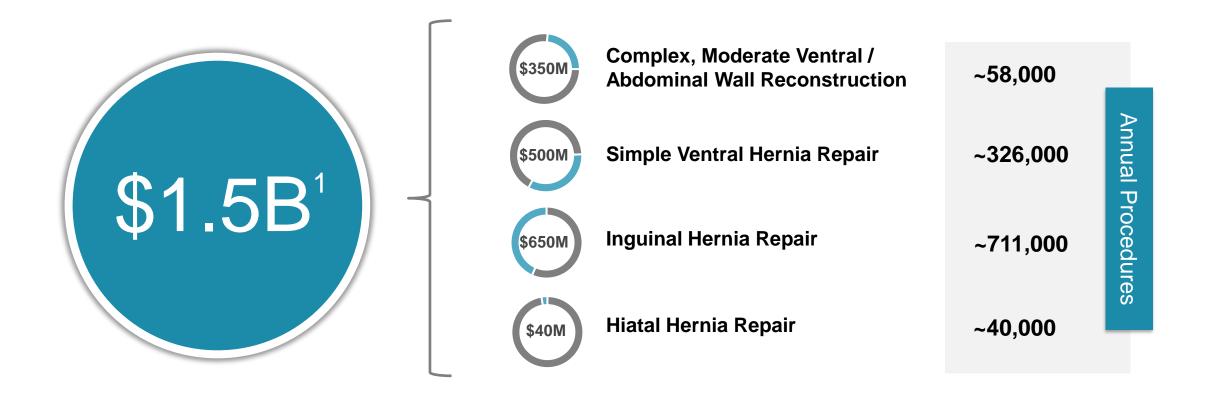


Hernia & Ab Wall
Reconstruction
Plastic
Reconstruction

Issued patents protect underlying biologic tissue and product design

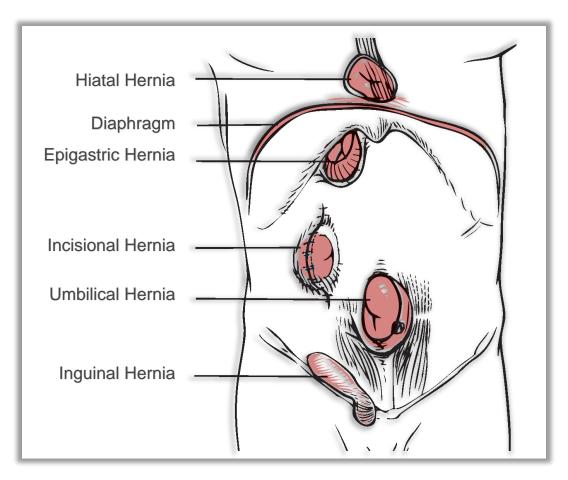


OviTex: ~\$1.5 Billion Annual U.S. Hernia Market Opportunity





Hernias Occur Throughout the Abdomen



What is a hernia?

- Occurs when an internal part of the body pushes through a weakness (that is natural occurring or from a previous surgical incision) or hole in the muscle or surrounding tissue
- Likelihood of developing a hernia increases with age & obesity

Treating a hernia

- Standard of care: Surgical repair of a hernia with a reinforcing material (mesh)
- ~90% of hernia patients receive a mesh repair¹
- Mesh intended to reinforce the defect and provide long-term support



Ventral Hernia Patients Range in Complexity

Ventral Hernia Complexity

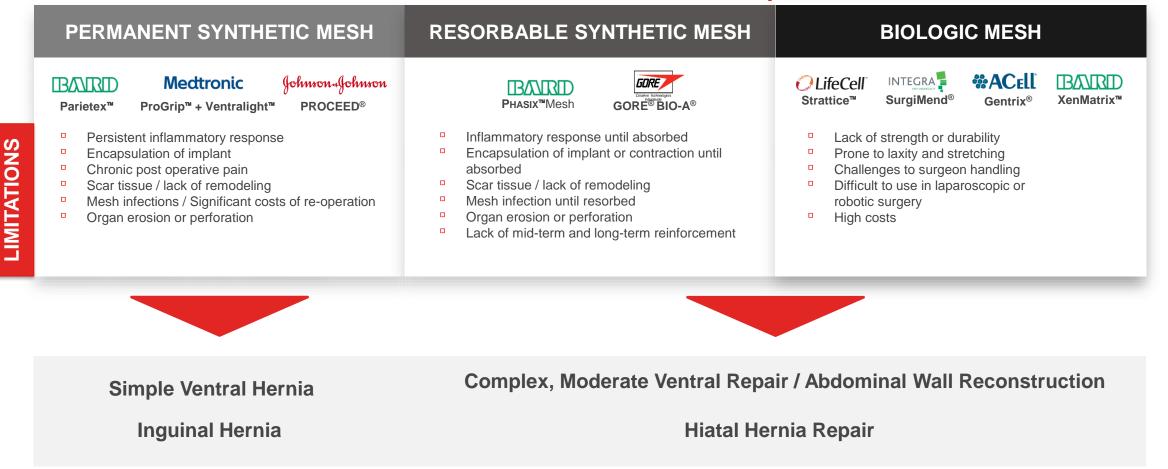
SIMPLE	MODERATE	COMPLEX
 CDC Wound Class I (clean) Healthier patients - no co- morbidities Primary hernia repair 	 CDC Wound Class II (clean-contaminated) Patient co-morbidities (i.e., obesity, diabetes, COPD) May have prior hernia repair failure 	 CDC Wound Class III (contaminated) & IV (infected) Large defects Infected synthetic mesh removals Multiple prior hernia repair failures

Objective: provide patients the best repair the first time to prevent the simple patient from becoming the complex



Current Ventral Hernia Treatment Options: No Perfect Product

Natural Repair Products





Growing Need for Alternative to Permanent Synthetic Mesh

59%

of surgeons agree that use of permanent synthetic mesh puts patients at long-term risk of complications¹



Hernia patients have voiced concern over use of permanent synthetic mesh in the past 12 months, according to surgeons¹

~15K

Lawsuits against permanent synthetic meshes estimated to be assembled across the U.S.²



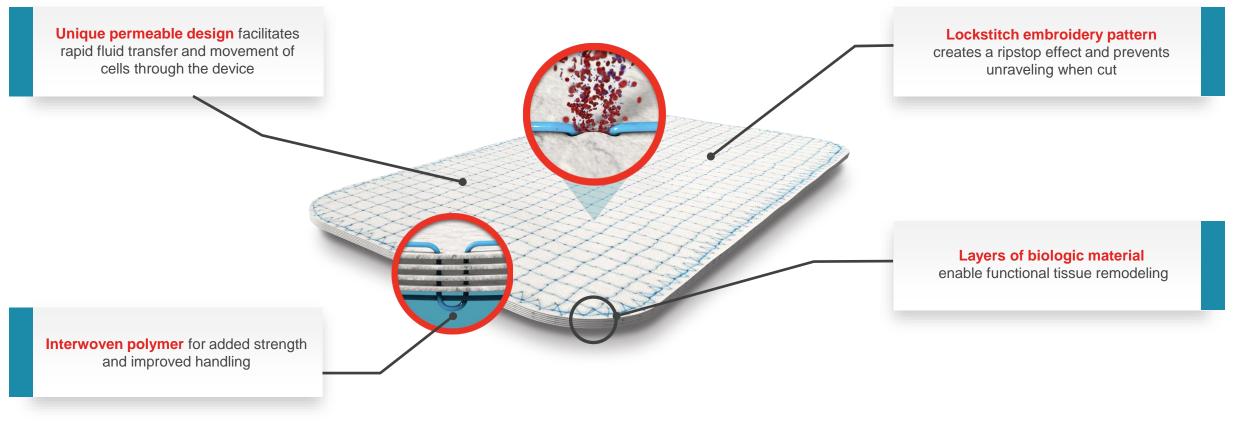
HERNIA MESH COMPLICATIONS INCLUDE: PAIN, INFECTION RECURRENCE, ADHESION, OBSTRUCTION, & PERFORATION. THOSE AFFECTED MAY BE ELIGIBLE FOR COMPENSATION.





OviTex Reinforced Tissue Matrix: a More Natural Hernia Repair™

An innovative reinforced tissue matrix designed to reduce stretch compared to biologic matrices and longterm complications experienced with resorbable and permanent synthetic meshes





Comprehensive Portfolio for a Broad Range of Hernia Types and **Surgical Techniques**

Each configuration is available with either permanent (polypropylene) polymer or resorbable (polyglycolic acid) polymer reinforcing the same biologic material.

PRODUCT DESIGN

OviTex

4-layer device, not intended for intraperitoneal placement

Strength*: + Common Procedures: Moderate ventral hernia (pre-peritoneal placement), inguinal hernia, hiatal hernia



OviTex 1S

6-layer device, with "smooth side" suitable for intraperitoneal placement

Strength*: ++ Common Procedures: Moderate to complex ventral hernia



OviTex 2S 8-layer device, with 2 "smooth sides" suitable for intraperitoneal placement

Strength*: +++ **Common Procedures:** Complex ventral hernia and abdominal wall reconstruction and can be used for bridging

Images represent permanent polymer OviTex products. Resorbable polymer products have clear polymer. * Biomechanical data on file.



OviTex LPR for Laparoscopic & Robotic Hernia Repair

Increase in Robotic-Assisted Hernia Repair

- Surgeons have adopted robotic-assisted techniques, primarily for inguinal & simple ventral Hernia repair, due to perceived patient and technique benefits
- Legacy biologic products are difficult to use minimally invasively (MIS) due to their thickness and handling properties

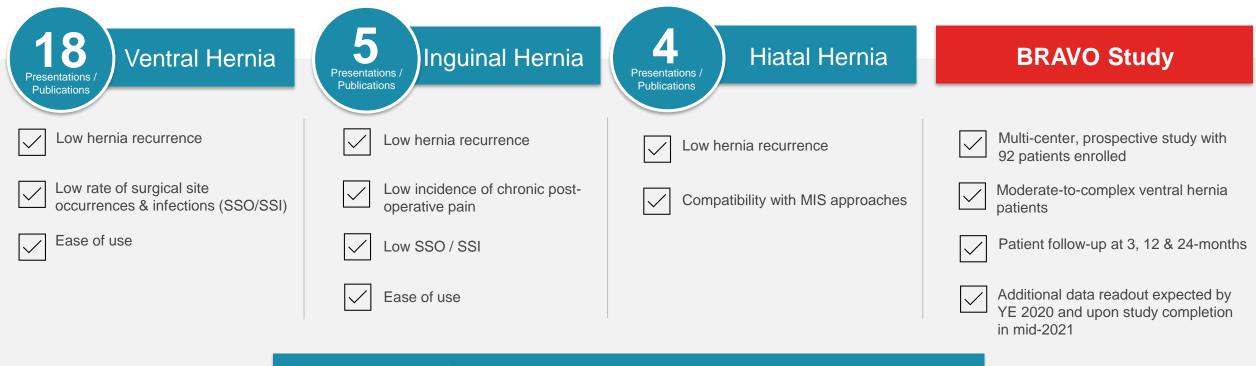
Our Solution: OviTex LPR

Tailored OviTex product designed for improved handling in MIS techniques and trocar accessibility





Compelling Clinical Evidence



OviTex supported by data from ~500 hernia patients across multiple hernia types



BRAVO Study Shows Low Recurrence Rate at 12 and 24-months

OviTex BRAVO Study

Pr	oduct Name	Tissue Reinforcement Material	Hernia Recurrence Rate	Number of Hernia Recurrence	Number of Patients who Completed Follow-up	Follow-up Period in Months
	OviTex	Reinforced Tissue Matrix	2.6%	2	76	12
	OviTex	Reinforced Tissue Matrix	0%	0	51	24

Results from Post-Market Clinical Studies of Competitive Materials

Produ	ct Name	Tissue Reinforcement Material	Published Hernia Recurrence Rate		umber of Hernia ecurrence, (%) [*]	Number of Patients who Completed Follow-up	Follow-up Period in Months
Pł	nasix	Resorbable Synthetic Mesh	4.1%		5 (5.3%)	95	12 ¹
Pł	nasix	Resorbable Synthetic Mesh	9%		11 (11.6%)	95	18 ²
Pł	nasix	Resorbable Synthetic Mesh	17.9%		19 (23.2%)	82	36 ³
Str	attice	Biologic Matrix	19%		15 (21.7%)	69	12 ⁴
Str	attice	Biologic Matrix		28%	22 (32.8%)	67	24 ⁴

1 Roth, J. S., Prospective Evaluation Of Poly-4-Hydroxybutyrate Mesh in Cdc Class I/High-Risk Ventral and Incisional Hernia Repair: 1 Year Follow-Up. Poster presented at: AHS 18th Annual Hernia Repair Meeting; 2017 March 8 – 11; Cancun, Mexico

2 Roth, J. S., Anthone, G. J., Selzer, D. J., Poulose, B. K., Bittner, J. G., Hope, W. W., ... Voeller, G. R. (2018). Prospective evaluation of poly-4-hydroxybutyrate mesh in CDC class l/high-risk ventral and incisional hernia repair: 18-month follow-up. Surg Endosc,

32(4), 1929-1936. doi:10.1007/s00464-017-5886-1

3 Roth, J. S., Anthone, G. J., Selzer, D. J., Poulose, B. K., Pierce, R. A., Bittner, J. G., . . . Voeller, G. R. (2021). Prospective, multicenter study of P4HB (Phasix) mesh for hernia repair in cohort at risk for complications: 3-Year follow-up. Ann Med Surg (Lond), 61, 1-7. doi:10.1016/j.amsu.2020.12.002

14 4 Itani, K. M., Rosen, M., Vargo, D., Awad, S. S., Denoto, G., 3rd, Butler, C. E., & Group, R. S. (2012). Prospective study of single-stage repair of contaminated hernias using a biologic porcine tissue matrix: the RICH Study. Surgery, 152(3), 498-505. doi:10.1016/j.surg.2012.04.008

*Hernia Recurrence Rate based on number of hernia recurrences reported in patients who completed follow up and patients who reported recurrent hernia before the specified follow up period. Clinical literature and conference presentations included hernia recurrence rates based on number of hernia recurrences in patients who comprised the initial intent-to-treat population (including those who did not complete the follow up period and did not report a hernia recurrence).



OviTex PRS: ~\$500 Million Annual U.S. Plastic & Reconstructive Surgery Market Opportunity



Surgeons use products to reinforce soft tissue during various reconstructive surgeries, including:

- Breast reconstruction
- Head and neck surgery
- Chest wall reconstruction
- Pelvic reconstruction
- Extremities reconstruction

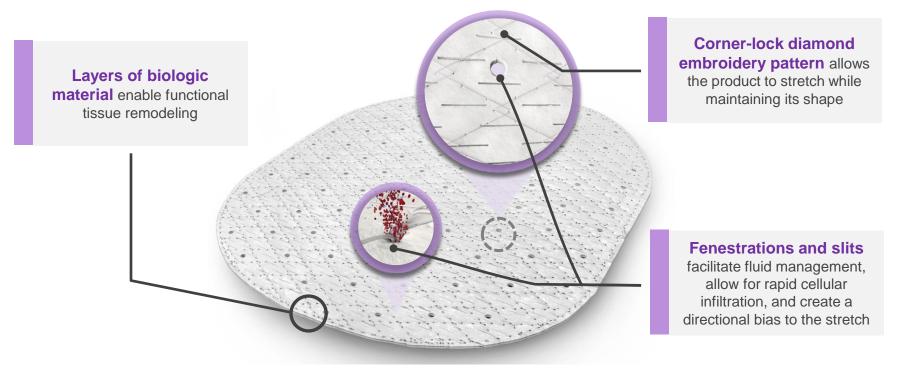
Market dominated by human acellular dermal matrices (HADMs)

- Prone to high degree of stretch
- ^D Expensive, putting pressure on hospital systems
- ^D Often experience supply shortages, particularly when large pieces of material are required



OviTex PRS: Purposely Designed for Plastic and Reconstructive Surgery

An innovative reinforced tissue matrix designed to improve outcomes by facilitating fluid management and controlling degree and direction of stretch



Expanded commercial launch in June 2020 following limited launch initiated in 2019



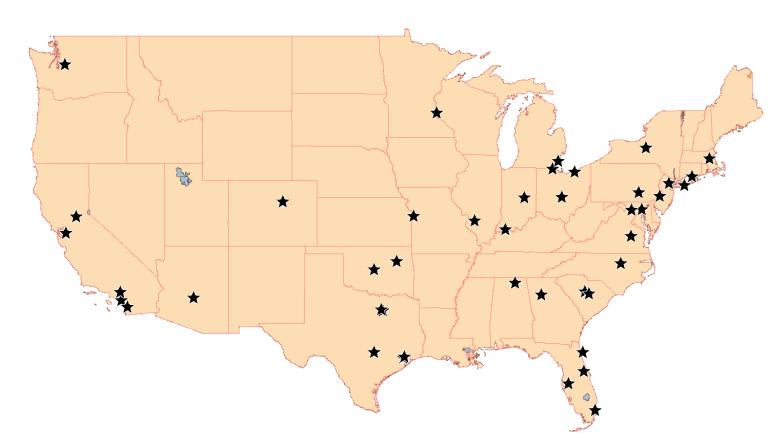
Commercial Organization

46 sales territories as of March 31, 2021

- OR-based Account Managers call on General, Plastic Recon, Colorectal & Trauma surgeons
- Carry full OviTex & OviTex PRS portfolios

6 sales regions

- Plan to scale existing regions until each region has ~8 territories
- Supported by Clinical Development and Strategic Customer Relations teams





Growth Strategy

INCREASE ADOPTION

- Promote broader awareness of OviTex & OviTex PRS products
- Employ virtual sales & marketing programs, including TELA LIVE
- Drive market awareness of risks of permanent synthetic mesh use
- Publish BRAVO clinical data

COMMERCIAL EXECUTION

- Scale direct sales force
- Drive account manager productivity
- Increase utilization within health systems under GPO contracts
- Secure additional contracts with high-potential IDNs and GPOs

MARKET EXPANSION

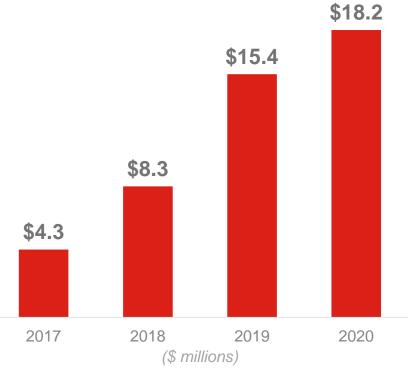
- Launch new product features and designs for OviTex and OviTex PRS
- Initiate robotic hernia post-market study
- Support investigator-led clinical studies for OviTex PRS



Delivering Revenue Growth

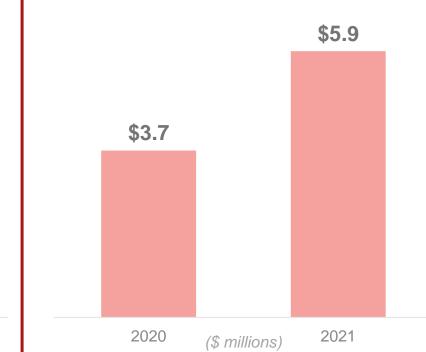
Annual Revenue

Revenue CAGR: 62%



First Quarter Revenue

Revenue Growth: 58%



Q1 2021 Performance

- Revenue growth of 58% year over year
- Cash and Cash equivalents (as of March 31, 2021): \$65.8



Investment Highlights



Advanced reinforced tissue matrix portfolio supported by compelling clinical evidence



Focused on ~\$2.0 billion annual U.S. total addressable markets



Driving commercial adoption with targeted direct-sales approach



Recent product launches in growing markets: robotic hernia surgery + plastic and reconstructive surgery



Broad intellectual property portfolio



Established DRG-based reimbursement pathway for hernia repair



Industry leading executive team with proven track record

