

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 8-K

**CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934**

Date of Report (Date of Earliest Event Reported): December 6, 2019

ORGANOGENESIS HOLDINGS INC.

(Exact Name of Registrant as specified in its charter)

Delaware
(State or Other Jurisdiction
of Incorporation)

001-37906
(Commission
File Number)

98-1329150
(IRS Employer
Identification No.)

85 Dan Road
Canton, MA
(Address of principal executive offices)

02021
(Zip Code)

(781) 575-0775
(Registrant's telephone number, including area code)

Not Applicable
(Registrant's name or former address, if change since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, \$0.0001 par value	ORGO	Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to Section 13(a) of the Exchange Act.

Item 7.01. Regulation FD Disclosure.

Organogenesis Holdings Inc. (the “Company”) from time to time presents at various industry and other conferences and provides summary business information. A copy of the slide presentation that will be used by representatives of the Company in connection with such presentations (the “Corporate Presentation”) is attached to this Current Report on Form 8-K as Exhibit 99.1. The Corporate Presentation is current as of December 6, 2019, and the Company disclaims any obligation to correct or update this material in the future.

The information in the press release attached as Exhibit 99.1 is intended to be furnished and shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”) or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

<u>Exhibit No.</u>	<u>Description</u>
99.1	Corporate Presentation current as of December 6, 2019.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Organogenesis Holdings Inc.

By: /s/ Timothy M. Cunningham

Name: Timothy M. Cunningham

Title: Chief Financial Officer

Date: December 6, 2019



Corporate Presentation

December 2019



Forward-Looking Statements / Industry and Market Data

Unless the context indicates otherwise, the terms "Organogenesis," "Company," "we," "us" and "our" refer to Organogenesis Holdings Inc. (formerly known as Avista Healthcare Public Acquisition Corp.), a Delaware corporation. References in this presentation to the "Business Combination" refer to the consummation of the transactions contemplated by that certain Agreement and Plan of Merger, dated as of August 17, 2018, which transactions were consummated on December 10, 2018.

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These forward-looking statements relate to expectations or forecasts of future events. Forward-looking statements may be identified by the use of words such as "forecast," "intend," "seek," "target," "anticipate," "believe," "expect," "estimate," "plan," "outlook," and "project" and other similar expressions that predict or indicate future events or trends or that are not statements of historical matters. Such forward-looking statements include statements relating to the Company's expected revenue for fiscal 2019 and the breakdown of such revenue in both its Advanced Wound Care and Surgical & Sports Medicine categories as well as the estimated revenue contribution of its PuraPly products and non-PuraPly products and statements related to ongoing clinical trials and the expected launch dates for new products. Forward-looking statements with respect to the operations of the Company, strategies, prospects and other aspects of the business of the Company are based on current expectations that are subject to known and unknown risks and uncertainties, which could cause actual results or outcomes to differ materially from expectations expressed or implied by such forward-looking statements. These factors include, but are not limited to: (1) the Company has incurred significant losses since inception and anticipates that it will incur substantial losses for the foreseeable future; (2) the Company faces significant and continuing competition, which could adversely affect its business, results of operations and financial condition; (3) rapid technological change could cause the Company's products to become obsolete and if the Company does not enhance its product offerings through its research and development efforts, it may be unable to effectively compete; (4) to be commercially successful, the Company must convince physicians that its products are safe and effective alternatives to existing treatments and that its products should be used in their procedures; (5) the Company's ability to raise funds to expand its business; (6) the impact of any changes to the reimbursement levels for the Company's products and the impact to the Company of the loss of preferred "pass through" status for PuraPly AM and PuraPly on October 1, 2020; (7) the Company's ability to maintain compliance with applicable Nasdaq listing standards; (8) changes in applicable laws or regulations; (9) the possibility that the Company may be adversely affected by other economic, business, and/or competitive factors; (10) the Company's ability to complete the relaunch of Affinity and to maintain production in sufficient quantities to meet demand; and (11) other risks and uncertainties described under the caption "Risk Factors" in Item 1A (Risk Factors) of the Company's Form 10-K for the year ended December 31, 2018 and Item 1A (risk factors) of the Company's Form 10-Q for the quarter ended September 30, 2019. You are cautioned not to place undue reliance upon any forward-looking statements, which speak only as of the date made. Although it may voluntarily do so from time to time, the Company undertakes no commitment to update or revise the forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable securities laws.

Unless otherwise noted, the forecasted industry and market data contained herein are based upon management estimates and industry and market publications and surveys. The information from industry and market publications has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy or completeness of the included information. The Company has not independently verified any of the data from third-party sources, nor has the Company ascertained the underlying economic assumptions relied upon therein. While such information is believed to be reliable for the purposes used herein, the Company makes no representation or warranty with respect to the accuracy of such information.

Use of Non-GAAP Financial Measures

This Company has presented the following measures that are not measures of performance under accounting principles generally accepted in the United States ("GAAP"): EBITDA and Adjusted EBITDA. EBITDA and Adjusted EBITDA are not measurements of our financial performance under GAAP and these measures should not be considered as an alternative to net income, operating income or any other performance measures derived in accordance with GAAP or as an alternative to cash flows from operating activities as a measure of our liquidity.

EBITDA as used herein is defined as net income (loss) attributable to Organogenesis Holdings Inc. before depreciation and amortization, net interest expense and income taxes and the Company defines Adjusted EBITDA as EBITDA, further adjusted for the impact of certain items that the Company does not consider indicative of its core operating performance. These items may include non-cash equity compensation, mark to market adjustments on the Company's warrant liabilities, change in fair value of interest rate swaps and its contingent asset and liabilities, write-off of deferred offering costs, merger transaction costs related to the Business Combination and a loss on the extinguishment of debt. The Company presented Adjusted EBITDA in this presentation because it is a key measure used by the Company's management and Board of Directors to understand and evaluate the Company's operating performance, generate future operating plans and make strategic decisions regarding the allocation of capital. In particular, the Company's management believes that the exclusion of certain items in calculating Adjusted EBITDA can produce a useful measure for period-to-period comparisons of the Company's business.

The Company's management does not consider these non-GAAP measures in isolation or as an alternative to financial measures determined in accordance with GAAP. Other companies may calculate EBITDA, Pro Forma Adjusted EBITDA and Pro Forma Adjusted EBITDA Margin and other non-GAAP measures differently, and therefore The Company's EBITDA, Pro Forma Adjusted EBITDA and Pro Forma Adjusted EBITDA Margin and other non-GAAP measures may not be directly comparable to similarly titled measures of other companies. A reconciliation of Non-GAAP measures used in this presentation to the most closely comparable GAAP measure is set forth in the Appendix. There are a number of limitations related to the use of Adjusted EBITDA rather than net income (loss), which is the most directly comparable GAAP equivalent. Some of these limitations are:

- Adjusted EBITDA excludes stock-based compensation expense, as stock-based compensation expense has recently been, and will continue to be for the foreseeable future, a significant recurring expense for our business and an important part of our compensation strategy;
- Adjusted EBITDA excludes depreciation and amortization expense and, although these are non-cash expenses, the assets being depreciated may have to be replaced in the future;
- Adjusted EBITDA excludes net interest expense, or the cash requirements necessary to service interest, which reduces cash available to us;
- Adjusted EBITDA excludes the impact of the changes in the fair value of our warrant liability and our contingent consideration forfeiture asset;
- Adjusted EBITDA excludes the write-off of deferred offering costs in connection with an abandoned public offering, as well as merger transaction costs, consisting primarily of legal and professional fees;
- Adjusted EBITDA excludes the loss of extinguishment of debt, which is a non-cash loss related to the write-off of unamortized debt issuance costs upon repayment of affiliate and third-party debt, and related prepayment penalties;
- Adjusted EBITDA excludes the advisory, legal, and professional fees incurred in connection with the warrant exchange transactions;
- Adjusted EBITDA excludes income tax expense (benefit); and
- Other companies, including companies in our industry, may calculate Adjusted EBITDA differently, which reduces its usefulness as a comparative measure.

Key Company Highlights

















Notes:

1. Includes studies yet to publish data and retrospective projects.
2. Number of facilities that have ordered products in 2018.
3. 9 months ended 9/30/19 gross margin.

Experienced Leadership with Track Record of Execution



Name/Title	 Gary Gillheaney, Sr <i>President & Chief Executive Officer</i>	 Tim Cunningham <i>Chief Financial Officer</i>	 Patrick Bilbo <i>Chief Operating Officer</i>	 Brian Grow <i>Chief Commercial Officer</i>	 Howard Walthall <i>EVP, Strategy and Market Development</i>	 Antonio Montecalvo <i>VP, Health Policy and Contracting</i>	 Lori Freedman <i>VP and General Counsel</i>
Background Information	<ul style="list-style-type: none"> 25+ years in senior leadership positions in both public and private organizations Served as President and CEO of Organogenesis since 2014 17 years at Organogenesis; also served as COO and CFO Recognized as one of Ernst & Young's 2009 "Entrepreneur of the Year" 	<ul style="list-style-type: none"> Earlier career in public accounting with Big 4 accounting firms followed by 20+ years leading Finance in private equity and venture backed companies to an IPO or a sale Certified Public Accountant 3 years at Organogenesis 	<ul style="list-style-type: none"> 25 years with Organogenesis Previously held management and research positions at Hologic, Stryker, and Harvard Medical School 	<ul style="list-style-type: none"> 15 years with Organogenesis Previously spent 3 years at Novartis / Innovex and 1 year at Bristol-Myers Squibb 	<ul style="list-style-type: none"> 6 years as President and CEO of NuTech Medical Previously served as partner at Burr & Forman, specializing in technology law and litigation 	<ul style="list-style-type: none"> 16 years with Organogenesis 6 years experience of Provider contracting with UnitedHealth and 7 years public accounting experience with large local public accounting firms 	<ul style="list-style-type: none"> 15+ years as general counsel and business development executive – 14 years for public companies Most recently VP Corporate Affairs, General Counsel & Secretary of pSivida Corp. with earlier career at McDermott, Will & Emery 

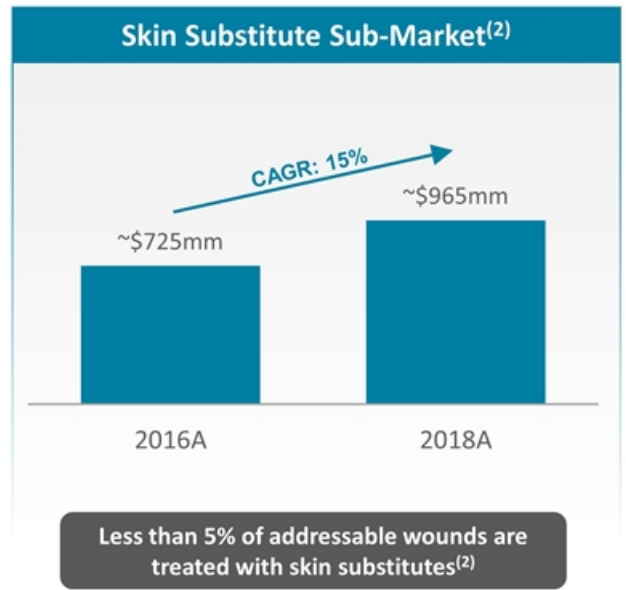
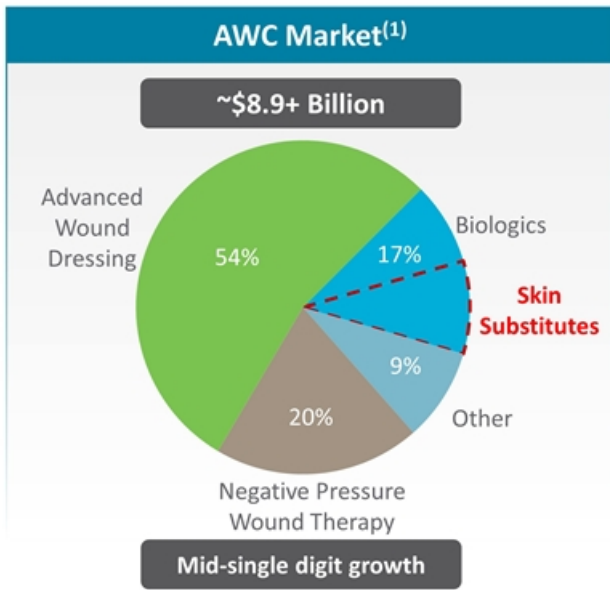


Organogenesis
Empowering Healing

Large and Growing Target Markets

Organogenesis

Skin Substitutes is a Fast-Growing, Under-Penetrated Segment of the Advanced Wound Care Market



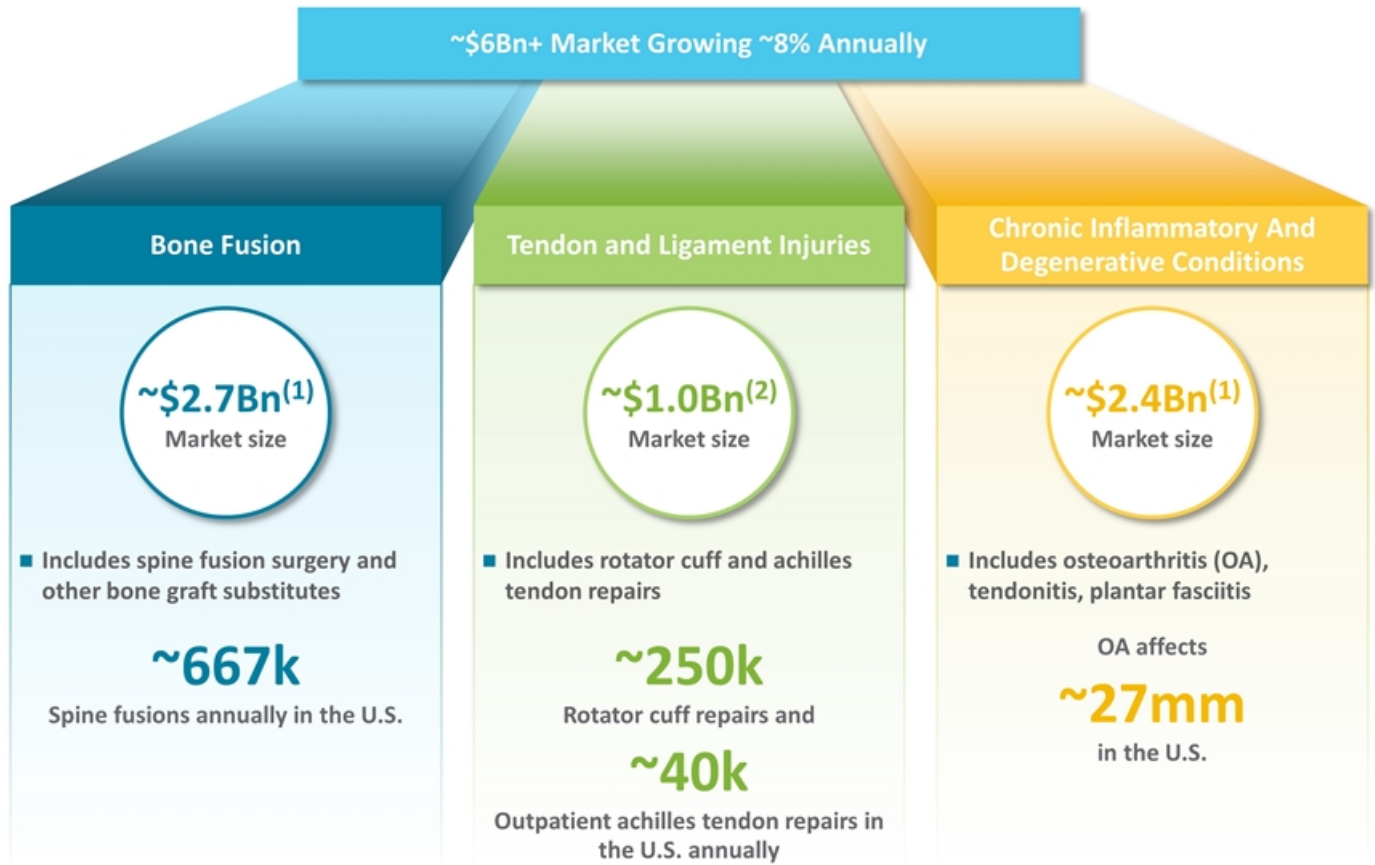
Key Drivers of Skin Substitute Market Include:

- ✓ Physician and payer education about the effectiveness and benefits of these products
- ✓ Clinical data
- ✓ Overall growth of Advanced Wound Care market driven by aging demographics and increase in comorbidities such as diabetes, obesity, etc.

Notes:

1. BIS Research; Global Advanced Wound Care Market (2019). Report covers global market.
2. BioMed GPS SmartTrak (2019). Report covers US market.

Surgical & Sports Medicine Market Is An Underserved, High-Growth Market



Notes:

1. Technavio (2018), Global Orthobiologics Market Report.
2. Technavio (2015), Global Regenerative Medicine Market Report, retrieved September 26, 2017, from EMIS Professional Database.



Organogenesis
Empowering Healing

Broad Product Portfolio

Organogenesis

Comprehensive and Differentiated Commercial Product Portfolio

Advanced Wound Care Only	AWC / S&SM	Surgical & Sports Medicine Only
<p>Organogenesis Apligraf[®] <small>Living Cellular Skin Substitute</small></p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Venous leg ulcers – Diabetic foot ulcers ■ Regulatory Pathway: PMA 	<p>Organogenesis PuraPlyAM <small>Antimicrobial Wound Matrix</small></p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Chronic and acute wounds ⁽¹⁾ – Surgical treatment of open wounds ■ Regulatory Pathway: 510(k) 	<p>Organogenesis NuCel^{® (3)}</p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Orthopedic surgical procedures including bone fusion ■ Regulatory Pathway: 361 HCT/P (Pursuing BLA)
<p>Organogenesis Dermagraft[®] <small>Human Fibroblast-derived Dermal Substitute</small></p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Diabetic foot ulcers ■ Regulatory Pathway: PMA 	<p>Organogenesis NuShield[®] <small>Sterilized, Dehydrated Placental Allograft</small></p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Chronic and acute wounds – Tendon, ligament and other soft tissue injuries ■ Regulatory Pathway: 361 HCT/P 	<p>Organogenesis ReNu[®]</p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Chronic inflammatory and degenerative conditions; soft tissue injuries such as tendinosis and fasciitis ■ Regulatory Pathway: 361 HCT/P (Pursuing BLA)
<p>PMA approval and robust clinical data set differentiates products and facilitates private payor coverage and reimbursement</p>	<p>Organogenesis Affinity^{® (2)} <small>Fresh Amniotic Membrane</small></p> <ul style="list-style-type: none"> ■ Clinical Application: <ul style="list-style-type: none"> – Chronic and acute wounds – Tendon, ligament and other soft tissue injuries ■ Regulatory Pathway: 361 HCT/P 	<p>Pursuing BLA approval to unlock significant commercial opportunity</p>
<p>Unique and broad applications across both markets</p>	<p>Unique and broad applications across both markets</p>	<p>Unique and broad applications across both markets</p>

Notes:

1. Except 3rd degree burns.
2. Affinity production suspended in Q1 2019, product launch anticipated in H1 2020.
3. Minimal sales in AWC.

Our Products Cover a Wide Range of Addressable Wounds

Ability to Treat a Wide Range of Wounds

- Complete product portfolio serves as a key competitive advantage
- PuraPly AM is the only first line antimicrobial skin substitute with PHMB⁽¹⁾ for all wounds⁽²⁾
- Apligraf (DFUs and VLUs) and Dermagraft (DFUs) are PMA-approved products for complex wounds



Chronic Wounds:

VLUs, DFUs and Pressure Ulcers

Acute Wounds:

Traumatic Wounds and Burns

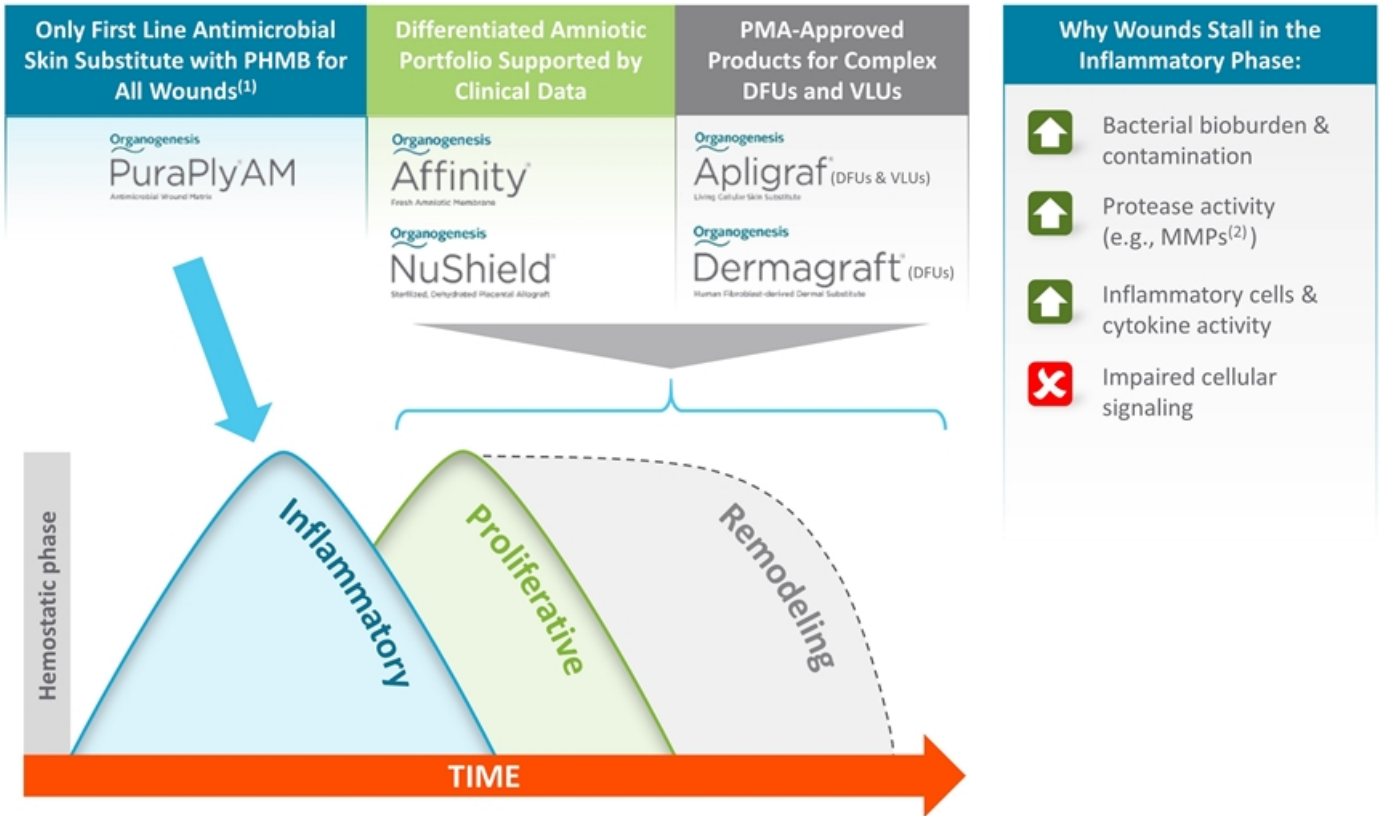
Benefits of Broad AWC Portfolio

- ✓ Serves wide range of health care customers
- ✓ Enables IDN / GPO contracting
- ✓ Facilitates patient-specific treatment protocols
- ✓ Robust mind share among customers
- ✓ Combination of PMA-approved, 510(k) and 361 HCT/P products diversifies revenue and reimbursement mix

Notes:

1. Polyhexamethylene biguanide.
2. Except 3rd degree burns.

Our Products Treat Wounds Across All Stages



Notes:

1. Except 3rd degree burns.
2. Matrix metalloproteinases.



Organogenesis
Empowering Healing

Growth Strategy

Organogenesis

Strategic Initiatives & Catalysts for Growth

Key Pillars of Growth Strategy

- Continue sales force expansion
- Penetrate additional sites of care
- Invest in R&D and launch new products
- Continue to build compendium of clinical data
- Expand payor and provider contracting efforts
- Manufacturing and infrastructure enhancements to improve gross margins
- Pursue strategic M&A and in-licensing to leverage commercial infrastructure

Anticipated Growth Drivers

Near-Term

- Relaunch Affinity product in H1 2020
- Unconstrained ramp of NuShield in 2020 after resolution of previous supply limitations
- Launch / commercial ramp of PuraForce, PuraPly XT and PuraPly MZ⁽¹⁾

Medium-Term (2021 – 2022)

- Proactive management of PuraPly pass-through status
- Enter burn market with TransCyte launch

Long-Term (2023+)

- Pursue BLA approvals for ReNu and NuCel for label indications and reimbursement
- Develop, in-license and/or acquire additional pipeline products

Robust Product Pipeline

	Product	Potential Timeline for Commercial Launch				Product Description / Enhancement
		2019	2020	Medium-Term (2021 – 2022)	Long-Term (2023+)	
Line-Extensions	Organogenesis PuraPly XT ⁽¹⁾ <small>Fresh Layer Adhesive Wound Matrix</small>	→		} Augment surgical offering and diversify revenue and reimbursement mix		<ul style="list-style-type: none"> Enhanced thickness and PHMB content Allows for sustained presence of the antimicrobial barrier in the wound
	Organogenesis PuraForce ⁽¹⁾ <small>Resorbable Dressing Matrix</small>	→				<ul style="list-style-type: none"> Bioengineered porcine collagen surgical matrix High biomechanical strength per unit thickness
	Organogenesis PuraPly MZ <small>Advanced Wound Matrix</small>	→				<ul style="list-style-type: none"> Micronized particulate version of PuraPly Allows application in powder or gel form to deep and tunneling wounds
New Launches	Organogenesis Novachor [®] <small>Fresh Chorionic Membrane</small>	→		} Entry into burn market		<ul style="list-style-type: none"> Fresh chorionic membrane containing viable cells, growth factors/cytokines, and extracellular matrix (ECM) protein Received Q-code (Q4194), effective 1/1/2019
	Organogenesis TransCyte [®] <small>Human Fibroblast-based Temporary Skin Substitute</small>	→				<ul style="list-style-type: none"> Bioengineered tissue scaffold that promotes burn healing Provides an outer protective barrier for bioactive dermal components, increases re-epithelialization and pain relief
BLA Approval	Organogenesis ReNu [®]	→ BLA approval				<ul style="list-style-type: none"> Continued data generation and BLA approval expected to drive step-function sales growth in large and underserved market Commercially launched in 2015 through 361 HCT/P pathway
	Organogenesis NuCel [®]	→ BLA approval				<ul style="list-style-type: none"> BLA approval expected to improve reimbursement backdrop and facilitate increased utilization Commercially launched in 2009 through 361 HCT/P pathway

Notes:

- Product already launched on small scale.

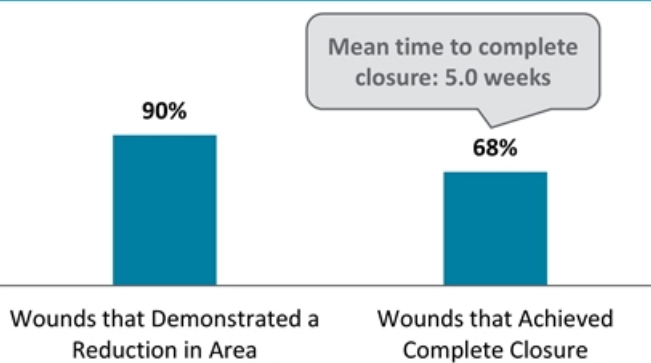
PuraPly – The Leader in Skin Substitute / Antimicrobial Space

Product Description

- Patented, purified native porcine collagen matrix embedded with a broadspectrum antimicrobial
- “Pass-through” reimbursement status until 9/30/2020
- Only first line antimicrobial skin substitute with PHMB for all wounds⁽¹⁾
- Provides 3 Key Clinical Benefits:
 - 1 Collagen matrix creates a durable biocompatible scaffold which promotes healing
 - 2 Effective barrier against a wide array of microorganisms
 - 3 Antimicrobial agent (PHMB) is known to inhibit the formation of biofilm on wound surfaces (biofilm management provides necessary support to proceed to wound closure)



Proven Clinical Outcomes



Study Background⁽³⁾

- Use of PuraPly AM in the management of bioburden and treatment of chronic, nonhealing wounds
- Study duration of 24 weeks and primary efficacy analyzed at 12 weeks; n=63
- Baseline wound statistics:
 - Wound area (median): 6.5 cm²
 - Wound duration (mean): 4 months
- All wound types studied⁽²⁾

Note:

1. Except 3rd degree burns.
2. 29% venous ulcers; 22% trauma and laceration; 16% post surgical wounds; 13% pressure ulcers; 10% diabetic ulcers; 10% other.

3.

Bain et al. (2019). (2019). Effect of Native Type I Collagen with Polyhexamethylene Biguanide Antimicrobial on Wounds: Interim Registry Results. Plastic and reconstructive surgery. Global open, 7(6), e2251. doi:10.1097/GOX.0000000000002251.

Measures Taken to Position PuraPly Post Pass-Through

Pass-Through Situation Overview

- PuraPly benefits from “pass-through” reimbursement specific to outpatient wound care centers and ASC
 - CMS provides additional reimbursement above the procedure’s bundled payment for certain products
- Pass-through status ended (temporarily) on 12/31/17
- Pass-through status restored effective Oct. 1, 2018 through Sep. 30, 2020

Proactive Measures Taken With PuraPly

- 1 Increased penetration in physician offices, where PuraPly is reimbursed at cost-plus
- 2 New smaller, lower-priced SKUs under bundle price
- 3 Invested in clinical data to facilitate private payor coverage
- 4 Introduction of innovative line extensions: PuraForce, PuraPly XT and PuraPly MZ⁽¹⁾

Other Organogenesis Growth Drivers Expected to Offset Impact of PuraPly

- 1 Affinity relaunch in H1 2020 hits stride in 2021
- 2 New revenue stream from TransCyte in medium term
- 3 Non-PuraPly revenues grew at a 14% CAGR from 2017 to LTM 9/30/19
 - Continued sales force expansion and customer growth
 - Robust growth in S&SM channel
 - Resolution of NuShield supply constraints in 2019

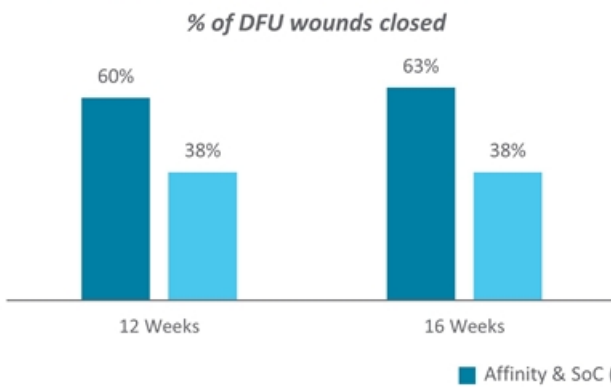
PuraPly is now well-established and regarded in the marketplace with increasing physician adoption and penetration
PuraPly is well positioned for robust revenue growth following initial dip

Product Description

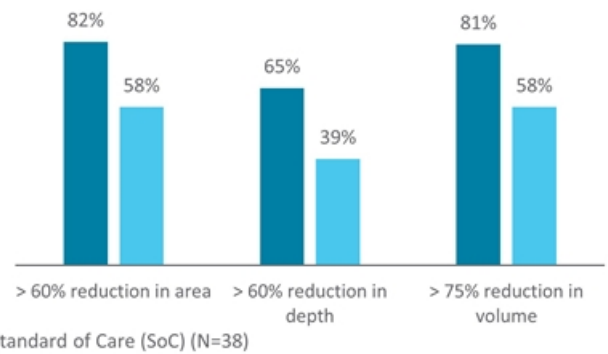
- Fresh amniotic membrane containing many types of viable cells, growth factors/cytokines, and ECM proteins
 - Manages chronic and acute wounds, as well as tendon, ligament and other soft tissue injuries
 - One of only a few amniotic tissue products containing viable amniotic cells
- Production suspended in Q1 2019; moving to new contract manufacturer
 - Relaunch anticipated in H1 2020⁽¹⁾
- Product demand grew from first launch in 2014 and sales continued to increase through 2018
 - Expected to be source of organic growth in 2020 and 2021 – negligible sales in 2019



Demonstrated Clinical Results⁽²⁾⁽³⁾



Broadly Improved Wounds Compared to SoC⁽³⁾



Note:

1. Acquired via NuTech acquisition in 2017.
2. Adjusted Cox Analysis.

3. Serena et al. (2019). A randomized controlled clinical trial of a hypothermally stored amniotic membrane for use in diabetic foot ulcers. Journal of comparative effectiveness research, (0).

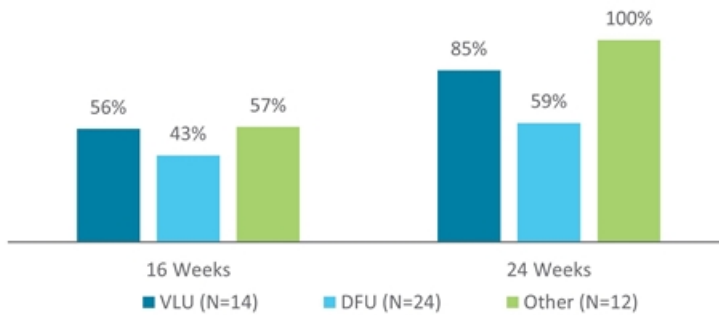
NuShield – Versatile Tissue Graft Covering Full Spectrum of Acute & Chronic Wounds

Product Description

- Dehydrated placental tissue graft that is topically or surgically applied to target tissue
- Acquired via NuTech acquisition in 2017; recent robust growth driven by leveraging Organogenesis commercial infrastructure
- Product highlights:
 - 1 **More complete, more versatile** dehydrated Allograft skin substitute
 - 2 Biologic characteristics support health of soft tissue defects, especially in **difficult to heal locations or challenging patient populations**
- Unimpeded growth anticipated in the near-term following resolution of supply constraints in 2019

Proven to Close Wounds⁽¹⁾

% of wounds closed



Note:

1. Caporusso et al. (2019). Clinical experience using a dehydrated amnion/chorion membrane construct for the management of wounds. Wounds: a compendium of clinical research and practice, 31(4 Suppl), S19-S27.

Pursuing BLA Approval for ReNu to Open Up Large and Growing Market Opportunity

Product Description

- Cryopreserved suspension of amniotic fluid cells and morselized amnion tissue from the same donor
 - Formulated for office use (injection)
 - Used to support healing of soft tissues:
 - Osteoarthritis (OA)
 - Joint and tendon injuries, such as tendinosis and fasciitis
- Product already being sold in market today
 - Predominantly cash pay
 - Significant reimbursement potential unlocked through BLA pathway
- First launched in 2015⁽¹⁾
- Currently registered as a 361 HCT/P
- Initial large trial completed for BLA program, additional Phase III study to be initiated in 2020

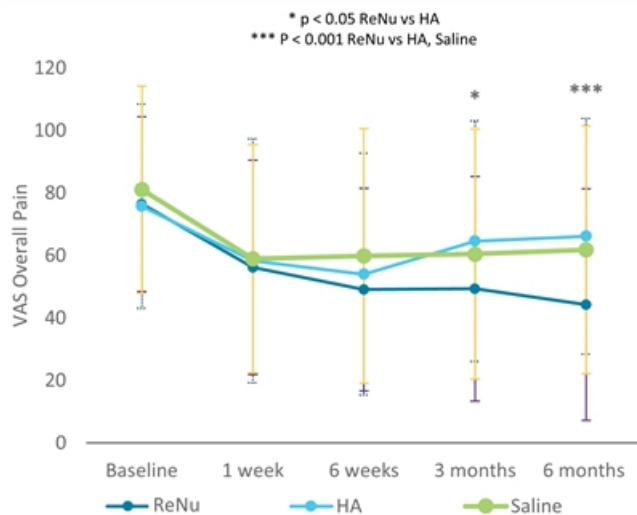
Market Opportunity



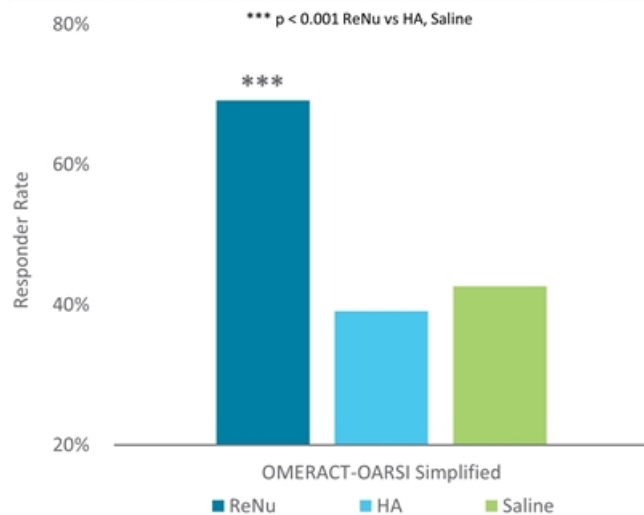
Clinical Data suggests improved patient outcomes

- Clinical significance in Knee Osteoarthritis outcome compared to commercially available Hyaluronic acid ("HA") and placebo (Saline) at 6 months
 - Less pain and demonstrated improvements in patient-reported outcomes
- Patient-blinded, randomized, controlled clinical trial had an enrollment of 200 adult patients (ReNu = 68 patients, HA = 64 patients and saline = 68 patients)

Lower Pain Scores⁽¹⁾



Higher Response Rate⁽¹⁾



Visual Analogue Scale (VAS)

Average ± standard deviation reported for VAS overall pain

Notes:

1. Farr et al. (2019). A Randomized Controlled Single-Blind Study Demonstrating Superiority of Amniotic Suspension Allograft Injection Over Hyaluronic Acid and Saline Control for Modification of Knee Osteoarthritis Symptoms. *Journal of Knee Surgery*. DOI: 10.1055/s-0039-1696672.

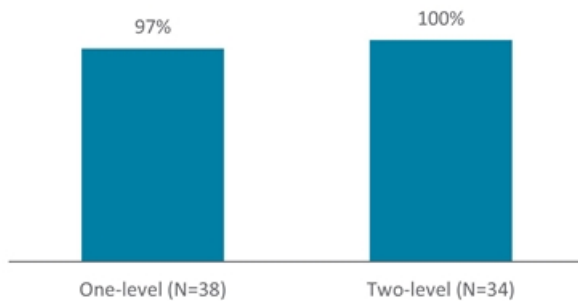
Product Description

- Surgically implanted allograft derived from human amniotic tissue and amniotic fluid
- Supports tissue healing in spinal and orthopedic surgical applications (i.e., bone growth and fusion)
- Launched in 2009⁽¹⁾
- Seeking BLA approval (clinical studies in process)
 - BLA approval expected to improve reimbursement backdrop and facilitate increased utilization
- Clinical trials demonstrated an ability to achieve kinematic fusion and effectiveness in treating patients with comorbidities



Proven to Achieve Kinematic Fusion⁽²⁾

% of patients achieving kinematic fusion



Study Overview⁽²⁾

- Patients received a one or two level lumbar interbody fusion with NuCel
- Baseline comorbidities were present in 90% of one-level patients and 88% of two-level patients
- No adverse events related to NuCel were reported

Note:

1. Acquired via NuTech acquisition in 2017.
2. Nunley et al. (2016). Preliminary results of bioactive amniotic suspension with allograft for achieving one and two-level lumbar interbody fusion. *International journal of spine surgery*, 10, 12.

TransCyte is an Approved Product in an Attractive Market with Limited Competition

Product Description

- Targeted at 2nd and 3rd degree burns
 - Bioengineered tissue scaffold that promotes burn healing
 - Provides bioactive dermal components and outer protective barrier
 - Increases re-epithelialization and pain relief
- PMA-approved product supported by robust data; well-regarded by customers
 - Requires manufacturing re-validation to re-launch product
 - Expected launch in medium-term (2021 – 2022)
- Burn market is sizeable and concentrated
 - Over 60% of U.S. acute hospitalizations related to burn injury were admitted to 128 burn centers⁽¹⁾
 - Penetrate market with small specialty sales force and open up cross-selling opportunities



Market Opportunity

~500,000 burns annually that require medical attention

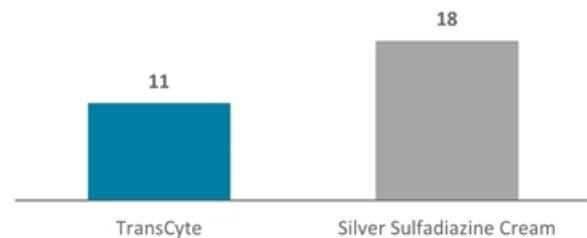
~40,000 burns annually that require hospitalization

We believe TransCyte has the ability to address a ~\$200mm market opportunity

Limited competition opportunity – Currently only one other PMA approved product on the market

Faster Wound Healing⁽²⁾

Mean days to ≥ 90% wound epithelialization



Notes:

1. American Burn Association.
2. Noordenbos et al (1999). Safety and efficacy of TransCyte* for the treatment of partial-thickness burns. Journal of burn care & rehabilitation, 20(4), 275-281.

Financial Profile

Attractive Revenue and Margin Profile

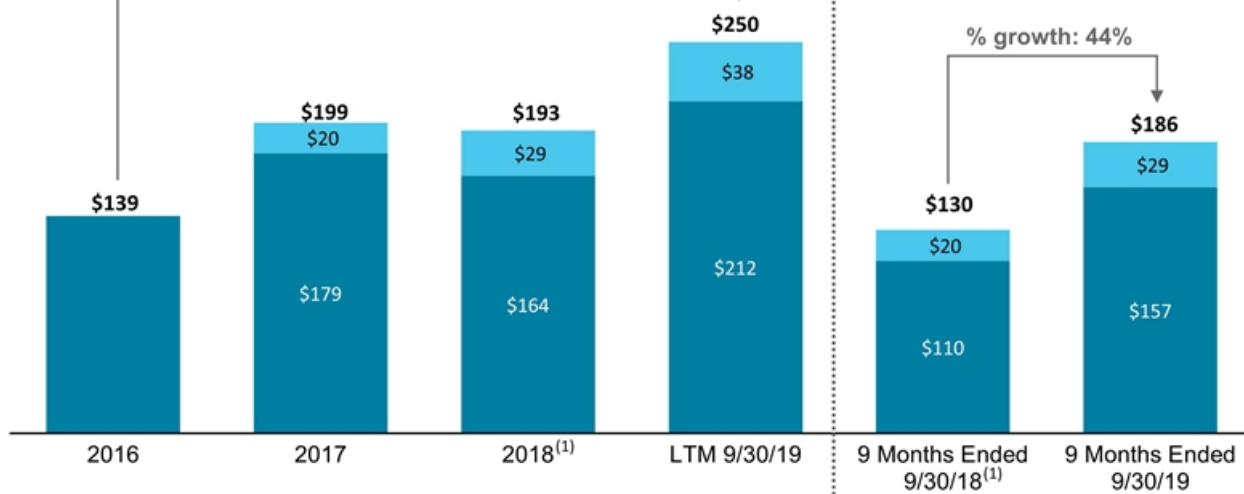
Financial Profile

(\$ in millions)

% growth CAGR: 24%

■ Advanced Wound Care
■ Surgical & Sports Medicine

% growth: 44%



PuraPly Revenue	\$62	\$109	\$70	\$115	\$41	\$87
Ex- PuraPly Revenue	\$76	\$89	\$124	\$135	\$89	\$99
% Gross Margin	65%	69%	64%	71%	60%	70%

Note:

1. PuraPly exited pass-through on 12/31/17 and entered pass-through status again on 10/1/18.

Opportunities to Enhance Margins Through Facility Optimization

Canton, MA



- Headquarters
- Devoted to manufacturing, shipping, operations and R&D
- Recent expansion of PuraPly production and logistics
- Opportunity to maximize physical footprint and manufacturing efficiency overtime

Norwood, MA



- Facility in Norwood, MA (nearby Canton HQ), production expected in 2020 which would drive supply chain efficiencies and enhanced margins
- GMP production facility with multiple cleanrooms to allow significant production capacity for multiple products
- Flexible laboratory and office space

Birmingham, AL



- Facility supports QC, warehouse and distribution of amniotic products
- Stand-alone R&D facility
- Utilizes contract manufacturing for amniotic products

La Jolla, CA



- Devoted to operations, R&D and manufacturing (6,000+ square feet warehouse facility)
- R&D labs
- Customer service

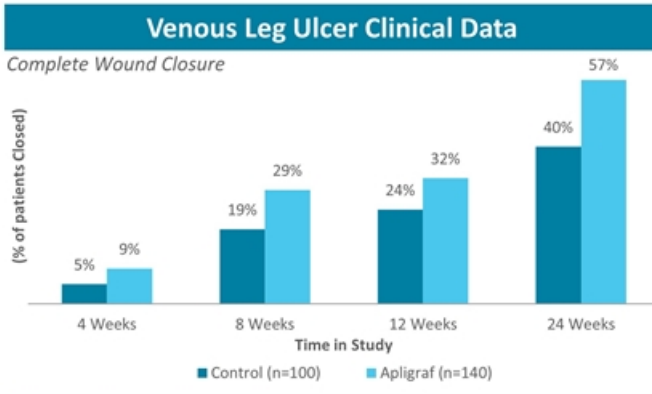
Amniotic products are currently contract manufactured

Appendix

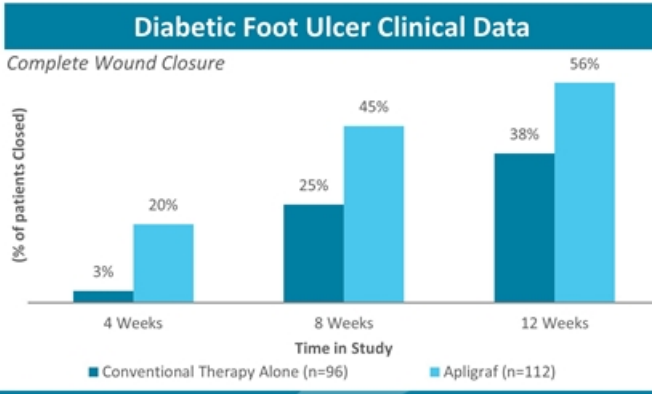
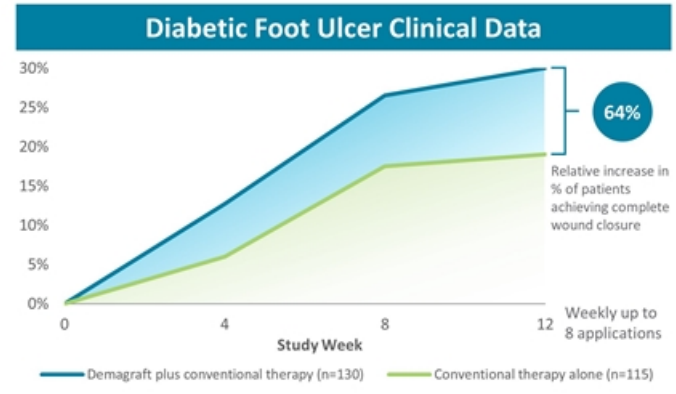
Apligraf & Dermagraft – PMA-Approved Products for VLU and DFUs

■ Products have ~15 years of clinical history


Apligraf[®]
Living Cellular Skin Substitute








Dermagraft[®]
Human Fibroblast-derived Dermal Substitute



PMA approval positions products for private payor coverage and diversifies Company's revenue mix



Robust Clinical Data Supporting Products: Advanced Wound Care

Product	Wound Type	Design	Completion Date	Estimated Data Presentation Date ⁽⁵⁾
 <small>Amniocellular Wound Matrix</small>	Acute + Chronic	Prospective Single Center Controlled Evaluation (N=40)	Completed ⁽²⁾	Publication Q1 2019
	Acute + Chronic	Prospective Single Center Controlled Prospective Evaluation (N=100)	Completed ⁽²⁾ Manuscript	Q1 2018 Q1 2020
	Acute + Chronic	PuraPly AM RESPOND Registry - 30 Center Registry Evaluating Real-World Effectiveness of PPAM (N=307)	Q2 2019 ⁽²⁾	Presented ACWHTR ⁽⁶⁾ Q4 2019
	All Wounds	Comparative Effectiveness Analysis (CEA), NetHealth EMR Database of PPAM for Treatment of wounds (N=1,544)	Q3 2019 ⁽³⁾	Q1 2020
	Diabetic Foot Ulcers (DFU)	Comparative Effectiveness Analysis (CEA), NetHealth EMR Database of PPAM vs. Grafix (N=806)	Q3 2019 ⁽³⁾	Q1 2020
	DFU	Comparative Effectiveness Analysis (CEA), NetHealth EMR Database of PPAM vs. Theraskin (N=719)	Q3 2019 ⁽³⁾	Q1 2020
	Pressure Ulcers (PU)	Prospective Multi-center Randomized Control Trial (RCT) PPAM vs. Standard of Care (SOC) (N=38)	Q4 2019 ⁽²⁾	Q2 2020
	Venous Leg Ulcers (VLU) ⁽¹⁾	Prospective Multi-center RCT PPAM vs. SOC (N=200)	FPI Q2 2020 ⁽⁴⁾	Q4 2022
 <small>Fresh Amniotic Membrane</small>	DFU	Prospective Multicenter RCT, Affinity vs. SOC (N=100)	Completed ⁽²⁾ Q4 2019	Q3 2019 Q4 2019 JCER
	VLU ⁽¹⁾	Prospective Study Evaluating Potential Changes in Wound Microenvironment (N=15)	Completed ⁽⁴⁾ Present at SAWC ⁽⁶⁾	Q4 2019 Q2 2020
	DFU ⁽¹⁾	Prospective Multicenter RCT, Affinity vs. SOC (N=200)	FPI Q3 2020 ⁽⁴⁾	Q4 2022
 <small>Human Fibroblast-derived Dermal Substitute</small>	DFU	CEA, NetHealth EMR Database of Dermagraft vs. Primatrix (N=208)	Q3 2019 ⁽³⁾	Q3 2019 WPM
	DFU	CEA, NetHealth EMR Database of Dermagraft vs. Grafix (N=1,622)	Completed ⁽³⁾	Q4 2019 JCER
 <small>Nonadhesive Debrided Patient Autograft</small>	DFU	Prospective Multicenter RCT, NuShield vs. SOC (N=125)	Q3 2020 ⁽²⁾	Q1 2021

Notes:

1. Planned.
2. Based on last patient last visit in the study.
3. Management estimate, or date analysis complete.
4. Initiation of the study based on first patient enrolled.
5. Estimated date of first external presentation of primary data.
6. ACWHTR: American College of Wound Healing and Tissue Repair; SAWC: Symposium of Advanced Wound Care.

Robust Clinical Data Supporting Products: Surgical & Sports Medicine

Product	Indication	Design	Completion Date ⁽¹⁾	Est. Data Presentation Date ⁽²⁾
	Lumbar Spine Vertebral Fusion	57 patient Prospective, Efficacy Study of NuCel in patients Undergoing Fusion for One, Two or Three Level Degenerative Disease of the Lumbar Spine	Q2 2020	Q3 2021
	Lumbar Spine Vertebral Fusion	200 patient Single-Arm Prospective, Multi-center study of NuCel in patients receiving interbody fusion for one and two level degenerative disease of the lumbar spine	Q4 2022	Q3 2023
	Hip Osteoarthritis	10 patient Pilot Study of ReNu Hip Injection: Monitoring the Response of Hip Function and Pain in patients with Osteoarthritis	Completed	Q1 2020
	Osteochondral Defect Repair	8 patient Evaluation of the ReNu Amniotic Suspension Allograft after Marrow Stimulation in the Treatment of Osteochondral Defects	Q2 2022	Q4 2022
	Plantar Fasciitis	150 patient Comparative study of injectable human amniotic allograft (ReNu) versus corticosteroids for Plantar Fasciitis: A Prospective, Randomized, Blinded Study	Q2 2021	Q2 2022
	Knee Osteoarthritis	200 patient Investigation of ReNu Knee Injection: Monitoring the Response of Knee Function and Pain in patients with Osteoarthritis	Completed	Presented at AAOS ⁽³⁾ 2019

Investment enhances sales efforts and reimbursement dynamics

Notes:

1. Based on last patient last visit in the study.
2. Estimated date of first external presentation of primary data
3. AAOS: American Academy of Orthopaedic Surgeons

We Have a Broad and Unique Portfolio in the Skin Substitute Market

Organogenesis
Empowering Healing

MiMedx

INTEGRA

smith&nephew













Osiris

MISONIX

Solsys

ACell

amnioX

Products	Skin Sub	Skin Sub-Sheet/Flowable	Skin Sub Honey ,TCC (cast), Dressings	Skin Sub, Enzymatic Debrider, PDGF, NPWT, Dressings	Skin Sub, Ultrasonic Debrider	Skin Sub-Sheet/Flowable	Skin Sub-Sheet/Flowable
Human Cellular Bioengineered Graft	  						
Xenograft / Antimicrobial	  		✓				
Xenograft			✓	✓		✓	
Allograft	    	✓	✓	✓	✓		✓
PMA / BLA Approved Products	4 ⁽¹⁾	0	1	1	0	0	0

Note:

1. Includes Gintuit.

We Have a Broad Portfolio in the Surgical & Sports Medicine Market



Products	Amniotic Membrane, Amniotic Suspension, Xenograft	Amniotic Membrane, Amniotic Suspension	Dermal Template, Amniotic Membrane, Amniotic Suspension, Tendon Reinforcement,	Collagen Sheets and Powders	Amniotic Membrane, Tendon Reinforcement	Orthobiologics	Orthobiologics	Orthobiologics, Tendon Reinforcement, Amniotic Suspension, Amniotic Membrane	Platelet Rich, Plasma Solutions	Hyaluronic Acid Injections
Spine Fusion						✓	✓			
Extremity Fusion							✓	✓		
Tendon Repair		✓	✓		✓			✓	✓	
OA Degenerative		✓						✓	✓	✓
Acute Surgical Wound		✓	✓	✓	✓					