XTANT MEDICAL

www.xtantmedical.com

Investor Presentation

May 20, 2021

DISCLOSURE STATEMENTS

Cautionary Statement Regarding Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements that are predictive in nature, that depend upon or refer to future events or conditions, or that include words such as "intends," ''expects,'' ''anticipates,'' ''plans,'' "targets," ''believes,'' ''estimates,'' "continue," "future," ''will,'' "potential," similar expressions or the negative thereof, and the use of future dates. Forward-looking statements in this presentation include, but are not limited to, statements about market size and potential, the Company's total addressable market and the Company's future growth plans, initiatives and strategies. The Company cautions that its forward-looking statements by their nature involve risks and uncertainties, and actual results may differ materially depending on a variety of important factors, including, among others: the Company's future operating results and financial performance; the effect of the COVID-19 pandemic on the Company's business, operating results and financial condition; the ability to increase or maintain revenue; the ability to remain competitive; the ability to innovate and develop new products; the success of our future growth initiatives; the ability to engage new and retain current independent distributors and other qualified personnel; government and third-party coverage and reimbursement for Company products; the ability to obtain and maintain regulatory approvals and comply with government regulations; the effect of product liability claims and other litigation to which the Company may be subject; the effect of product recalls and defects; the ability to obtain and protect Company intellectual property and proprietary rights and operate without infringing the rights of others; the ability to service Company debt and comply with its debt covenants; the ability to obtain additional financing; and other factors. Additional risk factors are contained in the Company's Annual Report on Form 10-K for the year ended December 31, 2020 filed with the Securities and Exchange Commission (SEC) on February 24, 2021 and subsequent SEC filings by the Company, including without limitation its most recent Quarterly Report on Form 10-Q for the quarter ended March 31, 2021 filed with the SEC on May 11, 2021. Investors are encouraged to read the Company's filings on the Company's website or at www.SEC.gov. The Company undertakes no obligation to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law. All forward-looking statements attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by this cautionary statement.

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Non-GAAP Financial Measures

To supplement the Company's consolidated financial statements prepared in accordance with U.S. generally accepted accounting principles, the company uses certain non-GAAP financial measures in this presentation, such as Adjusted EBITDA. The Company's management believes the presentation of these measures provides useful information to investors. The Company's non-GAAP adjusted EBITDA is calculated by adding back to net loss the charges for other expense, depreciation and amortization expense, interest expense, and tax expense and further adjusted by adding back in or excluding, as appropriate, provision for losses on accounts receivable, provision for excess and obsolete inventory, non-cash compensation, change in warrant derivative liability, separation-related expenses, field action expenses, and litigation reserve. The Company uses adjusted EBITDA and the other non-GAAP measures in making operating decisions because it believes these measures provide meaningful supplemental information regarding its core operational performance. Additionally, these measures give the Company a better understanding of how it should invest in sales and marketing and research and development activities and how it should allocate resources to both ongoing and prospective business initiatives. The Company also uses these measures to help make budgeting and spending decisions, for example, among sales and marketing expenses, general and administrative expenses, and research and development expenses. Additionally, the Company believes its use of non-GAAP adjusted EBITDA and other non-GAAP measures facilitates management's internal comparisons to historical operating results by factoring out potential differences caused by charges not related to its regular, ongoing business, including, without limitation, non-cash charges and certain large and unpredictable charges. For these reasons, the company cannot reasonably predict with sufficient reliability all of the necessary components of the comparable GAAP measure for a quantitative reconciliation of these future non-GAAP financial measures to the most directly comparable GAAP measures. Investors should consider non-GAAP financial measures only as a supplement to, not as a substitute for or as superior to, measures of financial performance prepared in accordance with GAAP. With respect to any historical non-GAAP financial measures that may be discussed, reference is made to the most directly comparable GAAP financial measures, the reconciliation of the differences between the two financial measures, and the other information included in the Company's prior Current Reports on Form 8-K filed with the SEC.

SUMMARY: XTANT MEDICAL TODAY

Re-birth of a Leading Spine Brand

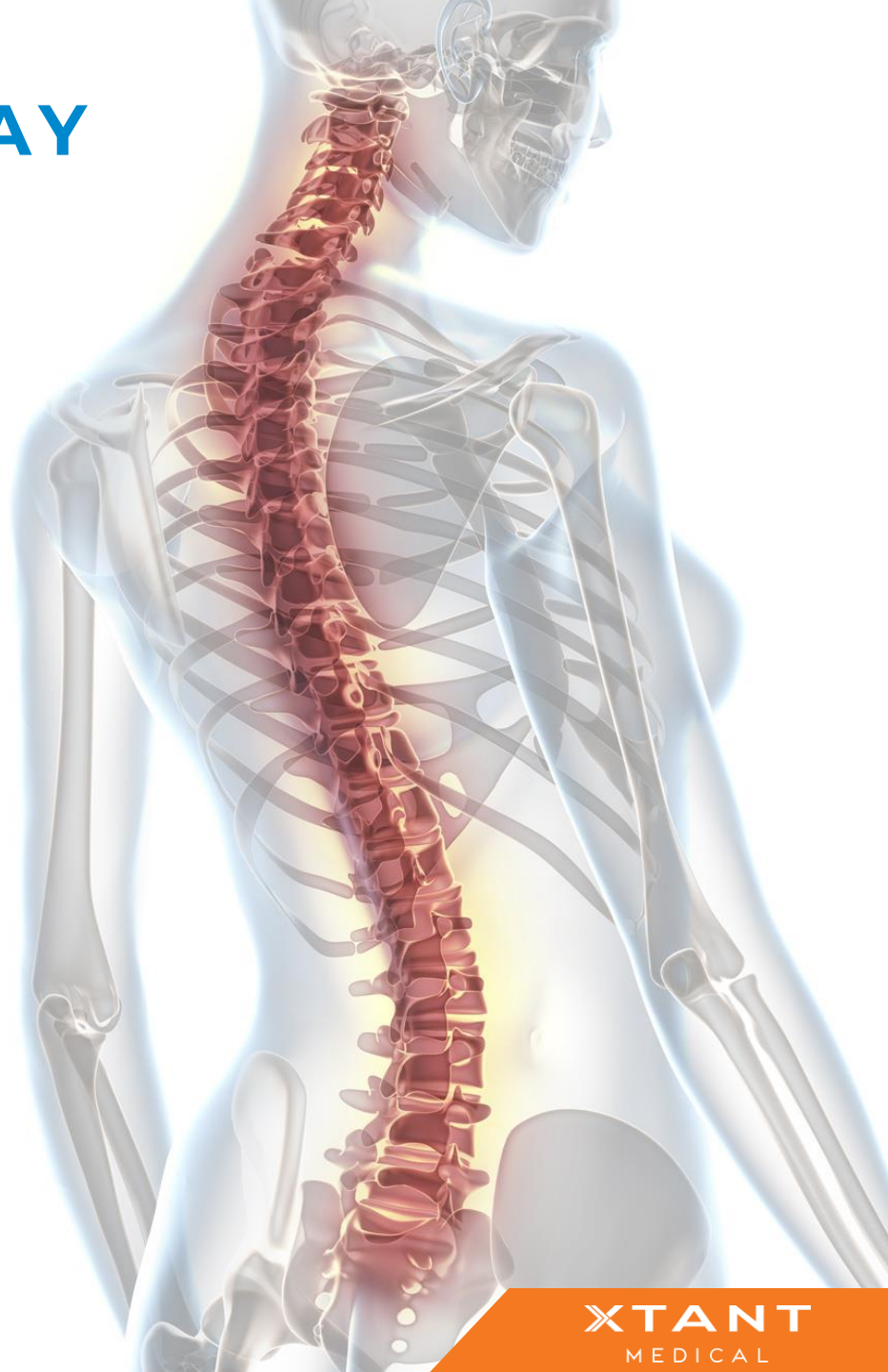
- Exceptional quality biologics
- Very strong niche fixation products

Platform for Growth

- Exceptional Market Access with contracts and nationwide distribution
- Updated bioproduction capabilities

Financially Sound

- Debt conversion with a clean balance sheet
- Efficient cost structure
- Positive EBITDA



EXPERIENCED SENIOR LEADERSHIP TEAM

SEAN BROWNE
PRESIDENT, CHIEF EXECUTIVE OFFICER

- Baxter
- McKesson
- Integra LifeSciences
- CCS Medical

KEVIN BRANDT
CHIEF COMMERICAL OFFICER

- Zimmer
- Stryker
- RTI

GREG JENSEN
CHIEF FINANCIAL OFFICER

- American Solutions for Business
- WTC Industries
- EnviroStaff

DANA LYONS
VP OF SALES

- Biomet
- Stryker
- Zimmer
- Amedica

JAMEY ROTTMAN
VP OF MARKETING

- Sulzer SpineTech
- Zimmer
- Amedica

EVOLUTION NOW HAS XTANT POISED FOR GROWTH

Xtant Medical unites exceptional biologics with intuitive fixation design to provide surgical solutions that advance regenerative medicine.

Stabilization of Business

1999
Bacterin Orthobiologics is founded

2003
X-spine Systems is founded

2015
Bacterin acquires X-Spine, changes name to XTANT MEDICAL

2019-2020
- New management team
- Re-engineered most major functions
- Converted Debt
- lowered operating cost basis

2021
"Poised for Growth"
- $20M private placement
- Refinanced Debt with reduced rates
- Capital efficient new product flow
- Leverageable channel strategy

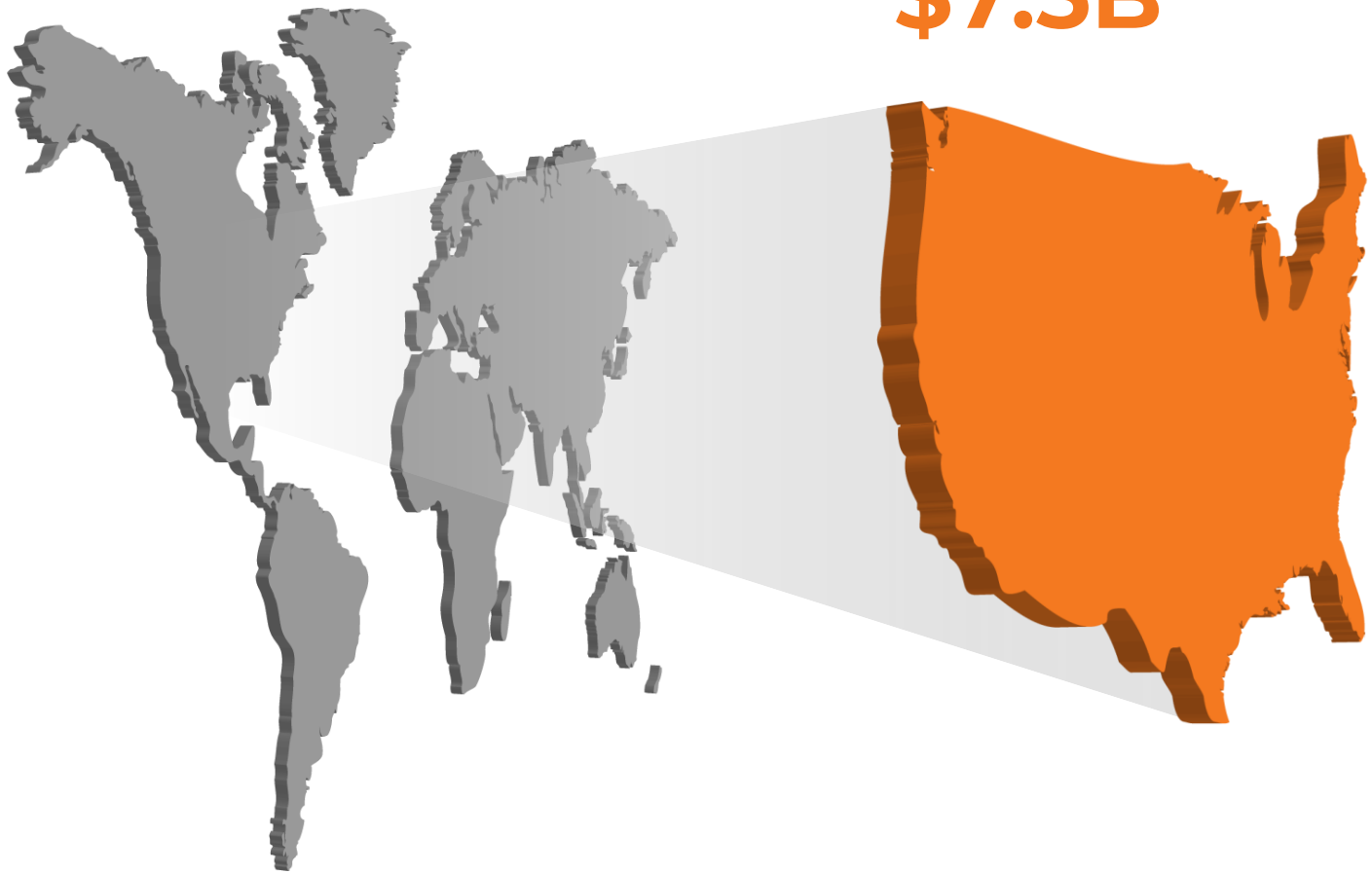
GLOBAL SPINE AND ORTHOBIOLOGIC MARKET

Total WW market:

$9.7B

Total US market:

$7.5B



ORTHOBIOLOGICS:

$2.4B

SPINAL IMPLANTS:

$5.1B

Source: Markets and Markets & iData US Market Report Suite for Orthopedic Biomaterials

US ORTHOBIOLOGIC MARKET

Opportunity to leverage #4 U.S. market share position in demineralized bone matrix (DBM) via strong distribution and GPO/IDN relationships and expansion into adjacent markets.

$2.4B

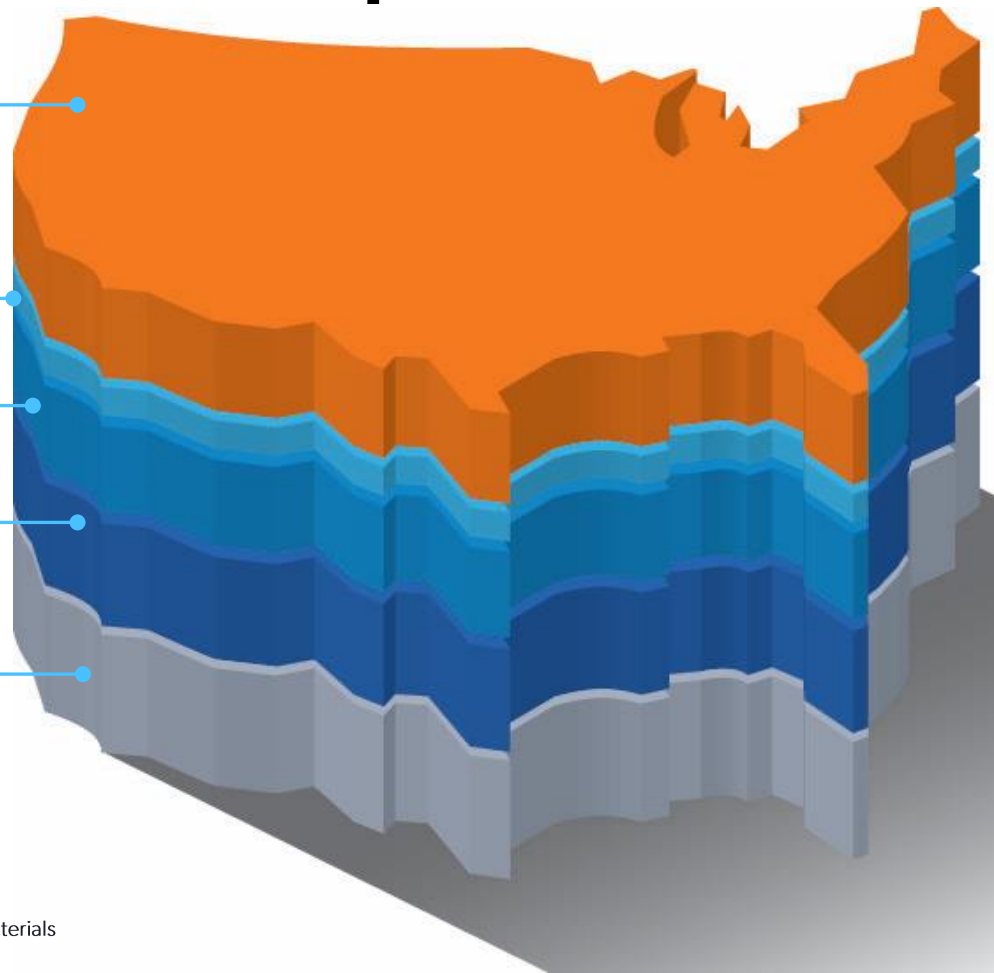
Demineralized Bone Graft **$485M**

Allograft **$163M**

Cellular Allograft **$511M**

Synthetic Bone Graft **$583M**

Growth Factor **$672M**



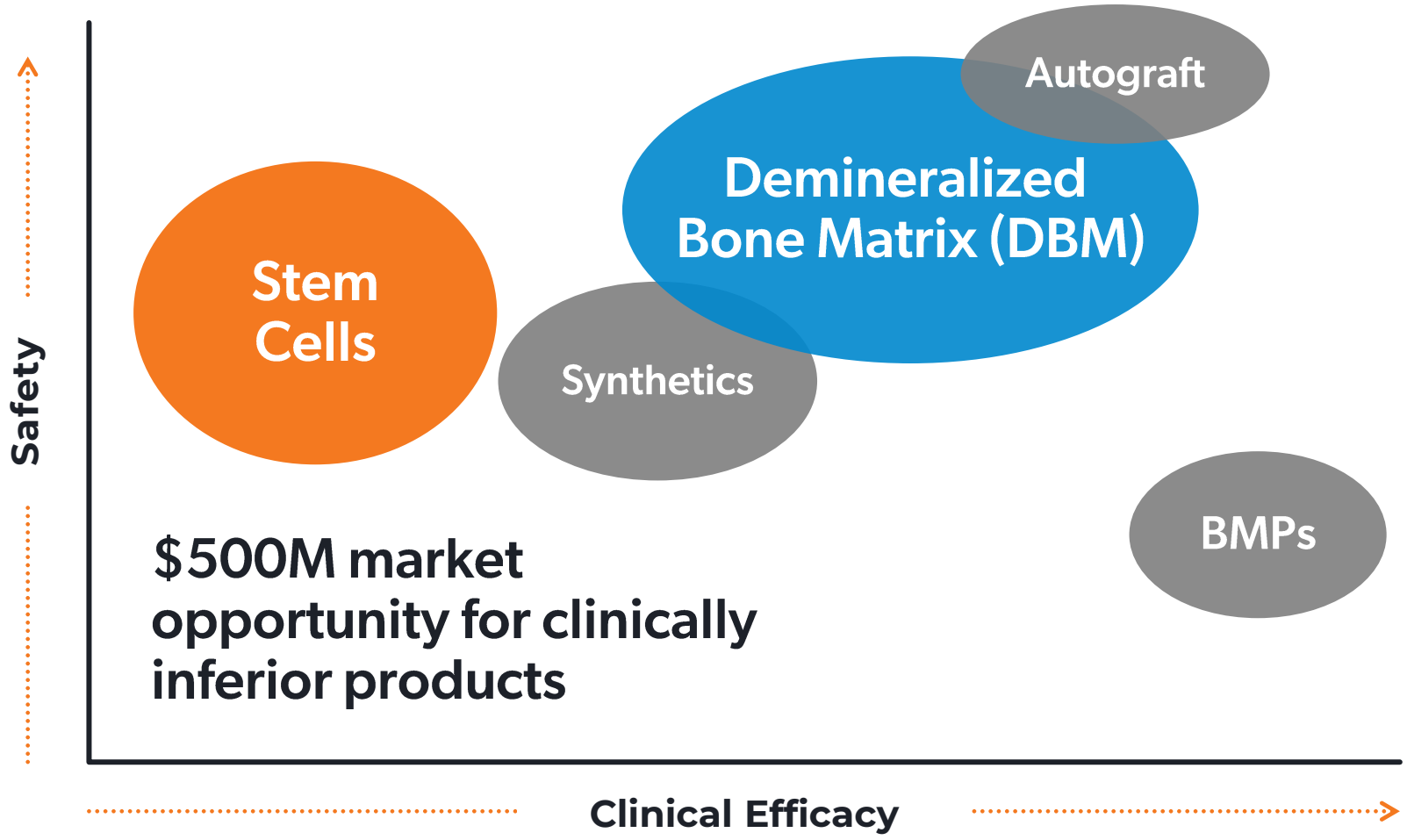
Xtant's current portfolio addresses $1.74B of the available market in the following areas:

- **Demineralized Bone Graft**
- **Cellular Allograft**
- **Allograft**
- **Synthetic Bone Graft**

Marrow-Derived Growth Factor new product line introduction, (Anticipated Q3 2021)

Source: iData US Market Report Suite for Orthopedic Biomaterials

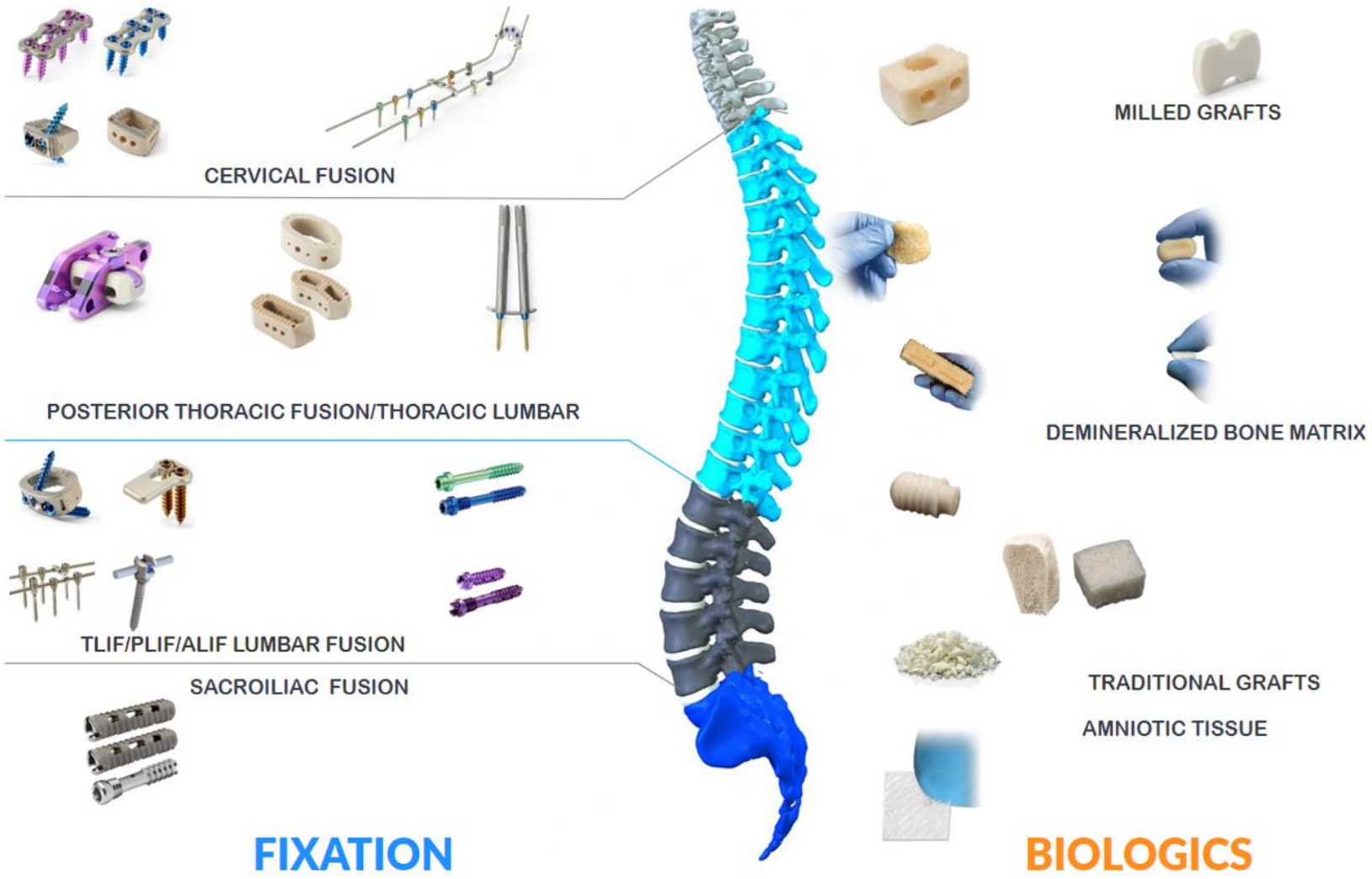
BIOLOGICS SAFETY & EFFICACY



Strong clinical evidence that points to a very high safety and effectiveness profile for DBM

Growing evidence undermining the $511M Stem Cell Market (e.g., HCA will not reimburse, SeaSpine study)

PRODUCT PORTFOLIO: BIOLOGICS INNOVATION



COMMITTED TO CLINICAL EVIDENCE: PUBLICATIONS

PRODUCT	STUDY DESIGN	PUBLICATION	YEAR	TITLE
OsteoSponge	Retrospective case series	The International Journal of Spine Surgery	2013	Transforaminal lumbar interbody fusion rates in patients using a novel titanium implant and demineralized cancellous allograft bone sponge
OsteoSponge	Retrospective	Journal Spine Surgery	2016	Percutaneous thoracolumbar decompression combined with percutaneous pedicle screw fixation and fusion
OsteoSponge	Expert Summary, Pre-Clinical, Prospective Case Studies	Dove Press	2012	Rationale, characteristics, and clinical performance of the OsteoSponge®: a novel allograft for treatment of osseous defects
OsteoSponge	Prospective Case Series	Orthopedics	2014	Biologic Augmentation of Foot and Ankle Arthrodesis with an Allogenic Cancellous Sponge
OsteoSponge	Retrospective, Multi-Center	The Journal of Foot & Ankle Surgery	2013	A Retrospective Analysis Evaluating Allogeneic Cancellous Bone Sponge For Foot and Ankle Arthrodesis
OsteoSponge	Retrospective Case Series	The Journal of Foot & Ankle Surgery	2014	Role of Demineralized Allograft Subchondral Bone in the Treatment of Shoulder Lesions of the Talus: Clinical Results with Two-Year Follow-Up
OsteoSponge	Retrospective Case Series	Foot & Ankle Specialist	2014	The Role of Demineralized Allograft Subchondral Bone in the Treatment of Talar Cystic OCD Lesions That Have Failed Microfracture
OsteoSponge	Retrospective Case Series	Foot & Ankle Specialist	2012	Reconstruction of Complex Osteochondral Lesions of the Talus with Cylindrical Sponge Allograft and Particulate Juvenile Cartilage Graft: Provisional Results with a Short-Term follow-up
OsteoSelect DBM Putty	Controlled Animal Study	The Spine Journal	2014	Evaluation of a new formulation of demineralized bone matrix putty in a rabbit posterolateral spinal fusion model
OsteoSelect DBM Putty	Controlled Animal Study	The Journal of Craniofacial Surgery	2014	Comparison of the Osteogenic Potential of OsteoSelect® DBM Putty to NovaBone Calcium-Phosphosilicate Synthetic Putty in a Cranial Defect Model
OsteoSelect DBM Putty	Scientific Paper	Cell Tissue Bank	2016	The Effect of Temperature Exposer During Shipment on a Commercially Available Demineralized Bone Matrix Putty

GROWTH STRATEGY PILLARS

XTANT MEDICAL GROWTH STRATEGY

New Product Flow

Drive new innovations and Distributor mindshare

Expand Distribution Network

Sell deeper and broader – become a strong national company

Leverage Adjacent Markets

Utilize current portfolio to penetrate underserved vertical markets

M&A Activity

Acquire best in class technologies to enhance current portfolio

ORGANIC GROWTH INITIATIVE: NEW PRODUCT FLOW

- Introduce 4-6 new products per year
- Roll-out next generation of demineralized bone matrix
- Expand fixation product set

2021

MarrowCellutions + OsteoSponge
BMA Delivery System

OsteoMix
Graft Mix
Delivery System

Osteo 100
Moldable
Allograft

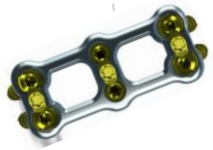
Growth Factor Powder

2022

OsteoVive PLUS
Viable Cell Strip

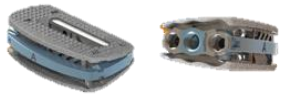
Fortex 2.0 MIS
Percutaneous Pedicle Screw System

Spider 2.0 (2.0)
Cervical Plate



InTice P/T
Lumbar
Interbody Device

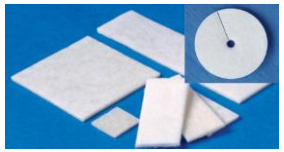
Xsert
Expandable
Lumbar Interbody



OUT Years

Growth Factor Strip

Growth Factor Shapes



OsteoSelect
Pre-Loaded
Graft Gun

EXPAND DISTRIBUTION NETWORK INITIATIVE

CONTRACTUAL ACCESS:

- All National GPO Contracts
- 385 IDN Contracts
- DOD/VA Access

Plan to Increase Distributor Revenue by 10% Annually

Penetration: **10%**

Expansion: **10+**

Plan to Add 10+ Distributors per Quarter

Open Distribution Channel

288 current distributors

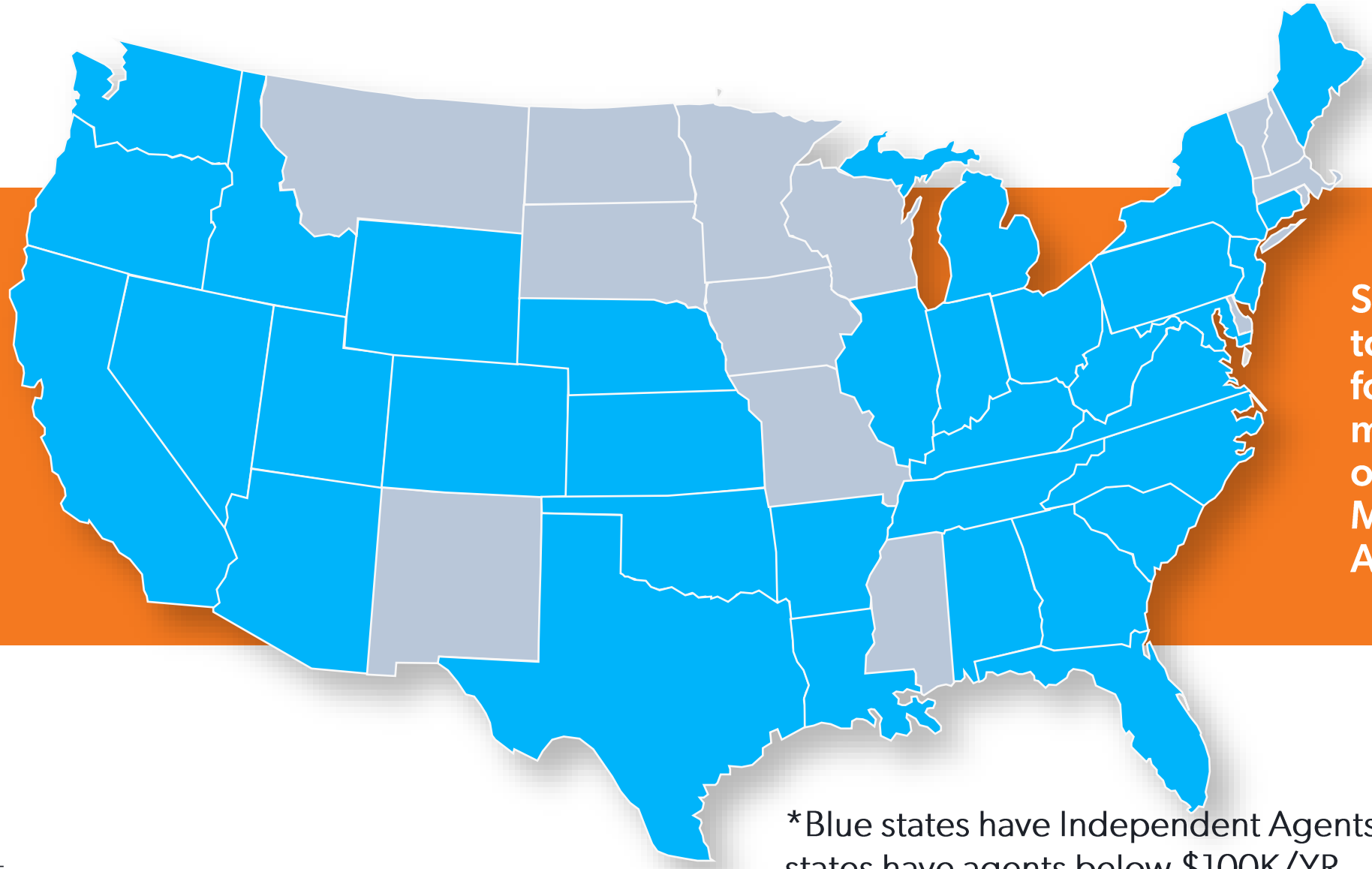
$224K revenue per distributor annually – target to grow to $300K per distributor by 2024

Build a National Network:

Approx. 48% of all sales come from CA, TX, AZ, FL

New agreements open-up Midwest & Mid-Atlantic

2020 SALES COVERAGE



Significant opportunities to expand our distribution footprint in some of the most populated regions of the country Northeast, Midwest, and Mid-Atlantic

*Blue states have Independent Agents of over $100K/YR, while Gray states have agents below $100K/YR

PLAN TO GROW ADJACENT MARKETS

82%

of Xtant's Biologics Revenue is Focused on Spine Procedures

OsteoSponge®
Cancellous DBM

3Demin®
Cortical DBM Fibers

OsteoSelect®
DBM Putty

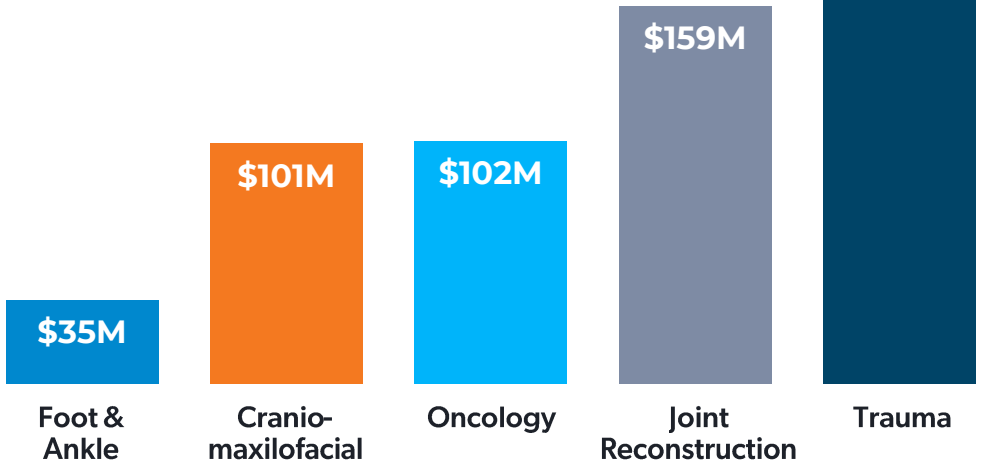
OsteoVive®
Viable Cell Allograft

Matriform®
Synthetic Bone Graft

18%

of Xtant's Biologics Revenue is Non-Spine Sales

Potential Bone Graft Markets:
$625M



XTANT MEDICAL

PLAN TO PURSUIT XTANT'S GROWTH PLATFORM ORGANICALLY AND THROUGH M&A

- Bring scale
- Fill product/ capabilities gaps
- Bring differentiated products
- Leverageable commercial assets
- Increased market access

Goal: Increase Long-term Shareholder Value

INVESTMENT OPPORTUNITY

- **LEADING SPINE & ORTHOBIOLOGICS COMPANY**
  - Significant opportunity to innovate and roll-up new technologies
- **LEVERAGEABLE STRENGTHS**
  - Market leader in DBM biologics
  - Advantageous GPO/IDN contract access
  - Large & scalable distribution network
  - Adjacent market expansion opportunity
- **GROWTH OPPORTUNITIES**
  - Technology and product acquisition
  - Accelerate organic growth

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