



Osteopore[®]

Empowering Natural Tissue Regeneration

INVESTOR PRESENTATION

NOVEMBER 2021



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NOVEL IMPLANTS THAT FACILITATE BONE & TISSUE REGENERATION

Breakthrough Technology

World first biomimetic implants developed in collaboration with leading research institutions and supported by granted patents.

Superior Products

Superior, commercially ready products for off-the-shelf use by surgeons conducting high volume routine procedures.

Craniofacial Regulatory Clearance



Australian Government
Department of Health
Therapeutic Goods Administration



Value Creating

A clear focus on developing revenue streams to deliver high margin growth underlies the drive toward sustainable value creation.

+US\$100Bn Markets

Global expansion underway and distribution partners secured in most major markets to penetrate the US\$3.9bn bone graft and US\$100bn permanent implant sectors.

Near-term Growth Catalysts

Significant opportunity to regain revenue momentum as the effects of COVID-19 diminish.



ASX REGENERATIVE MEDTECH LANDSCAPE

- Regenerative medicine treats injuries and diseases by harnessing the body's own regenerative capabilities to regrow, repair or replace damaged or diseased cells, organs or tissues.
- Treatments include the generation and use of therapeutic stem cells, tissue regeneration and the production of select artificial organs.

Osteopore is focused on the bone, cartilage and tendon sectors and is the only company using biomimetic scaffolds that dissolve over time leaving only healthy bone and tissue.

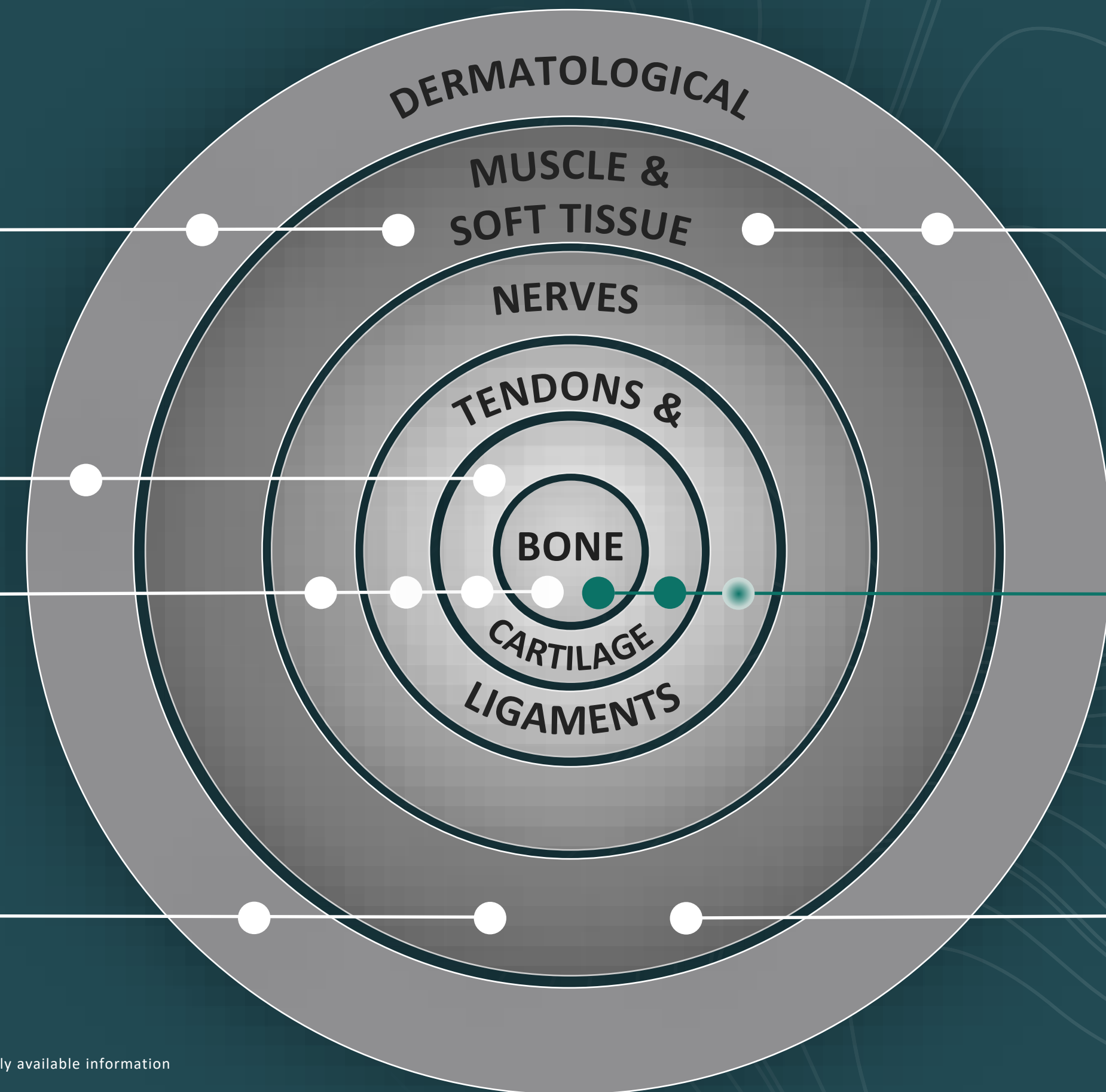
Polynovo
(ASX: PNV)
\$988.77m

Cynata
(ASX: CYP)
\$81.66m

Orthocell
(ASX: OCC)
\$96.05m

Aroa
(ASX: ARX)
\$381.17m

Market capitalisation as at 11/11/2021
Indicative business focus based on publicly available information



Avita
(ASX: AVH)
\$565.80m

Osteopore
(ASX: OSX)
\$28.14m

Mesoblast
(ASX: MSB)
\$1.06bn





STRONG FOCUS ON COLLABORATIVE PARTNERSHIPS

- Product development partnerships
- Cross-promotion sales agreements
- Combining complementary technology

GROUND-BREAKING UNIVERSITY RESEARCH



LEADERS IN LIFE SCIENCES



MANUFACTURING TECHNOLOGY



HOSPITALS AND HEALTHCARE INSTITUTES



SCIENCE AND INDUSTRY PARTNERS



CAD & AI



FOUNDATIONAL PLATFORM TO EMPOWER TISSUE REGENERATION

Novel process to regenerate bone

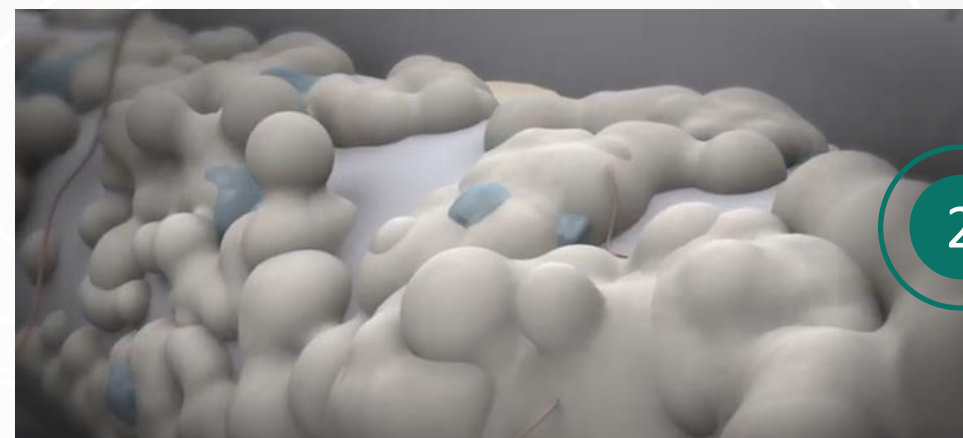
Proven applications across the entire body



1

IMPLANT DRAWS IN BLOOD

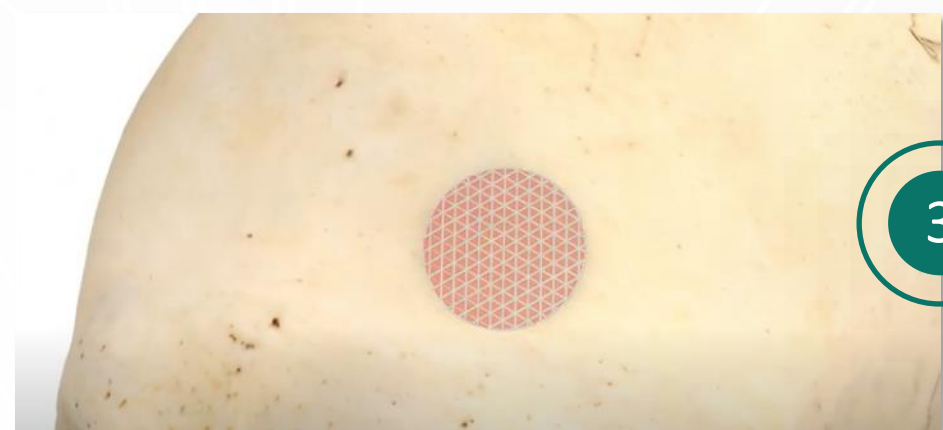
Biomimetic microstructures allow blood to be drawn into the implant before inserting into the body.



2

BONE GROWS ON SCAFFOLDS

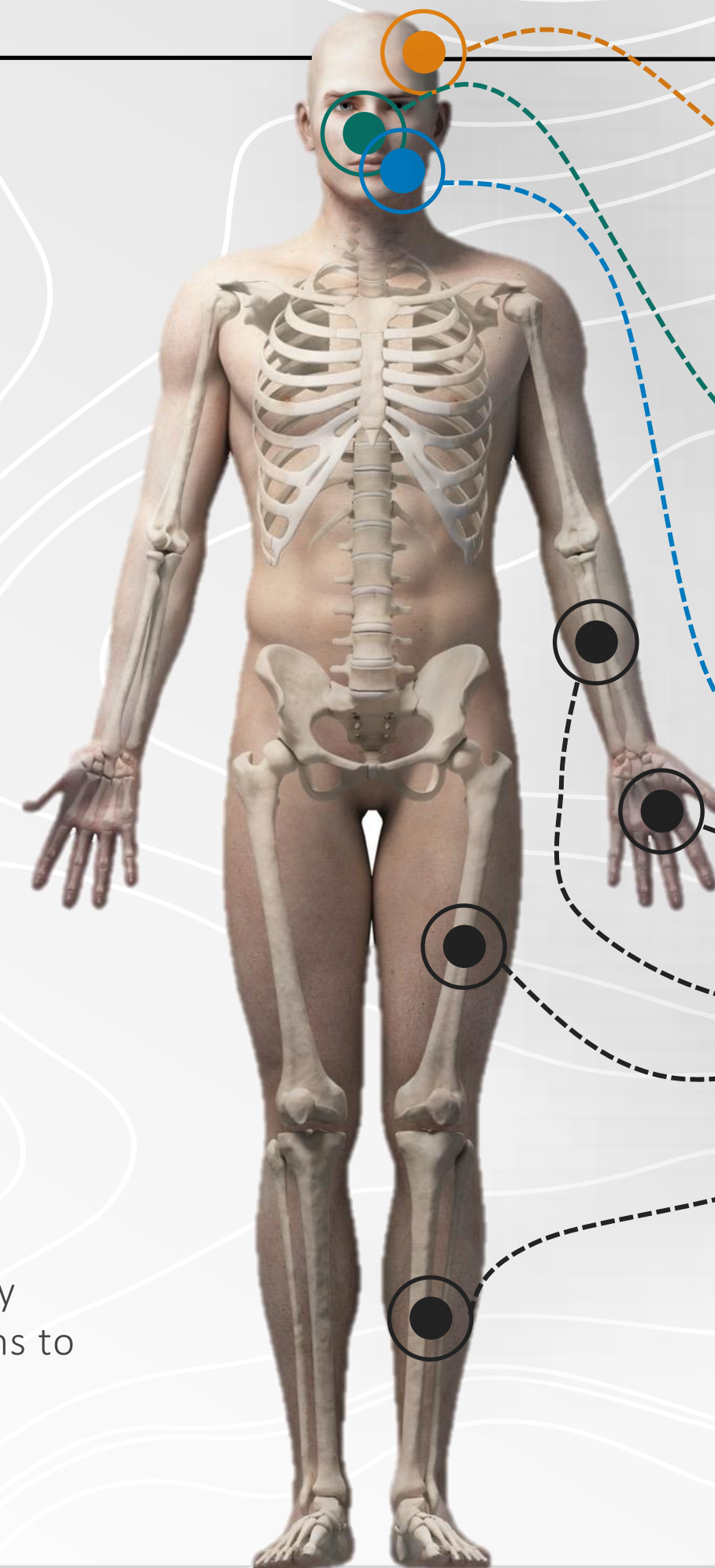
Once in the body the scaffold attracts cells and blood vessels, facilitating bone growth in-between the microstructures.



3

IMPLANT DISSOLVES

The implants naturally and predictably dissolve over a period of 18-24 months to leave only natural healthy bone.



CRANIOFACIAL & ORAL MAXILLOFACIAL

Multiple products that support craniofacial surgeries for regenerating bone within the head, skull, face and jaw.

AESTHETIC

Applications for aesthetic surgery procedures that improve the appearance of the face and body.

DENTAL - OMF

Applications that promote vertical bone growth in the jaw following tooth removal.

ORTHOPAEDIC*

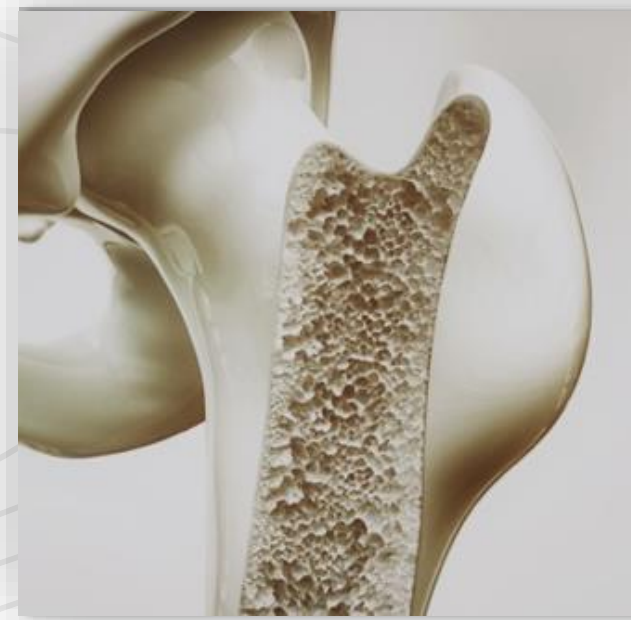
A range of orthopaedic applications, where significant lengths of long bones need to be regenerated.

*Promising outcomes in early clinical evaluation based on pipeline technology



COMPETITIVE STRENGTHS LEVERAGED BY SOLVING UNMET CLINICAL NEEDS

TRADITIONAL PROCEDURES



BONE GRAFT

Potential for **infection** and lasting pain at harvest site

Potential for body to **completely absorb the graft** with no bone regeneration

US\$3.9bn
Bone Graft Substitutes Market by 2025



PERMANENT IMPLANTS

Non-biodegradable with a high potential for post surgical complications

Difficult to micro-adjust for a better fit during the surgical procedure

US\$100bn
Permanent Implant Sales



Osteopore®



Highly customisable to biomimic different bone types



Proven to be effective in ~50k procedures



Unlikely inflammation or infection



Naturally dissolves over a predictable time frame



Leaves only **healthy** bone tissue



Extremely low post surgery complication rates to date

Bone Graft

6 – 19% ^{1,2,3}

REPORTED COMPLICATION RATES

Permanent Implants

25 – 33% ^{4,5,6}

REPORTED COMPLICATION RATES

Osteopore™

0.01%





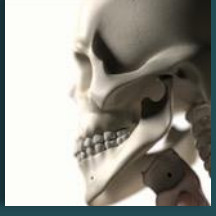
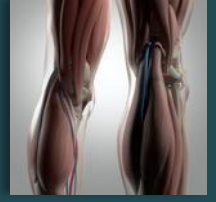
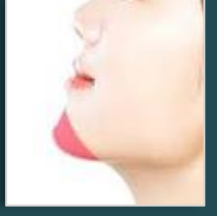
Sources 1-6 located in in Appendix slide 17



STRONG PRODUCT PIPELINE WITH SIGNIFICANT ADDRESSABLE MARKETS

EXISTING COMMERCIAL PRODUCTS

PIPELINE

SURGICAL SUBSPECIALTY	PRODUCTS FOR INDIVIDUAL APPLICATIONS	REGULATORY CLEARANCE	FY20	FY21	FY22	FY23	FY24	FY25	MARKET OPPORTUNITY	SALES AVENUE
 CRANIOFACIAL	Burr Hole Procedure Neurological Shunt Procedure Craniotomy Cranioplasty Craniosynostosis Endoscopic Skull Base Surgery Orbital Floor Reconstruction Septoplasty Patient Specific Implants	  Multiple SEA territories	██████████	██████████	██████████	██████████	██████████	██████████	~USD 1.0 bn ¹	DIRECT & DISTRIBUTION PARTNERS
 DENTAL	Socket Preservation Guided Bone Regeneration Immediate Implant Loading Guide Tissue Regeneration	✓ Singapore & Multiple SEA ✓ To initiate clinical validation to support wider adoption • To initiate clinical trials for EU access	██████████	██████████	██████████	██████████	██████████	██████████	~USD 1.67 bn in 2028 8.46% CAGR ²	DIRECT (SINGAPORE ONLY)
 ORAL MAXILLOFACIAL	Cleft Palate reconstruction Mandible reconstruction Buccal Defect reconstruction	• Undergoing trials to gain regulatory indication for use	██████████	██████████	██████████	██████████	██████████	██████████		SPECIAL ACCESS SALES
 ORTHOPAEDIC	Tibia reconstruction High Tibia Osteotomy Clavicle reconstruction Tendon repair Radial reconstruction	✓ Special access product whereby surgeon requests its use • To initiate clinical trials • Preparing 510k submission by Q1 2022	██████████	██████████	██████████	██████████	██████████	██████████	USD 2.0 bn ¹	SPECIAL ACCESS SALES
 AESTHETIC	Genioplasty (chin) Nipple reconstruction Breast reconstruction	• To initiate trials to gain regulatory indication for use	██████████	██████████	██████████	██████████	██████████	██████████	USD 1.0 bn ³	SPECIAL ACCESS SALES



ANTICIPATED REGULATORY MILESTONES

Q1 - Q2 CY22

Q3 – Q4 CY22

CY23 – CY24

China

- [expected] Guangdong-Hong Kong-Macau Greater Bay Area market access for craniofacial products
- Initiate market entry process for NMPA for craniofacial products

Australia

- Authorised Prescriber market access in Australia for rhinoplasty application

USA

- Lodge US 510(k) submission for orthopaedic application

Korea

- Lodge MFDS application for orthopaedic application with new generation material

Pakistan

- [expected] DRAP approval for craniofacial products

Switzerland

- [expected] Swissmedic approval for craniofacial products

Europe

- Lodge EU application for Custom Made Device with new generation material
- Launch clinical trials for cranioplasty application with new generation material

Australia

- Authorised Prescriber market access in Australia for orthopaedic application

Colombia

- [expected] INVIMA approval for craniofacial products

UK

- Lodge UKCA application for craniofacial products

Singapore

- Lodge HSA submission for Patient Matched Device with new generation material

China

- Initiate market entry process for NMPA (clinical trial) with craniofacial products

Europe

- [expected] EU approval for Custom Made Device with new generation material
- Lodge EU application for Custom Made Device, Long Bone Reconstruction with new generation material

Australia

- Lodge TGA submission for cranioplasty Patient Matched Device with new generation material

Singapore

- Lodge HSA submission for orthopaedic application with new generation material

USA

- [expected] US 510(k) clearance for orthopaedic application with new generation material

Korea

- [expected] MFDS approval for orthopaedic application with new generation material

China

- [expected] NMPA approval for craniofacial products

Europe

- Lodge CE mark application for Patient Matched Devices with new generation material
- [expected] EU approval for Custom Made Device, Long Bone Reconstruction with new generation material

Australia

- [expected] TGA approval for Patient Matched Device with new generation material

Abbreviations

NMPA	National Medical Products Administration, China
DRAP	Drug Regulatory Authority of Pakistan
INVIVMA	Instituto Nacional de Vigilancia de Medicamentos y Alimentos
HSA	Health Sciences Authority
UKCA	UK Competent Authority
MFDS	Ministry of Food and Drug Safety



POST-COVID GROWTH STRATEGY

Horizon 1: Next 12 to 18 months

Grow revenue across current commercial product line

Strategy

Build upon existing regulatory clearances to develop and strengthen brand recognition and uptake in core bone regeneration applications.

Drivers

- Global regulatory approval.
- Fully trained sales team.
- Building revenue in established and new markets through relationships with specialist distributorships with existing links to craniofacial surgeons.

EXISTING OSTEOPORE TECHNOLOGY

Horizon 2: Next 18 to 36 months

Launch additional products for new areas of treatment

Strategy

Secure regulatory clearance in existing key markets for new geometric shapes suitable for applications in new areas of regenerative bone treatment.

Drivers

- Proven ability to successfully develop and launch products globally.
- New products under development use the same regulatory approved materials and technology.
- Previous clinical data from commercial products allows for accelerated development timeframes.

Horizon 3: >36 months

Develop and commercialise breakthrough technology

Strategy

Investigating the viability of new materials and biologics to **accelerate** bone and tissue growth and developing new implants to potentially assist in growing cartilage and other tissue types.

Drivers

- World class development partners.
- Highly credentialed research and clinical advisor teams.
- Unprecedented access to surgeon's and hospitals with innovative, early adoption protocols for clinical trials.

NEW TECHNOLOGY



ENCOURAGING TAILWINDS EXPECTED TO DRIVE PRODUCT UPTAKE

POST-COVID

Vaccination rates are expected to improve as we head into CY2022.

ON-GROUND OPPORTUNITIES

Medical trade shows are starting to revert back to “in-person” which will help Osteopore® engage with healthcare decision makers.

PENT-UP DEMAND

Fully dedicated sales team ready to take advantage of a significant backlog of elective surgeries which have been disrupted by the pandemic.

INCREASED ACCESS

Increased access to hospitals and surgeons as the pandemic resides in key markets.




GLOBAL CUSTOMER RELATIONSHIPS

Continue to exploit Osteopore’s online sales and business development capability that was developed during the pandemic.




NEW APPLICATIONS



DENTAL

Application	Early clinical investigation	Market access status	Market growth strategy
Socket preservation		Singapore Multiple ASEAN countries	<ul style="list-style-type: none"> Leverage approval in Singapore to drive sales in ASEAN Sign-up KOL to conduct training (Q2 2022) Conduct multi-centre post-market study for further clinical validation (Q2 2022)
Buccal alveolar wall defect		Singapore Multiple ASEAN countries	<ul style="list-style-type: none"> Leverage approval in Singapore to drive sales in ASEAN Sign-up KOL to conduct training (Q1 2022) Authorised Prescriber Scheme for Australia (Q2 2022) Initiate clinical trials for market access to Europe (Q1 2023)
Buccal alveolar wall defect with Immediate Implant Loading		Singapore Multiple ASEAN countries	<ul style="list-style-type: none"> Leverage approval in Singapore to drive sales in ASEAN Sign-up KOL to conduct training (Q1 2022) Authorised Prescriber Scheme for Australia (Q2 2022) Initiate clinical trials for market access to Europe (Q1 2023)


ORTHOPAEDIC

Application	Early clinical investigation	Market access status	Next evolution
Patient Specific Long Bone Reconstruction	 Completed First-in-human implantation <ul style="list-style-type: none"> Initiated Clinical Trial in Q3 2021 	<ul style="list-style-type: none"> To lodge Custom Made Device submission in EU Q4 2022 	<ul style="list-style-type: none"> Special access sales where permitted and upon surgeon prescription
Orthopaedic bone filler (standard device)	<ul style="list-style-type: none"> Initiated First-in-Man implantation in Q1 2021 	<ul style="list-style-type: none"> To lodge US FDA 510k submission in Q1 2022 To lodge Korea MFDS submission in Q2 2022 To lodge Singapore HSA submission in Q3 2022 	<ul style="list-style-type: none"> Market access activity Special access sales where permitted and upon surgeon prescription

ORAL MAXILLOFACIAL

Application	Early clinical investigation	Next evolution
Cleft palate reconstruction	<ul style="list-style-type: none"> To initiate in Q2 2022 	<ul style="list-style-type: none"> Systematic clinical development
Graft containment for segmental defects	 Achieved early clinical success <ul style="list-style-type: none"> To conduct more clinical evaluation with KOLs 	<ul style="list-style-type: none"> Systematic clinical development
Patient Specific Implant	 Achieved early clinical success <ul style="list-style-type: none"> To conduct clinical trial 	<ul style="list-style-type: none"> Special access sales where appropriate and upon surgeon prescription

AESTHETIC

Application	Early clinical investigation	Next evolution
Nipple reconstruction	<ul style="list-style-type: none"> In progress 	<ul style="list-style-type: none"> Systematic clinical development
Genioplasty	 Achieved early clinical success <ul style="list-style-type: none"> To conduct more clinical evaluation with KOLs 	<ul style="list-style-type: none"> Systematic clinical development



NEW TECHNOLOGY

ACCELERATING BONE REGENERATION

Osteopore is investigating the viability of incorporating compounds to produce novel polycaprolactone polymer composites which could be used to develop additional products for adjacent therapeutic and surgical areas

Large-scale collaboration currently in late stages of research and development programs

REGENERATION OF OTHER TISSUE

Osteopore has successfully completed animal trials for knee cartilage regeneration, and the Osteopore scaffold may also potentially be used to assist with the regeneration of other tissue types.

Clinical evaluation underway of rotator cuff repair for improved shoulder ROM



FINANCIALS

REVENUE

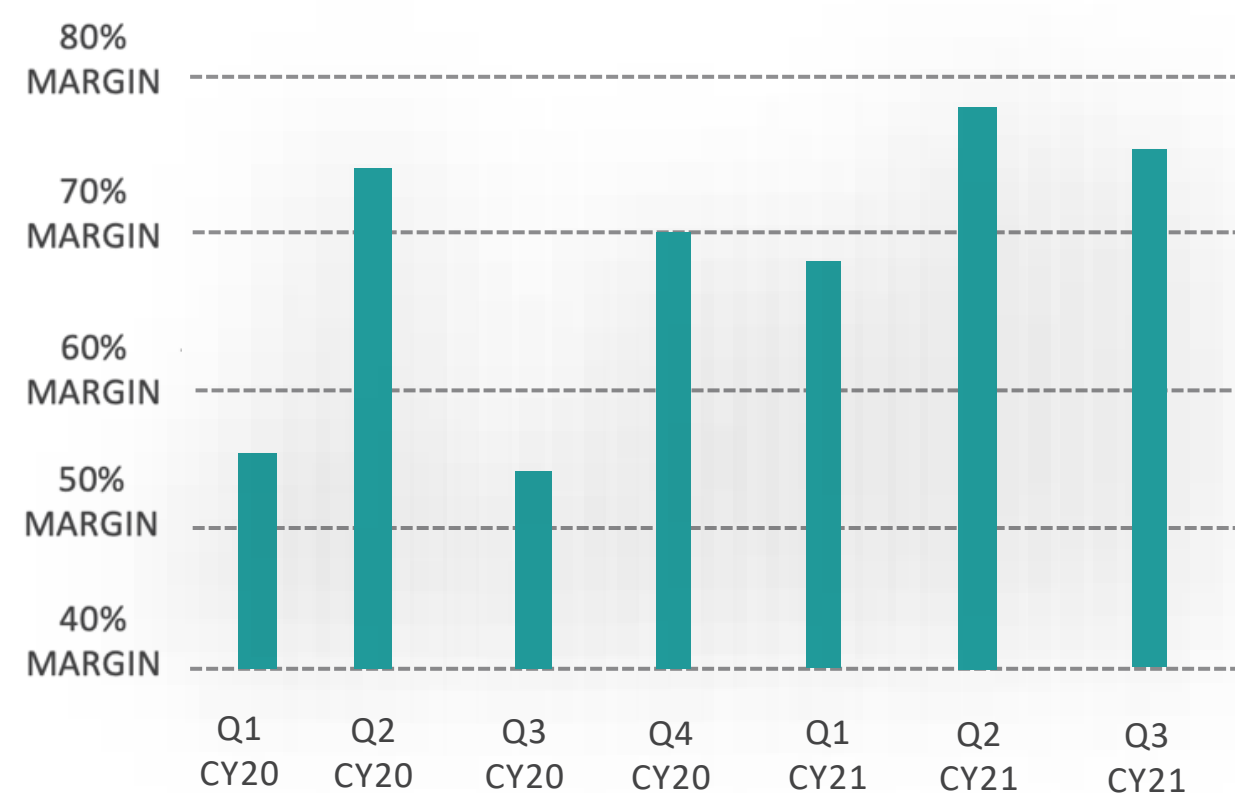
- Despite the considerable disruption COVID-19 has caused the healthcare eco-system, Osteopore® has continued generate consistent quarterly revenue.
- As global vaccinations increase and the pandemic eases, Osteopore® expects revenue to return to its post COVID levels with increased momentum.

QUARTERLY SALES REVENUE IN SGD (THOUSAND)



MARGINS

- Osteopore® continues to work towards maintaining and improving its margins.
- A gross margin of **74.9%** of sales revenue was achieved in Q3 CY21.
- Osteopore® believes that its cost effective and high margin manufacturing process will ultimately become a major contributor towards the Company achieving profitability as revenue scales.



CAPITAL STRUCTURE

Shares on Issue ^A	117.2m
Total Options on Issue ^B	13.4m
Market Cap @ \$0.29c ^C	A\$34m
EV @ \$0.29 ^C	A\$28m
CASH BALANCE ^D	A\$5.9m

CY21 Average Quarterly Net Operating Cash Used (A\$894)

A: Shares on Issue includes 16.0m placement shares.


B: 9.7m options with an exercise price of \$0.25 and an expiry date of 30 June 2022, 0.4m options with an exercise price of \$1.00 and an expiry date in December 2022, 3m options with exercise price of \$1.20 and expiry August 2023. 0.375 options with an exercise price of \$0.624 and expiry Nov 2025. Option incentives held by executive management, directors & advisors.

C: Market Close, 30 Sept 2021

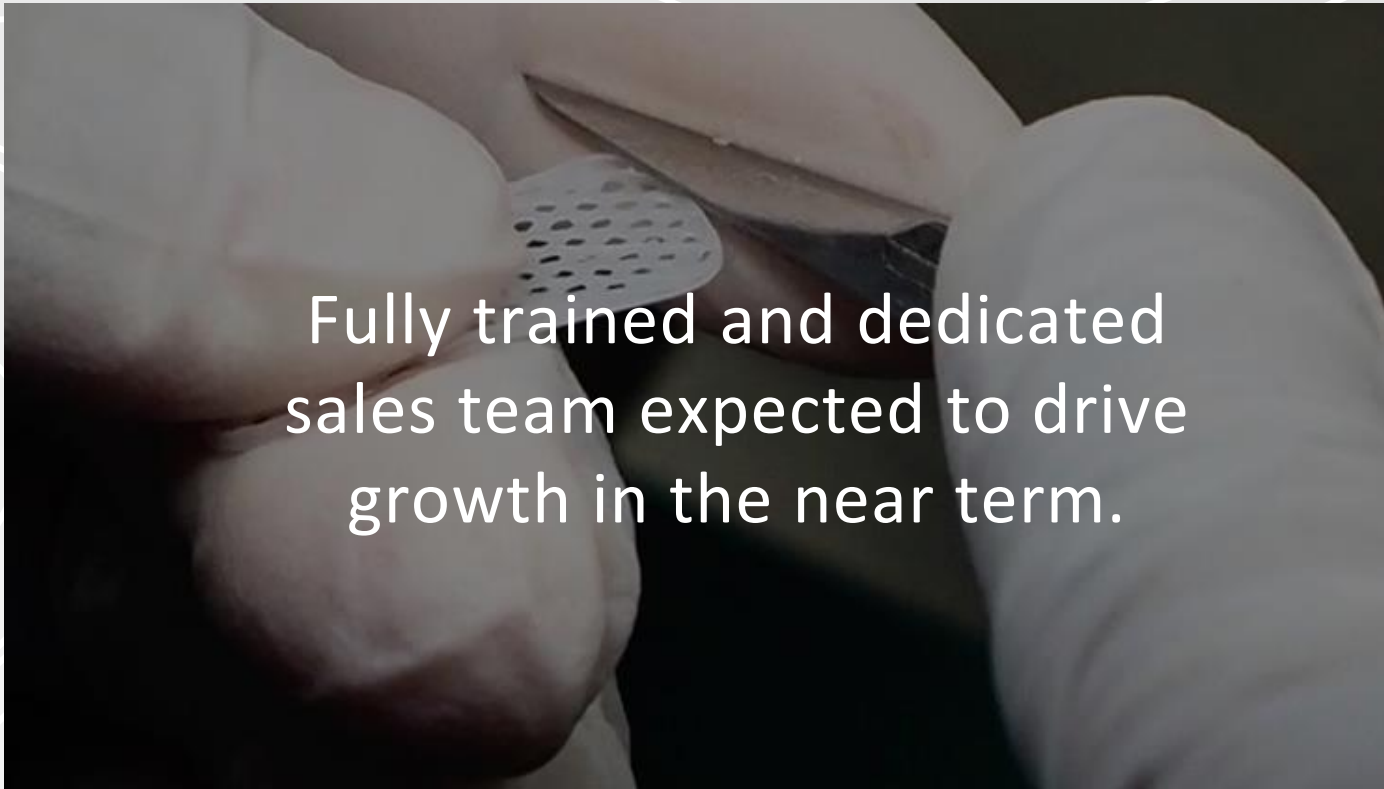
D: Cash balance at 30 Sept 2021




KEY TAKEAWAYS



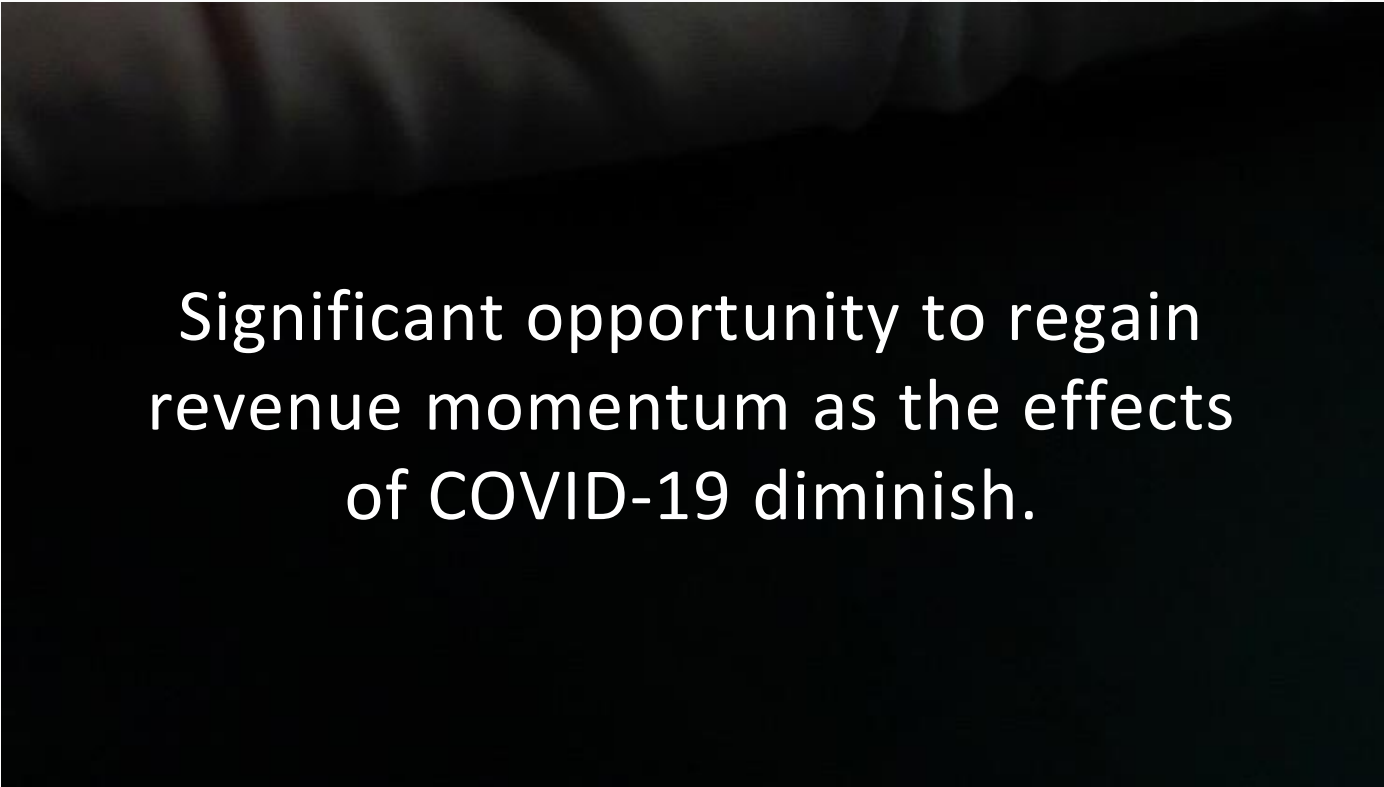
Regenerative medical device company with proven, superior products that empower tissue regeneration.



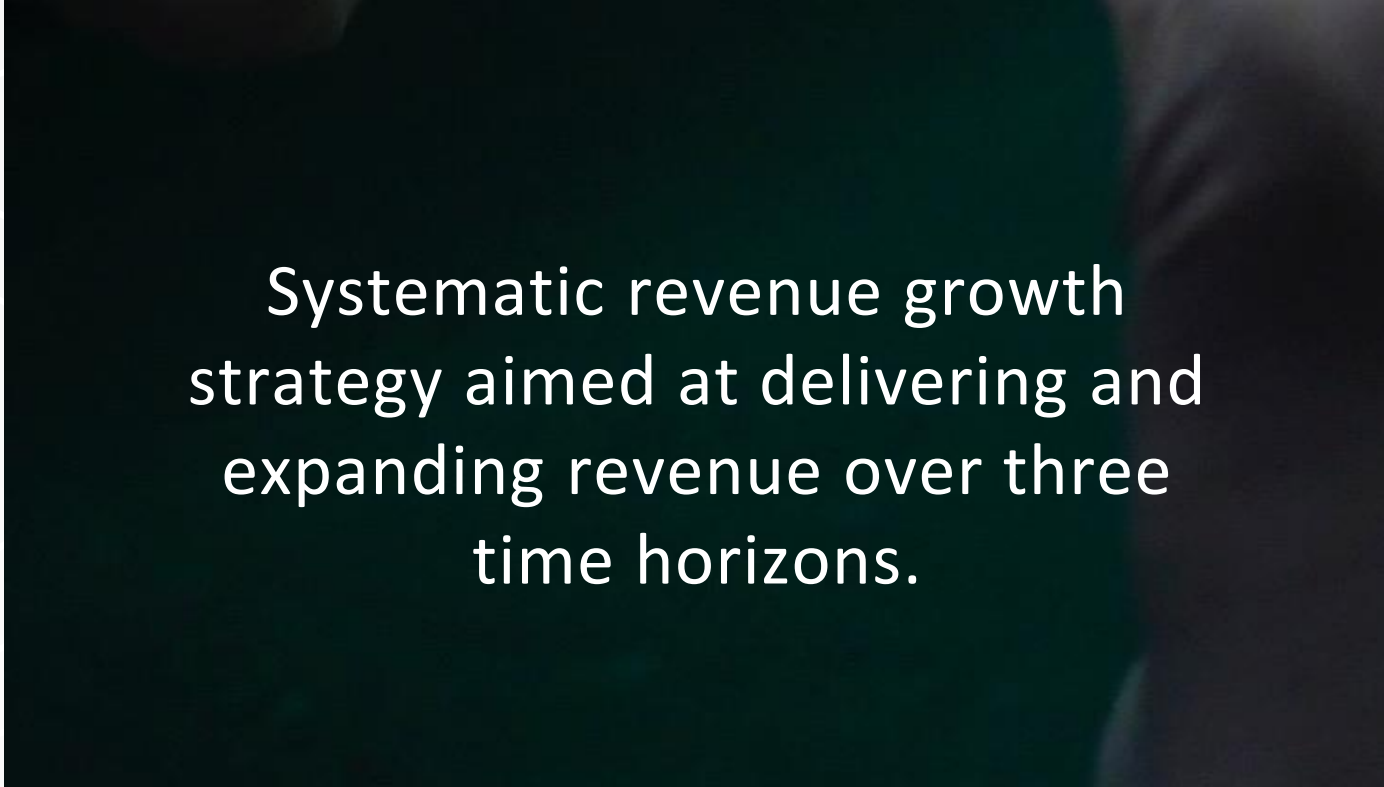
Fully trained and dedicated sales team expected to drive growth in the near term.



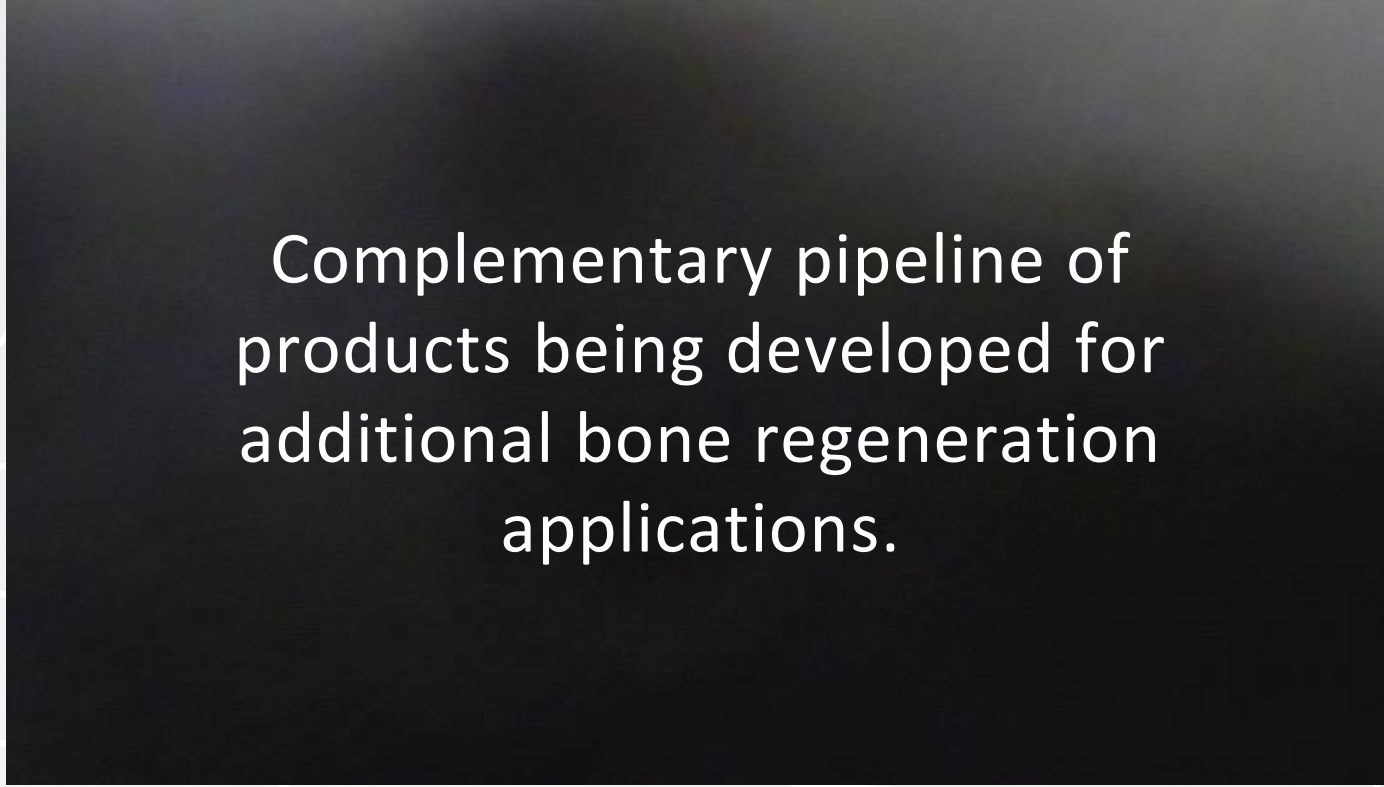
Global expansion underway with regulatory clearance and distribution partners secured in most major markets.



Significant opportunity to regain revenue momentum as the effects of COVID-19 diminish.



Systematic revenue growth strategy aimed at delivering and expanding revenue over three time horizons.



Complementary pipeline of products being developed for additional bone regeneration applications.



Osteopore®

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SOURCES

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