

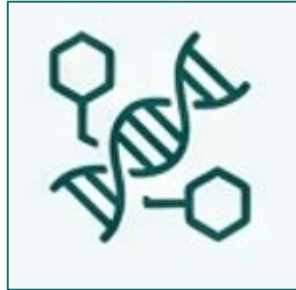
Strategic Investment Opportunity:

**Anchoring market leadership with disruptive
Bone Regeneration**

GreenBone®

A De-Risked, Commercial-Ready Asset...in a \$5B+ Growth Market

Pioneering Innovation as a Strategic Shield



Proprietary, sinter-free biomorphic transformation of rattan wood into bioresorbable, load-bearing bone substitute.

Strong Clinical Evidence



Over **700 patients** treated with zero device-related adverse events.

91% complete bone union at 12 months in severe trauma. Cleared for **large diaphyseal lesions** up to **6cm**.



EU-MDR is achieved, CE-marked portfolio. US-FDA 510(k) pre-submission is achieved, validated for extremities and spine, securing the pathway to the world's largest market.

Clear Regulatory Pathway



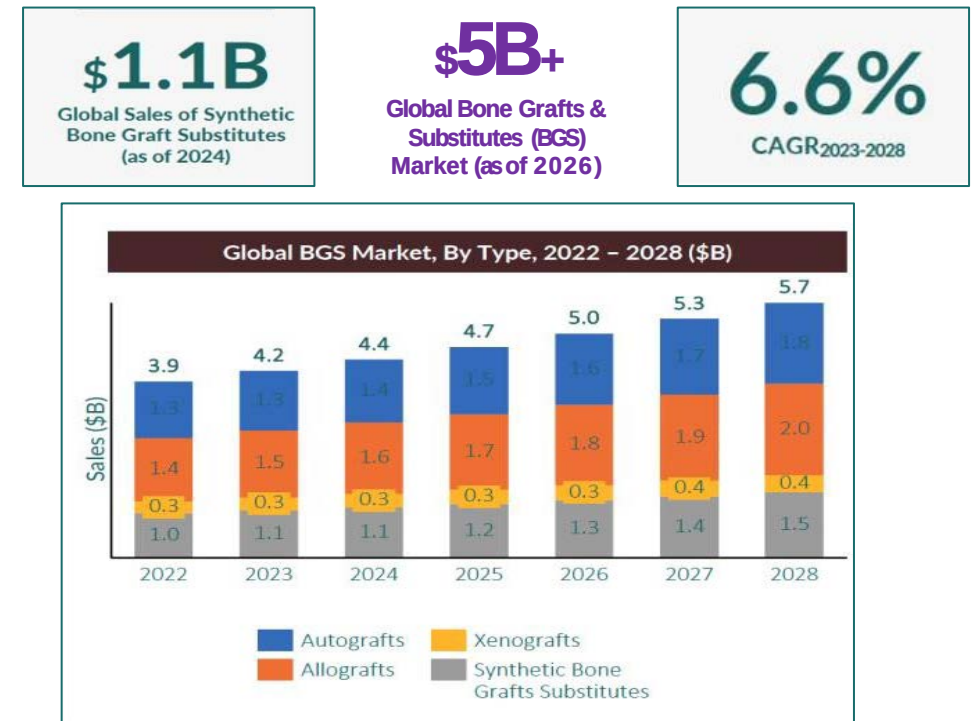
4,000 sqm state-of-the-art European manufacturing facility (including 930 sqm clean room), supporting projected ~100Mln \$ sales capacity by 2036

Scalable Operations

The Market Opportunity

The Bone Substitute market lacks a real synthetic regenerative technology that could replace autografts

"Generational Shift" Comparison Matrix				
	Biomimetic Structure	Resorbability	Structural Biomechanics	Manufacturing Scalability
Autografts	—	—	—	Fails: Donor site morbidity
Allografts	Fails: Immune response risks, non-unions	—	—	—
Sintered Synthetics	—	Fails: High-temp treatment destroys nanostructure, brittle, non-resorbing		—
GreenBone Scaffold	Hierarchic nanostructure	Cell-mediated reabsorption	Damage-tolerant fixing	Turnkey synthetic scale



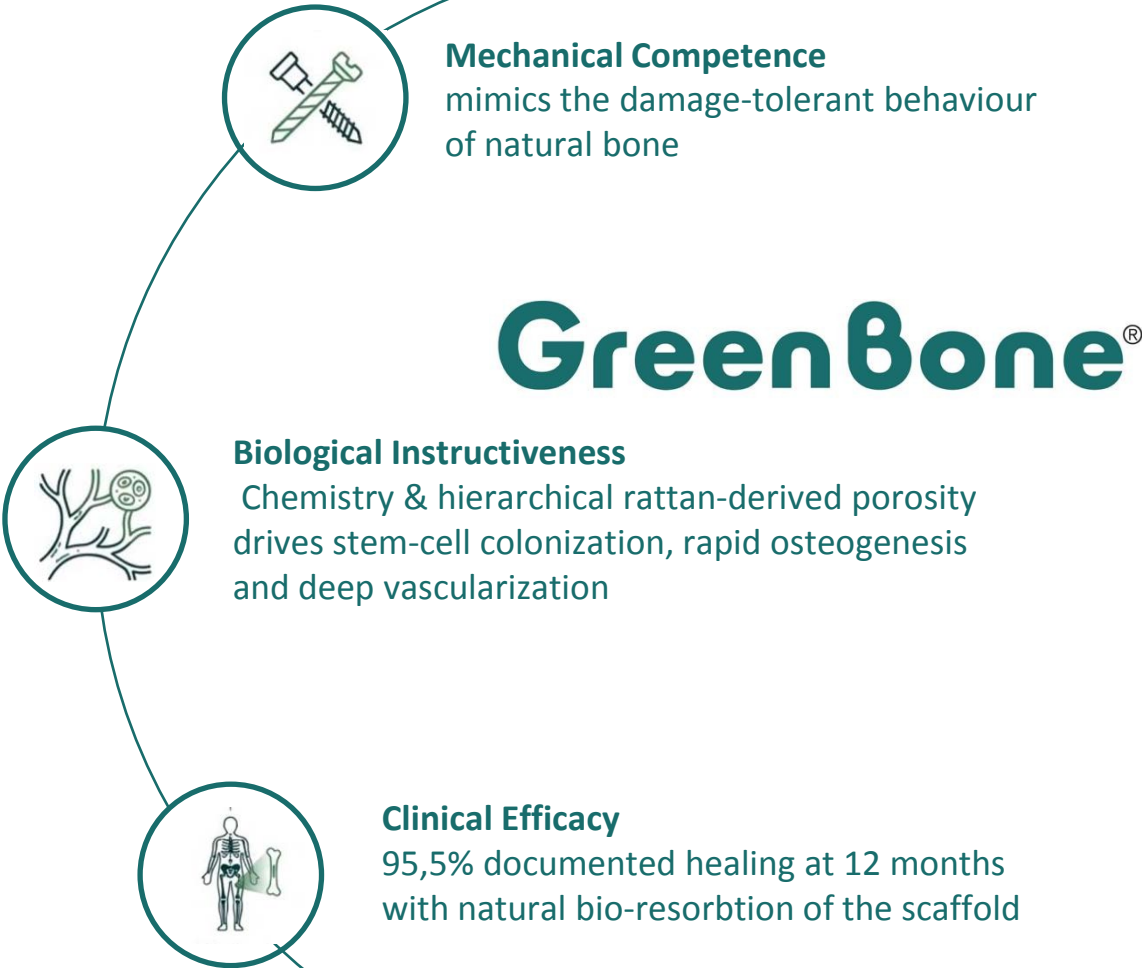
The Unmeet Clinical Need

Technological DIFFERENTIATOR

	b.Bone (GreenBone)	Autograft	Allograft	Traditional Synthetics
Infinite Scalability & Supply	✓	–	–	✓
Zero Donor Site Morbidity	✓	–	✓	✓
Structural Biomimesis (Load Bearing)	✓	✓	✓	–
Vascularization Support	✓	✓	–	–
EU MDR Compliant Asset	✓	N/A	–	Varies/Dash

Benchmarking the GOLD STANDARD:

- AUTOGRAFT & ALLOGRAFT

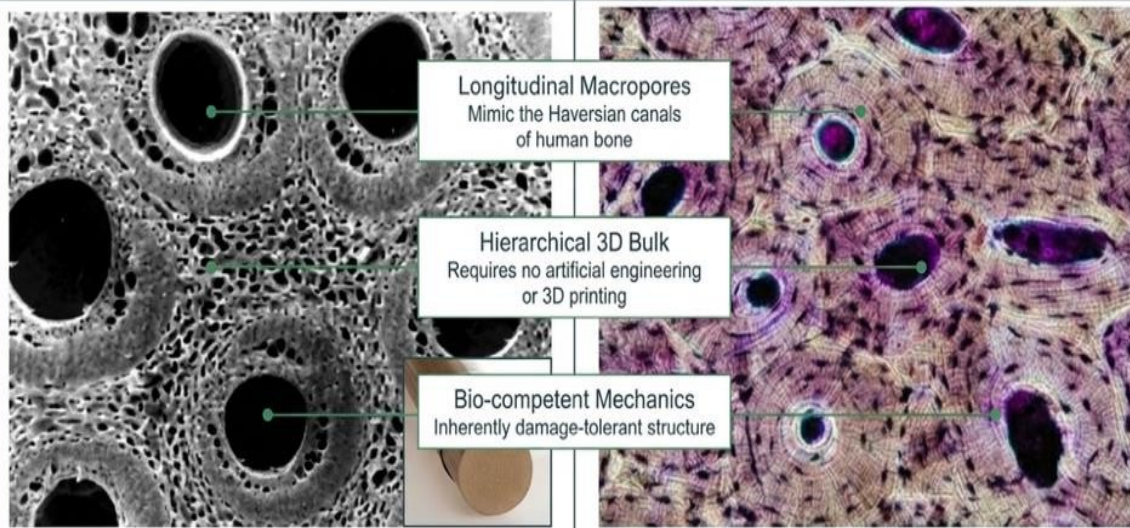


The First Synthetic Regenerative Bone Substitute

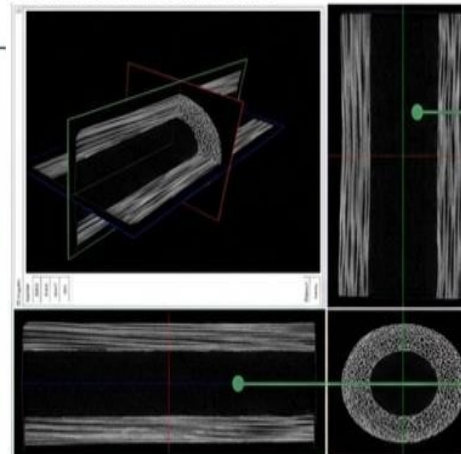
Inspired by nature and designed by innovators

Rattan Wood Provides a Naturally Occurring Blueprint for Human Osteons

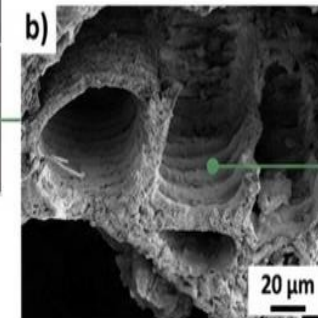
Structural Map



Hierarchical Porosity Actively Guides Vascularization and Tissue Integration



The Axial Channels: Large, continuous tubes connect the entire scaffold, allowing passage of cells and deep blood vessel penetration.

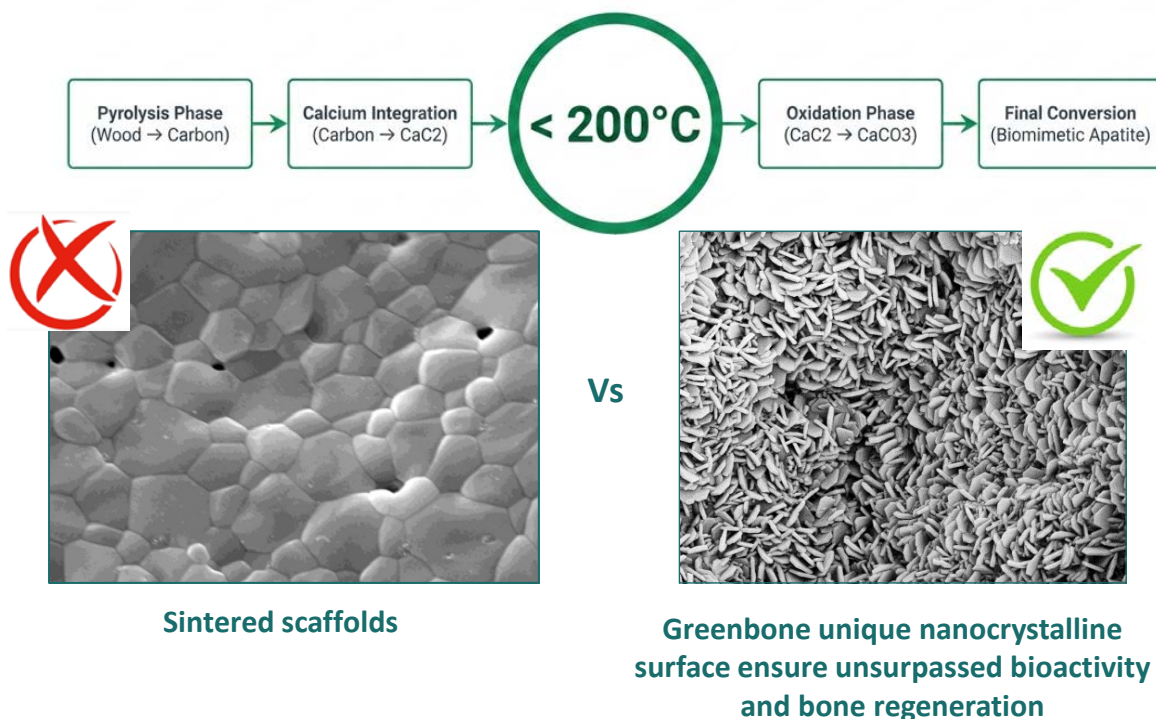


The Nano-Scale Roughness: Highly textured internal walls provide a specific surface area vastly higher than sintered ceramics, driving superior cell adhesion and bioactivity.

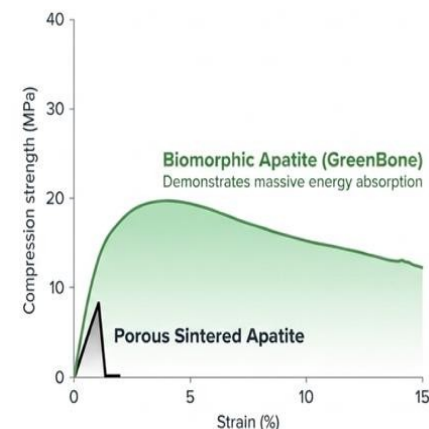
The First and Only Synthetic Regenerative Bone Substitute

Inspired by nature and designed by innovators

Low-temperature chemical transformation preserves
the Biomimetic Hydroxyapatite



The Damage-tolerant Scaffold



The **UNIQUE** ceramic scaffold that can be **CUSTOMIZED** to the needed shape **IN SITU** without catastrophic failure.
b.Bone® can be drilled, screwed and sawed.

Product Configurations

PRODUCT OFFERING

Cylinders



Blocks



Wedges

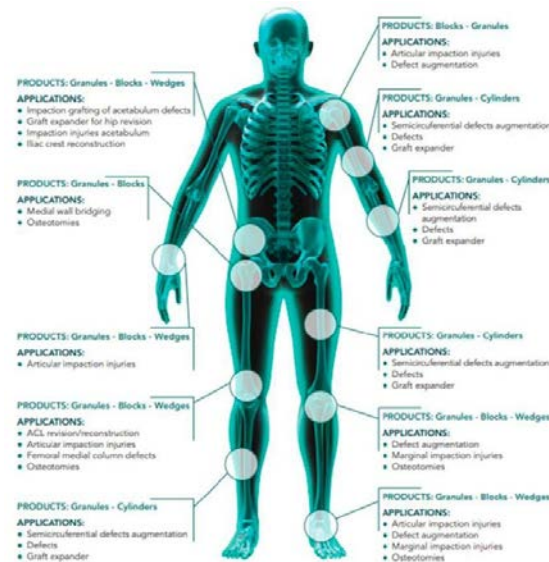


Granules



CLINICAL APPLICATIONS

- Traumatology
- Bone Augmentation
- Correction of deformity
- Bone lengthening
- Non-union
- Osteotomy
- Joint Revision
- Spinal Fusion



The image shows possible applications of the device. It is surgeon's responsibility to evaluate the use of the most suitable configuration and size.

CORE PRODUCT CLAIMS

▪ Bio-compatible

The chemical composition perfectly traces the mineral composition of natural bone.

▪ Bio-resorbable

Bioresorption occurs in kinetic compliance with the bone remodeling.

▪ Osteo-conductive

The scaffold's hierarchically organized porosity assures perfect osteo-conduction and vessel penetration.

▪ Osteo-inductive

The GB scaffold demonstrated osteo-inductivity in vivo.

▪ Biomimetic and mechano-transductive

The scaffold's hierarchical structure and nano-macro scale are driving cells to remodel mature and healthy bone.

▪ Biomechanically performing

The biomechanical performance is similar to the damage tolerant behavior of natural bone, enabling screw fixation and drilling, & cutting in situ.

Clinical Evidence

Exceptional clinical metrics and REAL-WORLD data



>700 patients treated successfully.

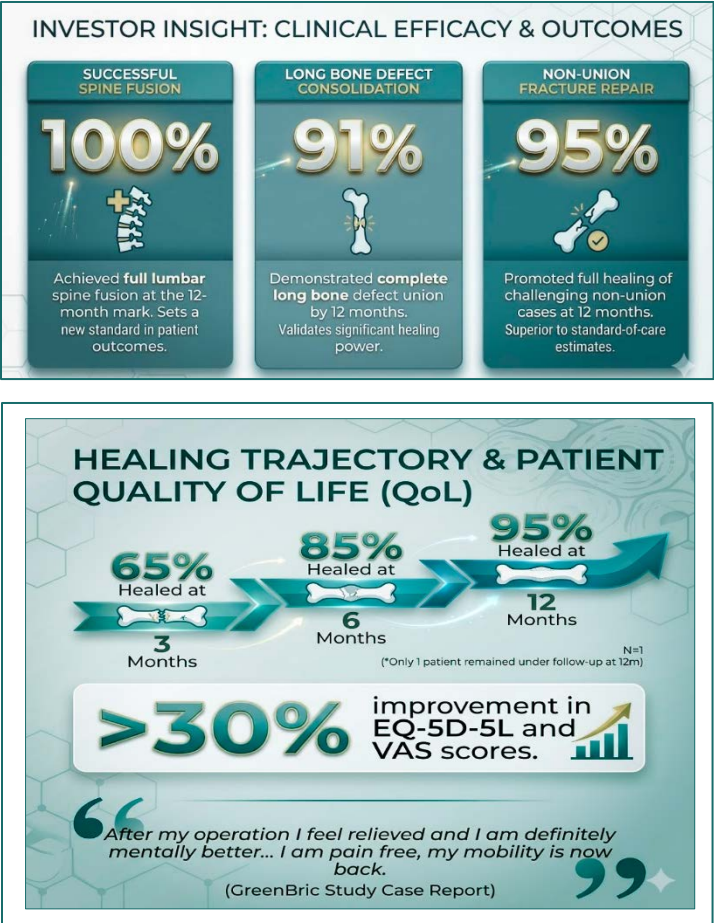


Zero device-related SAEs.



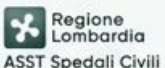
Exceptional healing metrics (100% spine fusion, 95% non-union healing).

Strong metrics in CLINICAL studies...



... in Leading Centers across Europe





Robust Intellectual Property with Freedom To Operate



Legal Shield

Global Coverage: EU, USA and Canada, Japan, Australia, Singapore, Korea, Brazil, Malaysia, China, Philippines, Israel, New Zealand, India

3 active patents **1** ongoing & **3** Global Trademarks

Freedom to Operate (FTO) assessment concluded that GreenBone's patents do not infringe on third-party IP.

Patents are filed globally and have expiration dates ranging from 2031 to 2039

GreenBone® — **b.bone™**

Ready To Scale-Up

De-risked Regulatory pathway



The Foundation

b.Bone is a regulatory-mature asset ready for commercial scaling.
MDR 2017/745 certified from 2024 for the EXTREMITIES-LONG BONE, PELVIS,
supported by a mature QMS compliant to **ISO 13485**



Geographic Acceleration (2026)

Structured MDR certification streamlines extra-EU approvals
reducing review times in countries recognizing EU standards



Indication for use Expansion (Q3-2026)

Expansion into spine represents a move into a high-volume, high-value segment



U.S. Market Entry

FDA Approval pathway both for Extremities and Spine in progress



FDA 510(k) Pre-Submission
COMPLETED. Formal
feedback received



510(K) Submission (Q4-2027)
The pre-sub clarified key
requirements, reducing final
submission uncertainty



510(K) Approval (Q1-2028)

De-risked manufacturing state-of-the-art facility



Highly scalable
MDR & FDA Compliant
No certification and
CAPEX bottlenecks

4,000 sqm
Total Operational
footprinting

150 sqm
Certified Clean
Room Space

**Acquired by a major
Medtech player**

Team – Management, Clinical & Scientific Advisors



Saverio Gellini
CEO

35 yrs global turnaround /
scale-up



Vanessa Bonomi
RA

15 yrs medical device
regulatory



Paolo Sala
CFO

Sr Finance roles, Med
Tech



Susanna Salvagno
Clinical Affairs

30 yrs orthopedic clinical
science



Andrea Cha
COO & Head of Sales Key
Account

22 yrs Med Tech industry.

Scientific Advisor



Anna Tampieri, PhD
(Faenza, IT)

- GreenBone technology inventor
- 30 years experience in Bioceramics and Bio-hybrid Composites.

Clinical Advisors



Prof. Peter Giannoudis
(Leeds, UK)



Prof. Volker Alt
(Regensburg, DE)



Prof. Giovanni Barbanti Brodano
(Bologna, IT)



Prof. Jörg Franke,
(Magdeburg, DE)

Team – Board Of Directors



**Saverio
Gellini**
CEO & DIRECTOR

Accomplished Director and Senior Executive, with 35+ year of experience on company leading and turnarounds



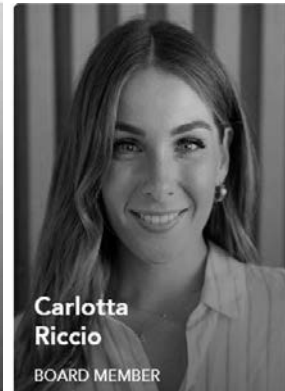
**Francesca
Natali**
CHAIRMAN & DIRECTOR

Managing Director of Meta Ventures, long experience at EU institutional level, deep knowledge in finance



**Anna
Tampieri**
BOARD MEMBER

Serial Inventor, accomplished director and research leader in biomaterials and regenerative medicine



**Carlotta
Riccio**
BOARD MEMBER

Strategic investment professional and corporate advisor with deep experience in VC's and portfolio management

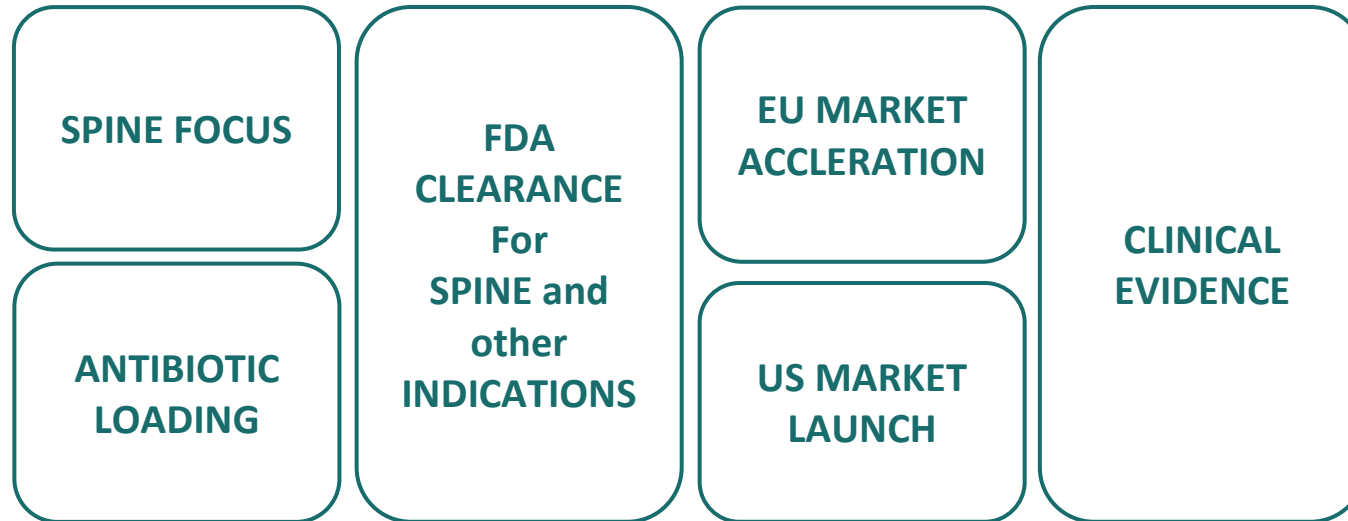


**Ennio
Tasciotti**
BOARD MEMBER

Renowned scientist and innovation leader in nanomedicine and regenerative therapies. Full Professor at San Raffaele University

Intelligence Analysis

Drivers for Value Creation



Tier 1 / 2 Strategic Worldwide Players



On Your Marks: the journey to 2030

Funding needs 20 M€ + NON-dilutive financing – **up to 3,8M€** for (Antibiotic, Anti-bacteria, Anti-cancer delivery)



Commercial

EU & ROW
acceleration



Commercial

US market
launch



Clinical

Data
expansion



FDA

510(k)
Clearance



Pipeline

Spine
Antibiotic
Putty



Accelerator's
Segments

Dental
&
Maxillo
market entry



Disruptive
Innovation

Anti-bacteria
Anticancer-
delivery
Osteoporosis

Greenbone in 2030



Commercial

Leveraging firmly established international market channels with **robust, recurrent revenue** streams.



Product Certification

Acquired regulatory approvals across leading healthcare systems:

FDA

MDR

Brazil

Canada



Clinical Evidence

Fully supported by a comprehensive, global repository of peer-reviewed clinical and scientific data.



R&D Pipeline

Active developmental stages advancing core therapeutic programs:

Spinal Line

Putty

Antibiotic loading



Accelerator's Segments

Immediate commercial scaling initiatives targeting high-yield surgical disciplines:

Dental

Maxillo facial



Disruptive Innovation

Next-generation therapeutics defining the future of targeted biosciences:

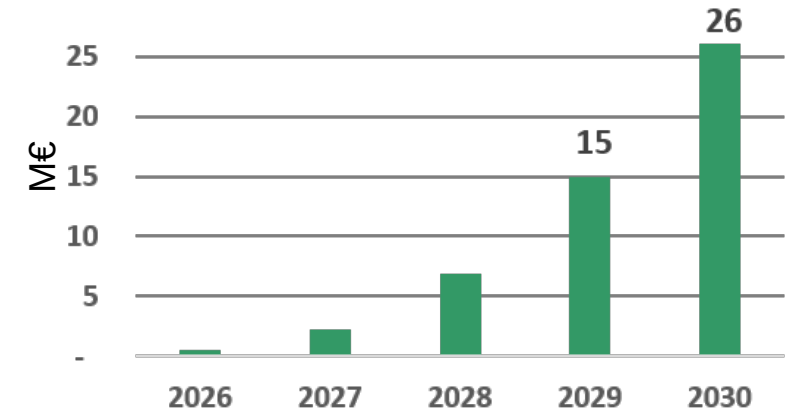
Osteoporosis

Anti-bacterial

Drug Delivery (Cancer)



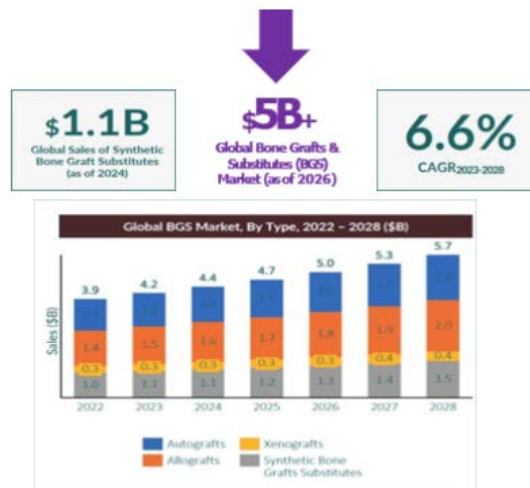
Projected Revenues



Total Addressable market

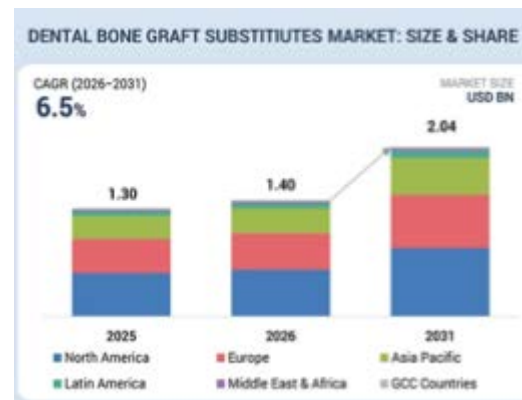
\$ 5,0 B

CORE: Extremities, Pelvis & Spine



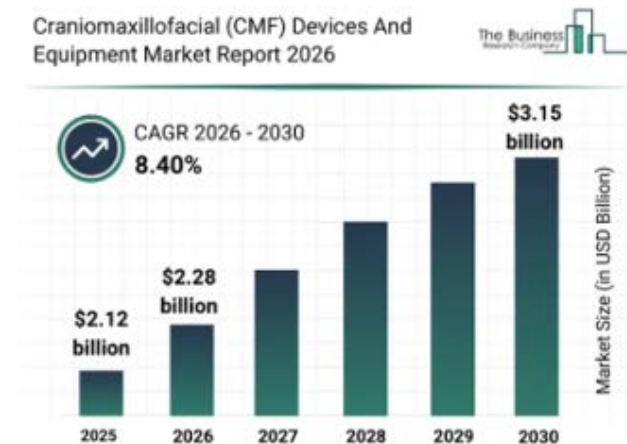
\$2,0 B

ACCELERATOR: Dental



\$ 0,5 B

ACCELERATOR: Maxillo/Facial



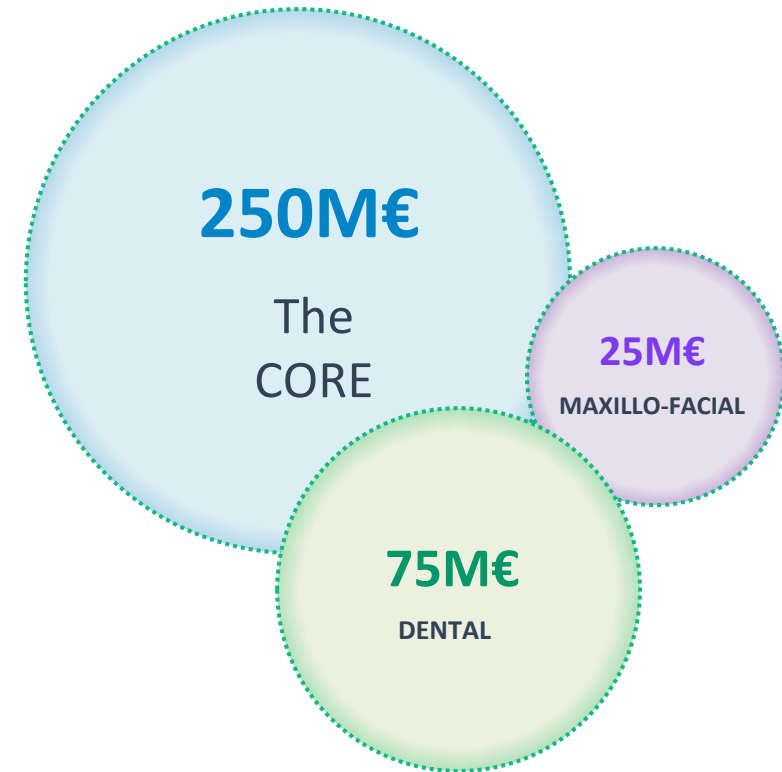
TAM (Core + Accelerators) → \$ 7,5B - Get to 5% of TAM leads to \$ 375 M in sales

Technological platform for 10yr Value Creation by Tier 1/2 WW Strategic Player

350M€

Greenbone offers a **solid operational positioning** across specialized markets.

The **Core Business** serves as an established foundation, while **Dental** and **Maxillofacial** capture highly profitable clinical niches.



Disruptive Value Creation by Tier 1/2 WW Strategic Player

>€500M

Disruptive Innovation



Antibacterial Properties: It prevents the formation of bacterial biofilms without systemic toxicity. This will drastically reduce surgical failures and the multi-billion-dollar costs associated with reoperations due to infection.

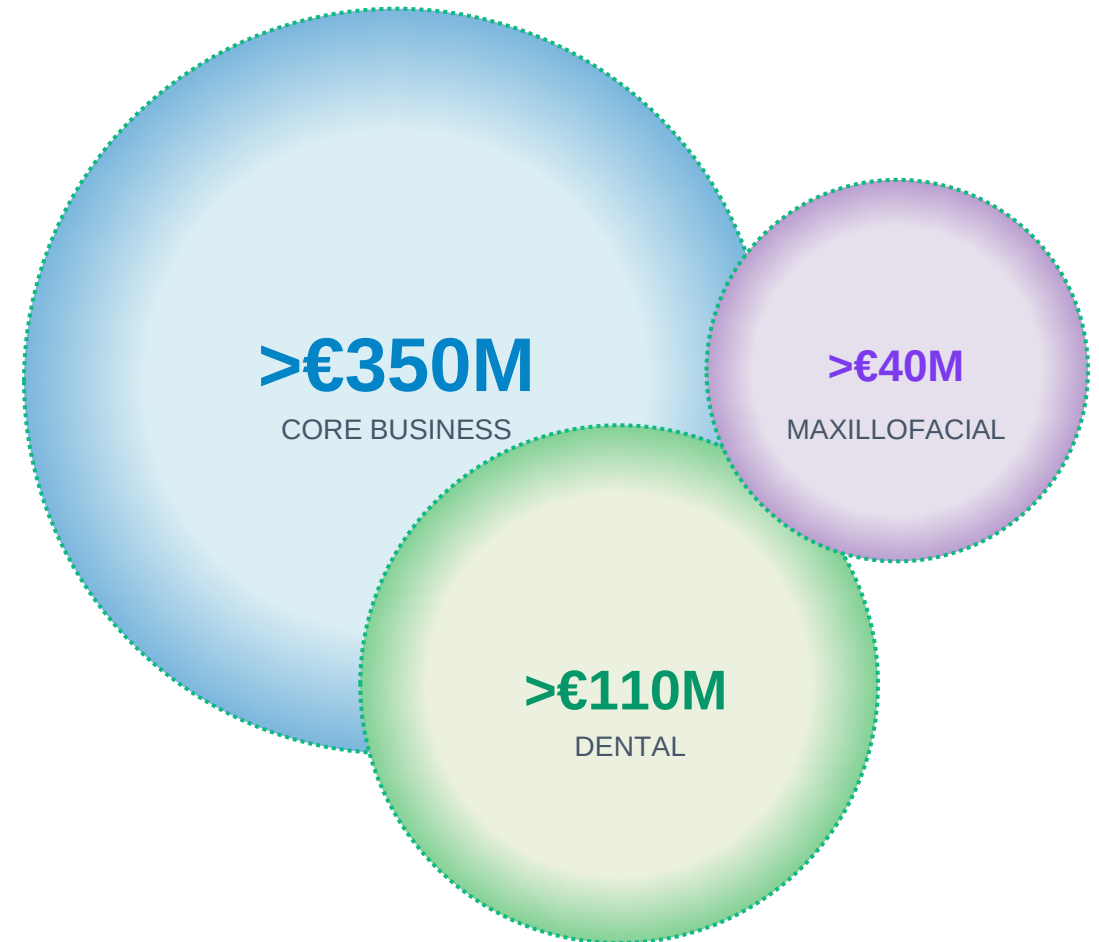


Drug Delivery Carrier: It enables targeted, personalized local oncological therapy, minimizing systemic side effects and positioning GreenBone at the intersection of orthopedics and oncology.



Osteoporotic Applications: It opens the door to a vast and rapidly growing market (driven by an aging population), transforming the product from a simple "fracture filler" into a genuine active regenerative therapy.

The Scientific Accelerator acts as an overriding catalyst
boosting the value across the entire portfolio.



■ List of Publications

1. Conza G, et al. Plant-derived bone substitute presents effective osteointegration in several clinical settings: a pilot study from a single center. *Bioengineering*. 2025;12(8):861. doi:10.3390/bioengineering12080861.
2. Giannoudis PV, et al. Safety and performance of a novel synthetic biomimetic scaffold for iliac crest defect reconstruction during surgical treatment of pelvic girdle pain: a first-in-human trial. *British Medical Bulletin*. 2025;153:1-10.
3. Pitsilos C, et al. Distal femoral bone defect treatment using an engineered hydroxyapatite cylinder scaffold made from rattan wood. *BMJ Case Reports*. 2025;18:e264131. doi:10.1136/bcr-2024-264131.
4. Cavuoto R, et al. Phase-field modelling of failure in ceramics with multiscale porosity. *Materials C Design*. 2024;238:112708. doi:10.1016/j.matdes.2024.112708.
5. Salamanna F, et al. Preliminary osteogenic and antibacterial investigations of wood-derived antibiotic-loaded bone substitute for the treatment of infected bone defects. *Frontiers in Bioengineering and Biotechnology*. 2024;12:1412584. doi:10.3389/fbioe.2024.1412584.
6. Alt V, et al. Bone defect filling with a novel rattan-wood based not-sintered hydroxyapatite and beta-tricalcium phosphate material (b.Bone™) after tricortical bone graft harvesting: a consecutive clinical case series of 9 patients. *Trauma Case Reports*. 2023;44:100805.
7. Tosounidis TH, et al. The use of a new grafting material (b.Bone™) for the management of severely depressed tibial plateau fractures: preliminary report of three cases. *Trauma Case Reports*. 2023;47:100893.
8. Mofori ND, et al. Ectopic bone formation causing chronic pubis symphysis pain: successful management with resection and pubic fusion. *BMJ Case Reports*. 2022;15(3):e248350.
9. Pupilli F, et al. Design strategies and biomimetic approaches for calcium phosphate scaffolds in bone tissue regeneration. *Biomimetics*. 2022;7(3):112. doi:10.3390/biomimetics7030112.
10. Kon E, et al. Bone regeneration in load-bearing segmental defects, guided by biomorphic, hierarchically structured apatitic scaffold. *Frontiers in Bioengineering and Biotechnology*. 2021;9:734486.
11. Panseri S, et al. Bone-like ceramic scaffolds designed with bioinspired porosity induce a different stem cell response. *Journal of Materials Science: Materials in Medicine*. 2021;32(1):3.
12. Ruffini A, et al. Nature-inspired unconventional approaches to develop 3D bioceramic scaffolds with enhanced regenerative ability. *Biomedicines*. 2021;9(8):916.
13. Sprio S, et al. Biomimetic transformations: a leap forward in getting nanostructured 3-D bioceramics. *Frontiers in Chemistry*. 2021;9:728907.
14. Tavoni M, et al. Bioactive calcium phosphate-based composites for bone regeneration. *Journal of Composites Science*. 2021;5(9):227.
15. Iaquina MR, et al. In vitro osteoinductivity assay of hydroxylapatite scaffolds, obtained with biomimetic transformation processes, assessed using human adipose stem cell cultures. *International Journal of Molecular Sciences*. 2021;22:7092. doi:10.3390/ijms22137092.
16. Bigoni D, et al. Ceramics with the signature of wood: a mechanical insight. *Materials Today Bio*. 2019;5:100032.
17. Sprio S, et al. Hierarchical porosity inherited by natural sources affects the mechanical and biological behaviour of bone scaffolds. *Journal of the European Ceramic Society*. 2019;40:1717-1727. doi:10.1016/j.jeurceramsoc.2019.11.015.
18. Tampieri A, et al. Heterogeneous chemistry in the 3-D state: an original approach to generate bioactive, mechanically-competent bone scaffold. *Biomaterials Science*. 2019;7:307. doi:10.1039/c8bm01145a.
19. Minardi S, et al. Evaluation of the osteoinductive potential of a bio-inspired scaffold mimicking the osteogenic niche for bone augmentation. *Biomaterials*. 2015;62:128-137.
20. Ruffini A, et al. Study of the hydrothermal transformation of wood-derived calcium carbonate into 3D hierarchically organized hydroxyapatite. *Chemical Engineering Journal*. 2012;217:150-158.
21. Sprio S, et al. Biomimesis and biomimetic transformations: new concepts applied to bone regeneration. *Journal of Biotechnology*. 2011;156(4):347-355. doi:10.1016/j.jbiotec.2011.07.034.
22. Tampieri A, et al. From wood to bone: multi-step process to convert wood hierarchical structures into biomimetic hydroxyapatite scaffolds for bone tissue engineering. *Journal of Materials Chemistry*. 2009;19:4973-4980.

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