Vivorté®

Performance Biologics

Corporate Overview

CORPORATE SUMMARY

- High-performance biomaterials for orthopedic surgery
- Commercial, growth-stage company
- FDA-cleared product portfolio; three distinct platforms
  - Trabexus® – moldable, curable, inductive bone matrix†
  - Fortera® – self-setting, injectable bone matrix
  - Regento™ – bone void filler
- Diverse clinical uptake; no device-related adverse events
- FDA & ISO 13485 registered manufacturing facility
- Attractive near-term opportunities for portfolio expansion

† Allograft component demonstrated osteoinductivity in athymic mouse model submitted for 510(k). Refer to 510(k) summary K143547. Data on file at Vivorté, Inc.

U.S. ORTHOPEDIC BIOMATERIALS MARKET

- Implantable materials used to "fill holes" in skeleton as the result of trauma, surgery or disease
- Implants intended to stimulate or enhance the body's reparative response
- >$1.7B market segment, growing 5% annually
- Multiple product strategies:
  - Synthetic/ceramics (resorbable calcium-based materials)
  - Therapeutic protein growth factors (BMP, PDGF)
  - Demineralized bone (cadaveric source)
  - Viable cell products ("stem cell" products)
- Vivorté specializes in the development resorbable, calcium-based biomaterials

THE VIVORTE DIFFERENCE

- R&D and engineering focus on biomaterials
- Commercial focus on biomaterials
- Commitment to supporting rigorous scientific justification
- Focus on surgeon education
- Products with differentiated clinical performance characteristics

VIVORTE PRODUCT PORTFOLIO

	Trabexus	Fortera	Regento
Description	Moldable, osteoinductive biocement†	Injectable, osteoconductive biocement	Particulate graft
Composition	Calcium phosphate with partially demineralized allograft	Calcium phosphate	ß-tricalcium phosphate
Positioning	"All-in-one" graft: strength, bioactivity, resorbable	High strength material; minimally invasive application	Bone void filler

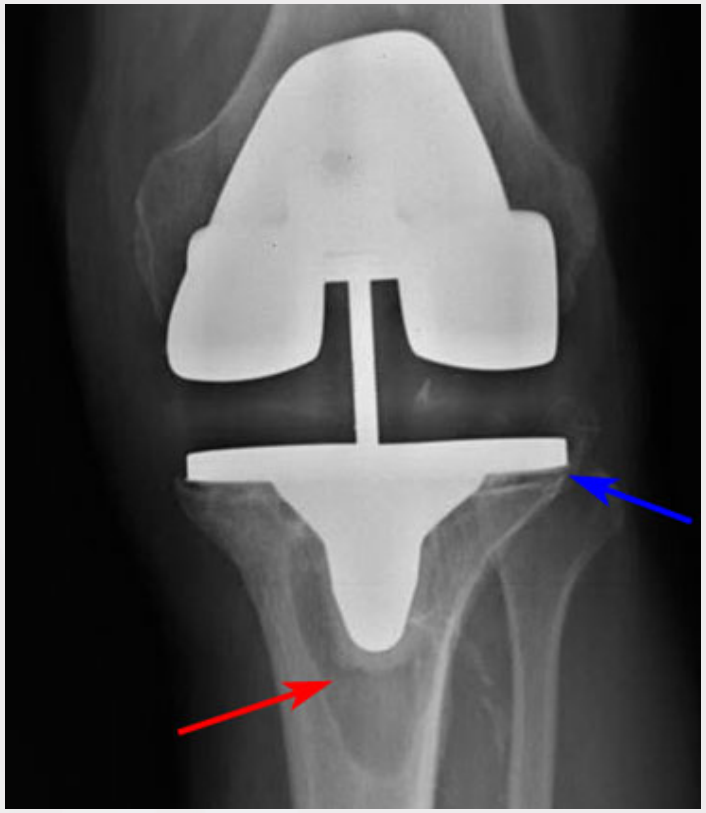
Three distinct product lines to address unique clinical applications

† Allograft component demonstrated osteoinductivity in athymic mouse model submitted for 510(k). Refer to 510(k) summary K143547. Data on file at Vivorté, Inc.

PRODUCT APPLICATIONS

Proximal Tibia Fracture

Calcaneus Fracture

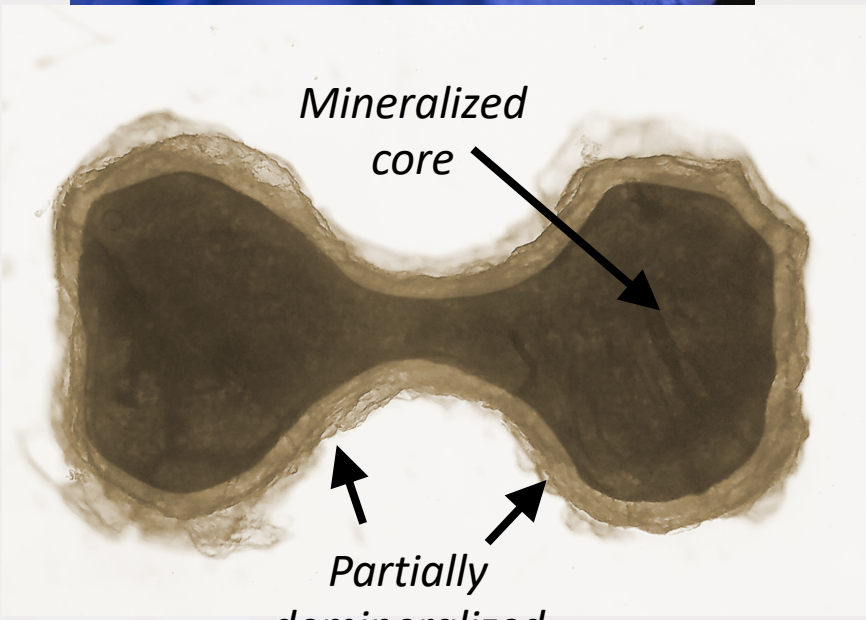


Total Joint Revision

Vivorté products have been used in multiple clinical indications: Fracture repair, fusions, reconstructive procedures, joint revisions, backfill procedures and orthopedic oncology

TRABEXUS OSTEOINDUCTIVE BIOCEMENT

- Material
  - Calcium phosphate cement
  - Partially demineralized bone – "TRABS®"
- Design Rationale
  - Resorbable, osteoconductive matrix
  - Partially demineralized bone provides osteoinductivity
  - "Hourglass" shape optimizes interconnectivity and strength
  - TRABS provide resorption channels, accelerate remodeling
  - Faster resorption/remodeling relative to standard cement
- Differentiating Aspects
  - Proprietary design
  - Moldable, settable, highly-resorbable
  - Optimal ratio of compressive strength and remodeling



TRABEXUS COMPARISON

	Trabexus® (Vivorté)	EquivaBone® (ZimmerBiomet)
Calcium Phosphate	**82%**	47.5%
Allograft	**18%**	50%
Compressive Strength	**25 MPa**	1-2 MPa
Maintains volume and does not expand following implantation	**YES**	NO
Resorption Profile	**Faster**	Slower

Source: Data on file at Vivorté

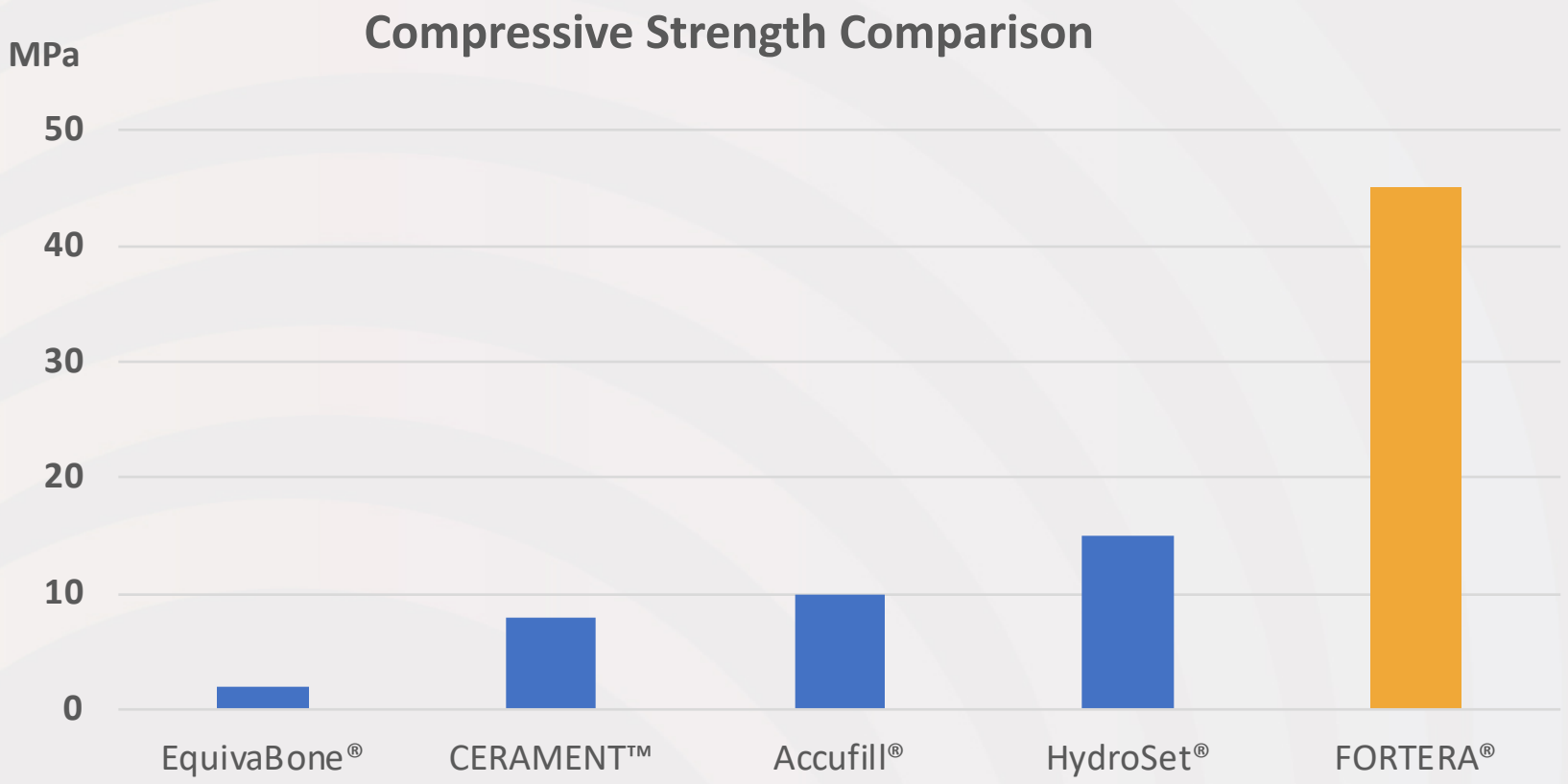
FORTERA OSTEOCONDUCTIVE BIOCEMENT

- Fully synthetic composition, solidifies into hydroxyapatite
- Industry leading compressive strength
- Injectable up to 16 gauge; compatible with minimally invasive and controlled delivery†
- Isothermic setting
- Does not require refrigeration or special handling prior to use

Fortera extruded through a 16G needle

† 3.5mm OD x 150mm length cannula is provided in each kit. Refer to package insert for additional product and safety information. Data on file at Vivorté, Inc.

FORTERA OSTEOCONDUCTIVE BIOCEMENT

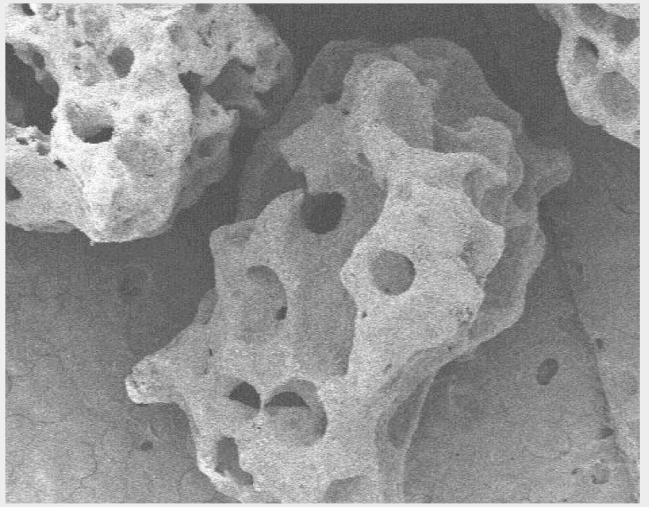


Fortera has superior compressive strength in comparison to a number of competitive alternatives

Source: Data on file at Vivorté

REGENTO REGENERATIVE SCAFFOLD

- β-TCP (tri-calcium phosphate granules)
- Micro-porosity (300 micron) to promote protein deposition; cell attachment
- Osteoconductive scaffold, bone graft extender
- Can be combined with bone marrow aspirate or blood or saline
- Available in two particle size ranges:
  - 1,000-2,000mm (regular)
  - 2,000-3,250mm (large format)



Regento particles at high magnification (top) and ready for clinical use (bottom)

MANUFACTURING/SUPPLY CHAIN

- Vivorté maintains a FDA registered and ISO 13485 compliant manufacturing facility
- Packaging, labeling, distribution, storage managed in-house
- Current capacity: >50,000 kits/year
- Vivorté has proprietary "TRAB" fabrication process know-how
- Vivorté maintains long-term supply agreements for key components of the proprietary calcium phosphate cement formulation

CORPORATE DETAILS

- Background
  - Founded 2011, based in Louisville, Kentucky
  - Exclusive license to intellectual property developed at the University of Louisville (U of L)
- Financial
  - Company primarily financed through angel investment, friends/family
  - Capital efficient, limited ownership dilution
- Intellectual Property
  - U.S. and worldwide patents under license from U of L
  - Process know-how and trade secrets

RECENT DEAL COMPARABLES

Company	Technology	Deal Size	Round	Date
BoneSupport	Hydroxyapatite/calcium sulfate injectable cements	$60M ($170M valuation)	IPO	Jun 2017
Xpand Biotechnology	Calcium phosphate biomaterials	$40M	Acquisition	Dec 2016
BioStructures	Synthetic and allograft products	$81M	Acquisition	Oct 2015
Biom'Up	Surgical hemostats, bone void fillers	$35M	Series C	Sep 2015
Advanced Biologics	Enhanced demineralized bone matrix	$38.5M	Acquisition	Oct 2014
ETEX	Calcium phosphate biomaterials	$50M	Acquisition	Oct 2014

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