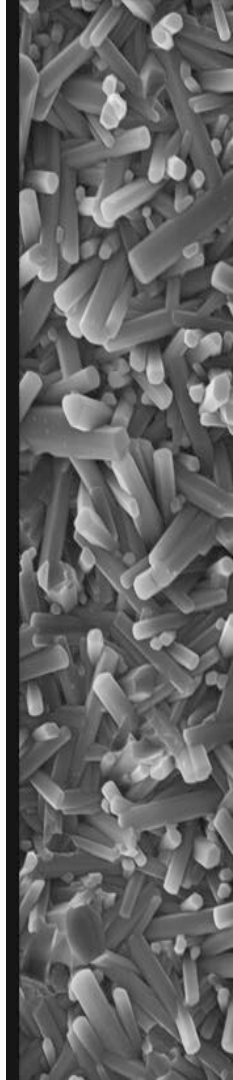
SINTX Technologies

Corporate Overview

June 2019

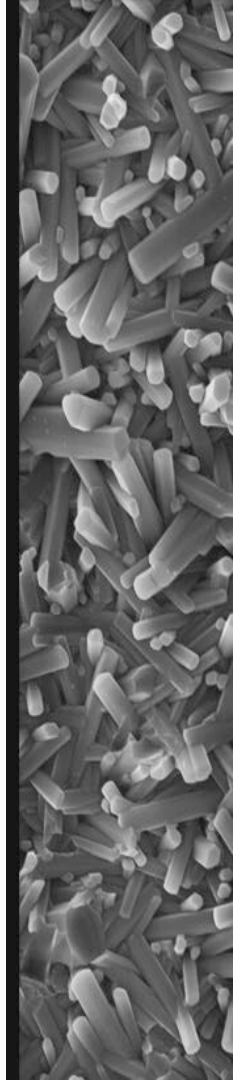


Our Vision

Leverage our expertise and knowledge in advanced ceramics towards customer-focused solutions.

Our Products

In 2008, the FDA cleared implantation of our spine fusion implants made of silicon nitride ceramic.



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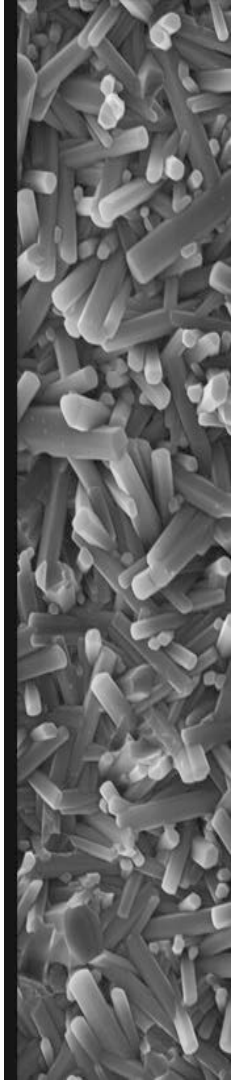
SINTX Technologies Milestones

- 1996 – “Amedica Corporation” founded by MD-PhD team in Salt Lake City
- 2008 – FDA 510(k) clearance for a spine fusion implant
- 2008 – First silicon nitride interbody spacer implanted; >35,000 since
- 2009 – Company moved into current facility
- 2010 - Acquired US Spine to gain product breadth
- 2010 – Silicon nitride implants cleared in Europe
- 2013 – 2nd generation silicon nitride spinal implant design
- 2014 – Amedica went public; Nasdaq- AMDA (currently SINT)
- 2015 – Silicon nitride spine implants cleared in Brazil
- 2017 – Silicon nitride spinal implants cleared in Australia
- 2018 – FDA clears porous silicon nitride spinal implant
- 2018 – Divested retail spine to CTL-Medical; we are now SINTX Technologies
  - SINTX has a 10 year exclusive manufacturing role for silicon nitride spine products
  - CTL has a 10 year exclusive sales agreement for all silicon nitride spine products



SINTX Technologies

Experienced Management Team

B. Sonny Bal, MD, JD, MBA, Ph.D
Chairman of the Board
Chief Executive Officer
President
Principal Financial Officer

- Orthopedic Surgeon, Attorney
- Ceramic Scientist and Investigator
- CEO since 2014, Board since 2012

Bryan J. McEntire, MBA, Ph.D
Chief Scientific Officer

- 35 years research in advanced ceramics
- Senior roles in ceramics and materials companies

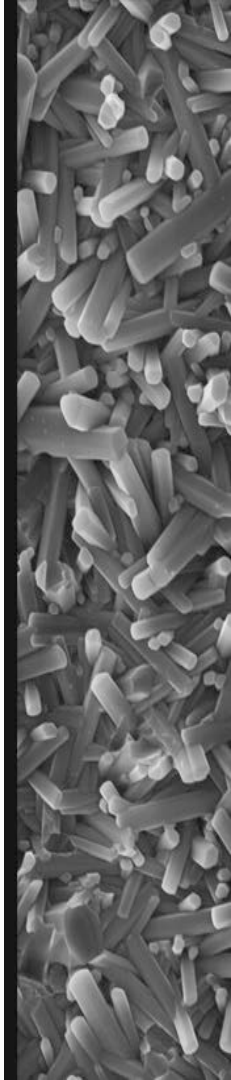
David O'Brien
Vice President / General Manager

- 30 years of operations, manufacturing, and engineering experience with medical devices and ceramics

Donald Bray
Vice President Business Development

- Extensive background and experience in technical ceramics and business development
- Proven track record of securing federal, state, and local funds in support of technology development

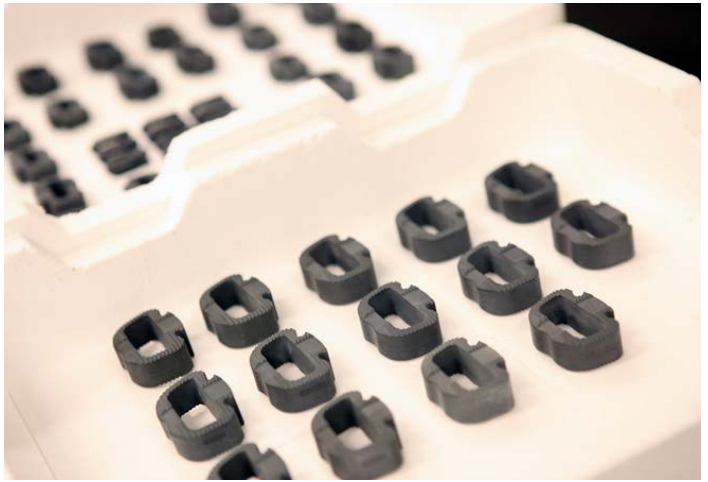
SINTX Technologies

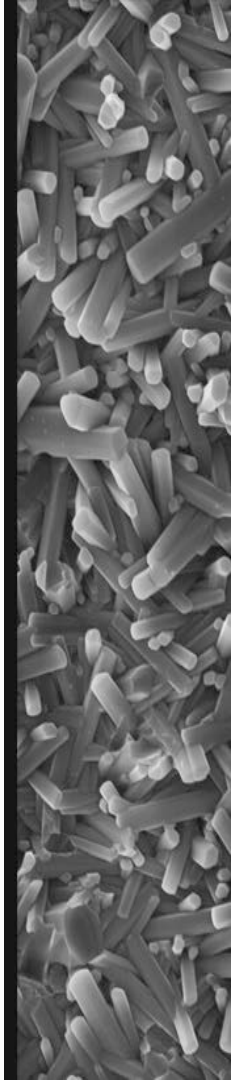


Properties of Silicon Nitride

Advanced ceramic with clinical advantages:

- Faster Bone Fusion
  - Favorable surface topography and chemistry
  - Enhances cell response for faster bone fusion
- Antibacterial Properties
  - Innate surface chemistry
  - A multi-factorial etiology
  - Replicated in multiple studies
- Superior Imaging
  - Easy to see on x-ray, CT, and MRI
  - No image distortion





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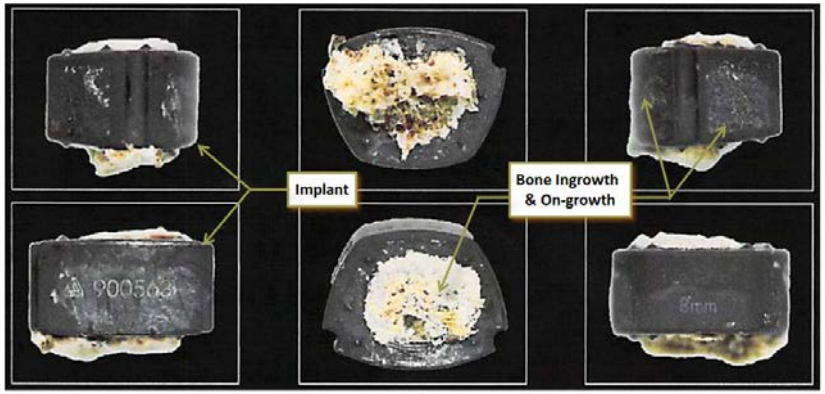
Proof of Technology in 80+ peer-reviewed papers and presentations in the last 4 years



www.nature.com/scientificreports

SCIENTIFIC REPORTS

OPEN

Silicon Nitride: A Synthetic Mineral for Vertebrate Biology

Giuseppe Pezzotti[1], Bryan J. McEntire[2], Ryan Bock[2], Marco Boffelli[1], Wenliang Zhu[3], Eleonora Vitale[1], Leonardo Puppulin[4], Tetsuya Adachi[3], Toshiro Yamamoto[5], Narisato Kanamura[5] & B. Sonny Bal[2,6]

Received: 02 November 2015
Accepted: 26 July 2016
Published: 19 August 2016

The remarkable stoichiometric flexibility of hydroxyapatite (HAp) enables the formation of a variety of charged structural sites at the material's surface which facilitates bone remodeling due to binding of biomolecule moieties in zwitterionic fashion. In this paper, we report for the first time that an optimized biomedical grade silicon nitride (Si_3N_4) demonstrated cell adhesion and improved osteoconductivity comparable to highly defective, non-stoichiometric natural hydroxyapatite. Si_3N_4's zwitterionic-like behavior is a function of the dualism between positive and negative charged off-stoichiometric sites

SINTX Technologies

Strong, active IP portfolio

13 patents issued

- 13 U.S

6 patent applications

- 5 U.S.
- 1 International

Note – SINTX sold 45 spine device-specific patents to CTL in 2018

SINTX Technologies

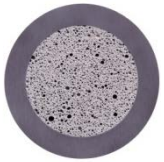
Versatility: Shapes and Compositions

Solid: As-Fired and Polished

As-fired promotes bone growth
Polished used for articulating applications

Porous: Cancellous (*CsC*)

Biologic substitute for bone in-growth



Composite: Cortico-Cancellous

Synthetic bone for a variety of medical applications

Composite: Articular-Bone Ingrowth

Joint arthroplasty/resurfacing applications

Technologies Under Development

- **Coatings**
- **Composite PEEK / Silicon Nitride**
- **Brazed devices**
- **Modified Silicon Nitride compositions with improved bioactivity**

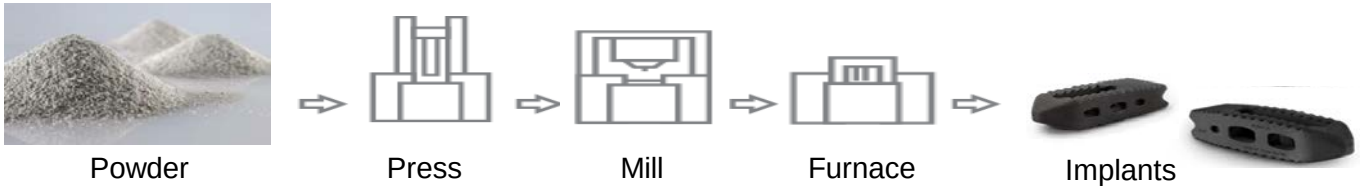
SINTX Technologies

Cost Efficient Manufacturing

- 30,000 sq. ft. manufacturing and distribution facility in Salt Lake City, UT
  - We believe we are the only FDA & CE cleared Si_3N_4 medical device manufacturing facility
  - Vertically integrated for rapid prototyping and development
  - Dedicated R&D and Product Development laboratories
- Production of powder and green compact preparation
- **Cost-competitive complex designs and shapes**
- Rigorous quality control process for each implant

Silicon Nitride

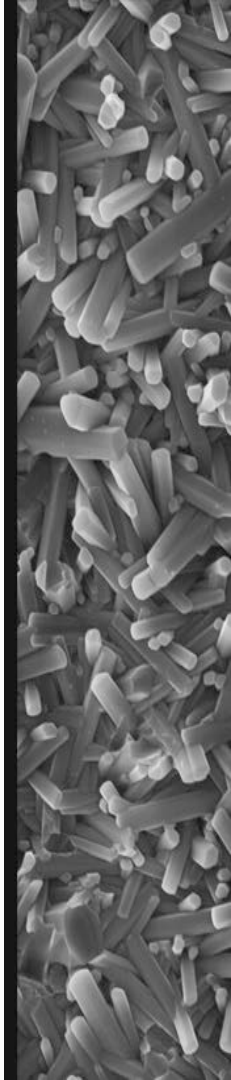
Manufacturing Process



SINTX Technologies

Rigorous Quality Systems

- Over 35,000 silicon nitride devices implanted since 2009
  - With < 200 FDA reportable incidents.
- SINTX's Quality Management System is certified by:
  - U.S. FDA
  - BSI (The British Standards Institution) – ISO 13485:2016
  - ANVISA (Brazilian regulatory body)



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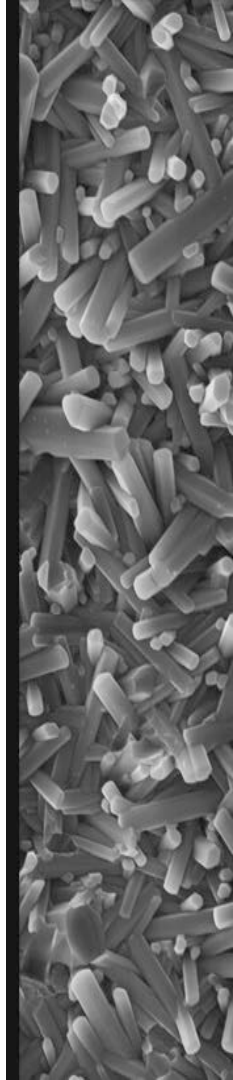
Silicon Nitride Product Pipeline

- Next-generation spinal implant – porous, textured, coated
- Dental implant and/or abutment
- Maxillofacial implant
- Coatings for spine, non-spine, and non-medical
- Polymer / Silicon Nitride composite devices
- Advanced metal-ceramic brazing technology
- Arthroplasty – hips and knees
- Anti-fungal applications in agriculture & consumer products
- Industrial and Defense applications



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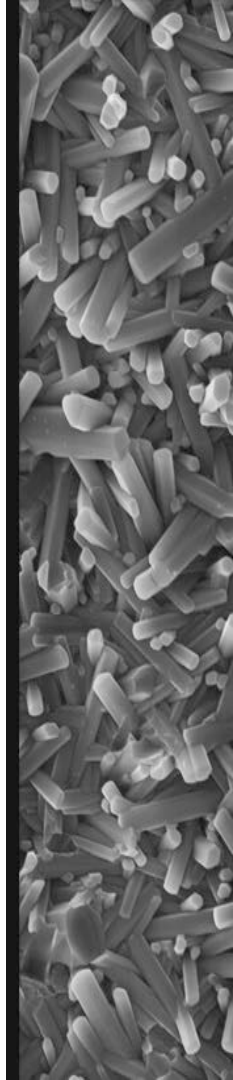
2019 Objectives

- Support CTL in transitioning and selling silicon nitride spine products
  - Regular orders from CTL for replenishments and additional banks
  - Multiple Product Development projects focused on new designs
- Publish SNAP prospective clinical trial, 4-Center clinical study, and others
- Manufacture and commercialize dental implants and abutments
  - Leverages skill and expertise in zirconia ceramics
- Develop new business in medical device and industrial applications
- Raise capital to fund SINTX through 2019-2020



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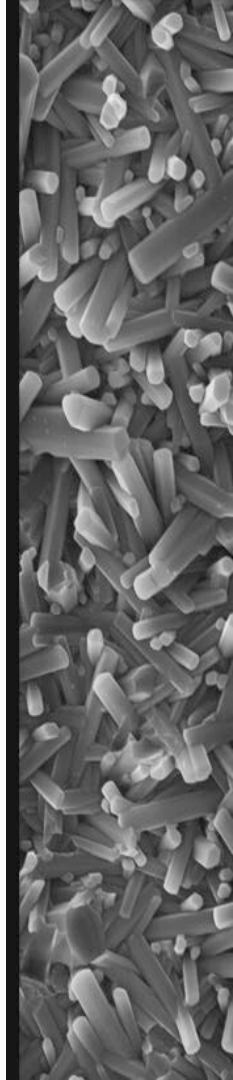
Cap Table -June 24, 2019

Warrants Outstanding	12,809,657
Options Outstanding (as of June 24, 2019)	11,290
Shares Available under 2017 Equity Incentive Plan	75,600
Total Potentially Dilutive Securities	12,896,547
Common Shares Outstanding (as of June 24, 2019)	44,970,153
Series B Outstanding (as converted)*	8,238,820
Total Shares & Potentially Dilutive Securities	66,105,520
Total Debt Outstanding	$ -

*737 Series B outstanding. Assuming conversion rate of 11,178.86:1



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SINTX At-A-Glance

Unique FDA registered and ISO 13485 certified silicon nitride medical device manufacturing plant

Leadership in knowledge of silicon nitride biomaterials

- **NU Spine**
- **30-year independent data**

Exclusive combination of scientific, technical, medical, and manufacturing expertise in silicon nitride

Keys- Bone healing, antimicrobial, and imaging-friendly behavior

SINTX Technologies