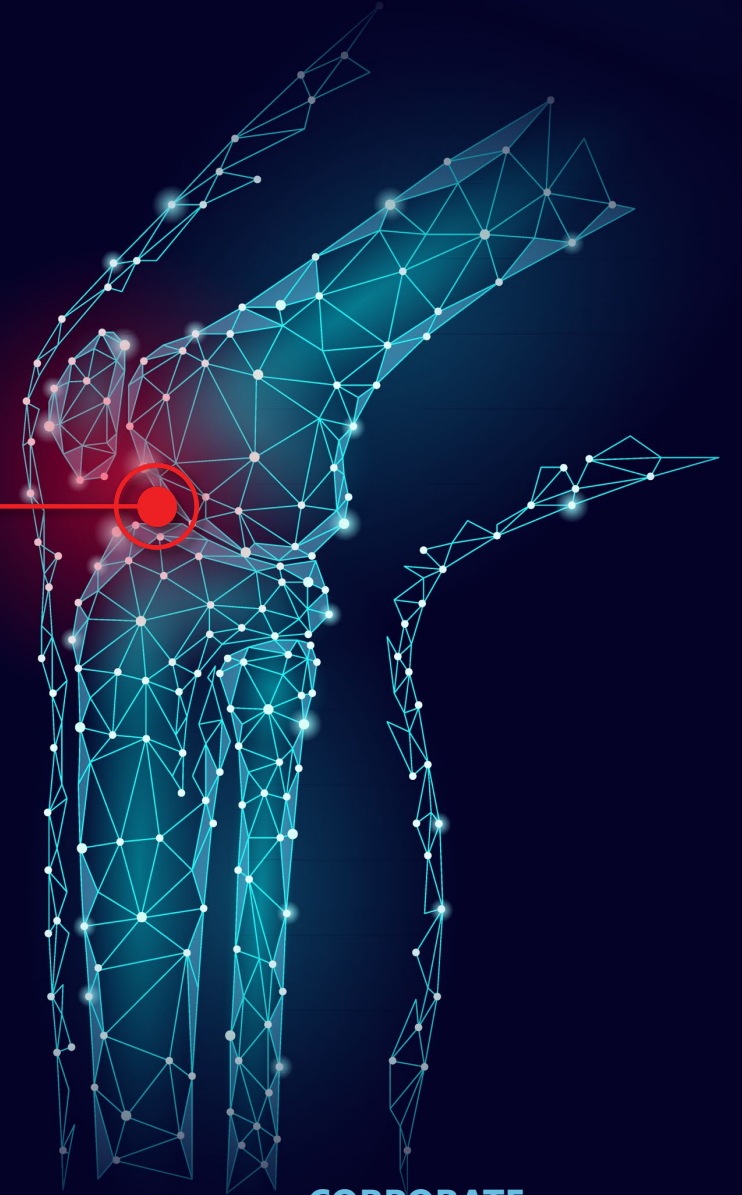
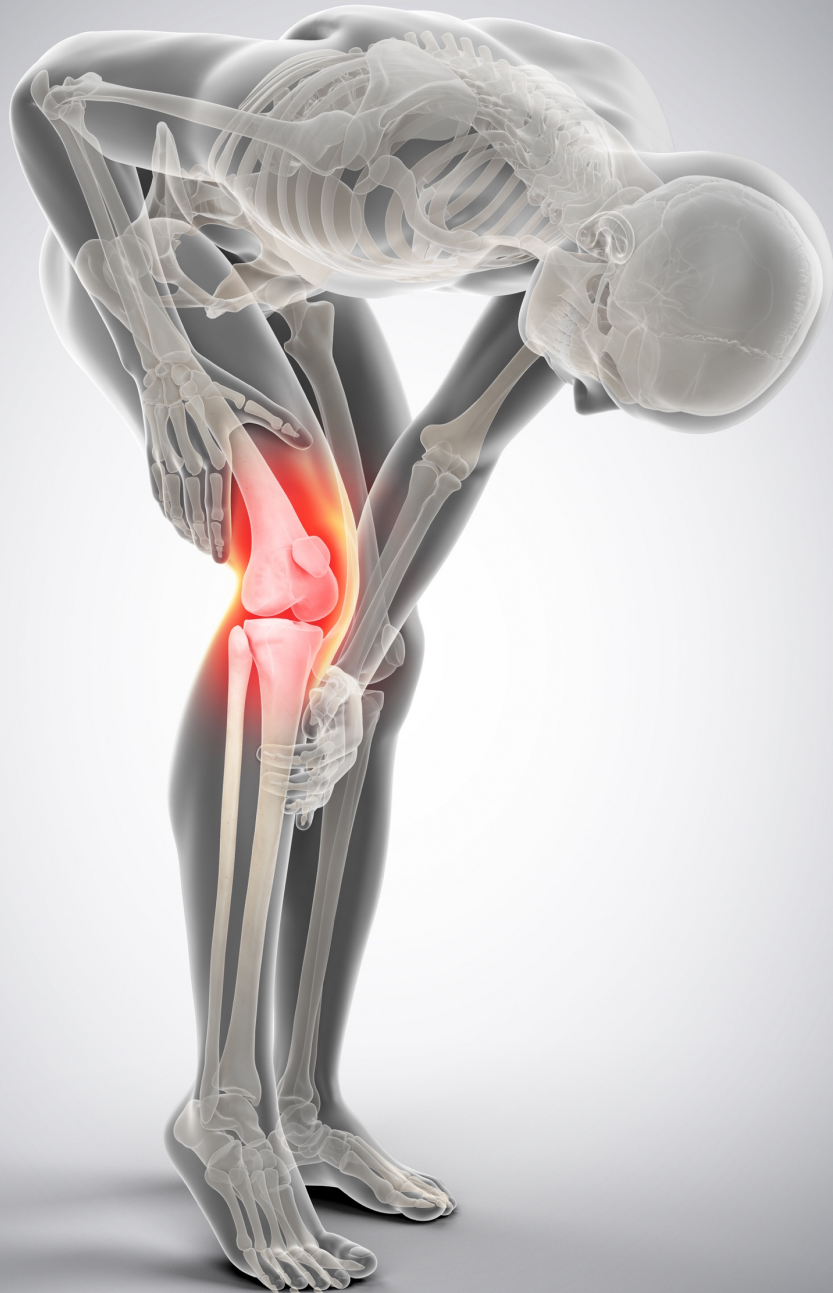




NANOCHON™
Repairing your active life



**CORPORATE
PRESENTATION
November 2020**



THE PROBLEM: JOINT DEFECTS

Total joint replacement solves joint defects, but the limited lifespan of common replacement joints limits their use to patients aged 55 or older.

This leaves patients between ages 18 and 55 suffering from cartilage damage, traumatic injury, or early stage cartilage loss with limited treatment options. Their joint defects will not heal on their own.

**Age 18-55:
Current treatment
options are costly,
invasive, & have limited
efficacy**

Only age 55 and
up are eligible
for
**JOINT
REPLACEMENT**

AGE

0

18

55



THE SOLUTION: NANOCHON™

- Replaces lost or damaged cartilage, encourages new tissue growth
- is 3-D printed, made of novel proprietary nano and micro material
- is an orthopedic load bearing implant as well a tissue growth scaffold
- has the potential to deliver faster and more successful recoveries for patients, while reducing costs to health providers, payers, and patients

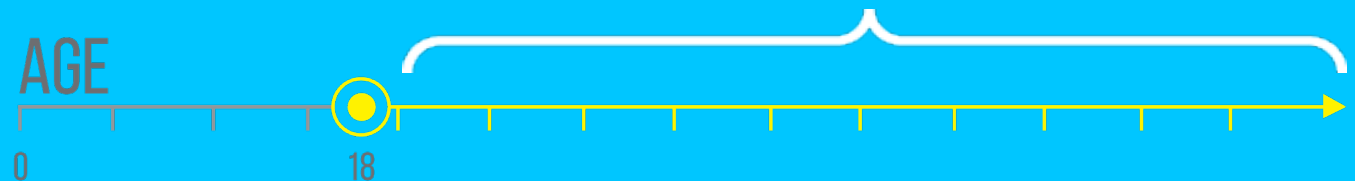
NANOCHON AIMS TO SET A NEW CLINICAL STANDARD FOR CARTILAGE RESTORATION.

Nanochon's implants are low cost, minimally invasive, efficacious, and available for ages 18+

AGE

0

18



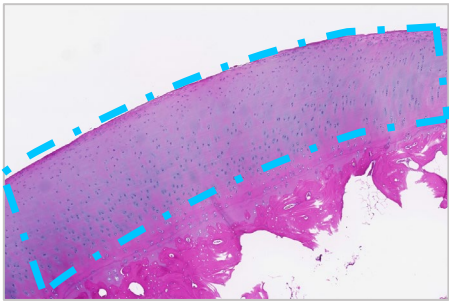


NANOCHON™ PROOF OF CONCEPT STUDY

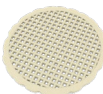


Goats were used in a large animal study that compared the recovery of damaged knees treated with Nanochon™ vs microfracture alone.

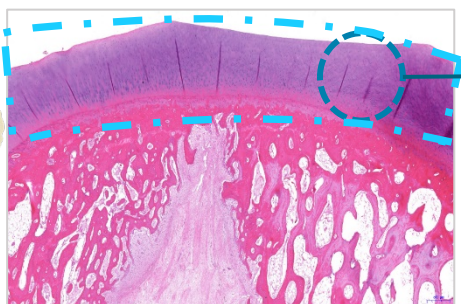
Defect site
1 cm defect
treated in
goat knees



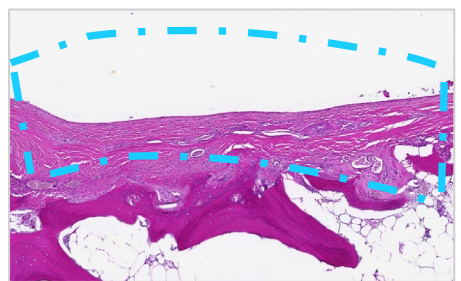
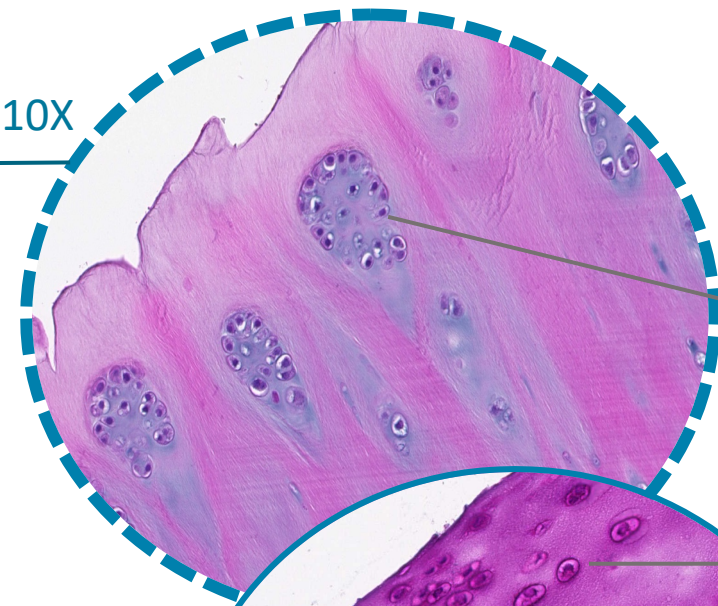
NORMAL CARTILAGE



NANOCHON™ IMPLANTED

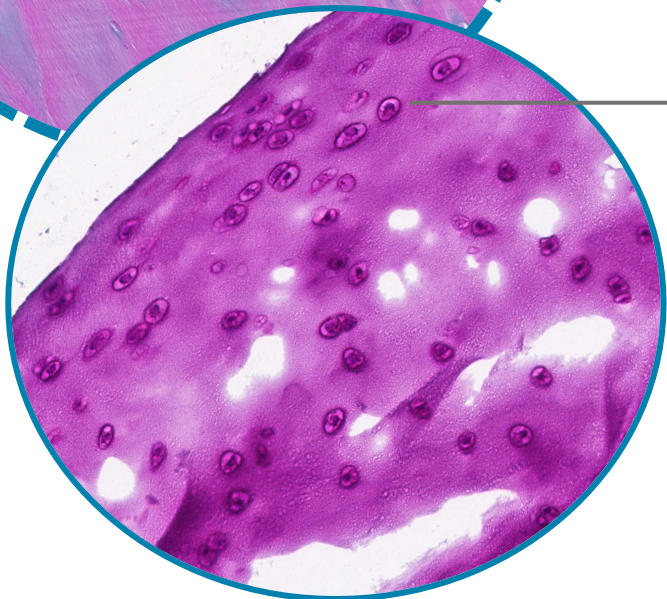


10X



MICROFRACTURE ALONE

Result: fibrous scar only



Results:
Immediate repair of damage occurs with Nanochon™.

CARTILAGE FORMATION is visible filling in the defect site.

CHONDROCYTES, which produce and maintain the cartilage matrix, are visible on the surface of the Nanochon™ implant.

ADDITIONAL DATA confirms quality and composition of tissue



INTERVIEW RESULTS AND KOL ENGAGEMENT



Over 250 customer discovery interviews: Surgeons are dissatisfied with current treatment options - notable KOLs.



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There is significant need for a lower cost, “manufactured” device to treat cartilage loss sooner.

We need a more robust, less invasive device to be on offer.

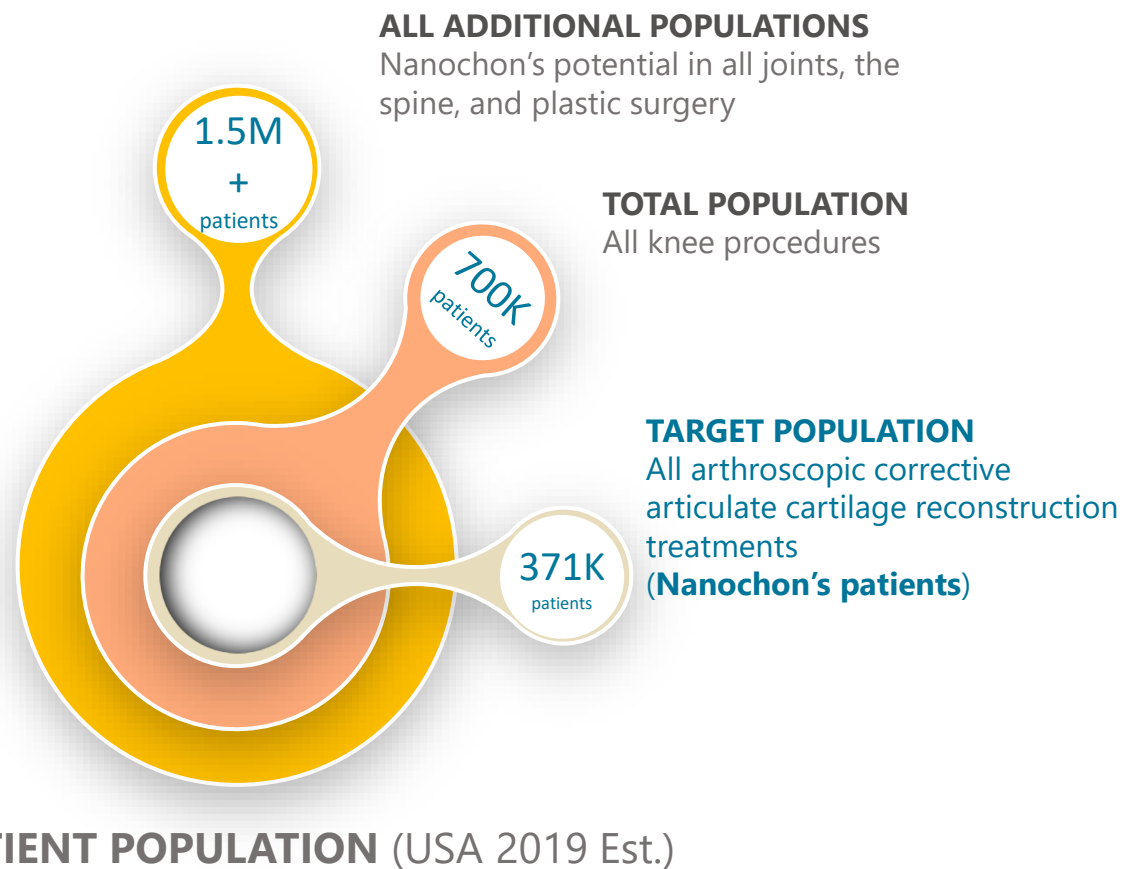
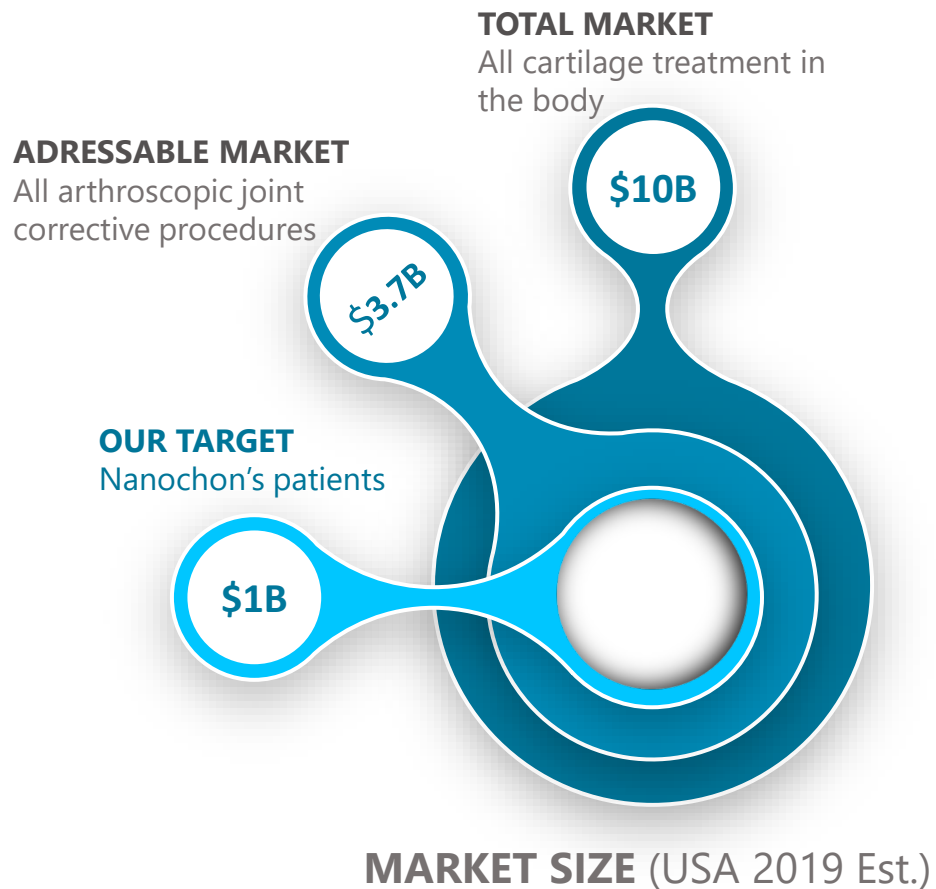
We need treatment options that provide long term better outcomes and recovery.

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MARKET SIZE VS PATIENT POPULATION*

- Target market focuses on “front line” treatments (microfracture)
- High unmet need = billion dollar market
- Reimbursable product = lower cost per patient, & not out of pocket means average patients can afford the treatment



* McCormick, F., et al., Trends in the surgical treatment of articular cartilage lesions in the United States: an analysis of a large private-payer database over a period of 8 years. Arthroscopy: The Journal of Arthroscopic & Related Surgery, 2014. 30(2): p. 222-226.



Dr Ben Holmes

CEO

- BS in MAE from UVA
- PhD from GW, biomaterials, 3-D printing, stem cell growth, orthopedics
- NSF I-Corps program (Best Entrepreneurial Lead)
- JLABS Resident @NYC fall 2018
- MassChallenge Boston 2019
- **UCSF Rosenman Innovator 2020**
- Raised funding for Nanochon: grants + seed + friends & family funding totaling \$425,000



Dr Nathan Castro

CTO

- BS in Chemistry with Honors from the University of Texas at El Paso
- MS in Engineering at UTEP, 3D printing and device manufacture
- PhD from GW, Provost Fellow and Lab Manager
- Postdoc at QUT in Dietmar Hutmacher's 3D printing lab
- NIST visiting fellow in fall 2018



Matthew Scherer
Financial

- Mergers, acquisitions, and divestitures over \$6 billion
 - Capital raises in excess of \$15B
- Former CFO, medical device company SonoStik LLC



Gary Wakeford
Business Development

- Product development and sales in medical devices
- Early stage capital raising, business development and strategy, Orthopedics



John Rodriguez
Development

- Product development leader with over 25 years of experience
- Global and domestic manufacturing operations
- Domain expertise (Cytori)



Christopher Cannova, MD
Medical

- Georgetown University, the Hospital for Special Surgery
- Commercial experience with start-ups, HSS and Zimmer Biomet

KEY TEAM MEMBERS



Darwin Rinderer
IP Counsel

- Patent Agent at Banner & Witcoff 2015-2018
- Life science and medical device experience
- IP support and filer for various Nanochon applications since 2016



Matthew Cunningham
General counsel

- Intellectual property, transactions, and corporate law
- Significant life sciences experience
- Former attorney at Weil, Gotshal & Manges LLP



CLINICAL ADVISORY BOARD



Highly regarded sports medicine surgeons and KOLs

- **John Dickens**, US Army, Sports Medicine and Head of Research at Walter Reed
- **Jon Godin**, sports medicine and knee specialist at Steadman Vail, CO
- **Tom Noonan**, sports medicine at Steadman Denver, CO, team doctor to Colorado Rockies
- **Kevin Kaplan**, sports medicine and knee specialist Jacksonville Orthopaedic Institute, FL, team doctor for Jacksonville Jaguars
- **Jorge Chahla**, sports medicine at Rush, Chicago IL
- **David Flanagan**, sports medicine at Ohio State University, Ohio State Department of Athletics Team Physician





FEEDBACK FROM POTENTIAL STRATEGIC PARTNERS



Conversations from major ortho device and therapeutic companies reveal interest in and enthusiasm for Nanochon's approach.



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Cartilage resurfacing in the knee remains an unmet need, and is a growing market.

The market wants a product which can be lower cost, at a trade-off with higher volume, since surgeons make money on procedure not the device.

Clinically, immediate load bearing / faster recovery can be as valuable as long term benefits (faster cartilage vs. longer lasting cartilage).

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WHAT WE ARE SEEKING: to raise a \$1M, pre-seed convertible note

FUNDS WILL BE USED TO:



\$400k for Animal trial

Long term safety and efficacy studies in animals, collaboration with Dr. Jen Barrett at VT



\$250k for Biomechanical testing

Advanced cadaver tissue simulation with Dr. Jason Kerrigan at UVA



\$350k for Nanochon ops

Materials development and device manufacturing
FDA consultant and regulatory activities, materials and device manufacturing

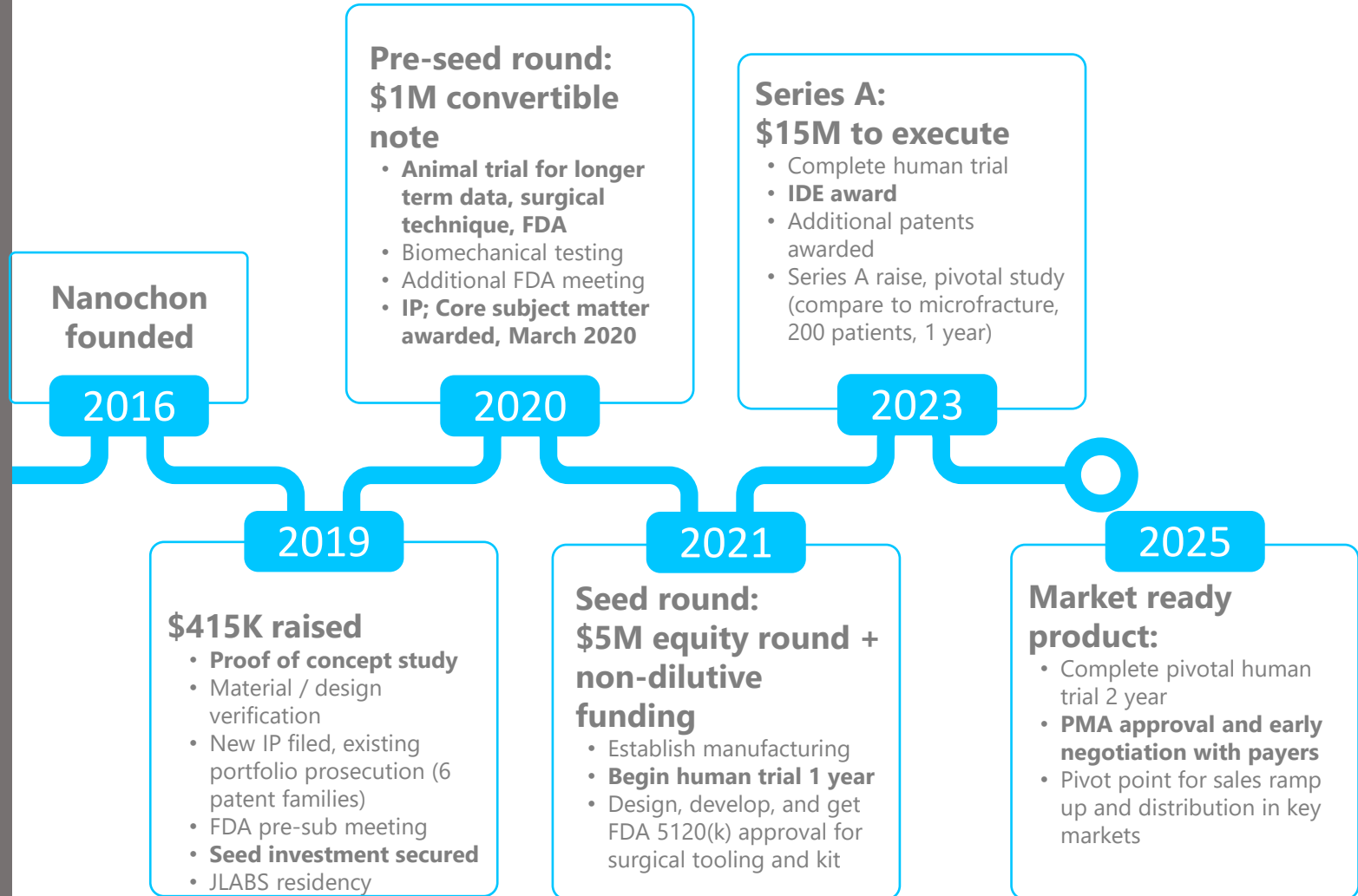
Funding would provide 18 months of runway before a SEED round. **Nanochon has strong interest from leading MedTech Venture Partners and a Strategic Investor to co-lead a ~\$5 M SEED round, after accomplishing specific short term milestones**



TIMELINE & MILESTONES



NANOCHON™





CONTACT US

We invite you to contact us to learn more about investment opportunities with NANOCHON



703-994-6099



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Washington DC,
JPOD@Philadelphia



NANOCHON™

Repairing your active life