

# DRUG-ELUTING ADDITIVELY MANUFACTURED MATERIALS & DEVICES



*Platform Technology Offering*

*Patient-Specific & Customizable*

*Simple Product-Line Integration*

Intellectual  
property



Base  
Materials



Manufacturing  
Methods



Finished  
Products

Patents  
issued:

- USA
- Canada
- China
- EU
- France
- Germany
- UK
- Italy
- Israel
- Australia
- Japan



Opportunity to license  
novel additively  
manufactured (AM)  
drug-eluting polymer  
technology for medical  
device applications

## Key opportunities

- Foundational technology suited to point-of-care manufacturing and personalized medicine
- Fully-customizable patient-specific devices
- Better addresses bacterial infections than existing implantables
- Broad intellectual property coverage
- Wide array of applications



## Applications

- Joint Arthroplasty
- Orthopaedic Trauma
- Sports Medicine
- Spine Orthopaedics
- Prosthetics
- Cardiology
- Wound
- Dental

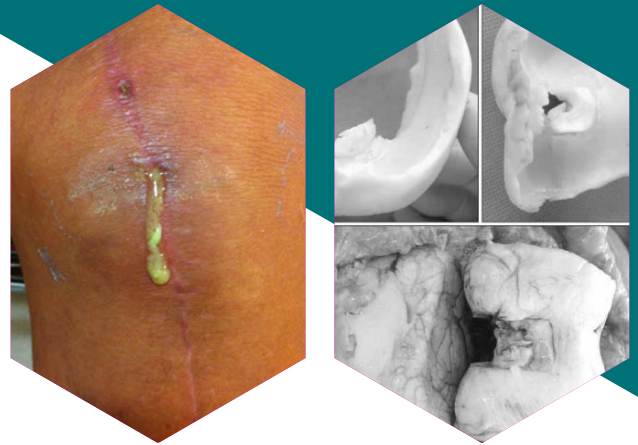
We are looking for a  
licensing partner to  
commercialize this material  
and device technology

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# High Potential Application

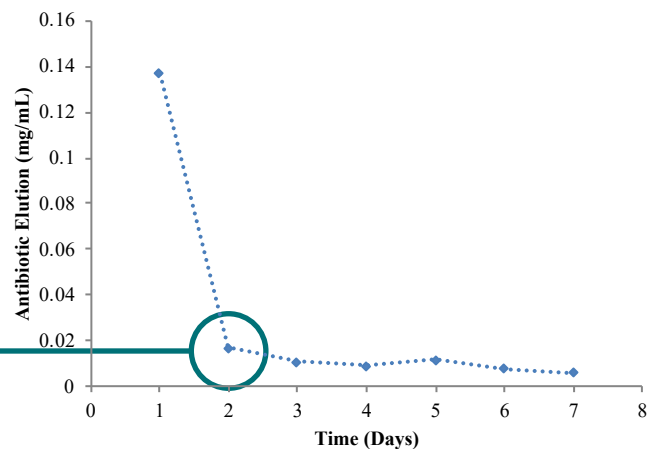
## Peri-prosthetic joint infection

- Devastating complication
- 1%-8% occurrence
- Months to years of recovery
- Poor patient outcomes
- Gold standard is two-stage revision with temporary implant (spacer)



## Existing Solutions

- Universal reliance of antibiotic-loaded bone cement
- Reduced interim patient function
- Limited antibiotic elution
- Virtually zero after 48 hr
- **Potential for improved and sustained elution using drug-eluting printed device and bioresorbable polymer**



## PCL Knee Spacer

- Customized spacer geometry
- Patient-specific antibiotic cocktail delivery
- Bioresorbing polymer for potentially improved elution
- Manufactured on-demand



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