

NOSTOPHARMA

Restoring the health of orthopedic patients



<https://www.nostopharma.com>

Location: Bethesda, MD



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SUMMARY

Combination product to treat pathologic bone growth

High unmet need: 90% of acetabular fractures

Product pipeline: trauma, ortho, inflammation

Replacing painful and costly revision surgeries
>> \$1B market

TRAUMA-INDUCED BONE GROWTH: HETEROTOPIC OSSIFICATION

▶ Patient profile:

- Mean age of 40
- >60% male
- Traumatic brain injury is co-morbidity

▶ Number of cases:

Joint	US	ROW
New Acetabular	17,000	85,000
Revisions	51,000	255,000
New Elbow	150,000	750,000



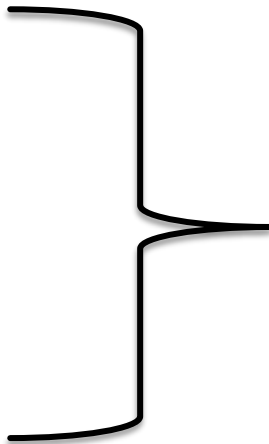
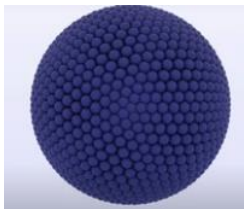
X-ray of HO condition



X-ray of Normal bone

1st COMBINATION PRODUCT – SurgeryGuard™

NP101-3 small molecule
drug combo



SurgeryGuard™
*Injectable
formulation*



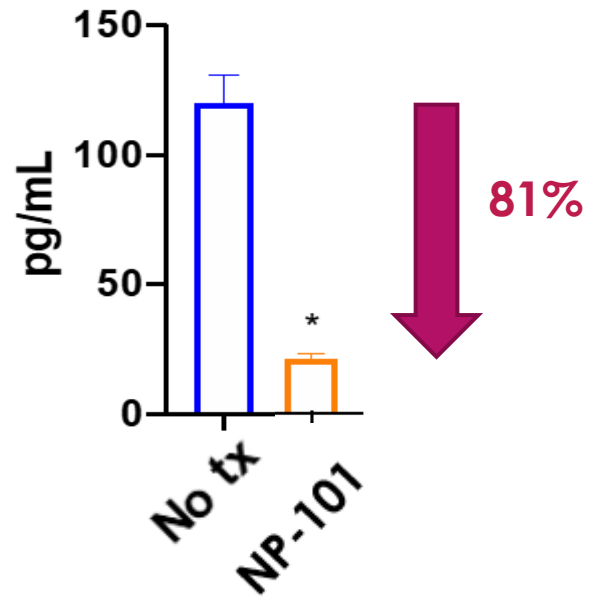
**Surgeons implant product
during bone fracture surgery**

Treatment	NSAIDS	Radiotherapy	SurgeryGuard TM
Efficacy	✗	✓	75 % Reduction ✓
Safety profile	Non-unions ✗	Non-unions ✗	✓
Acceptance with surgeons	Very low ✗	Diminished ✗	✓
Logistics	Noncompliance ✗	✗	Single application ✓
Cost	\$100-\$300 ✓	\$2000 ✗	\$1000 ✓
Stage	On the market	On the market	Preclinical

COMPETITIVE ADVANTAGES

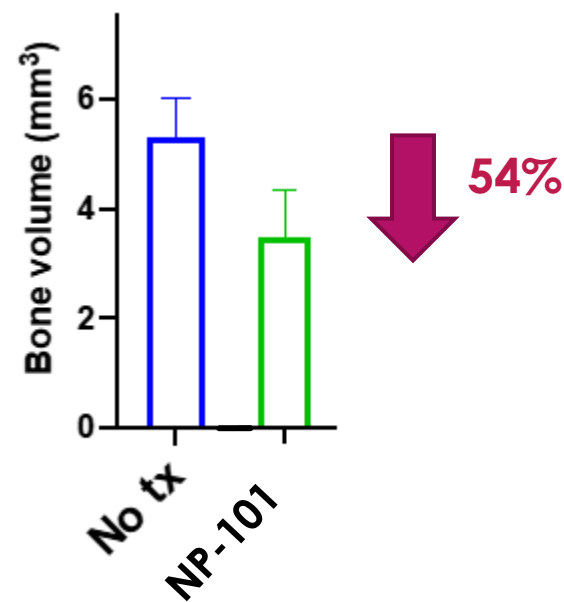
NP-101 shows significant reduction in abnormal bone formation (mouse model)

Reduction of critical inflammatory pathway – MCP-1

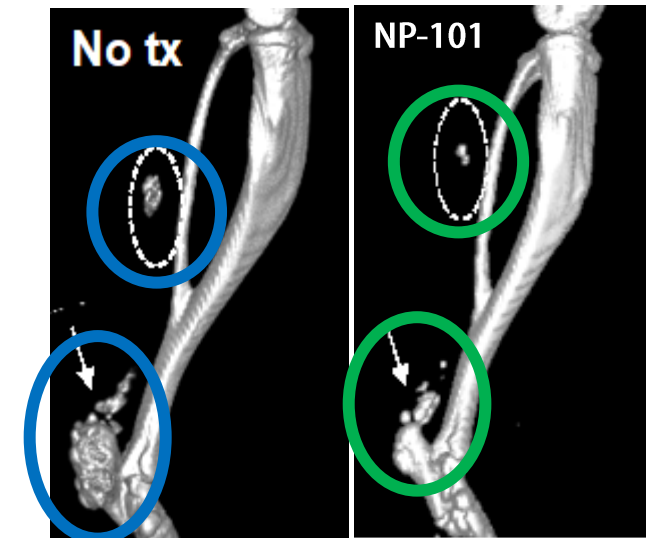


NP-101 reduces inflammatory response that induces abnormal bone growth

Proof of concept of NP-101



Drug combination (NP101):
Arsenic trioxide, Pravastatin, Vitamin D



Tenotomy/burn mouse model of acquired abnormal bone growth

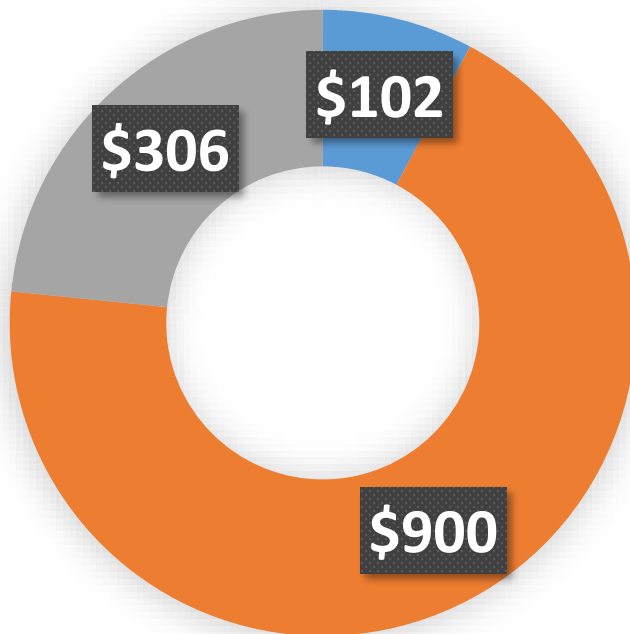
ROBUST IP PORTFOLIO

- ▶ Four patents filed
- ▶ Two granted (US 10,548,908, US 10,456,409)
- ▶ All filings included PCT
- ▶ Patent expiry date: 2036
- ▶ Evergreen strategy in place

INITIAL INDICATION UNLOCKS LARGER MARKETS

Serviceable Addressable Market

Worldwide cases in need of bone growth prevention



- Acetabular Fractures
- Elbows
- Revisions

Price per treatment:
\$1000

UNMET MEDICAL NEED

Trauma

#1

Cause of Disability

Patients suffer abnormal bone growth in

90%

Of Acetabular Fractures

Market Opportunity

>\$1B

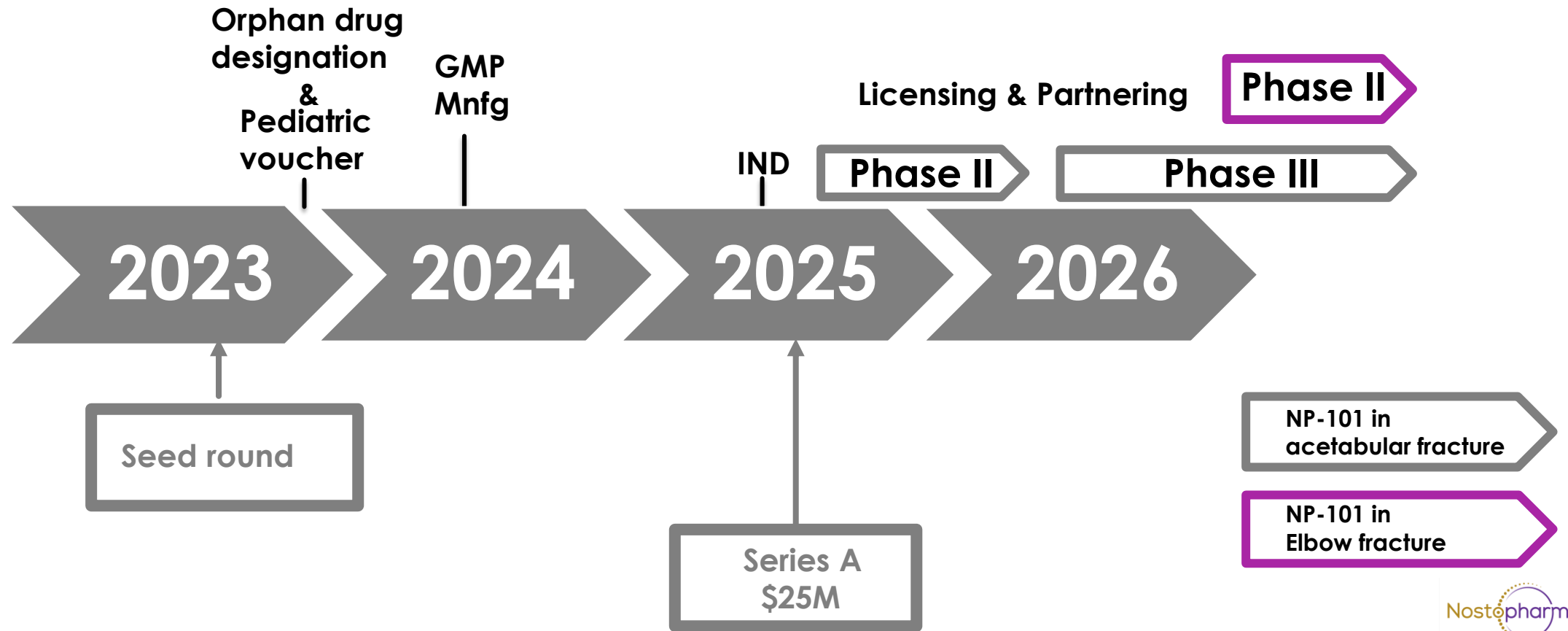
WW acetabular and elbow trauma

Preventing revision surgery translates into

\$176K

Savings per Patient

TIMELINE



2023 MILESTONES

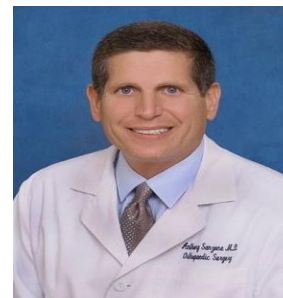
- ▶ Complete characterization of the SurgeryGuard™ prototype
- ▶ Pre-IND meeting with FDA
- ▶ Reimbursement strategy study
- ▶ Manufacturing scale-up

COMPANY OVERVIEW



Katya Vert-Wong, MSc, MBA
Co-Founder & CEO

Seasoned Pharma and Biotech Executive, with 20+ years of experience



Anthony G. Sanzone M.D.
Orthopaedic Surgeon

Fellow of the American Academy of Orthopaedic Surgery



Jelena Jeremic, PhD, MBA
Co-Founder & CSO

20+ years in Life Science; bone development and bone disease research



Stephen W. Hoag, PhD

Professor at Dept. of Pharmaceutical Sciences, University of Maryland School of Pharmacy

SCIENTIFIC & CLINICAL ADVISORY BOARD

OUTSTANDING ADVISORY BOARD

Dr. Anthony Sanzone, MD
Orthopaedic Trauma Surgeon



Orthopedic Trauma surgeon; Cofounder of the San Diego orthopedic trauma fellowship

Dr. Ran Schwarzkopf, MD
Orthopaedic Surgeon,
Hip and Knee Reconstruction



Division Chief of Joint Replacement Bellevue Hospital; Director of the Knee Center; Director of Research Division of Adult Reconstruction Surgery; Department of Orthopaedic Surgery; NYU Hospital for Joint Diseases

Dr. R.F. Davis, MD
Orthopaedic Surgeon



Associate Professor of Orthopaedics and Neurosurgery at Johns Hopkins University; Associate Professor of Orthopaedic Surgery at the University of Maryland

Dr. David J. Fink, PhD
Entrepreneur in Residence



Serial Biotech entrepreneur – stem cells, biomaterials; Founder of CollaTek, Inc., a collagen biomaterials company; President and COO of Chondros Inc., in 200; Co-founded and served as VP for R&D of Cell Targeting, LLC.

SUMMARY

- ▶ **First-in-class drug** that targets essential pathway
- ▶ Robust **multi-indication** pipeline
- ▶ SurgeryGuard™ in development addresses unmet need in orthopedic surgery and rehabilitation
- ▶ Patent protection **until 2036**
- ▶ Seeking \$10M **Seed round**