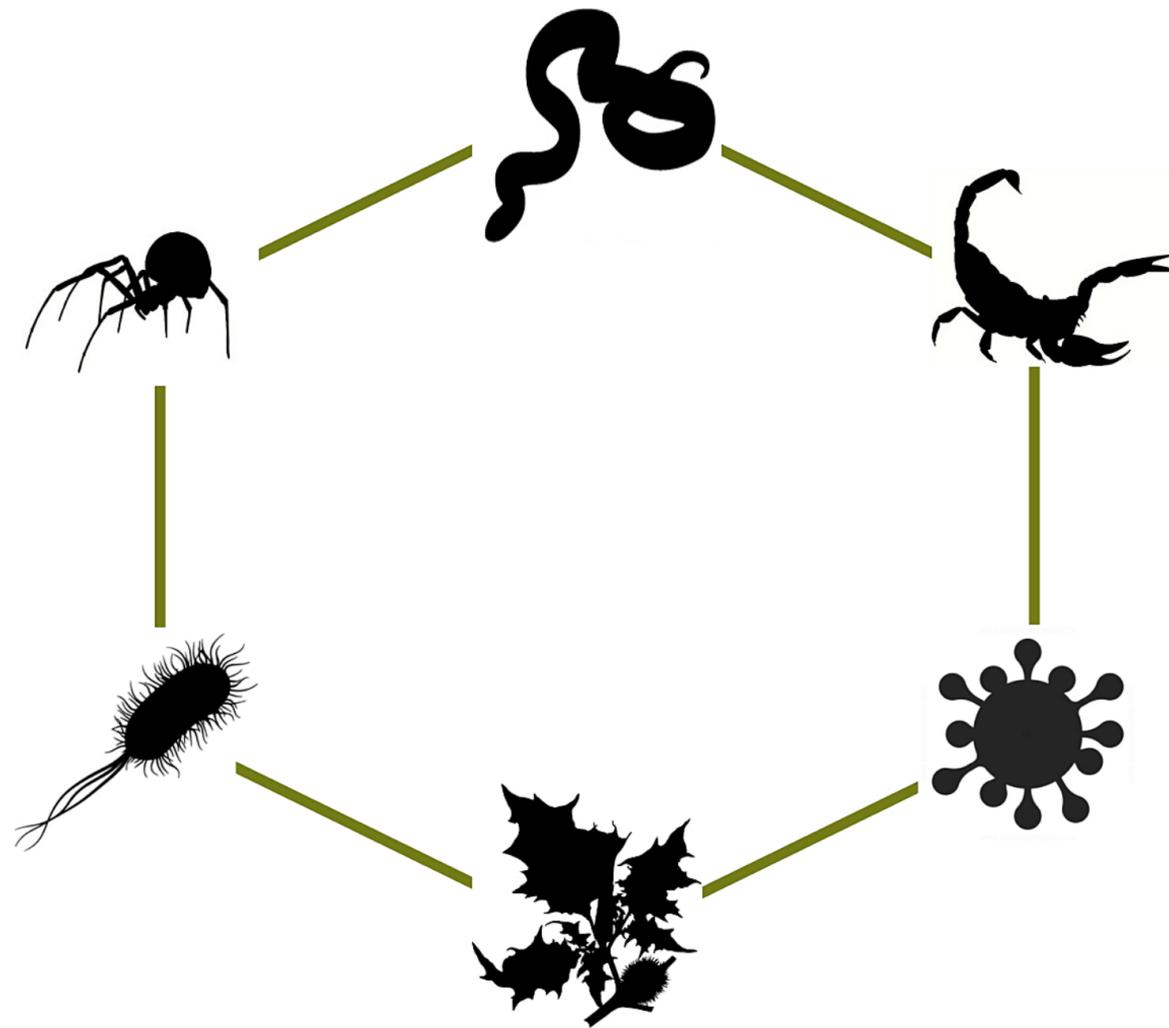


VENOM  **X**
THERAPEUTICS

ENGINEERED ANTITOXINS

We are creating novel therapeutics for the **\$15B antitoxins market**



- Snakes
- Spiders
- Scorpions
- Plants
- Bacteria
- Virus



OUR FIRST MARKET

The \$1B snake antivenom market

We are developing a modern antivenom that is:

- **Broad-spectrum**
- **Humanized for safety**
- **Not manufactured in animals**
- **Portable**

Vipax™





In 2019 there will be:

5,500,000 snakebites

500,000 amputations

150,000 deaths

“One of the world’s most neglected public health issues.”

–World Health Organization





Today's Antivenom Relies on Antiquated Technology

Antivenom is produced the **same way it was in the 1800s.**

Snake venom is injected into horses to produce antibodies.

Today's antivenom needs improvement



- X Expensive**
Difficult animal-based production process
- X Side effects**
Animal antibodies create immune response in patients
- X Poor efficacy**
Requires many doses and is species-specific



OUR SOLUTION

Universal Recombinant Antivenom

Single domain antibodies offer a new approach



- ✓ **Safe**
High homology with human antibodies
- ✓ **Effective**
High affinity against conserved epitopes
- ✓ **Robust**
High solubility and stability enable portability
- ✓ **Economical**
Manufactured at scale in bacteria

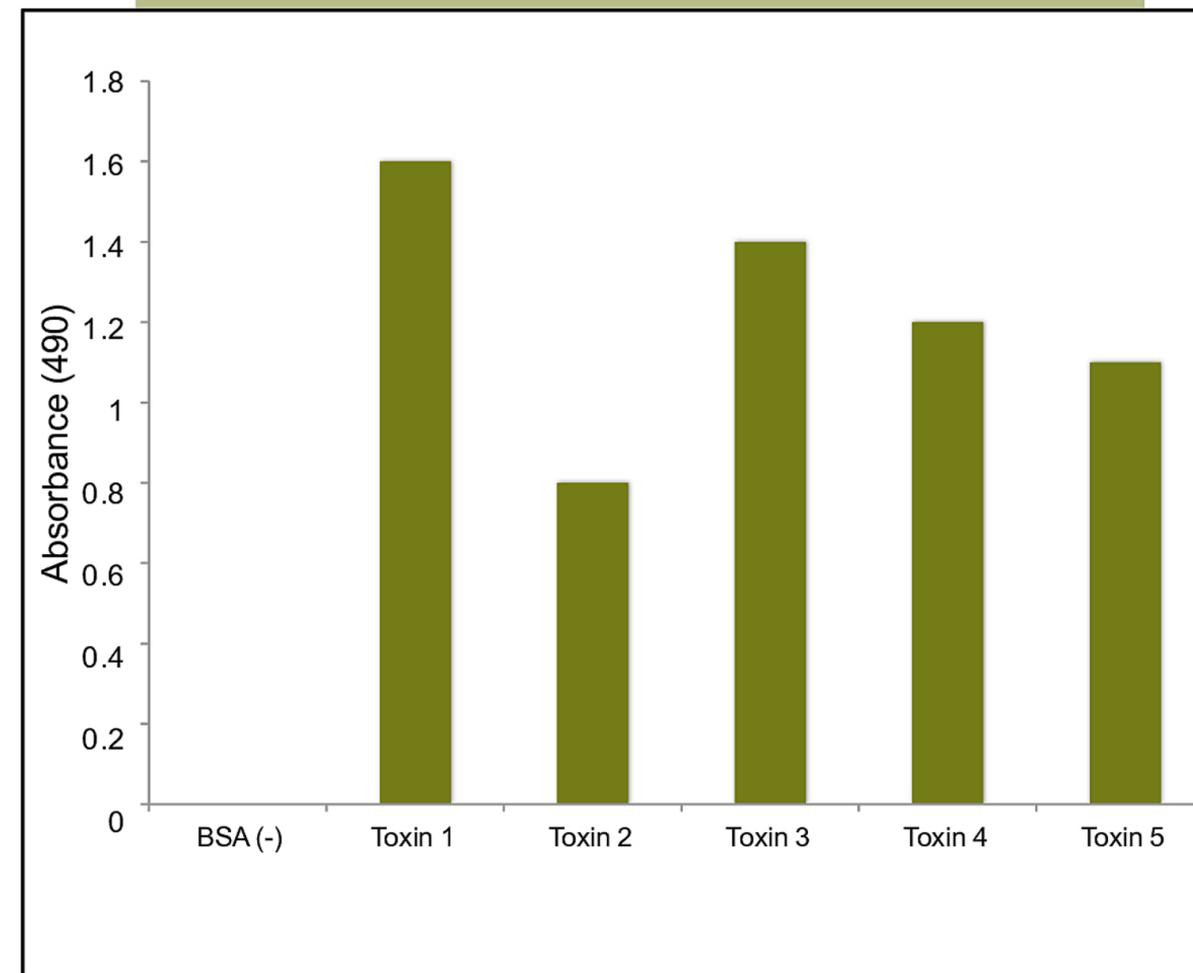
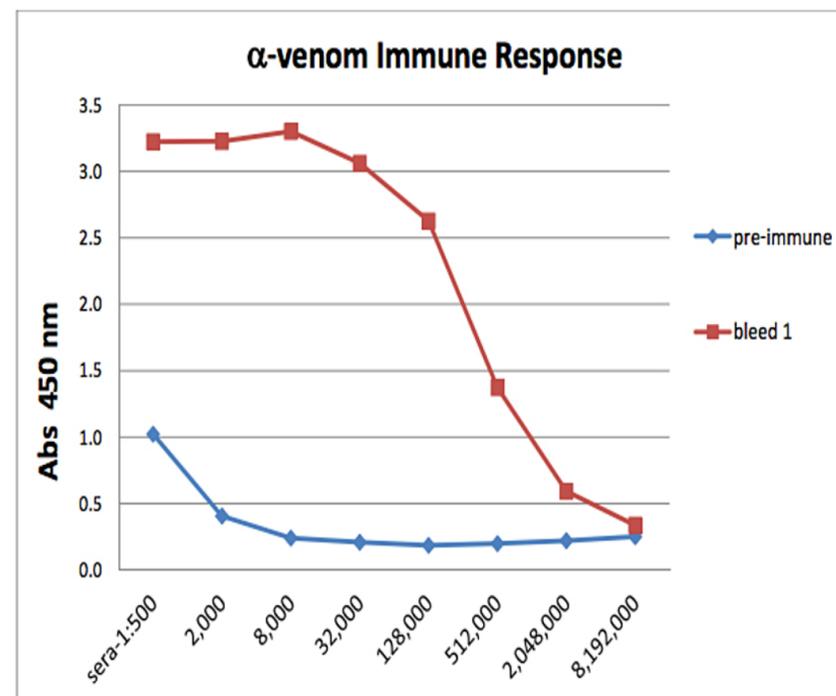


OVERVIEW OF OUR PROCESS

Making a Recombinant Antivenom



PROMISING PRECLINICAL RESULTS

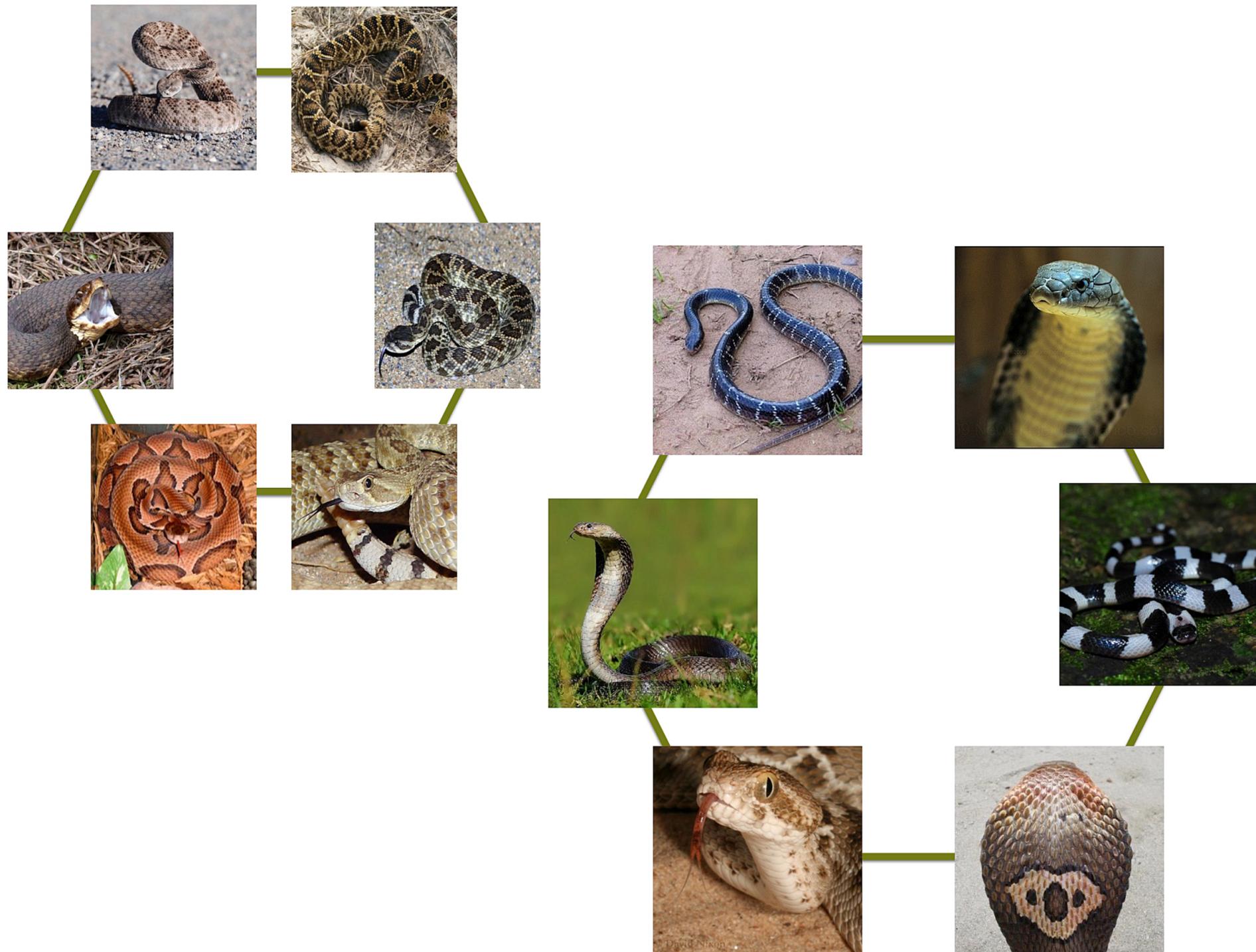


Llama immunization (for library only)

Llama serum titers

Llama Serum contains V_HH binders to every clinically-relevant toxin we've tested to date

PROMISING PRECLINICAL RESULTS

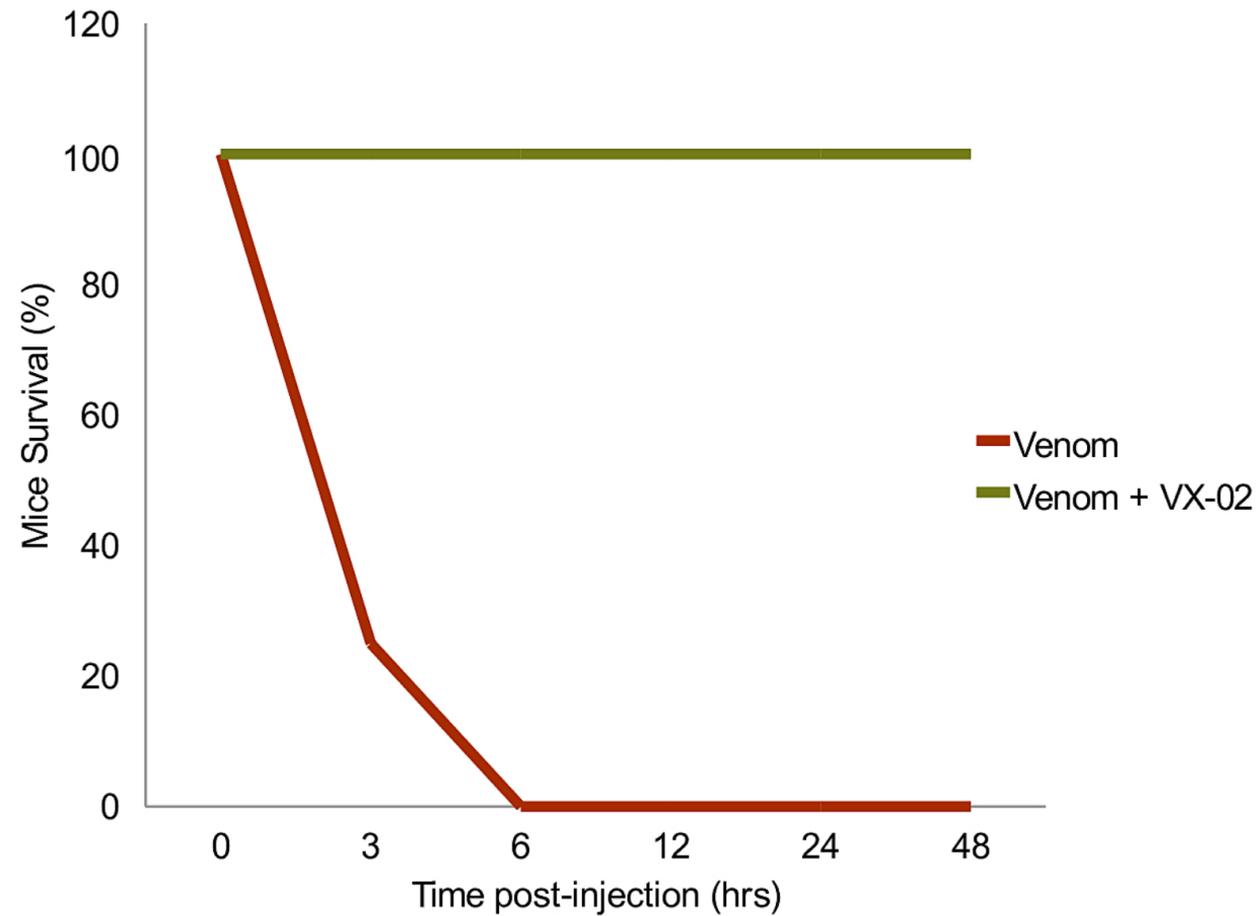


Binding and neutralizing whole venom of medically-important species in the U.S and Asia

PROMISING PRECLINICAL RESULTS



Monocled Cobra
N. kaouthia

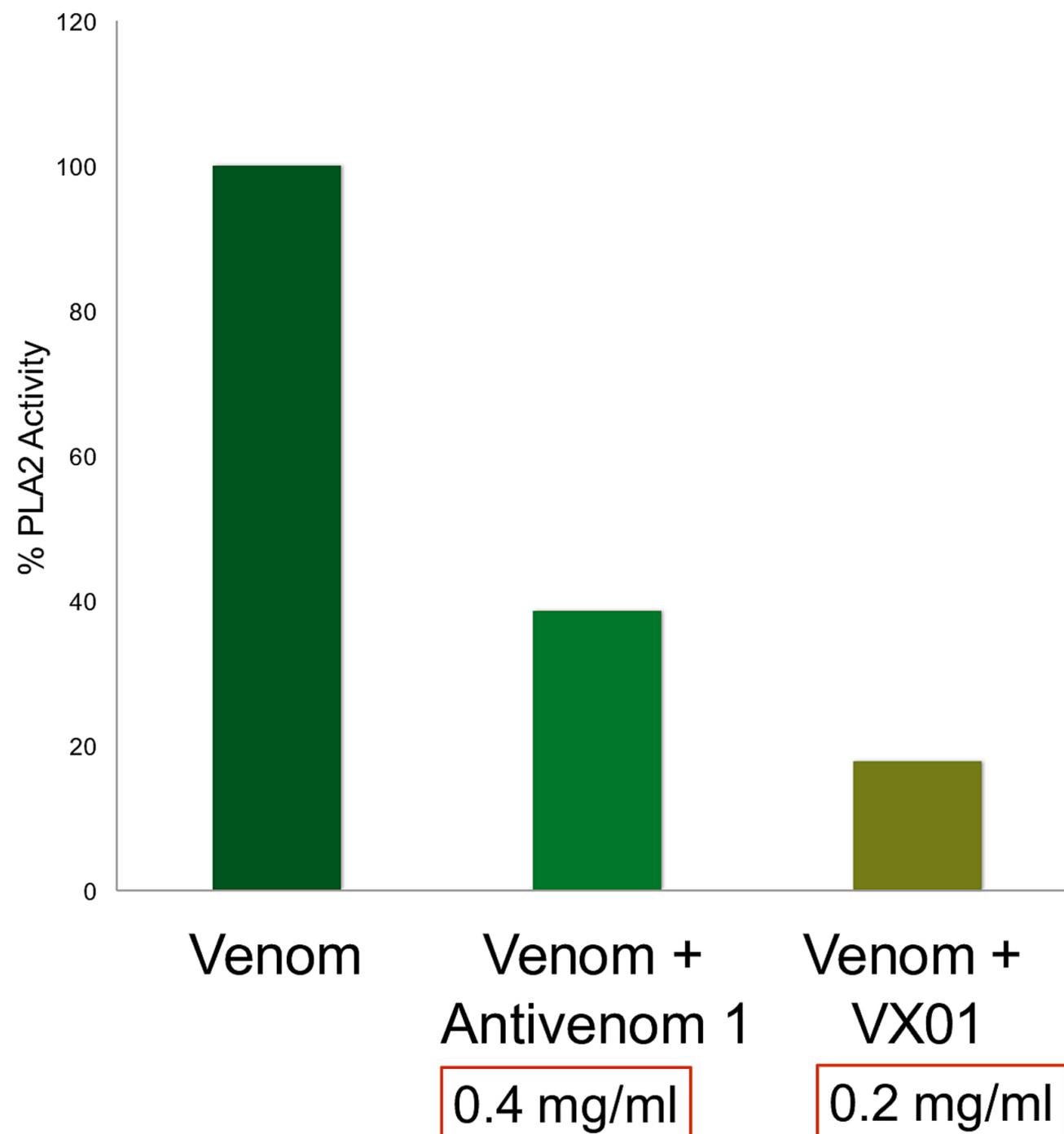


Our candidate was able to **save 100% of mice** from whole cobra venom

PROMISING PRECLINICAL RESULTS



**Eastern
Diamondback**
C. adamanteus



Our binders inhibit toxin activity **better** at **lower** doses when compared to standard of care



IP STATUS & ASSETS



International Patent Filing: PCT/US18/29498

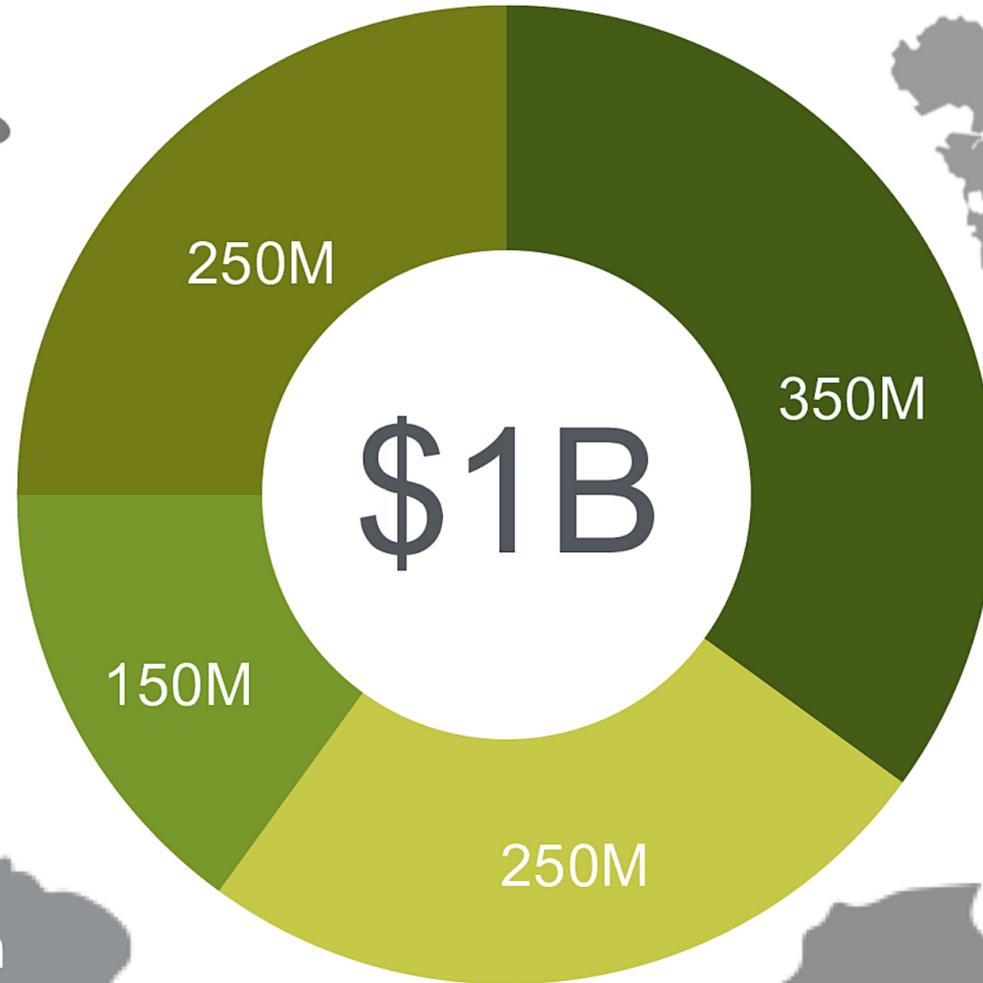
“Composition and Methods for Treating Snake Envenomation”

Filing Date 4/26/2018

- Venomics database
- Proprietary phage display libraries
- In-house expertise in toxinology and drug development

GLOBAL MARKET

Highly Underserved



WHO BUYS ANTIVENOM?



Customer	Conventional Antivenom	Vipax™
Hospitals	✓	✓
Government	✓	✓
Non-profits	✓	✓
Military		✓
First responders		✓
State Parks		✓
Schools		✓

GO-TO-MARKET STRATEGY

Beachhead Risk Mitigation

First establish clinical safety/efficacy in **U.S.**



Then develop product for remaining regions:
Asia, Africa, Latin America



TRACTION



Strategic partnership interest from 4 corporate partners in our space

Licensing model provides:



Manufacturing



Clinical Trials



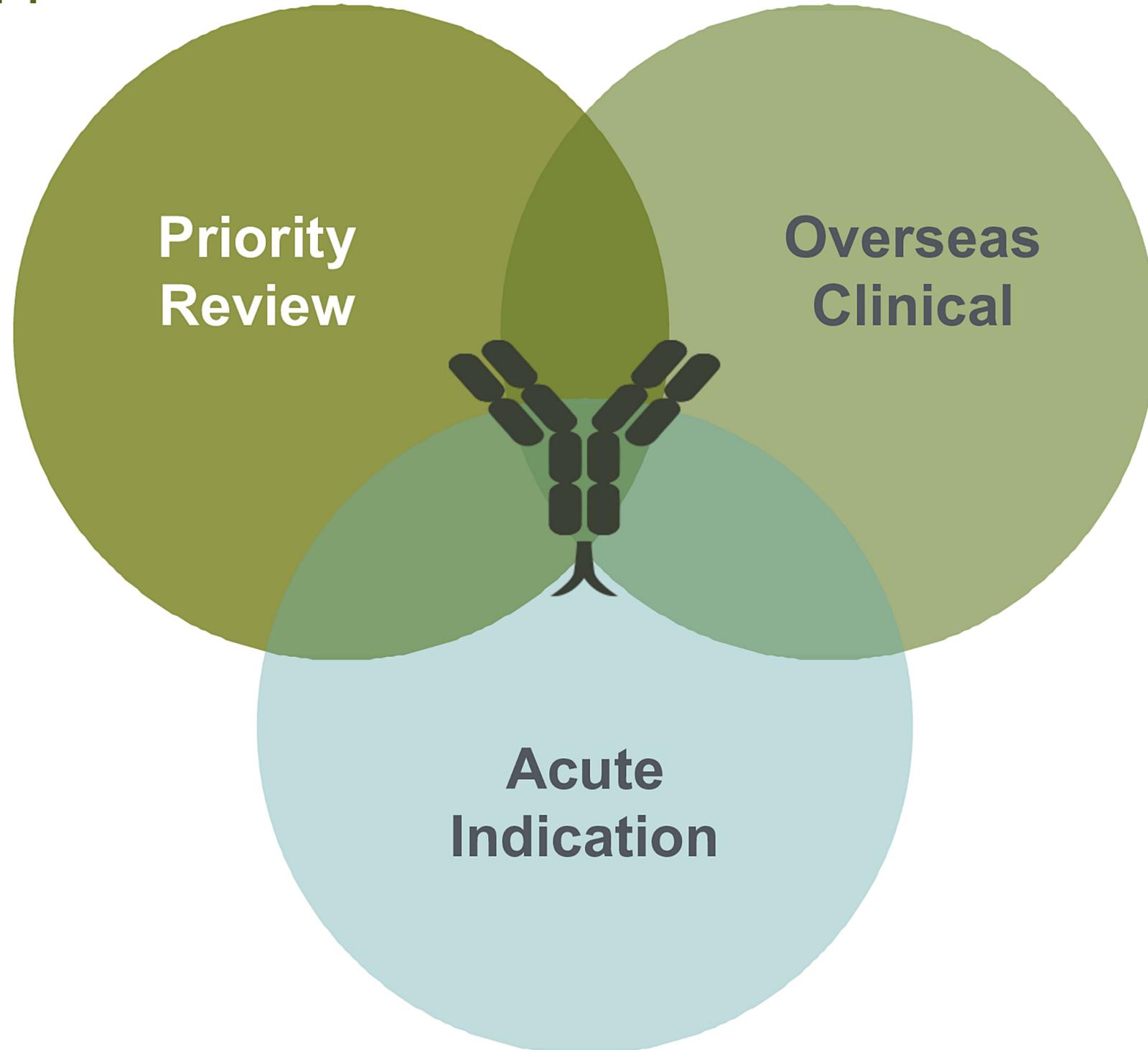
Distribution



Government Alliances

SWEET SPOT FOR BRINGING DRUGS TO MARKET

Compared to Typical Drug Approval

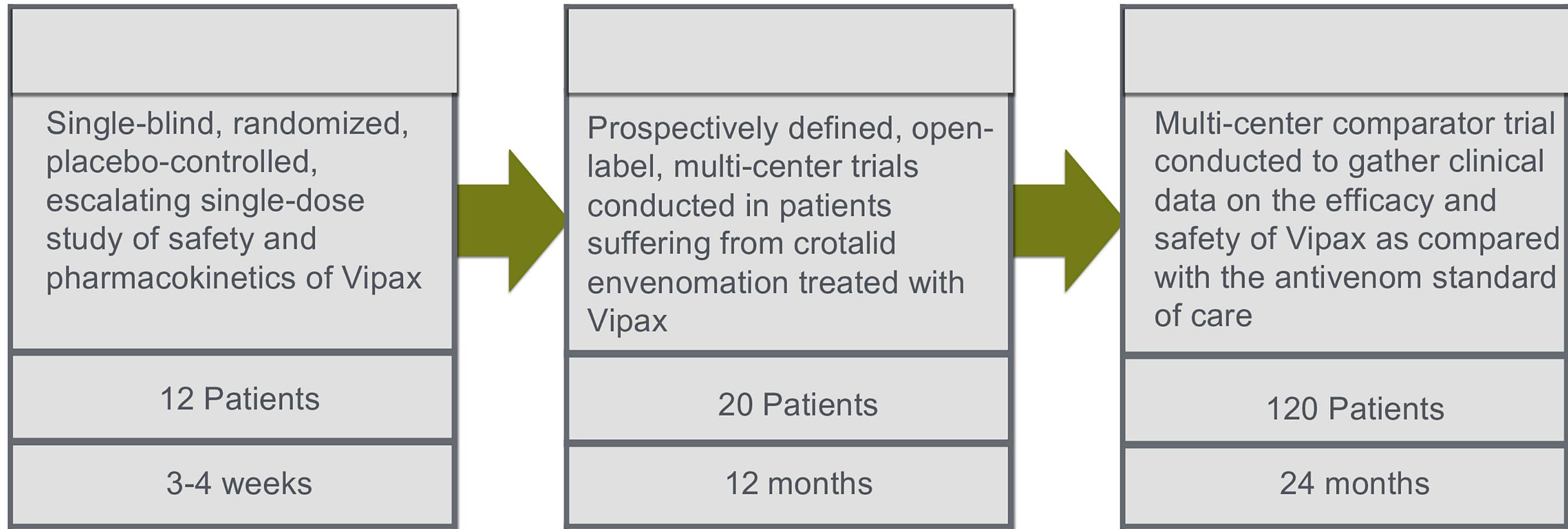


50% of the time
25% of the cost

REGULATORY PATHWAY



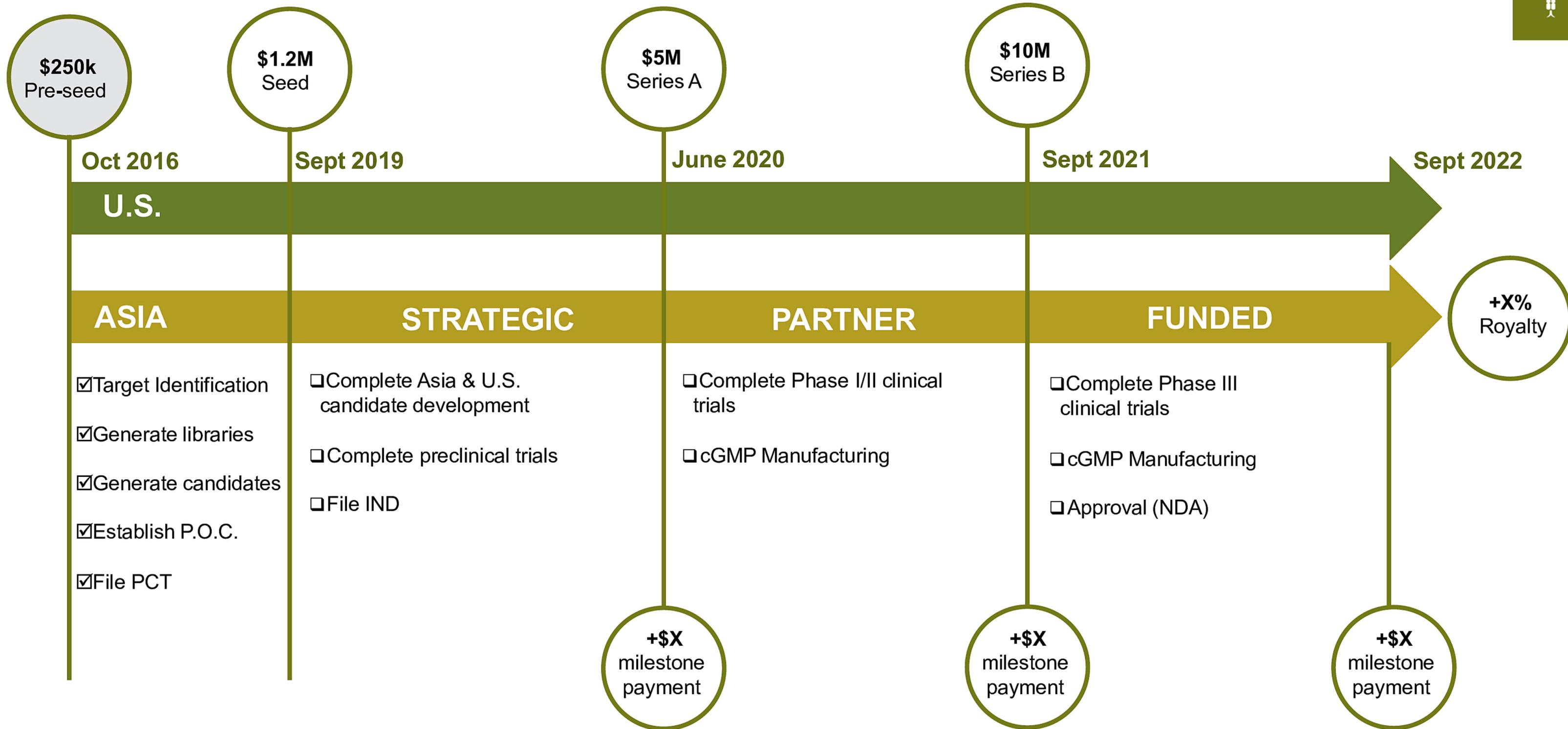
USFDA Clinical Trials



PAREXEL[®]

 **SynteractHCR**

Timeline & Milestones

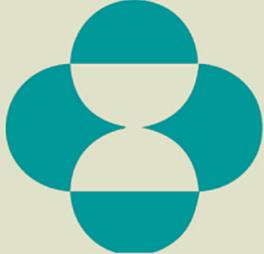


EXIT STRATEGY

M&A or IPO



Multiple Potential Strategic Partners

 BTG	 MERCK	 GlaxoSmithKline
 Boehringer Ingelheim	 POONAWALLA GROUP SERUM INSTITUTE OF INDIA PVT. LTD.	
 FERRING PHARMACEUTICALS	 Instituto Bioclon	 NOVARTIS

Antivenom

Antitoxin

CORE TEAM

Motivated team with 30 years of drug discovery scientific and business expertise



DAN DEMPSEY
Founder & CEO



DEEPANKAR ROY, PhD
Co-Founder & COO



USC

Genentech



PHILIP TAN, PhD
CSO

AstraZeneca 

SAIC®

ADVISORS



SCIENTIFIC:

ELDA SANCHEZ, PhD
Director

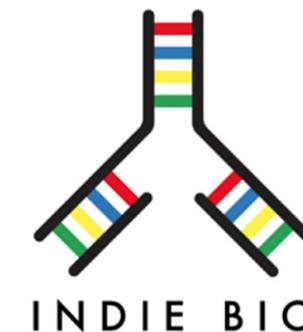
National Natural Toxin Research Center



WILLIAM HAYES, PhD
Principal Investigator
Venomous Species Laboratory



LEGAL & BUSINESS:



VENOMYX THERAPEUTICS

Now raising a \$1.2M Seed round to:

- ✓ Complete all preclinical trials
- ✓ File IND
- ✓ File PCT
- ✓ Generate candidates for antibacterial programs

\$250k committed to round

Thank you!

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www.venomyx.com