



# Small Molecule Approaches for Rapid and Robust Treatment (SMART) Antiviral Prize Overview

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SMART Antiviral Prize Launch Event, Cambridge, MA

January 7, 2026

# The BARDA Model

BARDA develops and makes available medical countermeasures (MCMs) by forming unique public-private partnerships to drive innovation off the bench to the patient to save lives.



Flexible, nimble authorities

Multi-year funding

Cutting edge expertise

Facilitate partnerships

Promote innovation

# The Need: A Stronger Pipeline for Future Threats






- Emerging viruses are causing **more frequent outbreaks**
- **Few or no treatments** exist for many deadly and highly transmissible viruses
- Current antivirals are often **narrow-spectrum** and virus-specific
- **Vaccine development takes time**; outbreaks move faster
- We lack **oral, shelf-stable options** for rapid, first-line use
- We need **novel approaches** that generate **better solutions** and drive the **future of antiviral discovery and development**

**A stronger pipeline of broad-spectrum antivirals is needed to bolster national health security against future threats**

# Join Us in Catalyzing the SMART Antiviral Pipeline



-  Bolstering the development of broad-spectrum small-molecule antivirals to solve key preparedness gaps, strengthen national health security, and provide rapidly deployable first-line treatments for emerging viral threats
-  Designing safe, orally deliverable therapeutic candidates with efficacy against multiple viruses within a single family (flavivirus or togavirus)
-  Moving these candidates toward Phase 1 readiness, a critical step toward having products ready to deploy when and where they are needed



**The \$100M SMART Antiviral Prize will jump-start this work by fostering collaboration and accelerating the most promising candidates toward early-stage clinical development.**

# Defining the Scope: Eligible Antiviral Candidates



## In Scope

### Small Molecule Drugs

*Organic compounds with a molecular weight at or below 900 Daltons that can be chemically synthesized or isolated from natural sources (e.g., plants, animals, minerals). Nucleotide and nucleoside analogs are allowed.*

### Discovery–Preclinical Stage Compounds

*Candidates currently positioned anywhere from early discovery through Investigational New Drug (IND)-enabling preclinical stages (no human dosing yet) are eligible.*

### Broad-Spectrum Antivirals

*Direct or indirect acting antivirals that exhibit antiviral activity against multiple pathogens within the chosen family (**Togavirus** or **Flavivirus**).*

## Out of Scope

### Biologics and Nucleic-Acid Based Drugs

*This includes peptide-based products and antibody–drug conjugates.*

### Clinical Stage Compounds

*Products that have already been investigated in humans for any indication are not eligible as prize candidates.*

### “One-bug, one-drug” approaches




*Candidates that only target a single virus and lack a credible path to broad-spectrum activity within **Flaviviridae** or **Togaviridae** are out of scope.*

# From Idea to IND: How the SMART Antiviral Prize Catalyzes Innovation

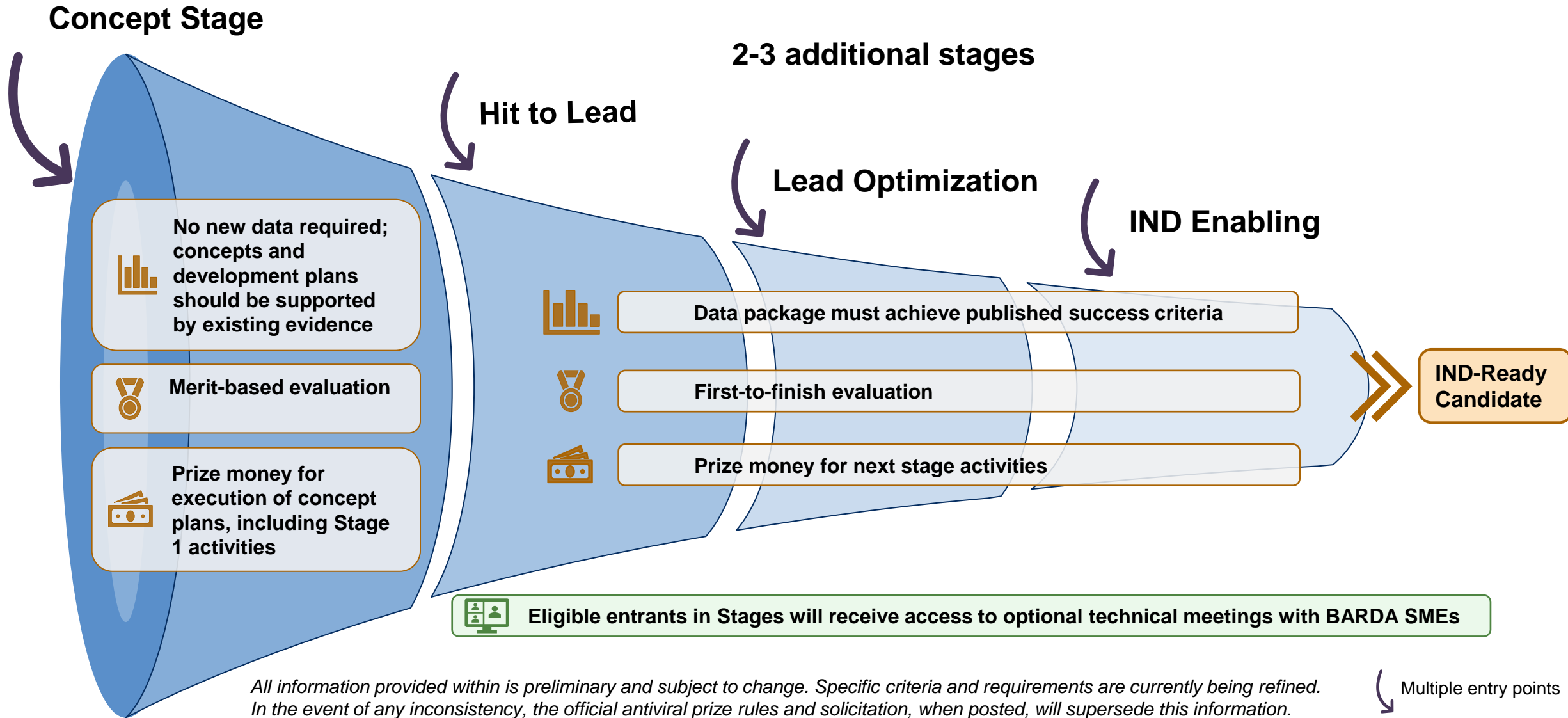


Prize competitions **complement** traditional government funding mechanisms (e.g., contracts) and can **catalyze breakthrough antiviral innovation**.

## The SMART Antiviral Prize will:

-  **Invite diverse solution types and teams** from industry, academia, and government partners.
-  **Use staged evaluations** (from concept through preclinical development) against clear, published criteria focused on broad-spectrum activity and product attributes.
-  **Provide non-dilutive funding and non-monetary support** (e.g., visibility, expert feedback, and access to collaborative networks) to accelerate the most promising candidates toward Phase 1 readiness.

# How the Prize Flows: Staged Path to an IND-Ready Antiviral



# Kicking Off the Competition: Concept Stage



## What We're Asking For

- Eligible entrants — antiviral developers, academic groups, and strategic partnerships — submit **concept papers**
- Concepts describe plans to discover or advance **broad-spectrum small-molecule antivirals** for *Flaviviridae* and/or *Togaviridae*
- Entrants must control the relevant intellectual property (IP) and have **freedom to operate** for their proposed concept
- Submissions are accepted only during a defined **submission window** (dates in the official rules)

## How It Works

- A panel of subject-matter experts evaluates submissions using published criteria focused on:
  - **Antiviral target & rationale**
  - **Development & regulatory strategy**
  - **Capabilities & partnerships**
- Selected entrants receive **Concept Stage awards** and an **invitation to advance** to later stages
- **Unsuccessful entrants may still be eligible** to enter subsequent stages

# What Comes Next: Later Prize Stages



## Declarations of Intent

- Prospective entrants will be asked to **declare their intent** to compete in later stages so we can:
  - Confirm that entrants and their candidates are still in scope and eligible, promoting efficient use of their time and resources
  - Plan stage timelines and allocate support resources accordingly
  - Provide access to technical assistance

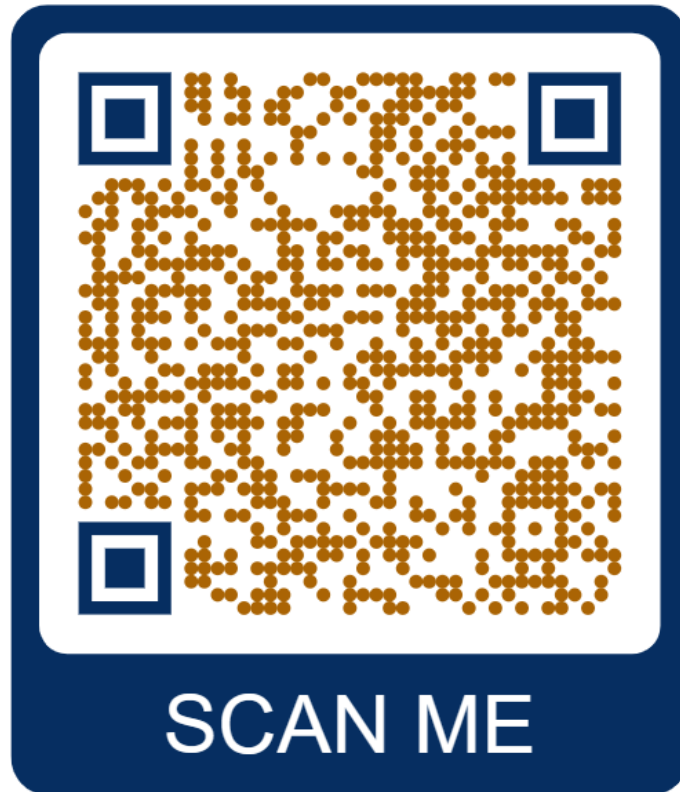
## Future Stages & Technical Submissions

- Up to **three additional stages** are anticipated, focused on hit validation, lead optimization, and IND-enabling work
- Each stage will require a **technical submission** (data package) and may include **first-to-finish elements**
- These stages are designed to **complement existing funding** and help **de-risk candidates** as they advance

# Stay Connected to the SMART Antiviral Prize



**SMARTantiviral.com**



**On SMARTantiviral.com, you'll find:**

## **How to Enter:**

- Prize rules and eligibility
- Key dates and stage timelines

## **Technical Resources:**

- Desired Product Attributes to guide concept plans
  - Scoping considerations and other FAQs

## **Opportunities to Connect:**

- Teaming resources to find collaborators
- Online feedback survey to help inform the prize design

# Closing / Contact

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**ASPR Website:**

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