Office of Biomedical Advanced Research and Development Authority (BARDA) Division of Research, Innovation & Ventures (DRIVe)

Amendment 008 Issuance for Easy Broad Agency Announcement (EZ-BAA) BAA-22-100-SOL-00003

The purpose of this Amendment is the following:

1) Add the following Area of Interest (AOI):

   AOI #25: FASTx

2) Update the language in **Section III (F)** of the Easy Broad Agency Announcement titled “Plus (+) Phase”

INTRODUCTION AND OVERVIEWINFORMATION

A. Development Opportunity Objective:

Under this Amendment, DRIVe is doing the following:

1) Adding the following research Area of Interest (AOI):

AOI #25: FASTx

We are seeking abstract submissions for the following AOI:

AOI #25 : Nucleic acid-based platform development for Flexible and Strategic Therapeutics (FASTx)

Antiviral therapy is essential to reduce disease burden and improve clinical outcomes for viral infections. However, emerging viral outbreaks are difficult to predict, and viral mutation can render medical countermeasures (MCMs) like monoclonal antibodies (mAbs) and small molecules that target viral proteins ineffective. Development of new antivirals often cannot keep pace with rapidly emerging and evolving pandemics. Therefore, BARDA is seeking quickly adaptable therapeutic platforms to support its mission of preparedness and response to emerging viral threats that continue to occur with increasing frequency, scale, and diversity. Nucleic acid-based antiviral platforms are of particular interest due to their potential for rapid adaptation to diverse viral threats based on pathogen sequence data alone. Investments that advance the development of nucleic acid-based antiviral platforms will improve BARDA's ability to address public health emergencies caused by viral diseases.

BARDA is requesting abstract submissions for projects that aim to advance the development of rapid response, nucleic acid-based platforms for the treatment of viral infections from multiple viral families. These platforms may include, but are not limited to, nucleic acid-expressed mAbs, double-stranded RNA-mediated interference (RNAi), clustered regular interspaced short palindromic repeat-associated proteins (CRISPR-Cas), and locked nucleic acids (LNAs). Candidate platforms should have the capacity to generate therapeutic candidates able to target a diverse set of viral families and a strong mechanistic justification for their use during acute viral infection or for use as pre-exposure prophylaxis (PrEP). Preference will be given to submissions that include the following: 1) proposed specific technical advancements that will improve the utility of the platform, and 2) proof of concept efficacy studies in vitro (or in vivo if feasible within the funding constraints) that will evaluate an investigational product against a relevant viral target.

<u>Abstract Submissions should address the following:</u>

Characteristics of the therapeutic platform that will improve critical features such as (but not limited to) the following:

a. Delivery of the investigational product to target tissues
b. Efficacy
c. Formulation

d. Manufacturability (speed, scale, cost, etc.)
e. Safety and toxicity
f. Thermostability

Abstract submissions should include the following information:

1. Potential to adapt to new viral families, including minimum data required to use the platform to address a newly identified viral threat (e.g., viral genome sequence vs. clinical samples, etc.) and applicability to both respiratory and systemic infections.
2. Mechanism of action of the platform
3. Evidence for efficacy to treat acute viral infection or for use as PrEP
    a. Abstracts focused on Pre-exposure prophylaxis (PrEP) should meet criteria described in "Guidance for abstract submissions pursuing a PrEP indication" below
4. Safety and approaches to mitigate the risk of off-target effects
5. Specific technical gaps or challenges intrinsic to the current state of the platform that could be addressed to improve its utility for use as a therapeutic or PrEP product. The abstract should/may aim to specifically address the identified challenges.
6. Current timeline from pathogen identification to IND filing, including key intermediate steps and timeline drivers; second estimated optimal timeline to IND reflecting the proposed technical improvements included in the Respondent's submission, if applicable.
7. Current state of manufacturing capabilities, including geographic location and scale

Projects are encouraged to develop a candidate product for one or more of the following viral threats as the primary target:

- SARS-CoV-2
- Filoviruses
- Influenza

A secondary viral target of the developer's choosing may be proposed in addition to the primary target so as to validate the flexibility of the platform. There is a preference for respiratory viruses and viruses causing hemorrhagic fever. Secondary target viruses must have a well-defined animal model and disease kinetics amenable to therapeutic treatment during acute infection. Moreover, the proposed therapeutic should have a clear regulatory path.

Guidance for abstract submissions pursuing a PrEP indication:

PrEP indications will only be considered for influenza and SARS-CoV-2, and candidates should meet the following criteria:

- Requires only a single dose for at least six months of protection
- Oral, subcutaneous, transdermal, inhaled, or intramuscular route of administration
- Influenza PrEP candidates must protect against Influenza A including seasonal (H1N1 and H3N2) and potential pandemic (H5N1 and H7N9) viruses
    - Preference will be given for PrEP candidates that protect against Influenza A and B
- SARS-CoV-2 PrEP candidates must target highly conserved regions of the virus and are expected to be resilient against new viral variants
    - Preference will be given to PrEP candidates that are efficacious against multiple coronaviruses (for example MERS-CoV and SARS-CoV)

Topics that are out of scope for this AOI include:

1. Vaccine platforms
2. Host directed therapeutics
3. Broad acting antivirals
4. Applications of Artificial Intelligence/Machine Learning that generate only theoretical therapeutics

We strongly encourage all interested parties to reach out via email to FASTx@hhs.gov with a description of the nucleic acid-based therapeutic platform and the intended viral targets. We will schedule a market research call with you to further discuss your technology and the EZ-BAA submission process.

2) Updating the language in Section III (F) of the Easy Broad Agency Announcement titled "Plus (+) Phase" (Changes are indicated in red):

The + Phase of the EZ-BAA will use the same scientific review procedures as those described in this EZ-BAA announcement for an award. Note that in the context of + Phase reviews, that the references to AOI's in the review procedures mean whether the proposed project expands/continues development of the underlying technology initially funded in addition to whether the proposed project aligns with current overall programmatic strategy(ies). The only key differences with the EZ-BAA+ Phase may be with respect to any resulting awards' contract type, anticipated contract duration, funding threshold, and cost accounting standards as required by 41 U.S. Code § 1502.

B. Eligible Respondents & Scope Parameters:

This Amendment is open to all responsible sources as described in the EZ-BAA. Abstract submissions that do not conform to the requirements outlined in the EZ-BAA may be considered non-responsive and will not be reviewed. In particular, an entity must have an active registration with https://sam.gov at the time of submission to be reviewed. If not, the abstract submission will not be reviewed and will be rejected. Please do not attempt to submit an abstract if your registration is not active in https://sam.gov.

IMPORTANT NOTE: Interested vendors are strongly encouraged to request and schedule a pre-submission call before submitting an abstract. This request should include the project title, key project staff, and a brief description of the proposed project. Please submit the requests to the following:

AOI #25: FASTx (FASTx@hhs.gov)

The closing date for abstract submissions for this AOI, unless otherwise extended will be:

Area of Interest	Closing Date for Abstract Submissions
#25	12:00pm ET on October 15, 2024

C. Number of Awards:

Multiple awards are anticipated and are dependent upon the program priorities, scientific/technical merit of abstract submissions, how well the abstract submissions fit within the goals of the AOI, and the availability of funding. The program funding is subject to change based on the Government's discretion.

Funding is limited, so we encourage any interested vendors to reach out to the respective program as soon as possible before submitting an abstract.

D. Amendment Application Process:

This Amendment will follow the same submission process and review procedures as those established under this EZ-BAA, unless otherwise noted. For complete details, please read the EZ-BAA in its entirety along with all amendments.

IMPORTANT NOTE: Respondents who are awarded a contract under each of these AOIs will be required to share any collected, de-identified data in an effort to advance the field and knowledge. Interested Respondents are strongly encouraged to commercialize their technology and algorithms, however note that consistent with BARDA's mission and federal standards, data collected through the use of government funding will be delivered to BARDA for government usage pursuant to applicable regulations and law.