

Chemical Biological Medical Systems (CBMS)–Therapeutics

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

MISSION

Provides the warfighter and the nation with innovative medical solutions to protect against and treat emerging, genetically-engineered, or unknown biothreats.

DESCRIPTION

Chemical Biological Medical Systems (CBMS)–Therapeutics consists of the following components:

Advanced Anticonvulsant System

(AAS): The AAS will consist of the drug midazolam in an autoinjector, which will replace the fielded Convulsant Antidote for Nerve Agents (CANAs) that contains diazepam. Midazolam, injected intramuscularly, will treat seizures and prevent subsequent neurological damage caused by exposure to nerve agents.

AAS will not eliminate the need for other protective and therapeutic systems.

Improved Nerve Agent Treatment System (INATS):

INATS is an enhanced treatment regimen against the effects of nerve agent poisoning. The new oxime component of INATS will replace 2-pyridine aldoxime methyl chloride (2-PAM) in the Antidote Treatment Nerve Agent Autoinjector (ATNAA). In addition U.S. Food and Drug Administration (FDA) approval will be obtained for use of pyridostigmine bromide (PB), the component of Soman Nerve Agent Pretreatment Pyridostigmine (SNAPP) for use against additional nerve agents.

Medical Radiation Countermeasure

(MRADC): Acute Radiation Syndrome (ARS) manifests primarily as hematopoietic (bone marrow), gastrointestinal, and cerebrovascular sub-syndromes depending on the dose of radiation received. The portfolio of MRADC will, when used as a system, provide a robust capability to the warfighter. The current lead

MRADC, Protectan CBLB502, is under investigation for reducing the risk of death following whole body irradiation.

Hemorrhagic Fever Viruses (HFV):

HFV medical countermeasures will mitigate the threat of illness or death, as well as lessen issues with performance degradation resulting from exposure to hemorrhagic fever viruses (Ebola and Marburg). Due to the general severity of these diseases, HFV therapeutics will be administered to infected warfighters while under direct medical observation.

Emerging Infectious Disease

Influenza (EID Flu): EID Flu is an FDA-approved, broad-spectrum medical countermeasure that will protect against naturally occurring or biologically-engineered influenza viruses. This therapeutic will mitigate the threat of pandemic and drug resistant influenza viruses and will mitigate performance degradation issues associated with exposure to this organism.

SYSTEM INTERDEPENDENCIES

None

PROGRAM STATUS

- **1QFY12:** INATS Phase 1 Clinical Trial began
- **2QFY12:** Contract awarded for EID Flu
- **3QFY12:** MRADC expanded cooperative efforts with Biomedical Advanced Research and Development Authority (BARDA)

PROJECTED ACTIVITIES

- **1QFY13:** INATS Milestone B
- **1QFY13:** EID Flu Milestone B
- **1QFY13:** AAS Milestone C
- **3QFY13:** HFV Milestone B
- **3QFY14:** INATS initiates animal efficacy and clinical trials
- **4QFY14:** AAS Initial Operational Capability (IOC)

ACQUISITION PHASE

Technology Development

Engineering & Manufacturing Development

Production & Deployment

Operations & Support

Chemical Biological Medical Systems (CBMS)–Therapeutics

INATS

FOREIGN MILITARY SALES

None

CONTRACTORS

AAS:

Meridian Medical Technologies
(Columbia, MD)

Battelle Biomedical Research Center
(Columbus, OH)

INATS:

Southwest Research Institute
(San Antonio, TX)

Battelle Memorial Institute (Columbus, OH)

MRADC:

Osiris Therapeutics (Columbia, MD)



Pretreatment



Therapeutic

21 TABLETS
PYRIDOSTIGMINE BROMIDE USP 30 mg
(Soman Nerve Agent Pre-Treatment Tablets)
NSN 6505-01-178-7903 Rx only

Directions for use:
1. START TAKING ONLY WHEN ORDERED
BY YOUR COMMANDER
EIGHT (8) HOURS
BEFORE THE STATED DOSE

Lot No.: 3B0003
Exp. Date: 02/2019

IMPROVED NERVE AGENT TREATMENT SYSTEM