Chemical Biological Medical Systems-Therapeutics

**MISSION**
Delivers safe, effective, and robust medical products that protect U.S. forces against validated CBRN threats. CBMS applies government and industry best practices to develop or acquire Food and Drug Administration (FDA)-approved products within rigorously managed cost, schedule, and performance constraints.

**DESCRIPTION**
Chemical Biological Medical Systems-Therapeutics consists of the following components:

**Advanced Anticonvulsant System (AAS)** will consist of the drug midazolam in an autoinjector. The midazolam-filled autoinjector will replace the fielded Convulsant Antidote for Nerve Agents (CANA) 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)** is an enhanced treatment regimen against the effects of nerve agent poisoning. The new oxime component of INATS will replace 2-PAM in the Antidote Treatment Nerve Agent Autoinjector (ATNAA).

**Medical Radiation Countermeasure (MRADC) Acute Radiation Syndrome (ARS)** manifests primarily as hematopoietic (bone marrow), gastrointestinal, and cerebrovascular subsyndromes, depending on the dose of radiation received. The lead MRADC is Protectan CBLB502, a recombinant protein under investigation to reduce the risk of death following whole body irradiation. The portfolio of MRADC will, when used as a system, provide a robust capability to the Warfighter.

**Intracellular Bacterial Pathogens (IBP)** will mitigate the threat of illness or death, as well as lessen issues with performance degradation resulting from exposure.

**Hemorrhagic Fever Viruses (HFV)** medical countermeasures will mitigate the threat of illness or death, as well as lessen issues with performance degradation resulting from exposure. Due to the general severity of these diseases, HFV therapeutics will be administered to infected Warfighters while under direct medical observation.

**SYSTEM INTERDEPENDENCIES**
None

**PROGRAM STATUS**
- **1QFY11**: HFV Phase 1 trials begin
- **2QFY11**: In-life portion of RAMPART study (DoD autoinjectors complete)
- **1QFY11**: HFV Milestone B Decision
- **3QFY11**: IBP Phase 1 trials begin
- **4QFY11**: HFV Phase II Pivotal Animal Studies

**PROJECTED ACTIVITIES**
- **1QFY12**: INATS Phase 1 Clinical Trial begins
- **1QFY13**: INATS Milestone B
- **1QFY13**: AAS Milestone C
- **1QFY13**: MRADC Milestone B
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)