Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army

Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System

PE 0604807A I Medical Materiel/Medical Biological Defense Equipment - Eng Dev

Development & Demonstration (SDD)

,	,				,									
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost		
Total Program Element	-	38.712	39.447	30.397	-	30.397	48.304	44.937	43.593	52.884	Continuing	Continuing		
812: Mil HIV Vac&Drug Dev	-	3.134	3.900	1.500	-	1.500	5.068	4.848	5.516	5.629	Continuing	Continuing		
832: Field Medical Systems Engineering Development	-	19.878	23.037	18.204	-	18.204	27.980	26.604	24.525	32.171	Continuing	Continuing		
849: Infec Dis Drug/Vacc Ed	-	13.358	12.510	10.693	-	10.693	14.857	13.371	13.438	15.084	Continuing	Continuing		
VS8: MEDEVAC Mission Equipment Package (MEP) - End Dev	-	2.342	-	-	-	-	0.399	0.114	0.114	-	Continuing	Continuing		

^{*} The FY 2015 OCO Request will be submitted at a later date.

Note

FY13 adjustments attributed to Congressional General Reductions (-59 thousand); SBIR/STTR transfers (-1.166 million); and Sequestration reductions (-3.458 million). FY15 reduction attributed to realignment to other higher priority Army programs.

A. Mission Description and Budget Item Justification

This program element (PE) funds advanced development of medical materiel within the System Demonstration and Low Rate Initial Production portions of the acquisition life cycle using 6.5 funding. It supports products successfully developed in the Systems Integration portion of the Systems Development and Demonstration phases through completion of the Milestone C Decision Review. Commercially-off-the-shelf (COTS) medical products are also tested and evaluated for military use, when available. This PE primarily includes pivotal (conclusive) human clinical trials necessary for licensure by the Food and Drug Administration.

(PROJ 812) project funds military relevant human immunodeficiency virus (HIV) medical countermeasures. These funds provide for engineering and manufacturing development of candidate vaccines and drugs to permit large-scale field testing. Development focused on military unique needs effecting manning, mobilization, and deployment. Products from this project will normally transition to DoD Health Programs or OPA Funds.

(PROJ 832) this project funds the engineering and manufacturing development of medical products for enhanced combat casualty care and follow-on care, including rehabilitation. Mature commercial-off-the-shelf (COTS) medical products are also evaluated for military use. Consideration will also be given to reduce the medical sustainment footprint through smaller weight and cube volume, or equipment independence from supporting material. Products from this project will normally transition to OPA Funds.

(PROJ 849) funds development of candidate medical countermeasures for military relevant infectious diseases. These products fall between four major areas: vaccines, drugs, diagnostic kits/devices, and insect control measures to limit exposure and disease transmission. FDA approval is a mandatory obligation for all military products

Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Army Date: March 2014

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

2040: Research, Development, Test & Evaluation, Army I BA 5: System Development & Demonstration (SDD)

PE 0604807A I Medical Materiel/Medical Biological Defense Equipment - Eng Dev

placed into the hands of medical providers or service members for human use. Products from this project will normally transition to DoD Health Programs or OPA funds.

(PROJ VS8) program receives products that transition from VS7 and funds effort to complete research and development for the MEDEVAC Mission Essential Packages (MEPs) to support 256 Medical Evacuation legacy helicopters. The force design will increase the number of air frames in the force from 12 to 15 aircraft for 37 MEDEVAC companies to better meet operation needs.

This program is managed by U.S. Army Medical Materiel Development Activity (USAMMDA) and U.S. Army Medical Materiel Agency (USAMMA) of the US Army Medical Research and Materiel Command.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	43.395	39.468	46.553	-	46.553
Current President's Budget	38.712	39.447	30.397	-	30.397
Total Adjustments	-4.683	-0.021	-16.156	-	-16.156
 Congressional General Reductions 	-0.059	-0.021			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-	-			
 SBIR/STTR Transfer 	-1.166	-			
 Adjustments to Budget Years 	-	-	-16.156	-	-16.156
 Other Adjustments 	-3.458	-	-	-	-

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2015 A	Army							Date: Marc	ch 2014	
Appropriation/Budget Activity 2040 / 5	•					7A I Medic	t (Number/ al Materiel/l uipment - E	Project (Number/Name) 812 I Mil HIV Vac&Drug Dev				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
812: Mil HIV Vac&Drug Dev	-	3.134	3.900	1.500	-	1.500	5.068	4.848	5.516	5.629	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project funds militarily relevant human immunodeficiency virus (HIV) medical countermeasures. These funds provide for engineering and manufacturing development of candidate vaccines and drugs to permit large-scale field testing. Development is focused on militarily unique needs effecting manning, mobilization, and deployment.

The major contractor is The Henry M. Jackson Foundation for the Advancement of Military Medicine, Rockville, MD. Research efforts are coordinated with the National Institutes of Health.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Military HIV Vaccine and Drug Development	3.134	3.900	1.500
Articles:	-	-	-
Description: This project provides funds for engineering and manufacturing development of candidate vaccines and drugs to permit large-scale field testing of vaccines for medical countermeasures to HIV			
FY 2013 Accomplishments:			
Refined vaccine administration schedule as well as clinical trial design based on data from previous clinical trials. Adjusted plan for increment 1 future efficacy trial planned to begin in late 2014.			
FY 2014 Plans:			
Continue to refine vaccine administration schedule as well as clinical trial design based on data from previous clinical trials. Adjust plan for Regional well-controlled clinical trial large enough to demonstrate vaccine efficacy which initiated mid-2013 future Prime/Boost Regional Phase 3 Study to Confirm Safety and Effectiveness in a Diverse Populaton, planned to begin in early 2018.			
FY 2015 Plans:			
Will continue to refine vaccine administration schedule as well as clinical trial design based on data from previous clinical trials.			
Will continue to adjust plan for Regional well-controlled clinical trial large enough to demonstrate vaccine efficacy which initiated mid-2013.			
Accomplishments/Planned Programs Subtotals	3.134	3.900	1.500

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army		Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604807A / Medical Materiel/Medical Biological Defense Equipment - Eng Dev	Project (Number/Name) 812 I Mil HIV Vac&Drug Dev
C. Other Program Funding Summary (\$ in Millions) N/A		
Remarks		
D. Acquisition Strategy Test and evaluate commercially developed vaccine candidates in government.	ernment-managed trials.	
E. Performance Metrics N/A		

PE 0604807A: Medical Materiel/Medical Biological Defense Equipm... Army

UNCLASSIFIED Page 4 of 31

R-1 Line #105

Exhibit R-3, RDT&E P	Project Co	ost Analysis: PB 2	2015 Army	/								Date:	March 20	014	
Appropriation/Budge 2040 / 5	t Activity	1				PE 0604	4807A / N	⁄ledical M	umber/Na lateriel/Me nent - Eng	edical		(Number il HIV Vac			
Management Service	s (\$ in M	illions)		FY 2	2013	FY 2	014	FY 2 Ba	2015 se		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development Management Services Cost	Various	Various : Various	1.339	0.299		0.823		0.173		-		0.173	Continuing	Continuing	-
		Subtotal	1.339	0.299		0.823		0.173		-		0.173	-	-	-
Product Developmen	t (\$ in Mi	illions)		FY 2	2013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development Cost	Various	Henry M. Jackson Foundation, : Various	30.279	2.047		0.951		0.325		-		0.325	Continuing	Continuing	Continuir
		Subtotal	30.279	2.047		0.951		0.325		-		0.325	-	-	-
Support (\$ in Millions	s)			FY 2	2013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development Support Cost	Various	Various : Various	0.626	0.031		0.878		0.302		-		0.302	Continuing	Continuing	_
		Subtotal	0.626	0.031		0.878		0.302		-		0.302	-	-	-
Test and Evaluation (\$ in Milli	ons)		FY 2	2013	FY 2	014	FY 2 Ba	2015 se		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Medical Product Development T&E Cost	Various	Henry M. Jackson Foundation, : Various	24.390	0.757		1.248		0.700		-		0.700	Continuing	Continuing	Continuin
		Subtotal	24.390	0.757		1.248		0.700		-		0.700	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2	2015 Army	/					Date:	Date: March 2014				
Appropriation/Budget Activity 2040 / 5	PE 060	4807A /	lement (Number/ Medical Materiel/N se Equipment - E	Project (812 / Mil								
Prior Years FY 2013					014	FY 2015 Base	FY 2		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	56.634	3.134		3.900		1.500	-		1.500	-	-	-
Remarks												

Exhibit R-4, RDT&E Schedule Profile: PB 2015	Army	/																				Date	e: M	arch	20	14		
Appropriation/Budget Activity 2040 / 5								PE	1 Pro 060 ologic	4807	7A /	Medi	ical	Mate	eriel/	Мес	•		Pro . 812	•	•				,	v		
		FY	2013	3		FY	′ 201	4		FY	201	5		FY 2	2016		F	Y 2	2017			FY 2	2018	3		FY 2	2019	
	1	2	3	4	1	2	2 3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Phase 2 study of Vaccine candidates																												

Page 7 of 31

Initiate Phase 3 Study of Vaccine candidates

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	,	,	umber/Name) IV Vac&Drug Dev

Schedule Details

	St	art	End			
Events	Quarter	Year	Quarter	Year		
Phase 2 study of Vaccine candidates	1	2014	4	2014		
Initiate Phase 3 Study of Vaccine candidates	1	2019	4	2019		

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army												
Appropriation/Budget Activity 2040 / 5		PE 060480	am Elemen 17A / Medica Defense Eq	al Materiel/I	umber/Name) Medical Systems Engineering ent							
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
832: Field Medical Systems Engineering Development	-	19.878	23.037	18.204	-	18.204	27.980	26.604	24.525	32.171	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project funds the engineering and manufacturing development of medical products for enhanced combat casualty care and follow-on care, including rehabilitation. This project funds pivotal (conclusive) human clinical trials or mechanical engineering evaluations for effectiveness of devices or biologics (products derived from living organisms) to fulfill unique military requirements. Mature commercial-off-the-shelf (COTS) medical products are also evaluated for military use. Consideration is also given to reducing the medical sustainment footprint through smaller weight and cube volume, or equipment independence from supporting material. This work is frequently completed through a laboratory/contractor team with the contractor obtaining the U.S. Food and Drug Administration (FDA) licensure for sale of the product.

Major contractors/intra-governmental agencies include: IGR Enterprises,Inc.;Army Medical Department Board Test Center;Se Qual Technologies,Inc.; Enginivity, Inc.;Ultrasound Diagnostics,Inc.;HemCon Medical Technologies,; Cerdak Ltd;Hemerus Medical,LLC; Fast Track Drugs & Biologics,LLC; Integrated Medical Systems,Inc;the National Institutes of Health National Heart, Lung and Blood Institute (NHLBI), and the U.S. Army Aeromedical Research Laboratory, Walter Reed Army Institute of Research (WRAIR) and Institute of Surgical Research (ISR) for user evaluation. Other military agencies include Program Executive Office (PEO) Soldier, PEO Combat Service Support (CSS), and Naval Undersea Warfare Center.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Field Medical Systems Engineering Development PM Medical Devices	0.200	0.943	2.984
Article	s:	-	-
Description: This project funds the engineering and manufacturing development of medical products for enhanced combat casualty care managed by PM Medical Devices.			
FY 2013 Accomplishments: The Burn Resuscitation Decision Device: Prepared documentation for CPD and MS B/C. This product transitioned to procuremer in FY 2013. MS B/C occurred in FY 2013. Oxygen Generator (15 LPM) System: 15LPM draft CDD completed and a request for proposals (RFP) award was received in March 2012. Continued development with a target to field in FY 2015. Replacement for the M-138 Steam Sterilizer: Conducted testing of the device. Began design and development of system in FY 2012 and continued development through FY 2013.			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: Mar	ch 2014	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604807A / Medical Materiel/Medical Biological Defense Equipment - Eng Dev	Project (Nu 832 / Field I Developme	Medical Sy	,	gineering
D. Accomplishments/Diamed Draggers (\$ in Millians, Auticle	Overtities in Feeb		0040	EV 0044	EV 004E

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2013 FY 2015 FY 2014 Oxygen Generator (15 LPM) System: Instead of ARMY only Request for Proposals (RFP cooperated with the Air Force 15 LPM on developmental effort. Army efforts are airworthiness certification for MEDEVAC aircraft and other Army-unique requirements; Air Force has funding to complete the project for their needs. Replacement for the M-138 Steam Sterilizer: Continue planned testing of devices designed and developed in previous years. Medical Equipment Sets COTS Modernization of Life Cycle Equipment: Continue development and testing to ensure the most current and cost effective devices are being utilized. Equipment is selected for modernization based on its own life cycle plan as part of a Sets, Kits and Outfits (SKO). Modernization also occurred when products are discontinued, new models are available and new technology introduced to meet current standard of patient care. TBI Diagnostic Assay System Increment II Point of Care Device: Candidate product entered pivotal clinical trial and prepare to obtain FDA approval once transition from project 836 is completed. FY 2015 Plans: Oxygen Generator (15 LPM) System: An MOA was developed in FY13 between USAMMA and the USAF to address this joint requirement. At this time no Army funds are projected for this project. Anticipate DHP RDT&E funds to be used in support of the joint requirement. Replacement for the M-138 Steam Sterilizer: In FY13 the sterilizer project has undergone a major shift in contract strategy. Funds will be used to allow a manufacturer to fully develop and achieve FDA approval by the end of FY15. At the end of the contract period, it is fully anticipated that the Army will have a new sterilizer available for fielding. Will move this project through the DOD Acquisition process to accommodate the modernization effort. Medical Equipment Sets COTS Modernization of Life Cycle Equipment: will continue development and testing to ensure the most current and cost effective devices are being utilized. Equipment is selected for modernization based on its own life cycle plan as part of a Sets, Kits and Outfits (SKO). Modernization also occurs if a product will be discontinued, new models will be available and new technology will be developed to meet the users need. TBI Diagnostic Assay System Increment II Point of Care Device: This effort has seen a dramatic realignment of effort and scope away from Banyan Technologies to Abbott Labs. The focus of this effort is to use the current Biomarker technology developed by Banyan and cross-level all known technologies to Abbott Diagnostics. Contracting efforts will be developed to facilitate this path forward. Army currently uses the i-STAT in assemblages. The intent of this effort is to modernize the i-STAT platform to accommodate the new cartridges associated with the TBI Biomarkers. Noninvasive Neurodiagnostics TBI: Noninvasive Neurodiagnostic technologies for TBI is multi-focused program that transitions product from S&T and Commercial Off the Shelf (COTS) products. Efforts to collate all non-invasive technologies into one integrated IPT are currently in place. The 3 technologies currently involved are the Eye- Tracking System, the QEEG and Balance Platforms. Future components of the multi-focused approach will fall under the scope of this line item. Anticipate full-up IPTs with funding allocations designated in FY15. Impedance Threshold Device for the Treatment of TBI: Current device has a 510(k) (Premarket Notification) clearance for multiple indications. The submission of a new 510(k) is planned to cover the expanded indications for the currently fielded device. Advanced Wound Dressing: Will conduct comparative studies for the Advanced Wound Care COTS products (in-vivo animal or human studies). Title: Field Medical Systems Engineering Development PM Pharmaceuticals 13.506 16.876 10.470

UNCLASSIFIED
Page 10 of 31

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: N	larch 2014	
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604807A I Medical Materiel/Medical Biological Defense Equipment - Eng Dev	832 <i>I I</i>	ct (Number/N Field Medical Opment	Name) Systems En	gineering
B. Accomplishments/Planned Programs (\$ in Millions, Article	,		FY 2013	FY 2014	FY 2015
Description: Funding is provided for engineering and manufacture Pharmaceuticals for enhanced combat casualty care and follow-or ending the casualty care and casualty care and casualty care and casualty casualty care and casualty care and casualty casualty care and casualty casualt	uring development of medical products managed by PM	ticles:	-	-	-
FY 2013 Accomplishments: Blood Pathogen Reduction/Inactivation: Transitioned to advance funded with Defense Health Program RDT&E funding in FY13. R program to maintain schedule and avoid delays. Freeze-Dried P test sites for Phase 3 Pivotal clinical trial, and continued developed Practices compliant manufacturing capability. Accelerated fielding the June 2011 Army Surgeon General's Report by the Blast Injury of current Good Manufacturing Practices manufacturing processes Developed Phase 3 clinical testing network and protocols in the experiments.	Remaining Army funding transitioned to Freeze-dried Plasma Plasma: Finalized Phase 3 test plan and protocols, recruited ment of commercially sustainable current Good Manufactur g of a FDA-approved Freeze-Dried Plasma was validated in ry Task Force. Cryopreserved Platelets: continued validation es in support of U.S. Food and Drug Administration licensur	ing in n re.			
FY 2014 Plans: Cryopreserved Platelets: Complete Phase 2 safety and effectiver continue development of Phase 3 clinical testing network and program Drug Administration. Freeze-Dried Plasma Program: continu Manufacturing Practices manufacturing process in support of U.S expanded safety and effectiveness clinical studies.	otocols, if Phase 3 Pivotal clinical trial is required by the U.S ue development and validation of a sustainable current Goo	5. Food od			
FY 2015 Plans: Current Freeze Dried Plasma development effort terminated in Freevised for new development effort begin in FY14. Will continue Fwill be extended one year due to the FDA requiring an additional cancer patients with platelet deficiency and continue development	Phase 2b safety clinical study. Cryopreserved Platelets sch safety clinical study. Will begin Phase 2 efficacy clinical tria	edule			
Title: Field Medical Systems Engineering Development PM Integ	grated Clinical Systems (ICS)		-	-	1.35
Description: This project funded the engineering and manufacture enhanced combat casualty care and follow-on care, including references.		5 for			
FY 2015 Plans: Pre-Hospital Medical Informatics Transport: Will continue with the Manufacturing Development Phase of the Defense Acquisition M					

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army	Project (Number 832 / Field Medic Development FY 2013 byed 6.172 cticles: cal	FY 2014	gineering FY 2015 3.393
B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) Transport System in order to provide medica with state of the art capability to monitor and communicate patient data to deplo medical treatment facilities and medical C2 nodes. Title: Field Medical Systems Engineering Development PM Medical Support Systems Art Description: This project funds the engineering and manufacturing development of medical products managed by PM Medical Support Systems for enhanced combat casualty care and follow-on care, including rehabilitation. FY 2013 Accomplishments: Transitioned from Project 836 and collaborate with PM HBCT on final integration/operational testing of the treatment table and blood refrigerator in the future treatment vehicle variant. As part of the medical equipment sets, transitioned cold chain technology transition of medical equipment sets, transitioned cold chain technology and terror management system, and quad fold litter from 836 and complete operational evaluation. Continued modernization of medical equipment sets for preventive medicine, air and ground medical evacuation, fresh water/waste water combat support hospital support. Transitioned ISO panel from 836 and complete operational testing Transitioned from 836 and completed final operational evaluation of Force Provider CSH. Complete operational testing Future Medical Shelter System (hard-wall 1-sided and 2-sided shelters) for a materiel procurement decision. Continued collaboration with PEO Combat Service/Combat Service Support on finalization of MRAP medical vehicle evacuation platform	FY 2013 oyed 6.17: cal dology,	FY 2014	FY 2015
Transport System in order to provide medics with state of the art capability to monitor and communicate patient data to deplot medical treatment facilities and medical C2 nodes. Title: Field Medical Systems Engineering Development PM Medical Support Systems Art Description: This project funds the engineering and manufacturing development of medical products managed by PM Medical Support Systems for enhanced combat casualty care and follow-on care, including rehabilitation. FY 2013 Accomplishments: Transitioned from Project 836 and collaborate with PM HBCT on final integration/operational testing of the treatment table and blood refrigerator in the future treatment vehicle variant. As part of the medical equipment sets, transitioned cold chain technol trauma tiered medical bag, water/waste water management system, and quad fold litter from 836 and complete operational evaluation. Continued modernization of medical equipment sets for preventive medicine, air and ground medical evacuation, fresh water/waste water combat support hospital support. Transitioned ISO panel from 836 and complete operational testing Transitioned from 836 and completed final operational evaluation of Force Provider CSH. Complete operational/technical test of Future Medical Shelter System (hard-wall 1-sided and 2-sided shelters) for a material procurement decision. Continued collaboration with PEO Combat Service/Combat Service Support on finalization of MRAP medical vehicle evacuation platform	6.17: ticles: cal ad alology,		
Title: Field Medical Systems Engineering Development PM Medical Support Systems Art Description: This project funds the engineering and manufacturing development of medical products managed by PM Medic Support Systems for enhanced combat casualty care and follow-on care, including rehabilitation. FY 2013 Accomplishments: Transitioned from Project 836 and collaborate with PM HBCT on final integration/operational testing of the treatment table and blood refrigerator in the future treatment vehicle variant. As part of the medical equipment sets, transitioned cold chain technological medical bag, water/waste water management system, and quad fold litter from 836 and complete operational evaluation. Continued modernization of medical equipment sets for preventive medicine, air and ground medical evacuation, fresh water/waste water combat support hospital support. Transitioned ISO panel from 836 and complete operational testing Transitioned from 836 and completed final operational evaluation of Force Provider CSH. Complete operational/technical test of Future Medical Shelter System (hard-wall 1-sided and 2-sided shelters) for a material procurement decision. Continued collaboration with PEO Combat Service/Combat Service Support on finalization of MRAP medical vehicle evacuation platform	6.17: ticles: cal and hology,	2 5.218	3.393
Description: This project funds the engineering and manufacturing development of medical products managed by PM Medic Support Systems for enhanced combat casualty care and follow-on care, including rehabilitation. FY 2013 Accomplishments: Transitioned from Project 836 and collaborate with PM HBCT on final integration/operational testing of the treatment table an blood refrigerator in the future treatment vehicle variant. As part of the medical equipment sets, transitioned cold chain technotrauma tiered medical bag, water/waste water management system, and quad fold litter from 836 and complete operational evaluation. Continued modernization of medical equipment sets for preventive medicine, air and ground medical evacuation, fresh water/waste water combat support hospital support. Transitioned ISO panel from 836 and complete operational testing Transitioned from 836 and completed final operational evaluation of Force Provider CSH. Complete operational/technical test of Future Medical Shelter System (hard-wall 1-sided and 2-sided shelters) for a material procurement decision. Continued collaboration with PEO Combat Service/Combat Service Support on finalization of MRAP medical vehicle evacuation platform	cal nd nology,	5.218	3.390 -
FY 2013 Accomplishments: Transitioned from Project 836 and collaborate with PM HBCT on final integration/operational testing of the treatment table an blood refrigerator in the future treatment vehicle variant. As part of the medical equipment sets, transitioned cold chain technotrauma tiered medical bag, water/waste water management system, and quad fold litter from 836 and complete operational evaluation. Continued modernization of medical equipment sets for preventive medicine, air and ground medical evacuation, fresh water/waste water combat support hospital support. Transitioned ISO panel from 836 and complete operational testing Transitioned from 836 and completed final operational evaluation of Force Provider CSH. Complete operational/technical test of Future Medical Shelter System (hard-wall 1-sided and 2-sided shelters) for a material procurement decision. Continued collaboration with PEO Combat Service/Combat Service Support on finalization of MRAP medical vehicle evacuation platform	nd pology,		
Transitioned from Project 836 and collaborate with PM HBCT on final integration/operational testing of the treatment table an blood refrigerator in the future treatment vehicle variant. As part of the medical equipment sets, transitioned cold chain technological trauma tiered medical bag, water/waste water management system, and quad fold litter from 836 and complete operational evaluation. Continued modernization of medical equipment sets for preventive medicine, air and ground medical evacuation, fresh water/waste water combat support hospital support. Transitioned ISO panel from 836 and complete operational testing Transitioned from 836 and completed final operational evaluation of Force Provider CSH. Complete operational/technical testing Future Medical Shelter System (hard-wall 1-sided and 2-sided shelters) for a material procurement decision. Continued collaboration with PEO Combat Service/Combat Service Support on finalization of MRAP medical vehicle evacuation platform	ology,		
	g. sting		
FY 2014 Plans: As part of the medical equipment sets, continue to perform form, fit and function of field medical sink, and continue to evaluate commercial litters and cold chain storage devices. Continue to evaluate modernization efforts and conduct airworthiness test for medical equipment sets Medical Evacuation and Treatment Vehicles Medical Equipment Set and Mission Essential Packa with products covering preventive medicine, air and ground medical evacuation, and fresh water/waste water systems. Compoperational testing of the ISO operating room shelter and finalize Force Provider soft-walled shelter for procurement. Continucollaboration with Program Executive Office Combat Support/Combat Support Service (PEO CS/CSS) and Program Executive Office Ground Combat Systems (PEO GCS) on development efforts for emerging medical vehicle evacuation/ casualty evacuation (CASEVAC) variants. Medical variants that will be collaborated on with PEO CS/CSS consist of medical shelters, Mine Resist Ambush Protected (MRAP), Armored Multipurpose Vehicle (AMPV), and Joint Light Tactical Vehicle (JLTV). Collaborate with PEO GCS on medical variants for the Heavy Brigade Combat Team (HBCT). Complete operational testing of the Environme Sentinel Biomonitor (ESB) when it transitions from project 836 and conduct a milestone C (Engineering, Manufacturing and Development phase review). The ESB will assist preventative medicine personnel certify water capabilities by providing a presumptive screening capability that can rapidly identify toxicity in water.	eting age aplete ue ve cuation istant		

UNCLASSIFIED
Page 12 of 31

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604807A I Medical Materiel/Medical Biological Defense Equipment - Eng Dev	- 3 (umber/Name) Medical Systems Engineering ent

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Modernization of medical equipment sets: As part of the medical equipment sets, will complete form, fit and function of field			
medical sink, and will continue to evaluate commercial litters, cold chain storage devices and commercial items. Airworthiness			
Testing: Will continue to evaluate modernization efforts and conduct airworthiness testing for medical equipment sets Medical			
Evacuation and Treatment Vehicles Medical Equipment Set and Mission Essential Package with products covering air and ground			
medical evacuation. PEO Combat Support /Combat Support Service Support: Will continue collaboration with Program Executive			
Office Combat Support/Combat Service Support (PEO CS/&CSS) and Program Executive Office Ground Combat Systems (PEO			
GCS) on development efforts for emerging medical vehicle evacuation/casualty evacuation (CASEVAC) package. Environmental			
Sentinel Biomonitor (ESB): Will complete operational testing of the Environmental Sentinel Biomonitor (ESB) and conduct a			
milestone C (Engineering, Manufacturing and Development phase review). Milestone C start was delayed in FY14 the ESB will			
assist preventative medicine personnel certify water capabilities by providing a presumptive screening capability that can rapidly			
identify toxicity in water. Waste Treatment System for the CSH: Will develop Waste Treatment System (WTS) for the CSH. The			
WTS will render liquid and other fluid medical (biohazard) waste products sterile and otherwise inert to the environment in austere,			
deployed locations. Current methods do mitigate the risk of contamination, but only reduce the levels of agents left behind;			
they cannot assure total inactivation of all pathogens or the neutralization of chemical agents. Altitude Readiness Management			
System (ARMS): Will complete validation/verification of the Altitude Readiness Management System (ARMS). The ARMS product			
is a handheld sensor and software decision device to plan, monitor, and manage unit altitude illness risk and task performance			
prediction. Will transition from 836. Improved Vector Trap: Will develop prototypes of the Improved Vector Trap for testing.			
The Improved Vector Trap is a device which allows for the attraction and subsequent collection of disease-carrying insects for			
disease risk assessment. Will transition from 836. Portable Vector Identification Workstation: Will begin development of field			
deployable Vector Identification Workstation to provide situational awareness necessary to prevent/mitigate vector borne threats			
and associated environmental hazards.			
Accomplishments/Planned Programs Subtotals	19.878	23.037	18.204

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Develop in-house or industrial prototypes in government-managed programs to meet military and regulatory requirements for production and fielding.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army

Date: March 2014

Appropriation/Budget Activity R-1 Program Element

2040 / 5

Army

R-1 Program Element (Number/Name)
PE 0604807A I Medical Materiel/Medical
Biological Defense Equipment - Eng Dev

Project (Number/Name) 832 I Field Medical Systems Engineering

Development

Management Service	s (\$ in M	illions)		FY 2	2013	FY 2	2014	FY 2 Ba		FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development Management Services Cost	Various	Various : Various	22.478	2.577		3.903		2.610		-		2.610	Continuing	Continuing	Continuing
		Subtotal	22.478	2.577		3.903		2.610		-		2.610	-	-	-

Product Developmer	nt (\$ in M	illions)		FY 2	013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Freeze-dried Human Plasma	Various	HemCon Medical Technologies, Inc, : Tigard OR	23.321	3.953		6.715		-		-		-	Continuing	Continuing	Continuing
Hypertonic Saline Dextran	Various	National Institutes of Health, National Heart, Lung and Blood Institute (NHLBI): Various	15.100	-		-		-		-		-	Continuing	Continuing	Continuing
Medical Product Development Cost	Various	Various : Various	3.260	0.250		0.608		1.124		-		1.124	Continuing	Continuing	Continuing
Extended Life Red Blood Cell Product	Various	Hemerus Medical, LLC, : Various	3.140	-		-		-		-		-	Continuing	Continuing	Continuing
Cryopreserved Platelets	Various	Clinical Research Management, Inc : Hinckley, OH	0.000	-		1.200		1.911		-		1.911	-	3.111	-
Cryopreserved Platelets	Various	Multiple DoD activities and Dartmouth Hitchcock Med Ctr : North Potomac, MD	7.300	7.062		-		-		-		-	Continuing	Continuing	Continuing
Cryopreserved Platelets	Various	TBD : TBD	0.000	-		1.450		-		-		-	-	1.450	-
TBI Diagnostic Assay System - Increment II (benchtop/POC/ Bandits)	Various	Banyan BioMarkers, Inc : Alachua, FL	0.000	-		0.373		-		-		-	-	0.373	-

PE 0604807A: Medical Materiel/Medical Biological Defense Equipm...

UNCLASSIFIED
Page 14 of 31

R-1 Line #105

Exhibit R-3, RDT&E P	Project Co	ost Analysis: PB 2	2015 Army	/								Date:	March 20)14	
Appropriation/Budge 2040 / 5	t Activity	1				PE 0604	1807A / N	e ment (Ni Medical Ma se Equipn	ateriel/Me	edical			r/Name) cal System	าร Engine	ering
Product Developmen	t (\$ in Mi	illions)		FY 2	013	FY 2	014	FY 2 Bas			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Noninvasive Neurodiagnostics	TBD	TBD : TBD	0.000	-		-		2.647		-		2.647	-	2.647	-
Impedance Threshold Device for the Treatment of Traumatic Brain Injury	TBD	Advance Circulatory Systems Inc. : Roseville, MN	0.000	-		-		0.335		-		0.335	-	0.335	-
Pre-Hospital Medical Informatics Transport (Ground Transport Telemedicine)	TBD	TBD : TBD	0.000	-		-		0.950		-		0.950	-	0.950	-
	l.	Subtotal	52.121	11.265		10.346		6.967		-		6.967	-	-	-
Support (\$ in Millions	EV 2045 EV 2045		FY 2015 Total												
Cost Category Item	Millions) FY 2013 FY 2014 Base OCO Total Contract Method Performing Value SType Activity & Location Performing Value Cost Date Date Date Date Date Date Date Dat	Target Value of Contract													
Regulatory Support	Various	Clinical Research Management,Inc,.: Various	5.557	-		-		0.659		-		0.659	Continuing	Continuing	Continuir
Medical Product Development Support Cost	Various	Various : Various	4.746	1.108		4.665		-		-		-	Continuing	Continuing	Continuir
Medical Equipment Sets Development	Various	Various : Various	0.000	-		0.456		2.349		-		2.349	-	2.805	-
		Subtotal	10.303	1.108		5.121		3.008		-		3.008	-	-	-
Test and Evaluation (\$ in Milli	ons)		FY 2	013	FY 2	014	FY 2 Bas			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development T&E Cost	Various	Various : Various	7.696	4.928		2.403		-		-		-	Continuing	Continuing	Continuin
Cryopreserved Platelets	TBD	TBD : TBD	0.000	_		1.150		1.743		_		1.743		2.893	_

UNCLASSIFIED

PE 0604807A: Medical Materiel/Medical Biological Defense Equipm...

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity	,	- , (umber/Name)
2040 / 5		832 I Field	Medical Systems Engineering
	Biological Defense Equipment - Eng Dev	Developme	ent

Test and Evaluation	(\$ in Milli	ions)		FY 2	2013	FY 2	2014	FY 2 Ba		FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Equipment Sets Development	Various	Various : Various	0.000	-		0.114		1.092		-		1.092	-	1.206	-
Freeze Dried Plasma	C/CPFF	TBD : TBD	0.000	-		-		2.784		-		2.784	-	2.784	-
		Subtotal	7.696	4.928		3.667		5.619		-		5.619	-	-	-
				<u> </u>											Target

	Prior Years	FY 2	2013	FY 2	2014	FY 2 Ba		2015 CO	FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract	- 1
Project Cost Totals	92.598	19.878		23.037		18.204	-		18.204	-	-	-	1

Remarks

Y 2014 2 3	 FY 20	15		FY 2				Y 2	017						
				FY 2	016			ΥZ			V 004	•		 / 00	10
		3 4	1	2	3	4		2		4	 Y 201 2 3		1	 1 20 ⁻ 2 3	19 3 4
							,			,					

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	3	- , (umber/Name) Medical Systems Engineering ent

Schedule Details

	St	art	Eı	nd
Events	Quarter	Year	Quarter	Year
Cryopreserved Platelets (CPP) Phase 2 efficacy clinical studies	3	2014	3	2016
CPP Phase 3 final pivotal clinical studies prior to FDA licensure	1	2017	4	2019
Freeze-dried Plasma (FDP) Phase 2b safety clinical studies	3	2014	2	2016
FDP Phase 2 efficacy clinical studies	2	2016	2	2018
FDP MS-B	3	2016	3	2016
Environmental Sentinel Biomonitor MS-C Proof of Concept	1	2015	1	2015
Noninvasive Neurodiagnostics MS-A	4	2014	4	2014
Pre-Hospital Medical Informatics Transport (Ground Transport Telemedicine) MS-A	2	2013	2	2013
Compartment Syndrome Pressure Device MS-A	4	2013	4	2013
Hydration Status Monitor MS-B	4	2015	4	2015
Noninvasive Neuromodulator TBI MS-A	4	2014	4	2014

Exhibit R-2A, RDT&E Project Ju	Exhibit R-2A, RDT&E Project Justification: PB 2015 Army														
Appropriation/Budget Activity 2040 / 5						am Elemen 07A <i>I Medic</i> Defense Eq	al Materiel/N	Medical			mber/Name) is Drug/Vacc Ed				
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO [#]	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost			
849: Infec Dis Drug/Vacc Ed	-	13.358	12.510	10.693	-	10.693	14.857	13.371	13.438	15.084	Continuing	Continuing			
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-					

[#] The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

This project funds development of candidate medical countermeasures for militarily relevant infectious diseases. These products fall within four major areas: vaccines, drugs, diagnostic kits/devices, and determining if insects are infected with pathogenic organisms capable of infecting service members' insect control/preventive medicine measures to limit exposure and disease transmission. It funds research that supports conclusive human clinical trials for large-scale human effectiveness (capacity to produce a desired size of an effect under ideal or optimal conditions) testing, expanded human safety clinical trials, long-term animal studies, and related manufacturing tests. This work, which is jointly performed by military laboratories, civilian contracted pharmaceutical firms and foreign research partners, is directed toward the prevention of disease, early diagnosis, and speeding recovery once diagnosed. Medical products approved for human use must successfully complete a series of clinical trials that are required and regulated by the U.S. Food and Drug Administration (FDA). FDA approval is a mandatory obligation for all military products placed into the hands of medical providers or service members for human use. Development priority is based upon four major factors: (1) the extent of the disease within the Combatant Commands' theater of operations, (2) the clinical severity of the disease, (3) the technical maturity of the proposed solution, and (4) the affordability of the solution (development, production, and sustainment). Malaria, dysentery, hepatitis, and Dengue diseases (a severe debilitating disease transmitted by mosquitoes), which are found in Africa Command, Central Command, European Command, Southern Command, and Pacific Command areas are at the top of the infectious diseases requirements list.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: Infectious Disease Drug and Vaccine Engineering Development	13.358	12.510	10.693
Articles.	-	-	-
Description: Funding for research and development efforts for Drugs and Vaccines.			
FY 2013 Accomplishments:			
Reviewed and analyzed data from the on-going Adult Indication study begun in FY 2012 with industry partner Sanofi Pasteur			
and determine a Go/No Go Decision on continued product development for the Dengue Tetravalent Vaccine. Phase 3 clinical			
effectiveness studies are on-going with industry partner Sanofi Pasteur for the Dengue Tetravalent Vaccine, as well as Phase 3 studies for traveler/military indication. Completed preparation prior to initiating Phase 3 Pivotal clinical trial for Malaria Prophylaxis			
Drug. For Topical Antileishmanial Cream, complete Phase 2 safety and effectiveness New World clinical trial analysis and			
complete Phase 3 New World Pivotal clinical trial, and begin New World Treatment Protocol for Phase 3 site(s). The enteric			
JBAIDS assay transitions to advanced development and clinical trial planning begins. The Dengue Rapid Diagnostic Device			
(DRDD) (Hand Held Infectious Disease Diagnostics) transitions to advanced development and will be evaluated in a multi-site			

UNCLASSIFIED Page 19 of 31

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army	Date: March 2014		
2040 / 5	, ,	- 3 (umber/Name) Dis Drug/Vacc Ed

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each) FY 2013 FY 2014 FY 2015 clinical performance study. Leishmania Rapid Diagnostic Device (LRDD) continued the new world clinical trial started in FY 2012. The Leishmania Skin Test project completed FDA approval and transition to procurement. The Antimalarial Drug, Artesunate Intravenous transitioned from 808 and conducted a MS C review FY 2014 Plans: :Dengue Tetravalent Vaccine (DTV): Continue patient follow up and serology (study of blood serum) and immunology (study of body's immune system) testing to determine persistence of protection for phase 3 (safety and effectiveness Clinical trials on >300 subjects) endemic region studies, continue performance of military-specific needs US adult clinical studies, and continue studies to determine if the vaccine will protect against the disease. Malaria Prophylaxis Drug (drug to prevent from contracting Malaria): continue Pivotal clinical trials and begin efforts to determine if licensing in Austratlia is feasible. Topical Antileishmanial Cream (TLC, Paromomycin/Gentamicin): Will complete New World Phase 3 (safety and effectiveness clinical trials > 300 subjects) clinical trial and Treatment Protocol for Phase 3 site(s), and complete Pivotal clinical trials in Tunisia and the U.S. Dengue Joint Biological Agent identification and Diagnostic System (JBAIDS): An updated Analysis of Alternatives (AoA and requirements analysis helped to determine that the Dengue JBAIDS capability does not meet user needs; therefore, the project has been terminated. Leishmania Rapid Diagnostic Device (LRDD): conduct milestone C (Engineering, Manufacturing and Development phase review) review, obtain FDA approval, and begin fielding. The Leishmania Skin Test (LST) project: The response from the FDA indicating they would only support limited clinical utility and require additional product characterization and additional clinical trial requirements helped to determine that the LST capability does not meet user needs; therefore, the project has been terminated. Antimalarial Drug, Artesunate Intravenous: Plan to obtain FDA approval and begin fielding to prevent deaths from severe or complicated Malaria. Phase 3 (Safety and Effectiveness Clinical trials on 250 to 3000 subjects). Preventive Medicine advanced detection devices: for the control/mitigation of arthropod (insect) borne diseases, begin field testing and evaluation. Preventive Medicine advanced pesticides: will begin field testing and evaluation. Preventive Medicine spatial repellents: will begin field testing and evaluation. Preventive Medicine arthropod collection devices: begin field testing and evaluation. Infectious Disease Diagnostic products: begin field testing and evaluation of several product candidates to include: Scrub Typhus, Rickettsiae, and Sand Fly Fever. FY 2015 Plans: Dengue Tetravalent Vaccine: Dengue Tetravalent Vaccine (DTV): will continue patient follow up and will complete Phase 3 pivotal clinical trials and adult/military-specific indication studies. Will continue and complete follow up of Phase 2 military-

Dengue Tetravalent Vaccine: Dengue Tetravalent Vaccine (DTV): will continue patient follow up and will complete Phase 3 pivotal clinical trials and adult/military-specific indication studies. Will continue and complete follow up of Phase 2 military-specific / immunological evaluation study in Syracuse, NY. Development of Biologic License Application (BLA) for US Licensure, development of Final reports, will continue trial-related activities and data analysis. Commercial Partner will validate production of batches at their dedicated manufacturing facility. Next Generation Malaria Prophylaxis: Malaria Prophylaxis Drug (drug to prevent contracting Malaria): will complete New Drug Application (NDA) preparatory work for a supplemental NDA filing with commercial partner Glaxo-Smith Kline after halting activities associated with a phase 3 study that is no longer needed. Topical Antileishmanial Cream: Topical Antileishmanial Cream: Transitioned from project 808 in FY14. Phase 3 New World clinical trial will be completed

UNCLASSIFIED
Page 20 of 31

Exhibit R-2A, RDT&E Project Justification: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity 2040 / 5	, ,	- , (umber/Name) Dis Drug/Vacc Ed

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
in FY15 based on additional guidance and requirements from the FDA. Will conduct MS-C decision review and submit New Drug			
Application to the FDA. Leishmania Rapid Diagnostic Device: Will complete fielding/delivery of Leishmania Rapid Diagnostic			
Device. Antimalarial Drug, Artesunate Intravenous: Antimalarial Drug, Artesunate Intravenous: conducted MS-C decision review			
and submitted New Drug Application to the FDA sent in FY14. Planning to obtain FDA approval in FY15 and begin fielding/delivery			
of Antimalarial Drug, Artesunate Intravenous. Preventive Medicine advanced detection devices: Preventive Medicine advanced			
detection devices: for the control/mitigation of arthropod (insect) borne diseases, will begin field testing and evaluation. Preventive			
Medicine advanced pesticides: Preventive Medicine advanced pesticides: will begin field testing and evaluation. Preventive			
Medicine spatial repellents: Preventive Medicine spatial repellents: will begin field testing and evaluation. Preventive Medicine			
arthropod collection devices: Preventive Medicine arthropod collection devices: will begin field testing and evaluation. Infectious			
Disease Diagnostic: Infectious Disease Diagnostic products: will begin field testing and evaluation of several product candidates to			
include: Scrub Typhus, Rickettsiae, and Sand Fly Fever.			
Accomplishments/Planned Programs Subtotals	13.358	12.510	10.693

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

D. Acquisition Strategy

Test and evaluate in-house and commercially developed products in government-managed trials to meet FDA requirements and Environmental Protection Agency registration.

E. Performance Metrics

N/A

UNCLASSIFIED
Page 21 of 31

Exhibit R-3, RDT&E F	Project C	ost Analysis: PB 2	2015 Arm	/		-						Date:	March 20	014	
Appropriation/Budge 2040 / 5						R-1 Program Element (Number/Name) PE 0604807A / Medical Materiel/Medical Biological Defense Equipment - Eng Dev Project (Number/Name) 849 / Infec Dis Drug/Vacc E									
Management Service	s (\$ in M	illions)		FY 2	013	FY 2	014	FY 2 Ba:			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development Management Services Cost	Various	Various : Various	14.489	2.172		2.220		0.265		-		0.265	Continuing	Continuing	Continui
Medical Product Development Management Services Cost	C/CPFF	General Dynamics Information Technology : Frederick MD	0.000	-		-		1.012		-		1.012	-	1.012	-
		Subtotal	14.489	2.172		2.220		1.277		-		1.277	-	-	-
Product Development (\$ in Millions)			FY 2	013	FY 2	014	FY 2 Ba			2015 CO	FY 2015 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
Medical Product Development Cost	Various	Various : Various	24.594	3.621		5.100		1.331		-		1.331	Continuing	Continuing	Continuir
Topical Antileishmanial Drug	TBD	TBD : TBD	0.000	2.400		-		-		-		-	-	2.400	-
Topical Antileishmanial Drug	C/CPFF	Advantar Laboratories, INC : TBD	0.000	-		-		1.355		-		1.355	-	1.355	-
Dengue Tetravalent Vaccine	TBD	TBD : TBD	0.000	-		-		1.525		-		1.525	-	1.525	-
		Subtotal	24.594	6.021		5.100		4.211		-		4.211	-	-	-
Support (\$ in Millions	s)			FY 2	013	FY 2	014	FY 2 Bas			2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value o Contrac
Medical Product Development Support Cost	Various	Various : Various	11.943	2.620		2.624		0.690		-		0.690	Continuing	Continuing	Continui

Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Army	,	Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604807A / Medical Materiel/Medical Biological Defense Equipment - Eng Dev	Project (Number/Name) 849 I Infec Dis Drug/Vacc Ed

Support (\$ in Millions	Support (\$ in Millions)				2013	FY 2	2014		2015 ise	FY 2	2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Medical Product Development Support Cos	PO	Clinical Research Management, In : Hinckley, OH	0.000	-		-		3.168		-		3.168	-	3.168	-
		Subtotal	11.943	2.620		2.624		3.858		-		3.858	-	-	-

Test and Evaluation	(\$ in Milli	ons)		FY 2	2013	FY 2	2014	FY 2 Ba	2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
Medical Product Development T&E Cost	Various	Various : Various	33.922	2.545		1.182		1.347		-		1.347	Continuing	Continuing	Continuing
Product Development of Dengue Tetravalent Vaccine	Various	TBD : TBD	0.000	-		1.384		-		-		-	-	1.384	-
		Subtotal	33.922	2.545		2.566		1.347		-		1.347	-	-	-

												Target
	Prior				FY 2	2015	FY 2	2015	FY 2015	Cost To	Total	Value of
	Years	FY 2013	FY 2	2014	Ва	se	00	co	Total	Complete	Cost	Contract
Project Cost Totals	84.948	13.358	12.510		10.693		-		10.693	-	-	-

Remarks

xhibit R-4, RDT&E Schedule Profile: PB 2015 A	my																				I	Date	: M	arch	20	14		
ppropriation/Budget Activity 040 / 5																			ame /Vac		Ēd							
	F	Y 20	013		F	Y 20)14		F	Y 20	15		F	Y 20)16		F	Y 20	17			FY 2	018			FY	201	9
	1	2	3	4	1	2	3 4	1	1	2 :	3 4	1	:	2	3 4	ļ.	1	2	3	4	1	2	3	4	1	2	3	4
Dengue Tetravalent Vaccine (DTV) Phase 3 Pivotal Clinical Trials																												
DTV Phase 2 Adult Traveler / Military Indication Studies																												
DTV Adult Indication Decision	_																							-				
DTV Milestone C (MS-C) Engineering, Manufacturing and Development phase review																												
DTV Biologic Licensing Application (BLA) Submission																												
DTV BLA Approval	_																											
Malaria Prophylaxis Phase 3 Safety and Effectiveness Pivotal Clinical Trial																												
Malaria Prophylaxis (MS-C) Engineering, Manufacturing and Development phase	_																											
Paromomycin/Gentamicin TLC Phase 3 Safety and Effectiveness Clinical Trial	_						,																					
Paromomycin/Gentamicin TLC (MS-C) Engineering, Manufacturing and Development																												
Paromomycin/Gentamicin TLC New Drug Application (NDA)																												
Paromomycin/Gentamicin TLC FDA Approval																												
Paromomycin/Gentamicin TLC (Fielding / Delivery)																												
Leishmania Rapid Diagnostic Device (MS-C) Engineering, Manufacturing and Develop																												_
Leishmania Rapid Diagnostic Device FDA Clearance																												

Exhibit R-4, RDT&E Schedule Profile: PB 2015 A	rmy																					Dat	e: M	arch	1 20	14		
Appropriation/Budget Activity 2040 / 5	FY 2013 FY 20							PE	060	480	7A	Elem I Med ense l	dica	i Ma	terie	el/Me	dica	I		Project (Number/Name) 849 / Infec Dis Drug/Vacc Ed								
		FY	201	3		FY	201	4		FY	20	15		FY	201	6		FY	2017	7		FY	2018	3		FY	2019	9
	1	2	3	4	1	2	3	4	1	2	3	3 4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Leishmania Rapid Diagnostic Device (Fielding / Delivery)		•												·														
Antimalarial Drug, Artesunate Intravenous New Drug Application (MS-C)																												
Antimalarial Drug, Artesunate Intravenous FDA Approval																												
Antimalarial Drug, Artesunate Intravenous (Fielding / Delivery)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
2040 / 5	R-1 Program Element (Number/Name) PE 0604807A I Medical Materiel/Medical Biological Defense Equipment - Eng Dev	- , (umber/Name) Dis Drug/Vacc Ed

Schedule Details

	Sta	art	En	d
Events	Quarter	Year	Quarter	Year
Dengue Tetravalent Vaccine (DTV) Phase 3 Pivotal Clinical Trials	1	2011	4	2015
DTV Phase 2 Adult Traveler / Military Indication Studies	2	2012	1	2016
DTV Adult Indication Decision	4	2014	4	2014
DTV Milestone C (MS-C) Engineering, Manufacturing and Development phase review	4	2016	4	2016
DTV Biologic Licensing Application (BLA) Submission	1	2017	4	2017
DTV BLA Approval	1	2018	1	2018
Malaria Prophylaxis Phase 3 Safety and Effectiveness Pivotal Clinical Trial	1	2013	4	2013
Malaria Prophylaxis (MS-C) Engineering, Manufacturing and Development phase	4	2017	4	2017
Paromomycin/Gentamicin TLC Phase 3 Safety and Effectiveness Clinical Trial	3	2011	1	2015
Paromomycin/Gentamicin TLC (MS-C) Engineering, Manufacturing and Development	2	2015	2	2015
Paromomycin/Gentamicin TLC New Drug Application (NDA)	4	2015	4	2015
Paromomycin/Gentamicin TLC FDA Approval	4	2016	4	2016
Paromomycin/Gentamicin TLC (Fielding / Delivery)	1	2017	4	2019
Leishmania Rapid Diagnostic Device (MS-C) Engineering, Manufacturing and Develop	1	2014	1	2014
Leishmania Rapid Diagnostic Device FDA Clearance	4	2014	4	2014
Leishmania Rapid Diagnostic Device (Fielding / Delivery)	4	2014	4	2015
Antimalarial Drug, Artesunate Intravenous New Drug Application (MS-C)	4	2014	4	2014
Antimalarial Drug, Artesunate Intravenous FDA Approval	3	2015	3	2015
Antimalarial Drug, Artesunate Intravenous (Fielding / Delivery)	3	2015	4	2019

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2015 A	Army							Date: Mar	ch 2014					
Appropriation/Budget Activity 2040 / 5					PE 060480	7A I Medic	t (Number/ al Materiel/l uipment - E	Medical	VS8 / MÈD	(Number/Name) IEDEVAC Mission Equipment e (MEP) - End Dev						
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost				
VS8: MEDEVAC Mission Equipment Package (MEP) - End Dev	-	2.342	-	-	-	-	0.399	0.114	0.114	-	Continuing	Continuing				
Quantity of RDT&E Articles	-	-	-	-	_	-	-	-	-	-						

^{*} The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Funding for this project starts in FY 2013. Original models of Army Black Hawk MEDEVAC helicopters continue to play a major role in maintaining high US troop survival rates in Iraq and Afghanistan by evacuating wounded troops in less than one-hour. In 2009, a VCSA-approved force design update increased the number of air frames in the force from 12 to 15 aircraft for 37 MEDEVAC companies to better meet operational needs. In 2010, the Army Medical Department (AMEDD) accepted lifecycle management of the MEDEVAC MEP from PEO Aviation. In order to achieve required operational capability and enhance commonality across the MEDEVAC fleet, the MEDEVAC MEP program upgrades and retrofits the 256 MEDEVAC legacy helicopters to achieve the medical capability provided by the HH-60M, which is factory built for the MEDEVAC mission.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2013	FY 2014	FY 2015
Title: MEDEVAC Mission Sensor Forward Looking Infrared Radar (FLIR)	2.342	-	-
Articles:	-	-	-
Description: MEDEVAC Mission Sensor (MMS) FLIR for UH-60 aircraft. One of the requirements for the UH-60A/L MEDEVAC is a sensor system that will assist the pilots in locating patient pick-up points and assist them in maintaining situational awareness in night and adverse weather conditions. The MMS is currently being qualified for use on the HH-60M aircraft. This system will be installed on UH-60 aircraft using the proven Sponson-Mount FLIR system, which is currently being used in Operation Enduring Freedom (OEF) for the MEDEVAC mission.			
FY 2013 Accomplishments: Transitioned from VS7 and completed testing and integration of the Talon FLIR into the aircraft suspenson to ensure maximum capability of the sensor, while minimizing impact to aircraft performance.			
Accomplishments/Planned Programs Subtotals	2.342	-	-

C. Other Program Funding Summary (\$ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2015 A	rmy	Date: March 2014
Appropriation/Budget Activity 2040 / 5	R-1 Program Element (Number/Name) PE 0604807A I Medical Materiel/Medical Biological Defense Equipment - Eng Dev	Project (Number/Name) VS8 / MEDEVAC Mission Equipment Package (MEP) - End Dev
D. Acquisition Strategy	·	
Develop in-house or industrial prototypes in government-	managed programs to meet military MEDEVAC and regulatory re-	quirements for production and fielding.
E. Performance Metrics		
N/A		

Exhibit R-3, RDT&E F	Project C	ost Analysis: PB 2	2015 Army	y								Date:	March 20	14	
Appropriation/Budge 2040 / 5	et Activity	1				PE 060	ogram Ele 04807A / M cal Defens	Medical M	lateriel/M	edical	VS8 / N		r/ Name) Mission E End Dev	Equipmer	nt
Product Developmen	nt (\$ in M	illions)		FY 2	013	FY	2014		2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
MEDEVAC Mission Sensor Forward Looking Infrared	TBD	Redstone Arsenal, : AL	0.000	1.721		-		-		-		-	-	1.721	-
		Subtotal	0.000	1.721		-		-		-		-	-	1.721	-
Support (\$ in Millions	s)			FY 2	013	FY	2014		2015 ise		2015 CO	FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
Medical Product Development Support Cost	SS/UCA	Redstone Arsenal : AL	0.000	0.621		-		-		-		-	-	0.621	-
		Subtotal	0.000	0.621		-		-		-		-	-	0.621	-
			Prior Years	FY 2	2013	FY	2014		2015 ise		2015 CO	FY 2015 Total	Cost To	Total Cost	Target Value of Contract

Remarks

Project Cost Totals

0.000

2.342

2.342

Exhibit R-4, RDT&E Schedule Profile: PB 20	15 Army	,																			D	ate:	: Ма	ırch	201	14	
Appropriation/Budget Activity 2040 / 5								PE	0604	807	ΆΙ		cal	Mat	eriel	/Med	ne) lical Dev		Proje VS8 Pack	I MI	ÈDE	VAC	Mis	ssio	n E	quipn	ent
		FY 2	2013	}		FY	2014	1		FY	2015	5		FY	2016		F	Y 2	2017		F	Y 20	018			FY 20	19
											_	, ,			_	_										_	_
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3

Exhibit R-4A, RDT&E Schedule Details: PB 2015 Army			Date: March 2014
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)
2040 / 5	PE 0604807A I Medical Materiel/Medical	VS8 I MED	DEVAC Mission Equipment
	Biological Defense Equipment - Eng Dev	Package (I	MEP) - End Dev

Schedule Details

	St	art	Er	nd
Events	Quarter	Year	Quarter	Year
MEDEVAC Mission Sensor (MMS) FLIR	2	2013	4	2013