AWARD NUMBER: W81XWH-14-1-0112

TITLE: Hemorrhage Control for Major Traumatic Vascular Injuries

PRINCIPAL INVESTIGATOR: John B. Holcomb, M.D.

CONTRACTING ORGANIZATION: The University of Texas Health Science Center at Houston
Houston, TX 77225

REPORT DATE: October 2015

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

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**REPORT DOCUMENTATION PAGE**

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E-Mail: john.holcomb@uth.tmc.edu

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**12. DISTRIBUTION / AVAILABILITY STATEMENT**

Approved for Public Release; Distribution Unlimited

**13. SUPPLEMENTARY NOTES**

**14. ABSTRACT**

The objective of this proposed study is to systematically define the clinical and logistical issues surrounding traditional open vascular surgery and catheter-based hemorrhage control. The hypothesis is that minimally invasive, device-driven and expert-led NCTH control techniques improve survival compared to traditional open vascular surgery. This project will achieve the following aims: 1) Determine current practice patterns for the treatment of patients with NCTH among 4 clinical sites using a retrospective study design (Phase 1a); 2) Conduct a 2-day Delphi Panel meeting of military and civilian experts to gain consensus regarding anatomic, technology, credentialing, competency, and training issues for catheter-based hemorrhage control (Phase 1b); 3) Conduct a prospective 4-site observational study to test the hypothesis that less-invasive device-driven and expert-led hemorrhage control techniques are associated with improved survival in NCTH patients and strengthen the evidence base to inform future development of catheters, devices, and training required for surgeons for catheter-based hemorrhage control (Phase 2). At the end of Y1, the study is nearing completion of data collection for the retrospective study. Analysis of the retrospective data will take place in Y2Q1 with the Delphi following soon thereafter. At the Delphi meeting, the design of the prospective study will be developed and it will be implemented later in Y2.

**15. SUBJECT TERMS**

Trauma, vascular, hemorrhage, Non-compressible Torso Hemorrhage, coagulation, mortality

**16. SECURITY CLASSIFICATION OF:**

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**17. LIMITATION OF ABSTRACT**

Unclassified

**18. NUMBER OF PAGES**

31

**19. NAME OF RESPONSIBLE PERSON**

USAMRMC

**19a. TELEPHONE NUMBER**

(include area code)
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INTRODUCTION

On September 30, 2014, the U.S. Army Medical Research Acquisition Activity (USAMRAA) awarded a 2-year contract to the University of Texas Health Science Center at Houston (UTHealth). This 2-year, 2-phase project will systematically define the clinical and logistical issues surrounding traditional open vascular surgery and catheter-based hemorrhage control for non-compressible torso hemorrhage (NCTH). The hypothesis is that minimally invasive, device-driven and expert-led NCTH control techniques improve survival compared to traditional open vascular surgery. In addition to UTHealth, Baylor College of Medicine, the University of Texas Health Science Center at San Antonio (UTHSCSA) and the San Antonio Military Medical Center (SAMMC)/US Army Institute of Surgical Research (USAISR) are collaborating.

KEYWORDS
Trauma, Vascular, Hemorrhage, Non-compressible Torso Hemorrhage, Coagulation, Mortality

ACCOMPLISHMENTS
What were the major goals of the project?

Calendar Year 2014-2015 Goals/Milestones – Phase I
1. Obtain DOD HPRO and local institutional review board (IRB) Approvals
2. Conduct retrospective data collection
3. Analysis of retrospective data
4. Hold Delphi Meeting

Calendar Year 2015-2016 Goals/Milestones – Phase II
1. Obtain regulatory amendment approvals for prospective study
2. Conduct prospective observational study
3. Data Analysis/Publications

What was accomplished under these goals?
Milestone 1: Obtain USAMRMC HRPO and participating sites’ IRB approvals
Q1 UT Houston IRB approval was received 26-NOV-2014. We submitted the USAMRMC Human Research Protections Office (HRPO) application on 02-DEC-2014 for review and approval. We also sent the UTHealth IRB approval and study documents to participating sites to submit to their local IRB review and approval. Baylor College of Medicine (BCM) and the University of Texas Health Science Center at San Antonio (UTHSCSA) submitted their local IRB applications in Q1.
Q2 USAMRMC HRPO approval was obtained 23-JAN-2015. BCM also received local IRB approval on 13-MAR-2015. UTHSCSA submitted their IRB application in late Q1. San Antonio Military Medical Center (SAMMC) requested that their site be changed to the US Army Institute of Surgical Research (USAISR) because USAISR had more developed human subjects and contracting processes. USAISR submitted documents to their IRB in Q2.
Q3 UTHSCSA received HRPO approval on 27-MAR-2015 and BCM received HRPO approval on 20-APR-2015. USAISR received local IRB approval on 21-June-2015 and received their HRPO approval on 22-June-2015. See Appendix 1 for all IRB/HRPO documents.
Q4 No updates in Q4.

Milestone 2: Initiate retrospective data collection study.

Q1 Before the UTHealth IRB submission, we had a series of internal meetings as well as phone calls and emails with external investigators to discuss, revise, and finalize the protocol and case report forms for the retrospective study. The protocol and case report forms were finalized as of 15-NOV-2014. We also submitted information and study documents to UTHealth’s Sponsored Projects Administration in order to begin drafting of the subcontracts for the three external sites as the next step to initiating data collection.

Q2 The subcontracts with the three sites were drafted by UTHealth’s Sponsored Projects Administration and sent to the three external sites as the first step to initiating data collection. The subcontracts were sent to the sites on 07-JAN-2015. Contract negotiation has taken longer than expected and at the end of Y1Q2, all three subcontracts were not yet executed. USAISR has requested a Cooperative Research and Development Agreement (CRADA) and a Data Use Agreement (DUA) for this study instead of the standard Federal Demonstration Partnership (FDP) contract we use for all other sites and projects. We expect that the contracts for BCM and UTHSCSA will be executed in early Q3. Because we have not received approval from the GOR for the change in PI for USAISR, we cannot move forward with the CRADA; however, the DUA can move forward. We have developed a REDCap application for the Phase 1 retrospective study, including a data dictionary, codebook and data entry forms. We are finalizing this database application. Once completed, UTHealth will start entering data into the application.

Q3 UTHSC-Houston, UTHSCSA and BCM have begun the trauma registry query and retrospective data review. We received approval from the GOR for the change in PI and research site to USAISR. Contract negotiations continue with USAISR because they are using a Cooperative Research and Development Agreement (CRADA) instead of the standard Federal Demonstration Partnership (FDP) contract we developed for all sites. The Data Use Agreement (DUA) that ISR also required has been executed by both parties. The Program Manager at USISR contacted UTHealth on 25-June-2015 to request additional documents be sent to the Contract Officer at USAMRAA in order for the change in site to take effect. UTHealth sent the documents to her on 29-JUNE-2015. The REDCap application has been finalized and data entry into the system has begun.

Q4 UTHealth requested a status update from the Contract Office at USAMRAA on 13-July-2015, and a response was received on 22-JULY-2015 stating that a modification was being prepared to change the study site. We received a request for additional documents on 08-OCT-2015 from USAMRAA. As of 30-SEPT-2015, all relevant data for the retrospective study has been entered by UTHealth. BCM has reviewed 100 charts and expect to completed data entry by 16-OCT-2015. UTHSCSA expects to complete data entry by 30-OCT-2015. USAISR has run the query to identify the patients of interest. They expect to have 40 charts to review.

Milestone 3: Analysis of retrospective data
The data cannot be analyzed until it has been entered. Data for UTHealth is complete. Both BCM and UTHSCSA anticipate finishing data entry by 30-OCT-2015. We are currently programming analytic code and will start to analyze data in November 2015 using the three available sites.
Data finalization will wait until data from USAISR are entered. We expect that data analysis will be completed in early Y2Q2.

**Milestone 4: Hold Delphi Meeting**
The Delphi Meeting is contingent upon the analysis of the retrospective data being complete. We expect the analysis to be completed in January 2016 and therefore the Delphi Meeting will be scheduled soon thereafter.

**What opportunities for training and professional development has the project provided?**
Nothing to report.

**How were the results disseminated to communities of interest?**
Nothing to report. Results will be disseminated at the end of the project.

**What do you plan to do during the next reporting period to accomplish the goals?**
- **Milestone 1: Obtain USAMRMC HRPO and participating sites’ IRB approvals**
  During Y2 of the project, we will ensure that the sites submit continuing reviews to their local IRBS and HRPO.

- **Milestone 2: Initiate retrospective data collection study**
  During Y2Q1 of the project, we will complete data entry for the retrospective study for all four sites including USAISR.

- **Milestone 3: Analysis of retrospective data**
  Analysis of the retrospective data will occur after all site data has been entered into REDCap and will be completed after data entry in completed in Y2Q1.

**IMPACT**
**What was the impact on the development of the principal discipline(s) of the project?**
Nothing to report.

**What was the impact on other disciplines?**
Nothing to report.

**What was the impact on technology transfers?**
Nothing to report.

**What was the impact on society beyond science and technology?**
Nothing to report.

**CHANGES/PROBLEMS**
**Changes in approach and reasons for change**
Nothing to report.
Actual or anticipated problems or delays and actions or plans to resolve them
One delay is due to the PI and institution change from SAMMC to USAISR that was requested by the PI at SAMMC. This change continues to affect our progress. Data analysis cannot begin until USAISR has entered all their data, however, that process cannot be started until the grants officer at USAMRAA has approved and executed the change and the CRADA has been executed. A lack of responsiveness from multiple grants officers we have contacted has delayed the process. We will continue to work with USAISR and USAMRAA to get all of these items completed early in Y2.

We anticipate that data queries and reviews will continue into Y1Q1 with analysis getting underway in Year 2, Quarter 1. The Delphi Meeting will be scheduled as soon as possible after the data analysis is complete.

Changes that had a significant impact on expenditures
Because of a later start than anticipated, sites have not spent as much of their Y1 funding as expected. We have executed a no cost extension to BCM and UTHSCSA to allow them to spend their Y1 funds to complete the retrospective study and participate in the Delphi Meeting. They will receive their Y2 funding when the prospective study has been designed and initiated.

Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents
Nothing to report.

PRODUCTS
Publications, conference papers, and presentations
Nothing to report.

Website(s) or other Internet site(s)
Nothing to report.

Technologies or techniques
Nothing to report

Inventions, patent applications, and/or licenses
Nothing to report

Other Products
Nothing to report

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS
What individuals have worked on the project?
Name: John Holcomb, MD
Project Role: Principal Investigator
Dr. Holcomb oversees all aspects of study management and execution. He oversees all study staff, regulatory submissions, patient screening, subject enrollment, and data collection. He actively communicates with all clinical sites for this study to coordinate administration across institutions and to ensure accurate and timely data collection and transfer.

Funding Source: DOD W81XWH-14-1-0112

Name: Erin Fox, PhD
Project Role: Co-Investigator; Project Manager
Nearest Person Months Worked: 2
Contribution to Project: Dr. Fox oversees the day-to-day communication and overall study coordination for this multisite study. She ensures timely and accurate reporting, including financial and interim research reports. She participated in the creation of the data management system and the Manual of Operation, data cleaning and integration, and coordination of requested data to research investigators. She coordinated the subcontracts and budgets for the research sites. She will also be analyzing the retrospective data when it is ready.

Funding Source: DOD W81XWH-14-1-0112

Name: Charles Wade, Ph.D.
Project Role: Co-Investigator
Nearest Person Months Worked: 1
Contribution to Project: Dr. Wade participated in the creation of the data management system and the Manual of Operation, data cleaning and integration, and coordination of requested data to research investigators.

Funding Source: DOD W81XWH-14-1-0112

Name: Deborah del Junco, Ph.D.
Project Role: Co-Investigator
Nearest Person Months Worked: 1
Contribution to Project: Dr. del Junco worked closely with the Data Manager and Project Manager to ensure valid and timely integration of data from all sources. She participated in the creation of the data management system and the Manual of Operation, data cleaning and integration, and coordination of requested data to research investigators. Dr. del Junco retired on 31-AUG-2015 and her responsibilities have been taken over by Dr. Fox.

Funding Source: DOD W81XWH-14-1-0112
Name: Jeanette Podbielski, R.N.
Project Role: Clinical Program/Regulatory Director
Nearest Person Months Worked: 1
Contribution to Project: Ms. Podbielski managed all regulatory aspects of this study. She assisted with study coordination as well as IRB preparation and submission. She managed the activities of the Research Coordinator and Assistant.

Funding Source: DOD W81XWH-14-1-0112

Name: Adrian Botello
Project Role: Research Coordinator
Nearest Person Months Worked: 5
Contribution to Project: Mr. Botello assisted with all aspects of study coordination including the attainment and maintenance of all necessary regulatory approvals and guidelines as well as data protection and collection at the UTHealth site. Mr. Botello left UTHealth on 28-AUG-2015. Mr. Jost has taken over his responsibilities.

Funding Source: DOD W81XWH-14-1-0112

Name: Garrett Jost
Project Role: Research Assistant
Nearest Person Months Worked: 5
Contribution to Project: Mr. Jost has been responsible for identifying eligible patients and performing data collection for those patients at the UTHealth site.

Funding Source: DOD W81XWH-14-1-0112

Name: Jeff Tomasek, MD
Project Role: Research Assistant
Nearest Person Months Worked: 3
Contribution to Project: Dr. Tomasek identified an appropriate population of patients through the trauma registry, set-up the REDCap database, provided training for the external sites, and coordinates the collection of data from the four clinical sites into the central database that will be used for analysis.

Funding Source: DOD W81XWH-14-1-0112

Name: Donna Grayson
Project Role: Administrator
Nearest Person Months Worked: 1
Contribution to Project: Ms. Grayson assisted in subcontracting, billing, budgeting and the preparation of financial and interim report reports.

Funding Source: DOD W81XWH-14-1-0112
Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

Dr. del Junco has retired from UTHealth and is no longer involved on this project. The project entitled “Statistical Methodology Development in Blood Transfusion Protocol Research” has ended and therefore Drs. Holcomb and Fox are no longer contributing effort to it. The project entitled “Catheter-based Hemorrhage Control” has ended and therefore Dr. Fox is no longer contributing effort toward it. The project entitled “Evaluation of Lyophilized Plasma (LP) in Models of Vascular Injury and Hemorrhagic Shock” has ended and Dr. Holcomb no longer contributes effort to it. New projects include the following:

Title: Prospective Randomized Optimal Platelet and Plasma Ratio (PROPR)

Time Commitment: Holcomb- 20% (Principal Investigator), Fox- 25% (Co-Investigator)

Supporting Agency: Resuscitation Outcomes Consortium via National Heart, Lung, and Blood Institute (5U01HL077863)

Agency Contact: Suzanne May, PhD/Gerald van Belle, Ph.D., vanbelle@uw.edu
1107 NE 45th St. Ste. 505, Seattle, WA 98105

Performance Period: 01/2015-12/2017

Annual Direct Costs: $2,574,358

Project Goals: The objective of this study is to compare the effectiveness of two different existing prehospital resuscitation approaches in severely injured trauma patients transported by air ambulance in a pragmatic, multicenter, prospective observational study.

Overlap: No scientific or effort overlap

What other organizations were involved as partners?

Baylor College of Medicine
Houston, TX
Research collaborator

University of Texas Health Science Center at San Antonio
San Antonio, TX
Research collaborator

US Army Institute of Surgical Research
San Antonio, TX
Research collaborator

SPECIAL REPORTING REQUIREMENTS
Quad Chart uploaded as Appendix 2.

APPENDICES
Appendix 1. IRB and HRPO approval letters
NOTICE OF APPROVAL TO BEGIN RESEARCH

HSC-GEN-14-0966 - A Retrospective Analysis of Non-Compressible Torso Hemorrhage

PROVISIONS: This approval relates to the research to be conducted under the above referenced title and/or to any associated materials considered by the Committee for the Protection of Human Subjects, e.g. study documents, informed consent, etc.

APPROVED: By Expedited Review and Approval

REVIEW DATE: November 17, 2014

APPROVAL DATE: 11/18/2014

EXPIRATION DATE: 10/31/2015

CHAIRPERSON: John C. Ribble, MD

Subject to any provisions noted above, you may now begin this research.

CHANGES: The principal investigator (PI) must receive approval from the CPHS before initiating any changes, including those required by the sponsor, which would affect human subjects, e.g. changes in methods or procedures, numbers or kinds of human subjects, or revisions to the informed consent document or procedures. The addition of co-investigators must also receive approval from the CPHS. **ALL PROTOCOL REVISIONS MUST BE SUBMITTED TO THE SPONSOR OF THE RESEARCH.**

INFORMED CONSENT DETERMINATION:
Waiver of Consent Granted

HEALTH INSURANCE PORTABILITY and ACCOUNTABILITY ACT (HIPAA):
Waiver for Retrospective Chart Review granted:
Information to be accessed: patient name, medical record number, date of birth, treatment date, date of discharge/death
Information to be retained: date of birth, treatment date, date of discharge/death

UNANTICIPATED RISK OR HARM, OR ADVERSE DRUG REACTIONS: The PI will immediately inform the CPHS of any unanticipated problems involving risks to subjects or others, of any serious harm to subjects, and of any adverse drug reactions.

RECORDS: The PI will maintain adequate records, including signed consent and HIPAA documents if required, in a manner that ensures subject confidentiality.
NOTICE OF APPROVAL TO IMPLEMENT REQUESTED CHANGES

November 26, 2014

HSC-GEN-14-0966 - Hemorrhage Control for Major Traumatic Vascular Injuries Phase I: A Retrospective Analysis of Non-Compressible Torso Hemorrhage (NCTH)
PI: John Holcomb, MD, FACS

Reference Number: 116932

PROVISIONS: Unless otherwise noted, this approval relates to the research to be conducted under the above referenced title and/or to any associated materials considered at this meeting, e.g. study documents, informed consent, etc.

APPROVED: By Expedited Review and Approval

CHANGE APPROVED: Changed study title to reflect the grant title

REVIEW DATE: November 26, 2014

APPROVAL DATE: November 26, 2014

CHAIRPERSON: John C. Ribble, MD

Upon receipt of this letter, and subject to any provisions noted above, you may now implement the changes approved.

CHANGES: The principal investigator (PI) must receive approval from the CPHS before initiating any changes, including those required by the sponsor, which would affect human subjects, e.g. changes in methods or procedures, numbers or kinds of human subjects, or revisions to the informed consent document or procedures. The addition of co-investigators must also receive approval from the CPHS. ALL PROTOCOL REVISIONS MUST BE SUBMITTED TO THE SPONSOR OF THE RESEARCH.

INFORMED CONSENT: Informed consent must be obtained by the PI or designee(s), using the format and procedures approved by the CPHS. The PI is responsible to instruct the designee in the methods approved by the CPHS for the consent process. The individual obtaining informed consent must also sign the consent document. Please note that if revisions to the informed consent form were made and approved, then old blank copies of the ICF MUST be destroyed. Only copies of the appropriately dated, stamped approved informed consent form can be used when obtaining consent.
UNANTICIPATED RISK OR HARM, OR ADVERSE DRUG REACTIONS: The PI will immediately inform the CPHS of any unanticipated problems involving risks to subjects or others, of any serious harm to subjects, and of any adverse drug reactions.

RECORDS: The PI will maintain adequate records, including signed consent documents if required, in a manner that ensures subject confidentiality.
March 13, 2015

To: Brian J. Eastridge, M.D. (eastridge@uthscsa.edu)
   UTHSCSA

cc: Kristin Rocchi 210-746-4146 (Rocchi@uthscsa.edu)

From: Institutional Review Board

Subject: Expedited Approval of a New Human Research Protocol (Initial Review)

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Dear Principal Investigator,

Your request to conduct this minimal risk research was approved by Expedited Review on March 12, 2015, under the following regulation(s):

Collection of existing research or clinical data and/or prospective clinical data (refer to Form B-1, Category 5 for details).

The inclusion of the following vulnerable populations was approved: Children (refer to Form W of the protocol for details).

The request for a waiver of informed consent was approved as detailed in Form F of the protocol. The request for a waiver of the HIPAA authorization was approved as detailed in Form J of the protocol.

The IRB expiration date: March 12, 2016. Your progress report must be submitted to the IRB Office 34 days before the IRB meeting that will occur before the study’s expiration date.

The IRB application and the following documents were reviewed: Signature Assurance Sheet; Form F - Consent or Documentation Waiver; Form J - HIPAA Waiver; Form M - Data Collection Instrument(s); Form W - Children; Grant Application; Sponsor’s Protocol, NCTH Protocol Version 2, 19Nov2014 Other: UTHSCH IRB Approval, HRPO Approval.

Affiliated institutions which are engaged in this research: UTHSCSA University Health System

Sincerely,

Juanita Ching

Research Compliance Coordinator
Research Regulatory Programs

Please retain this document in your IRB correspondence file

Institutional Review Board Office  |  Mail Code 7830  |  7703 Floyd Curl Drive  |  San Antonio, Texas 78229-3900
210.567.8250  |  http://research.uthscsa.edu/irb  |  FWA00005928  |  IORG0000312

OIRB-50
April 10, 2015

RAMYAR GILANI
BAYLOR COLLEGE OF MEDICINE
SURGERY: HCHD DIVISION

H-36237 - PHASE I: A RETROSPECTIVE ANALYSIS OF NON-COMPRESSIBLE TORSO HEMORRHAGE (NCTH)

APPROVAL VALID FROM 3/3/2015 TO 1/20/2016

Dear Dr. GILANI

The Institutional Review Board for Human Subject Research for Baylor College of Medicine and Affiliated Hospitals (BCM IRB) is pleased to inform you that the research protocol named above was approved.

The study may not continue after the approval period without additional IRB review and approval for continuation. You will receive an email renewal reminder notice prior to study expiration; however, it is your responsibility to assure that this study is not conducted beyond the expiration date.

Please be aware that only IRB-approved informed consent forms may be used when written informed consent is required.

Any changes in study or informed consent procedure must receive review and approval prior to implementation unless the change is necessary for the safety of subjects. In addition, you must inform the IRB of adverse events encountered during the study or of any new and significant information that may impact a research participants' safety or willingness to continue in your study.

The BCM IRB is organized, operates, and is registered with the United States Office for Human Research Protections according to the regulations codified in the United States Code of Federal Regulations at 45 CFR 46 and 21 CFR 56. The BCM IRB operates under the BCM Federal Wide Assurance No. 00000286, as well as those of hospitals and institutions affiliated with the College.

Sincerely yours,

JULIE PAMELA KATKIN, M.D.
Institutional Review Board for Baylor College of Medicine and Affiliated Hospitals
MEMORANDUM FOR THE RECORD

SUBJECT: Initial Approval of the Protocol, "Hemorrhage Control for Major Traumatic Vascular Injuries Phase I: A Retrospective Analysis of Non-Compressible Torso Hemorrhage (NCTH)," Principal Investigator: LTC Kevin Chung, MC, US Army Institute of Surgical Research (USAISR), Joint Base San Antonio, Fort Sam Houston, TX, USAISR Protocol H-15-004, IRBNet ID 411591, Protocol Number M-10446, in Support of the Proposal "Hemorrhage Control for Major Traumatic Vascular Injuries," Proposal Principal Investigator: John Holcomb, MD, University of Texas Health Science Center, Houston, Proposal Number 13057176, Award Number W81XWH-14-1-0112

1. The Headquarters, US Army Medical Research and Materiel Command Institutional Review Board (HQ USAMRMC IRB) reviewed the above-referenced research protocol for compliance with applicable human subject protection regulations. There are no outstanding human research protections issues.

2. In accordance with 32 CFR 219.110(a,b), the research qualifies for review via an expedited review procedure as it involves no more than minimal risk and is included in the categories of research listed in the 9 November 1998 Notice in the Federal Register (63 FR 60364-60367), specifically, research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (Category 5).

3. The research protocol is approved for a one-year period, 21 June 2015 – 20 June 2016 pending approval of the Commander, USAISR.

4. The study is approved to review medical record data from AHLTA, Healthcare Artifact and Image Management Solution, CHCS, San Antonio Military Medical Center Trauma Registry, and Essentris databases for patients with non-compressible torso hemorrhage between January 2008 and December 2012.

5. The requirement to obtain informed consent is waived as allowed under 32 CFR 219.116(d) as the research involves no more than minimal risk to the subjects, the waiver will not adversely affect the rights and welfare of the subjects, and the research could not practicably be carried without the waiver.

6. A waiver of the Health Insurance Portability and Accountability Act Privacy Rule requirement to obtain authorization for the use and disclosure of protected health information in research is approved as allowed under DOD 6025.18-R, C7.9.2.2.

7. Approved documents:
   a. Core Protocol (NCTH Protocol Version 3, dated 13 February 2015);
SUBJECT: Initial Approval of the Protocol, "Hemorrhage Control for Major Traumatic Vascular Injuries Phase I: A Retrospective Analysis of Non-Compressible Torso Hemorrhage (NCTH)," Principal Investigator: LTC Kevin Chung, MC, US Army Institute of Surgical Research (USAISR), Joint Base San Antonio, Fort Sam Houston, TX, USAISR Protocol H-15-004, IRBNet ID 411591, Protocol Number M-10446, in Support of the Proposal "Hemorrhage Control for Major Traumatic Vascular Injuries," Proposal Principal Investigator: John Holcomb, MD, University of Texas Health Science Center, Houston, Proposal Number 13057176, Award Number W81XWH-14-1-0112

b. Site-specific Protocol (Version 1, dated 11 May 2015); and


8. Please note the following requirements:

a. Submit all proposed changes to the study for review and approval by the HQ USAMRMC IRB before initiating the changes.

b. Promptly report to the HQ USAMRMC IRB:

(1) All unanticipated problems involving risks to subjects or others and related serious adverse events.

(2) Any protocol deviation that affects subjects' safety or rights and/or the integrity of the study.

c. Submit a continuation report, a copy of the current protocol and supporting documents to the HQ USAMRMC IRB in sufficient time to ensure review and approval on or before 20 June 2016.

d. Submit a final study report and request to close the protocol upon completion of all research activities.

9. The IRB Office point of contact for this action is Debra DePaul, RN, MSN, General Dynamics Information Technology Corporation, at 301-619-2620 or debra.depaul.ctr@mail.mil.

LTC JAY R. BUCCI, MC
Chair
Headquarters, US Army Medical Research and Materiel Command
Institutional Review Board

2
To all,
Here is our HRPO approval for the NCTH vascular study for UT/MHH to begin.
Jeanette

Classification: UNCLASSIFIED
Caveats: NONE


1. The subject protocol (version 1.2) was approved by the University of Texas Health Science Center at Houston (UTHSCH) Institutional Review Board (IRB) on 14 January 2015. This protocol was reviewed by the US Army Medical Research and Materiel Command (USAMRMC), Office of Research Protections (ORP), Human Research Protection Office (HRPO) and found to comply with applicable DOD, US Army, and USAMRMC human subjects protection requirements.

2. This no greater than minimal risk study is approved for the retrospective review of 3500 records across the identified research sites.

3. The Principal Investigator has a duty and responsibility to foster open and honest communication with research subjects. The USAMRMC strongly encourages the Principal Investigator to provide subjects with a copy of the research protocol, if requested, with proprietary and personal information redacted as needed.

4. The following are reporting requirements and responsibilities of the Principal Investigator to the HRPO. Failure to comply could result in suspension of funding.
a. Substantive modifications to the research protocol and any modifications that could potentially increase risk to subjects must be submitted to the HRPO for approval prior to implementation. The USAMRMC ORP HRPO defines a substantive modification as a change in Principal Investigator, change or addition of an institution, elimination or alteration of the consent process, change to the study population that has regulatory implications (e.g. adding children, adding active duty population, etc.), significant change in study design (i.e. would prompt additional scientific review), or a change that could potentially increase risks to subjects.

b. All unanticipated problems involving risk to subjects or others must be promptly reported by telephone (301-619-2165), by email (usarmy.detrick.medcom-usamrmc.other.hrpo@mail.mil), or by facsimile (301-619-7803) to the HRPO. A complete written report will follow the initial notification. In addition to the methods above, the complete report can be sent to the US Army Medical Research and Materiel Command, ATTN: MCMR-RP, 810 Schreider Street, Fort Detrick, Maryland 21702-5000.

c. Suspensions, clinical holds (voluntary or involuntary), or terminations of this research by the IRB, the institution, the sponsor, or regulatory agencies will be promptly reported to the USAMRMC ORP HRPO.

d. Events or protocol reports received by the HRPO that do not meet reporting requirements identified within this memorandum will be included in the HRPO study file but will not be acknowledged.

e. A copy of the continuing review approval notification by the UTHSCH IRB must be submitted to the HRPO as soon as possible after receipt of approval. According to our records, it appears the next continuing review by the UTHSCH IRB is due no later than 31 October 2015. Please note that the HRPO conducts random audits at the time of continuing review and additional information and documentation may be requested at that time.

f. The final study report submitted to the UTHSCH IRB, including a copy of any acknowledgement documentation and any supporting documents, must be submitted to the HRPO as soon as all documents become available.

g. The knowledge of any pending compliance inspection/visit by the Food and Drug Administration (FDA), Office for Human Research Protections, or other government agency concerning this clinical investigation or research; the issuance of inspection reports, FDA Form 483, warning letters, or actions taken by any regulatory agencies including legal or medical actions; and any instances of serious or continuing noncompliance with the regulations or requirements must be reported immediately to the HRPO.

5. Please note: The USAMRMC ORP HRPO conducts site visits as part of its responsibility for compliance oversight. Accurate and complete study records must be maintained and made available to representatives of the USAMRMC as a part of
their responsibility to protect human subjects in research. Research records must be stored in a confidential manner so as to protect the confidentiality of subject information.

6. Do not construe this correspondence as approval for any contract funding. Only the Contracting Officer/Grants Officer can authorize expenditure of funds. It is recommended that you contact the appropriate contract specialist or contracting officer regarding the expenditure of funds for your project.

7. The HRPO point of contact for this approval is Karen M. Eaton, MS, Human Subjects Protection Scientist, at 301-619-9268/karen.m.eaton.ctr@mail.mil.

SHARON A. EVANS, PhD, CIP
Deputy Director, Human Research Protection Office
Office of Research Protections
US Army Medical Research and Materiel Command

Note: The official copy of this memo is housed with the protocol file at the Office of Research Protections, Human Research Protection Office, 810 Schreider Street, Fort Detrick, MD 21702-5000. Signed copies will be provided upon request.

Classification: UNCLASSIFIED
Caveats: NONE
FYI – here is HRPO approval for UTSA.

SUBJECT: Initial Approval for the Protocol, “Hemorrhage Control for Major Traumatic Vascular Injuries Phase I: A Retrospective Analysis of Non-Compressible Torso Hemorrhage (NCTH),” Submitted by Brian J. Eastridge, MD, University of Texas Health Science Center San Antonio, San Antonio, Texas, in Support of the Proposal, “Hemorrhage Control for Major Traumatic Vascular Injuries,” Submitted by John B. Holcomb, MD, University of Texas Health Science Center at Houston, Houston, Texas, Proposal Log Number 13057176, Award Number W81XWH-14-1-0112, HRPO Log Number A-18067.b

1. The subject protocol (version 2/dated 19 November 2014) was approved by the University of Texas Health Science Center San Antonio (UTHSCSA) Institutional Review Board (IRB) on 12 March 2015. This protocol was reviewed by the US Army Medical Research and Materiel Command (USAMRMC), Office of Research Protections (ORP), Human Research Protection Office (HRPO) and found to comply with applicable DOD, US Army, and USAMRMC human subjects protection requirements.

2. This no greater than minimal risk study is approved for the retrospective review of 3500 records across the identified research sites.

3. The Principal Investigator has a duty and responsibility to foster open and honest communication with research subjects. The USAMRMC strongly encourages the Principal Investigator to provide subjects with a copy of the research protocol, if requested, with proprietary and personal information redacted as needed.

4. The following are reporting requirements and responsibilities of the Principal...
Investigator to the HRPO. Failure to comply could result in suspension of funding.

a. Substantive modifications to the research protocol and any modifications that could potentially increase risk to subjects must be submitted to the HRPO for approval prior to implementation. The USAMRMC ORP HRPO defines a substantive modification as a change in Principal Investigator, change or addition of an institution, elimination or alteration of the consent process, change to the study population that has regulatory implications (e.g. adding children, adding active duty population, etc.), significant change in study design (i.e. would prompt additional scientific review), or a change that could potentially increase risks to subjects.

b. All unanticipated problems involving risk to subjects or others must be promptly reported by telephone (301-619-2165), by email (usarmy.detrick.medcom-usamrmc.other.hrpo@mail.mil), or by facsimile (301-619-7803) to the HRPO. A complete written report will follow the initial notification. In addition to the methods above, the complete report can be sent to the US Army Medical Research and Materiel Command, ATTN: MCMR-RP, 810 Schreider Street, Fort Detrick, Maryland 21702-5000.

c. Suspensions, clinical holds (voluntary or involuntary), or terminations of this research by the IRB, the institution, the sponsor, or regulatory agencies will be promptly reported to the USAMRMC ORP HRPO.

d. Events or protocol reports received by the HRPO that do not meet reporting requirements identified within this memorandum will be included in the HRPO study file but will not be acknowledged.

e. A copy of the continuing review approval notification by the UTHSCSA IRB must be submitted to the HRPO as soon as possible after receipt of approval. According to our records, it appears the next continuing review by the UTHSCSA IRB is due no later than 12 March 2016. Please note that the HRPO conducts random audits at the time of continuing review and additional information and documentation may be requested at that time.

f. The final study report submitted to the UTHSCSA IRB, including a copy of any acknowledgement documentation and any supporting documents, must be submitted to the HRPO as soon as all documents become available.

5. Please note: The USAMRMC ORP HRPO conducts site visits as part of its responsibility for compliance oversight. Accurate and complete study records must
be maintained and made available to representatives of the USAMRMC as a part of their responsibility to protect human subjects in research. Research records must be stored in a confidential manner so as to protect the confidentiality of subject information.

6. Do not construe this correspondence as approval for any contract funding. Only the Contracting Officer/Grants Officer can authorize expenditure of funds. It is recommended that you contact the appropriate contract specialist or contracting officer regarding the expenditure of funds for your project.

7. The HRPO point of contact for this study is Karen M. Eaton, MS, Human Subjects Protection Scientist, at 301-619-9268/karen.m.eaton.ctr@mail.mil.

SHARON A. EVANS, PhD, CIP
Deputy Director, Human Research Protection Office
Office of Research Protections
US Army Medical Research and Materiel Command

Note: The official copy of this memo is housed with the protocol file at the Office of Research Protections, Human Research Protection Office, 810 Schreider Street, Fort Detrick, MD  21702-5000. Signed copies will be provided upon request.

Classification: UNCLASSIFIED
Caveats: NONE
Classification: UNCLASSIFIED

Caveats: NONE


1. Please see the attached memorandum regarding the Headquarters, US Army Medical Research and Materiel Command Institutional Review Board (HQ USAMRMC IRB) review and approval of this research protocol.

2. This protocol was also reviewed by the USAMRMC, Office of Research Protections, Human Research Protection Office (ORP HRPO) and found to comply with applicable DOD, US Army, and USAMRMC human subjects protection requirements.

3. Do not construe this correspondence as approval for any contract funding. Only the Contracting Officer/Grants Officer can authorize expenditure of funds. It is recommended the appropriate contract specialist or contracting officer be contacted regarding the expenditure of funds for this project.

4. The ORP IRB Office point of contact for this action is Debra DePaul, RN, MSN, Human Subjects Protection Scientist, General Dynamics Information Technology Corporation, at DSN 343-2620 or debra.depaul.ctr@mail.mil; the POC for the USAMRMC ORP HRPO review is the undersigned at 301-619-7801.
ANDREA J. KLINE, MS, CIP

Director, Institutional Review Board Office

Office of Research Protections

US Army Medical Research and Materiel Command

Note: The official copy of this memo is housed with the protocol file at the Office of Research Protections, Human Research Protection Office, 810 Schreider Street, Fort Detrick, MD 21702-5000. Signed copies will be provided upon request.

<<...>>

Classification: UNCLASSIFIED

Caveats: NONE
BCM is fully approved for vascular.

From: Podbielski, Jeanette M
To: Fox, Erin E; Grayson, Donna A
Subject: FW: A-18067.d, HRPO Approval Memorandum (Proposal Log Number 13057176, Award Number W81XWH-14-1-0112) (UNCLASSIFIED)
Date: Monday, April 20, 2015 9:58:45 AM

Subject: A-18067.d, HRPO Approval Memorandum (Proposal Log Number 13057176, Award Number W81XWH-14-1-0112) (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

SUBJECT: Initial Approval for the Protocol, “Hemorrhage Control for Major Traumatic Vascular Injuries Phase I: A Retrospective Analysis of Non-Compressible Torso Hemorrhage (NCTH),” Submitted by Ramyar Gilani, MD, Baylor College of Medicine, Houston, Texas, in Support of the Proposal, “Hemorrhage Control for Major Traumatic Vascular Injuries,” Submitted by John B. Holcomb, MD, University of Texas Health Science Center at Houston, Houston, Texas, Proposal Log Number 13057176, Award Number W81XWH-14-1-0112, HRPO Log Number A-18067.d

1. The subject protocol was approved by the Baylor College of Medicine (BCM) Institutional Review Board (IRB) on 10 April 2015. This protocol was reviewed by the US Army Medical Research and Materiel Command (USAMRMC), Office of Research Protections (ORP), Human Research Protection Office (HRPO) and found to comply with applicable DOD, US Army, and USAMRMC human subjects protection requirements.

2. This no greater than minimal risk study is approved for the retrospective review of 3500 records across the identified research sites.

3. The Principal Investigator has a duty and responsibility to foster open and honest communication with research subjects. The USAMRMC strongly encourages the Principal Investigator to provide subjects with a copy of the research protocol, if requested, with proprietary and personal information redacted as needed.

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b. All unanticipated problems involving risk to subjects or others must be promptly reported by telephone (301-619-2165), by email (usarmy.detrick.medcom-usamrmc.other.hrpo@mail.mil), or by facsimile (301-619-7803) to the HRPO. A complete written report will follow the initial notification. In addition to the methods above, the complete report can be sent to the US Army Medical Research and Materiel Command, ATTN: MCMR-RP, 810 Schreider Street, Fort Detrick, Maryland 21702-5000.

c. Suspensions, clinical holds (voluntary or involuntary), or terminations of this research by the IRB, the institution, the sponsor, or regulatory agencies will be promptly reported to the USAMRMC ORP HRPO.

d. Events or protocol reports received by the HRPO that do not meet reporting requirements identified within this memorandum will be included in the HRPO study file but will not be acknowledged.

e. A copy of the continuing review approval notification by the BCM IRB must be submitted to the HRPO as soon as possible after receipt of approval. According to our records, it appears the next continuing review by the BCM IRB is due no later than 20 January 2016. Please note that the HRPO conducts random audits at the time of continuing review and additional information and documentation may be requested at that time.

f. The final study report submitted to the BCM IRB, including a copy of any acknowledgement documentation and any supporting documents, must be submitted to the HRPO as soon as all documents become available.

g. The knowledge of any pending compliance inspection/visit by the Food and Drug Administration (FDA), Office for Human Research Protections, or other government agency concerning this clinical investigation or research; the issuance of inspection reports, FDA Form 483, warning letters, or actions taken by any regulatory agencies including legal or medical actions; and any instances of serious or continuing noncompliance with the regulations or requirements must be reported immediately to the HRPO.

5. Please note: The USAMRMC ORP HRPO conducts site visits as part of its responsibility for compliance oversight. Accurate and complete study records must be maintained and made available to representatives of the USAMRMC as a part of their responsibility to protect human subjects in research. Research records must be
stored in a confidential manner so as to protect the confidentiality of subject information.

6. Do not construe this correspondence as approval for any contract funding. Only the Contracting Officer/Grants Officer can authorize expenditure of funds. It is recommended that you contact the appropriate contract specialist or contracting officer regarding the expenditure of funds for your project.

7. The HRPO point of contact for this study is Karen M. Eaton, MS, Human Subjects Protection Scientist, at 301-619-9268/karen.m.eaton.ctr@mail.mil.

SHARON A. EVANS, PhD, CIP
Deputy Director, Human Research Protection Office
Office of Research Protections
US Army Medical Research and Materiel Command

Note: The official copy of this memo is housed with the protocol file at the Office of Research Protections, Human Research Protection Office, 810 Schreider Street, Fort Detrick, MD 21702-5000. Signed copies will be provided upon request.

Classification: UNCLASSIFIED
Caveats: NONE
Appendix 2. Quad Chart
Hemorrhage Control for Major Traumatic Vascular Injuries
EDMS: 5840 and Quad Chart for Year 1 Quarter 2 Report
W81XWH-14-1-0112

PI: John B. Holcomb, M.D. 
Org: University of Texas Health Science Center at Houston 
Award Amount: $1,991,317

Study Aims
• Determine current practice patterns for the treatment of patients with non-compressible torso hemorrhage (NCTH) among 4 clinical sites using a retrospective study design;
• Conduct a 2-day Delphi Panel meeting of military and civilian experts to gain consensus regarding anatomic, technology, credentialing, competency, and training issues for catheter-based hemorrhage control and inform the development of the prospective study.
• Conduct a 4-site prospective observational study to test the hypothesis that less-invasive device-driven and expert-let hemorrhage control techniques improve survival in NCTH patients and definitively inform development of catheters, devices and training required for catheter-based hemorrhage control.

Approach
This is a 2-phase study which will include a retrospective study and Delphi Meeting in Phase I, then a prospective study in Phase II informed by the Phase I activities.

Goals/Milestones
CY14 -15 Goals – Phase I
- Obtain DoD HPRO and local IRB approvals
- Conduct retrospective data collection
- Analysis of retrospective data
- Hold Delphi meeting

CY15-16 Goals – Phase II
- Obtain regulatory amendment approvals for prospective study
- Conduct prospective observational study
- Data Analysis/Publications

Comments/Challenges/Issues/Concerns
• The timeline for the project has changed slightly. Data collection will be completed in Y2Q1. There are no financial or scientific concerns. We are still awaiting execution of the SAMMC/ISR PI and negotiating agency change.

Budget Expenditure to Date
Projected Expenditure: Y1Q4 $325K; YTD $994K 
Estimated Actual Expenditure: $275K

Updated: October 1, 2015