



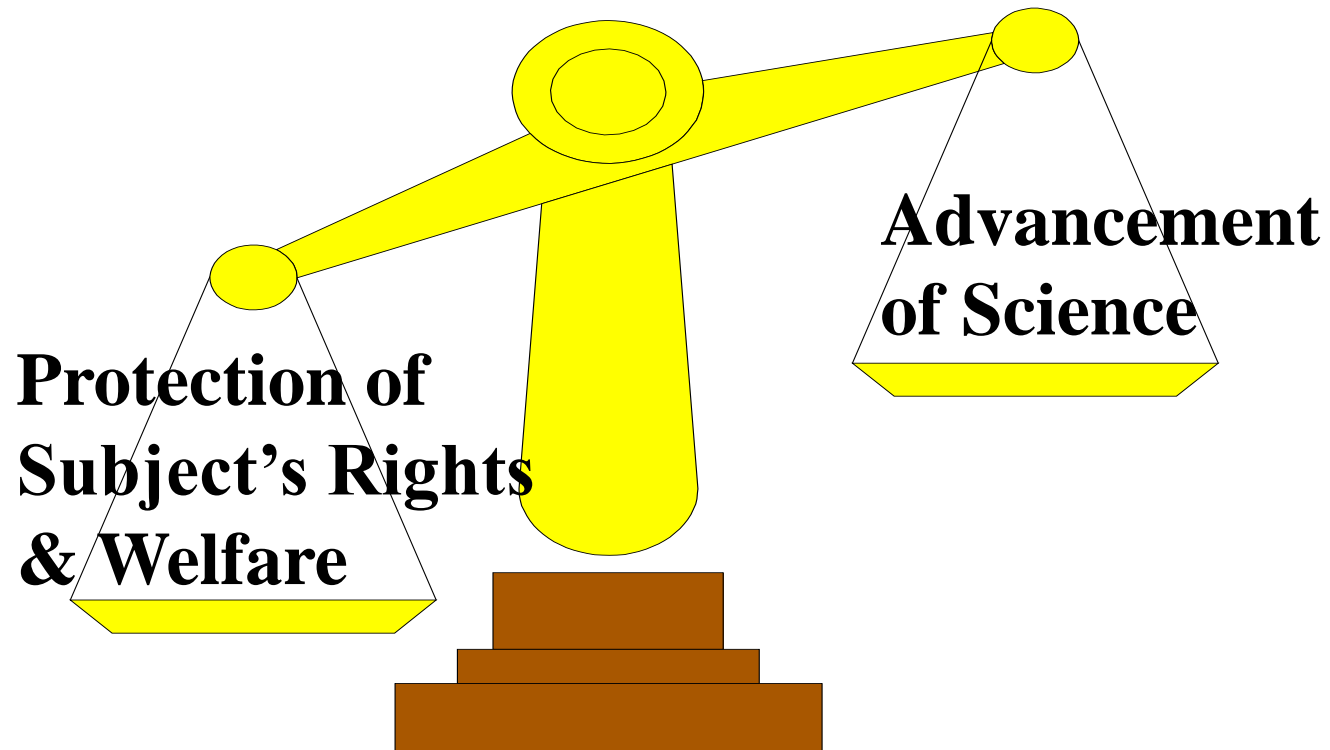
**“Consent or Not to Consent –  
That is the Question”  
Ethical Issues in Human Participant  
Research**

**Jon Mark Hirshon, MD, MPH, PhD  
Senior IRB Vice-Chair  
University of Maryland, Baltimore**

# What We Will Cover:

- **Historical perspective on research ethics**
  - Focus on consent
- **Federal regulations**
- **Waiver of Consent versus Exception from Informed Consent**
- **University of Maryland, Baltimore**
  - Brief introduction to the Human Research Protection Program
  - Experiences with Exception From Informed Consent (EFIC) studies: RAMPART Case Study

# Balancing Two Goals





# Nuremberg Code (1947)

## First Codification of Research Guidelines

**“The voluntary consent of the human subject is absolutely essential.”**

- No coercion in informed consent
- Subjects must be free to stop at any time.
- Prior animal data
- Scientific value; Anticipated results justify the risks
- Favorable risk/benefit ratio
- Suffering by subjects should be avoided
- No expectation of death/disability

# Lessons Learned from Nuremberg Trials

- **Medical Practice**

- Clinical Ethics: guided by Hippocratic Oath

- Patient is silent; dutifully obedient to the beneficent physician
- Doctor's primary obligation is the patient and acts in the patients' best interest

- **Research**

- Lies outside of the context of the physician-patient relationship

- Primary goal is to test a hypothesis, secondary obligation is to subject

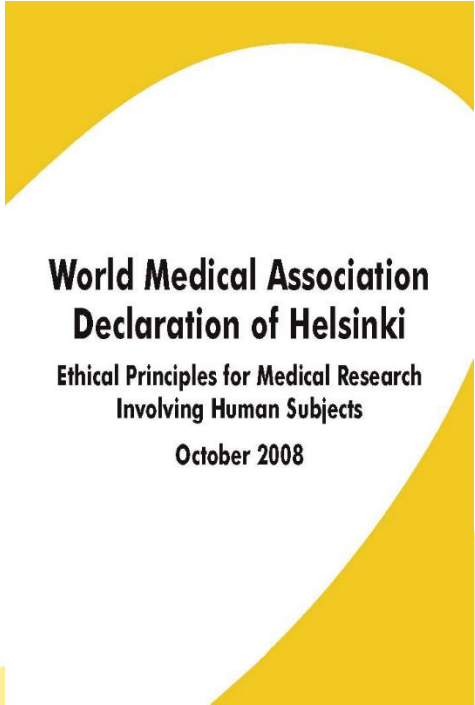
- **Conflict of Roles?**

# Declaration of Helsinki

## World Medical Association

- Adopted by the 18th WMA General Assembly, Helsinki, Finland, June 1964
  - Subsequent multiple amendments

- **Updated informed consent**
  - **Consent individuals**
    - Capable of giving informed consent
    - Recognizes that consent may not always be possible



**World Medical Association  
Declaration of Helsinki**  
Ethical Principles for Medical Research  
Involving Human Subjects  
October 2008

# Tuskegee Syphilis Study (1932 - 1972)

## Ethical Issues

- Inadequate disclosure of information
- Subjects believed they were getting free treatment
- Told that spinal taps were therapy
- US Gov't actively prevented men from receiving penicillin
- 1972 press reports caused the U.S. Gov't to stop the study

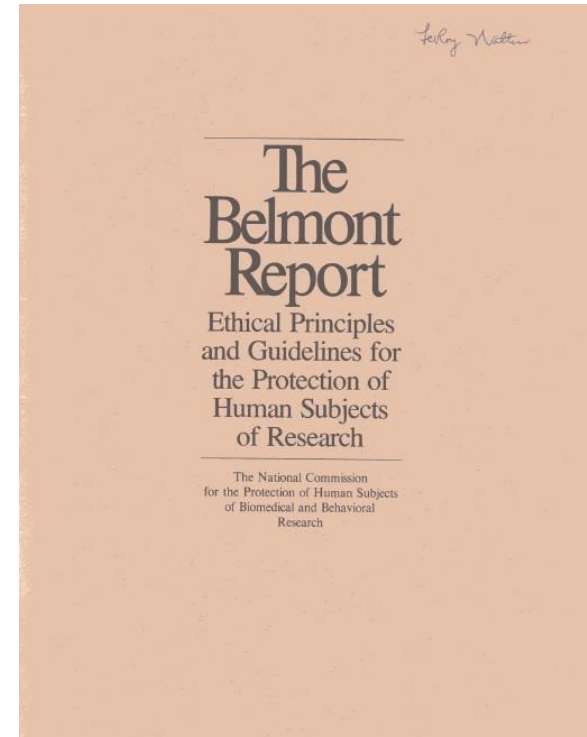




# The Belmont Report

April 18, 1979

- **Basic ethical principles**
  - **Respect for Persons**
    - Autonomy
  - **Beneficence**
    - Maximizing benefits while minimizing risks
  - **Justice**
    - Fair distribution of costs and benefits
- **The Common Rule (1981)**
  - No exceptions for emergencies





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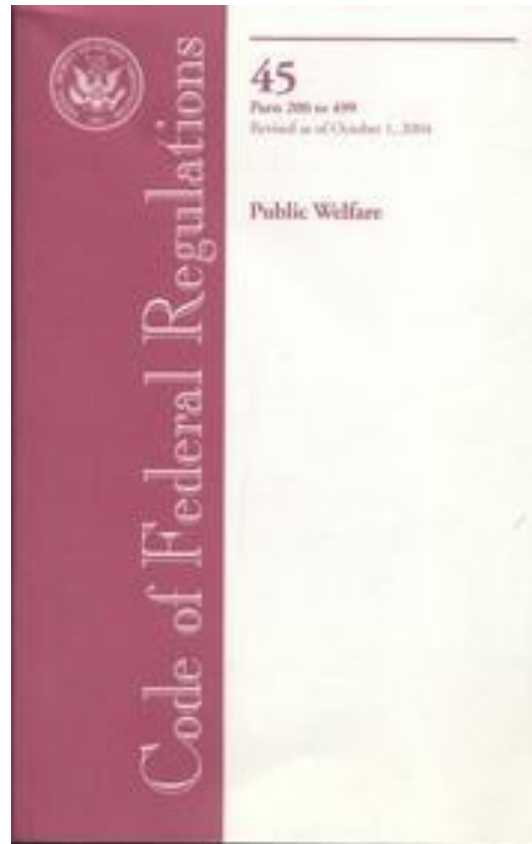
# Informed Consent in Emergency Research

Consensus Statement From the Coalition Conference  
of Acute Resuscitation and Critical Care Researchers

Michelle H. Biros, MD, MS; Roger J. Lewis, MD, PhD; Carin M. Olson, MD; Jeffrey W. Runge, MD;  
Richard O. Cummins, MD, MPH; Norman Fost, MD, MPH

**JAMA** April 1995

# FEDERAL REGULATIONS



# DEFINITIONS

- ***“Medical Practice”*** (IRB is not involved)
  - Interventions designed solely to enhance the well-being of the patient.
  - Provides diagnosis, prevention or therapy with the expectation of a successful outcome.
- ***“Experimental”***
  - Defined as new, untested or different.
  - An experimental procedure is not automatically categorized as research.
  - A new "experimental" procedure should be formally researched (investigated) to determine if is safe and effective.

# DEFINITIONS

- ***“Research”*** (IRB is involved)
  - Activities designed to contribute to generalizable knowledge.
  - Tests a hypothesis and draws conclusions.
  - Research is described in a formal protocol and a set of procedures designed to reach an objective.
  - The line between practice and research is often blurred.
  - Research and practice can occur simultaneously

# What is a Human Subject?

- A “human subject” (participant, volunteer) is a living individual about whom an investigator conducting research obtains:
  - **Data through intervention or interaction with the individual**
  - or
  - **Identifiable private information**

From: 45 Code of Federal Regulations (CFR) 46.102

# Responsibilities of the IRB and Human Research Protections Program

- Protect the rights and welfare of human research subjects
- Determine if **Benefit** of the research (to the individual or society) *exceeds* the **Risk** to the participant (subject, volunteer, patient)

# What is Informed Consent?

- ***It is a process- not just a document!***
  - (1) disclosing to potential research subjects information needed to make an informed decision;
  - (2) facilitating the understanding of what has been disclosed; and
  - (3) promoting the voluntariness of the decision about whether or not to participate in the research

See: <http://answers.hhs.gov/ohrp/categories/1566>



**WAIVER OF CONSENT  
VS.  
EXCEPTION FROM  
INFORMED CONSENT (EFIC)**



# **WAIVER OR ALTERATION OF INFORMED CONSENT**

**45 CFR 46.116(d)**



# To Waive or Alter Informed Consent

- **4 Conditions**

- the research involves no more than minimal risk to the subjects;
- the waiver or alteration will not adversely affect the rights and welfare of the subjects;
- the research could not practicably be carried out without the waiver or alteration; **and**
- whenever appropriate, the subjects will be provided with additional pertinent information after participation.

# Minimal Risk Research


- The probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.\*

\*[From: 45 CFR 46.102 i.]

# Examples of Minimal Risk Research

- Chart review
- Survey
- Physical exam
- Drawing blood
- Review of previously collected specimens
- Collection of stool or sputum specimens

# **Not adversely affect the rights and welfare of the subjects**

- Would the subject population consider their rights were violated?
  - Open for interpretation
- 

# Research could not practicably be carried out

- Impracticable to conduct the research
  - NOT just impracticable to obtain consent
- Scientific validity would be compromised if consent was required.
- Ethical concerns would be raised if consent were required

# Subjects will be provided with additional pertinent information

- When appropriate
  - A debriefing after a “deception research”
  - New information is obtained that directly impacts the safety or welfare of the subjects



**EXCEPTION FROM INFORMED CONSENT  
(EFIC) REQUIREMENTS IN EMERGENCY  
RESEARCH**

**21 CFR 50.24 AND 45 CFR 46.101**



# EFIC Requirements

21 CFR 50.24 and 45 CFR 46.101

- IRB responsible for the review, approval, and continuing review
- Life-threatening situation, available treatments are unproven or unsatisfactory
  - Collection of valid scientific evidence... is necessary to determine the safety and effectiveness of particular interventions

# EFIC Requirements (cont.)

- Obtaining informed consent is not feasible
- The research holds out the prospect of direct benefit
  - Subjects are facing a life-threatening situation that necessitates intervention;
  - Prior animal and preclinical studies support the research
  - Risk/benefit ratio is reasonable, considering the medical condition and potential class of subjects

# EFIC Requirements (cont.)

- The clinical investigation could not practicably be carried out without the waiver
- The length of potential therapeutic window is defined (i.e.- short window)
  - Efforts will be made to contact the a legally authorized representative within the window
- The IRB has reviewed and approved informed consent procedures and an informed consent document

# EFIC Requirements: Additional Protections

- Consultation with the community
- Public disclosure to the community
- Establishment of an independent data monitoring committee
- Efforts made to contact family members will be summarized and available to the IRB at time of continuing review

# What is community consultation?

- Consultation (including, where appropriate, consultation carried out by the IRB) with representatives of the communities in which the clinical investigation will be conducted and from which the subjects will be drawn

# Who is the Community?

- Rule doesn't dictate how or what to do
  - Communities differ
    - Size
    - Homogeneity of population
    - Culture
    - Language
- Effective consultation
  - Multifaceted
  - Informative to IRBs and communities
  - Continuing
- Two way communication is key

# **UNIVERSITY OF MARYLAND, BALTIMORE**

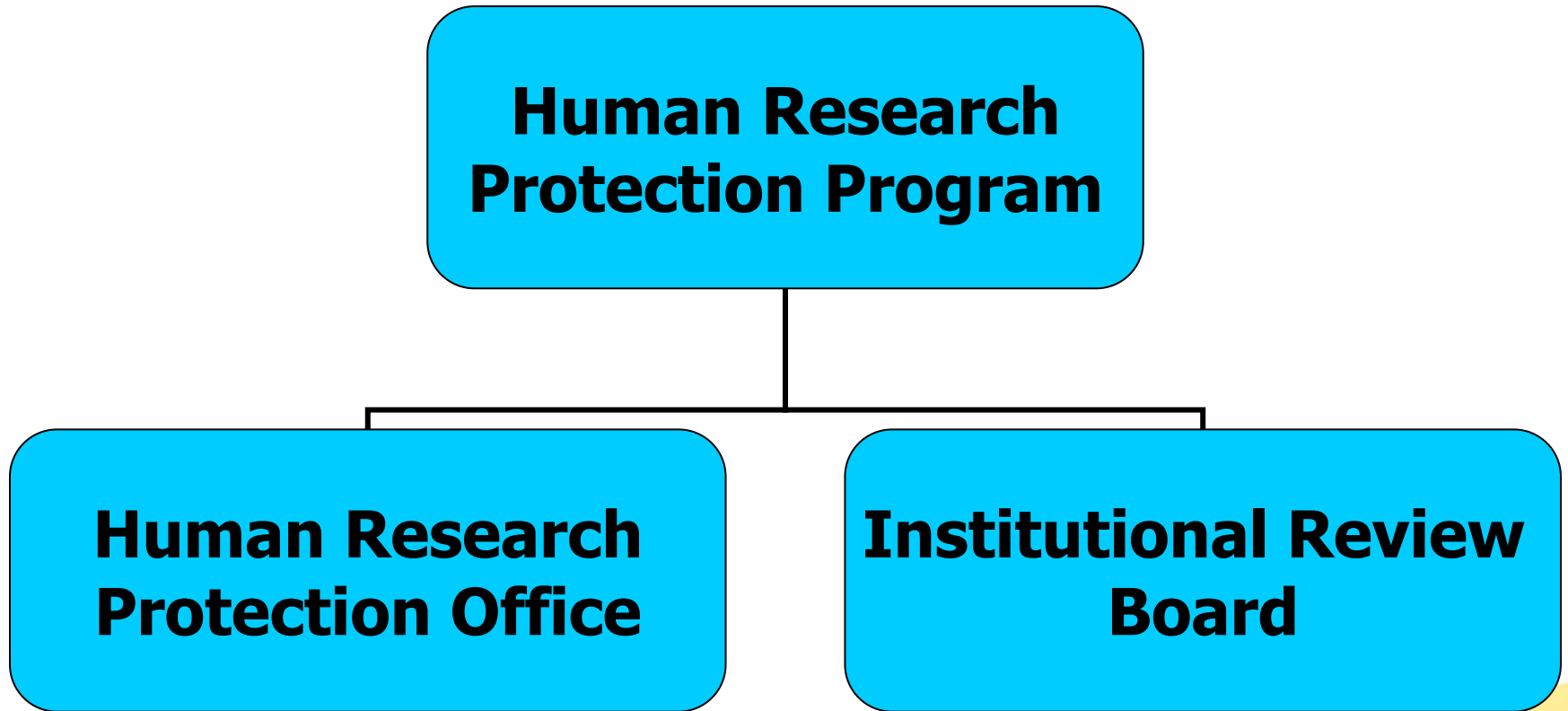
**Human Research Protection Program  
&  
Exception from Informed Consent Case Study**



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THE FOUNDING CAMPUS



# *Human Research Protection: UMB Model*



# Human Research Protection Office (HRPO)

- The HRPO is the coordinating office for the Human Research Protections Program (HRPP)
  - The HRPP is a comprehensive system designed to ensure the protection of the rights and welfare of subjects in Human Research.
- HRPO provides support for the Institutional Review Board
  - Oversight of > 2,000 clinical research protocols.

# HRPO's Mission

- The mission of our Human Research protection program plan is to protect the rights and welfare of subjects involved in Human Research that is overseen by this organization.
  - Foster a high caliber research culture through the support of investigators

# Functions of the Human Research Protections Office

- Review Protocol Transactions
  - New, Amendments, Renewals, Reportable New Information
- Organize IRB meetings
- Monitor and Audit investigators to ensure compliance with regulations
- Educate the research community

# What is an Institutional Review Board (IRB)?

- The group or committee that is given the responsibility by an institution to review research projects involving human subjects.
- Its primary purposes are
  - to assure the protection of the safety, rights and welfare of the human subjects.
  - determine if Benefit of the research (to the individual or society) *exceeds* the Risk to the participant (healthy volunteer or patient)
- By federal law, the group contains both scientific and non-scientific (community) members

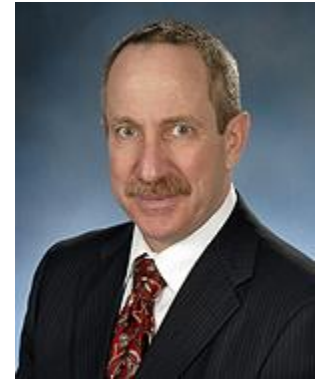
# IRB Leadership



James Campbell, Vice  
Chair, CRTMP Director



Robert Rosenthal,  
Chair



Jon Mark Hirshon,  
Senior Vice Chair



Robert Edelman,  
Vice Chair



Peter Gaskin,  
Vice Chair



Carla Alexander,  
Vice Chair



Joseph Pellegrini,  
Vice Chair



Seth Himelhoch,  
Vice Chair

# IRB Meetings

- Small Committees
- Frequent (3x/week meetings)
- Affiliated Scientists
- Non-Scientists
- Unaffiliated Community Members
- Representative Advocates for Vulnerable Populations
- VA Representatives as Appropriate

# What Aspects Are Important for an IRB Review?

- Subjects adequately protected
- Potential Benefits > Risk
- Study design/scientific integrity of research
- Equitable Subject Selection (No Coercion)
- **Appropriate Informed Consent**
- Privacy & Confidentiality Protection
- Data & Safety Monitoring



# The PI needs to:

- Assure appropriate oversight of research
- Respond to participant concerns
- Have adequate Data & Safety Monitoring
- Give appropriate care to the participants

**The principal investigator is the critical component in the conduct of high quality research and in the assurance of human research subjects' safety**


# **Collaborative Institutional Comprehensive Evaluation of Research Online (CICERO)**




# CICERO

- Electronic System
  - Creating, submitting, reviewing, documenting, communicating, storing
  - Web-enabled database
  - Benefits:
    - Reduces administrative burden
    - Improves consistency
    - Improves efficiency
    - Improves accountability
  - Modifiable

# HRPP Checklists & Worksheets

 <b>CHECKLIST: Waiver of the Consent Process for Planned Emergency Research</b>			
NUMBER	DATE	PAGE	
HRP-424	3/12/2014	1 of 2	
<p>The purpose of this checklist is to provide support for IRB members or the <u>Designated Reviewer</u> following the <b>CHECKLIST: Criteria for Approval and Additional Considerations</b> when research involves waiver of the consent process for planned emergency research. This checklist must be used for all reviews (initial, continuing, modification, review by the convened IRB, and review using the expedited procedure.)</p> <ul style="list-style-type: none"> <li>For initial review using the expedited procedure and modifications and continuing reviews where the determinations relevant to this checklist made on the previous review have changed, the <u>Designated Reviewer</u> completes this checklist to document determinations required by the regulations along with protocol specific findings justifying those determinations. The <u>Designated Reviewer</u> attaches this checklist to CHECKLIST: Non-Committee Review (HRP-402) and the IRB Office retains this checklist in the protocol file.</li> <li>For initial review using the convened IRB and for modifications and continuing reviews where the determinations relevant to this checklist made on the previous review have changed, one of the following two options may be used:               <ol style="list-style-type: none"> <li>The convened IRB completes the corresponding section of the TEMPLATE MINUTES (HRP-501) to document determinations required by the regulations along with protocol specific findings justifying those determinations, in which case this checklist does not need to be completed or retained.</li> <li>The convened IRB completes this checklist to document determinations required by the regulations along with protocol specific findings justifying those determinations and the IRB Office retains this checklist in the protocol file.</li> </ol> </li> </ul>			
<b>1 Waiver of Informed Consent for Planned Emergency Research<sup>1</sup></b> (All items in the left most columns must be "Yes" – Records or minutes must document protocol-specific findings justifying each of the following determinations.)			
<input type="checkbox"/> Yes <input type="checkbox"/> No	The research is <b>NOT</b> subject to regulation by a Common Rule agency other than DHHS.		
<input type="checkbox"/> Yes <input type="checkbox"/> No	The <u>Human Subjects</u> are in a life-threatening situation. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Available treatments are unproven or unsatisfactory. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	The collection of valid scientific evidence, which may include evidence obtained through randomized placebo-controlled investigations, is necessary to determine the safety and effectiveness of particular interventions. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Obtaining informed consent is not feasible because the subjects will not be able to give their informed consent as a result of their medical condition. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Obtaining informed consent is not feasible because the intervention under investigation must be administered before consent from the subjects' legally authorized representatives is feasible. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Obtaining informed consent is not feasible because there is no reasonable way to identify prospectively the individual's likely to become eligible for participation in the research. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Participation in the research holds out the prospect of direct benefit to the subjects because they are facing a life-threatening situation that necessitates intervention. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Appropriate animal and other preclinical studies have been conducted, and the information derived from those studies and related evidence support the potential for the intervention to provide a direct benefit to the individual subject. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Risks associated with the investigation are reasonable in relation to what is known about the medical condition of the potential class of subjects, the risks and benefits of standard therapy, if any, and what is known about the risks and benefits of the proposed intervention or activity. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	The research could not practicably be carried out without the waiver. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	The proposed investigational plan defines the length of the potential therapeutic window based on scientific evidence, and the investigator has committed to attempting to contact a legally authorized representative for each subject within that window of time and, if feasible, to asking the legally authorized representative contacted for consent within that window rather than proceeding without consent. The investigator will summarize efforts made to contact legally authorized representatives and make this information available to the IRB at the time of continuing review. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Additional protections of the rights and welfare of the subjects will include consultation (including, where appropriate, consultation carried out by the IRB) with representatives of the communities in which the research will be conducted and from which the subjects will be drawn. <i>Provide protocol specific findings justifying this determination:</i>		

 <b>CHECKLIST: Waiver of the Consent Process for Planned Emergency Research</b>			
NUMBER	DATE	PAGE	
HRP-424	3/12/2014	2 of 2	
<input type="checkbox"/> Yes <input type="checkbox"/> No	Additional protections of the rights and welfare of the subjects will include public disclosure to the communities in which the research will be conducted and from which the subjects will be drawn, prior to initiation of the research, of plans for the investigation and its risks and expected benefits. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Additional protections of the rights and welfare of the subjects will include public disclosure of sufficient information following completion of the research to apprise the community and researchers of the study, including the demographic characteristics of the research population, and its results. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Additional protections of the rights and welfare of the subjects will include establishment of an independent data monitoring committee to exercise oversight of the research. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	If obtaining informed consent is not feasible and a legally authorized representative is not reasonably available, the investigator has committed, if feasible, to attempting to contact within the therapeutic window the subject's family member who is not a legally authorized representative, and asking whether he or she objects to the subject's participation in the research. The investigator will summarize efforts made to contact family members and make this information available to the IRB at the time of continuing review. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	Procedures are in place to inform, at the earliest feasible opportunity, each subject, or if the subject remains incapacitated, a legally authorized representative of the subject, or if such a representative is not reasonably available, a family member, of the subject's inclusion in the research, the details of the investigation and other information contained in the informed consent document. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	There is a procedure to inform the subject, or if the subject remains incapacitated, a legally authorized representative of the subject, or if such a representative is not reasonably available, a family member, that he or she may discontinue the subject's participation at any time without penalty or loss of benefits to which the subject is otherwise entitled. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	If a legally authorized representative or family member is told about the research and the subject's condition improves, the subject is also to be informed as soon as feasible. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	If a subject is entered into a research with waived consent and the subject dies before a legally authorized representative or family member can be contacted, information about the research is to be provided to the subject's legally authorized representative or family member, if feasible. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	The investigator will interpret "family member" to mean any one of the following legally competent persons: spouses; parents; children (including adopted children); brothers, sisters, and spouses of brothers and sisters, and any individual related by blood or affinity whose close association with the subject is the equivalent of a family relationship. <i>Provide protocol specific findings justifying this determination:</i>		
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> NIA	If the research is FDA-regulated, the protocol is being performed under a separate investigational new drug application (IND) or investigational device exemption (IDE) that clearly identifies this protocol as including subjects who are unable to consent. ("NIA" if not FDA-regulated) <i>Provide protocol specific findings justifying this determination:</i>	
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> NIA	If the research is FDA-regulated, a licensed physician who is a member of or consultant to the IRB and who is not otherwise participating in the research has concurred with the above findings. ("NIA" if not FDA-regulated) <i>Provide protocol specific findings justifying this determination:</i>	

<sup>1</sup>The research may proceed only after institutional approval.

# EFIC Research: Case Study

- **Neurological Emergencies Treatment Trials (NETT) Network**
  - NIH funded clinical trials network
  - Focuses on neurologic emergencies
  - Clinical coordinating center is at University of Michigan





- Welcome
- Community
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- RAMPART
- EFIC
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- Events
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## EFIC: Exception from Informed Consent for Emergency Research

### What is EFIC?

Since unconscious emergency patients cannot tell us whether they do or do not want to participate in a research study, they cannot provide or refuse to give informed consent (permission). The Food and Drug Administration (FDA) developed special rules ([FDA 50.24](#)) that allow patients to be treated as part of research studies using an exception from informed consent for emergency research (EFIC).

These studies are special and rare. EFIC can only be used in life-threatening emergencies, when there is a possibility for direct benefit to participants, and when consent is not possible. It can only be done when we do not know if existing treatments work at all, or when we know they do not work well enough.

Patients and/or their legally authorized representatives (ex. spouse, parent, legal guardian) are always told about their participation and given information about the study as soon as possible after the treatment was given. They are also asked if they want to continue participating in the study.

### How do participating communities learn about EFIC studies?

These studies are very public and transparent. The research is discussed in the community (including potential study participants and their family members) and is advertised. Some examples of this are meetings with community leadership, targeted groups, or the general public. The research team attends these meetings and provides information about the research study, asks for the group's feedback, and addresses the group's questions and concerns. The public is also notified about the research study by providing study information on TV, radio, cable access shows, newspapers, billboards, bus displays, websites, and email. Some communities will also participate in a telephone survey to get feedback about the study. There is often a toll-free number that people can call to ask questions about the study and/or express their thoughts and concerns.

Click [here](#) to find out what community events are happening within the NETT Network.

### How are participants protected in EFIC studies?

There are many protections and rules to make sure the research studies are done in a proper and safe manner. Institutional Review Boards (IRBs) are committees of doctors, researchers, ethicists, lawyers, and members of the general public that are committed to protecting the safety of patients participating in research. IRBs work to make sure that studies are appropriate and comply with research rules before they can start. IRBs also monitor research studies while patients are being treated. They watch for unexpected side effects, and make sure patients are being treated correctly and safely. The IRB reviews every study yearly to make sure it can continue. At the Federal level, oversight of large research studies may involve several agencies including the National Institutes of Health (NIH), the FDA, and the Office of Human Research Protections. Data Safety and Monitoring Boards (also known as Data Monitoring Committees) are an independent group of researchers and doctors that meet regularly and look at information

# Rapid Anticonvulsant Medications Prior to Arrival Trial: Rampart Study

## The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812

FEBRUARY 16, 2012

VOL. 366 NO. 7

### Intramuscular versus Intravenous Therapy for Prehospital Status Epilepticus

Robert Silbergleit, M.D., Valerie Durkalski, Ph.D., Daniel Lowenstein, M.D., Robin Conwit, M.D., Arthur Pancioli, M.D., Yuko Palesch, Ph.D., and William Barsan, M.D., for the NETT Investigators\*

#### ABSTRACT

##### BACKGROUND

Early termination of prolonged seizures with intravenous administration of benzodiazepines improves outcomes. For faster and more reliable administration, paramedics increasingly use an intramuscular route.

##### METHODS

This double-blind, randomized, noninferiority trial compared the efficacy of intramuscular midazolam with that of intravenous lorazepam for children and adults in status epilepticus treated by paramedics. Subjects whose convulsions had persisted for more than 5 minutes and who were still convulsing after paramedics arrived were given the study medication by either intramuscular autoinjector or intravenous infusion. The primary outcome was absence of seizures at the time of arrival in the emergency department without the need for rescue therapy. Secondary outcomes included endotracheal intubation, recurrent seizures, and timing of treatment relative to the cessation of convulsive seizures. This trial tested the hypothesis that intramuscular midazolam was noninferior to intravenous lorazepam by a margin of 10 percentage points.

##### RESULTS

At the time of arrival in the emergency department, seizures were absent without rescue therapy in 329 of 448 subjects (73.4%) in the intramuscular-midazolam group and in 282 of 445 (63.4%) in the intravenous-lorazepam group (absolute difference, 10 percentage points; 95% confidence interval, 4.0 to 16.1;  $P < 0.001$  for both noninferiority and superiority). The two treatment groups were similar with respect to need for endotracheal intubation (14.1% of subjects with intramuscular midazolam and 14.4% with intravenous lorazepam) and recurrence of seizures (11.4% and 10.6%, respectively). Among subjects whose seizures ceased before arrival in the emergency department, the median times to active treatment were 1.2 minutes in the intramuscular-midazolam group and 4.8 minutes in the intravenous-lorazepam group, with corresponding median times from active treatment to cessation of convulsions of 3.3 minutes and 1.6 minutes. Adverse-event rates were similar in the two groups.

##### CONCLUSIONS

For subjects in status epilepticus, intramuscular midazolam is at least as safe and effective as intravenous lorazepam for prehospital seizure cessation. (Funded by the National Institute of Neurological Disorders and Stroke and others; ClinicalTrials.gov number, NCT00809146.)

From the Department of Emergency Medicine, University of Michigan, Ann Arbor (R.S., W.B.); the Department of Medicine, Division of Biostatistics and Epidemiology, Medical University of South Carolina, Charleston (V.D., Y.P.); the Department of Neurology, University of California, San Francisco, San Francisco (D.L.); the National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, MD (R.C.); and the Department of Emergency Medicine, University of Cincinnati, Cincinnati (A.P.). Address reprint requests to Dr. Silbergleit at the Department of Emergency Medicine, Suite 3100, 24 Frank Lloyd Wright Dr, Ann Arbor, MI 48105, or at: robert.silbergleit@umich.edu.

\*The Neurological Emergencies Treatment Trials (NETT) investigators are listed in the Supplementary Appendix, available at [nejm.org](http://nejm.org).

This article (10.1056/NEJMoa1107494) was updated on February 16, 2012.

N Engl J Med 2012;365:591-600.  
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# RAMPART STUDY OBJECTIVE

- To compare the efficacy of intramuscular midazolam with that of intravenous lorazepam for children and adults in status epilepticus treated by paramedics



# Important EFIC Points

- Patients seizing (unable to consent)
- Potential life threatening condition
- Time sensitive condition
- Prior studies supported research
  - Clinical practice equivocal

# Multi-Step Review & Approval Process

- **Network Level**
  - Extensive pre-research discussions
    - Thought leaders in emergency research and ethics
    - Investigators' meeting with IRB representatives
      - To primarily discuss exception from informed consent
- **Site (UMB) Level**

# UMB Review and Approval

- Community consultation plan
  - Reviewed and approved by the IRB
  - Included:
    - Community meetings and survey
    - Identification of target groups
    - Media announcements
- Implementation of the consultation plan
- “Opt out” mechanism
  - Decline bracelet

# Overall RAMPART Timeline at UMB

- January 2008: Network EFIC Meeting
- February 2008: FDA Investigational New Drug
- December 2008: Initial submission to UMB IRB
- January 2009: Initial IRB review (deferred)
  - Multiple subsequent IRB reviews and correspondence
- October 2009: IRB Approval

# EFIC Controversies

- Pediatric research in Maryland
- Pre-hospital research in Maryland



# What We Covered:

- **Historical perspective on research ethics**
  - Focus on consent
- **Federal regulations**
- **Waiver of Consent versus Exception from Informed Consent**
- **University of Maryland, Baltimore**
  - Brief introduction to the Human Research Protection Program
  - Experiences with Exception From Informed Consent (EFIC) studies: RAMPART Case Study

# Summary

- Waiver of Informed Consent ≠ EFIC
- EFIC is permissible for emergency research
  - Recognition that there are times/condition when informed consent is not possible
  - Rarely used, only for true emergencies
  - Special protections and conditions, in addition to the regular ethical review

# Questions?

