

Meeting Date: _____
 IRB No. _____

**PNNL IRB Decision Quadrant
 Basic Ethical Principles of the Belmont Report**

Research Design		Risk/Benefit (Beneficence or Non Malfeasance)	
<ul style="list-style-type: none"> - Is scientifically sound and will not unnecessarily expose subjects to risk. - Supports proving hypothesis - Human subjects necessary - Peer review documented 		<ul style="list-style-type: none"> - Risks to subjects are reasonable in relation to anticipated benefits - Benefits maximized/risks fully considered and minimized - Appropriate safeguards applied - Emergency response plan in place 	
Acceptable		Acceptable	
Comments:			
Subject Selection (Justice)		Subject Protection (Respect/Autonomy)	
<ul style="list-style-type: none"> - Inclusion/exclusion criteria appropriate and documented. - Equitable selection of subjects – results benefit community being studied - Free of coercion/undue influence - Special protections provided for vulnerable subjects or those vulnerable to coercion or undue influence 		<ul style="list-style-type: none"> - Informed consent sought from each subject - Informed consent appropriate/clearly written and documented - Clear explanation of risks and benefits - Privacy of subjects and confidentiality of data is maintained. - Data is monitored and secure - Assurance that no conflict of interest exists 	
Acceptable		Acceptable	
Comments:			
<div style="background-color: #cccccc; height: 15px; width: 100%; margin-bottom: 5px;"></div> <p>Risk/Benefit Analysis</p> <p>___ The risk to subjects is reasonable in relation to anticipated benefits to them and/or to the significance of the knowledge that may reasonably be expected to result from the research.</p> <p>___ This research involves the prospect of direct benefit to individual subjects.</p> <p>___ The research involves no prospect of direct benefit to individual subjects, but is likely to yield generalizable knowledge about the subject’s disorder or condition.</p> <p>___ This research involves the prospect of indirect benefit to the individual subject because of direct benefit to the society in which the individual participates.</p> <p>Risk/benefit to children involved in this research is best represented in Federal Regulation 45 CFR 46.40 _____.</p>			
Risk Level:	Minimal	Greater Than Minimal	Life Threatening

In accordance with 10 CFR 745 and 45 CFR 46, Subparts B, C, and D, I recommend this project be:

___ Approved ___ Disapproved ___ Tabled ___ Approved, under the following conditions:

And suggest the following for consideration by the Board:

Informed consent may be altered or waived.	Yes _____ No _____
Conformance review should be conducted.	Yes _____ No _____
Minor changes may be expedited by the IRB administrative team.	Yes _____ No _____
Continuing Review required at intervals of:	3 Mo. _____ 6 Mo. _____ 12 Mo. _____

1. Research - Scientific Design and Purpose

- Scientific peer review has been conducted and documented.
- The hypothesis (purpose/overall objective) is clearly stated.
- The study design is scientifically sound and appropriate to prove the hypothesis (documented peer review).
- The research will contribute to generalizable knowledge.
- The research is justifiable to expose subjects to (any) risk, discomfort, or inconvenience.
- The proposal contains information regarding previous animal, human, or bench research.
- The participation of human subjects is necessary to meet research objectives.
- Subjects' rights and welfare are considered as integral part of study design.

2. Subjects

Subject Population

- What are the inclusion/exclusion criteria: sex, age, health status, ethnicity, number of subjects?
- Is the subject population appropriate for the goals of the study?
- Are subjects likely to benefit individually?
- Is the selection of subjects equitable, given restrictions imposed by (justifiable) inclusion/exclusion criteria?
- Will physiological, psychological, social, or cultural characteristics of the subject population pose medical, ethical, or legal problems?
- Have appropriate steps been taken to minimize these potential problems?

Subject Selection and Recruitment

- Is the method used to identify a subject population ethically and legally acceptable?
- Is the recruitment process appropriate and free of coercion?
- Do recruitment advertisements/information contain sufficient information?
- Are incentives for participation (e.g., payments) appropriate? Is there potential for coercion?

Vulnerable Subjects

- Additional safeguards are required for subjects likely to be vulnerable to coercion or undue influence such as pregnant women, children, prisoners, mentally disabled, economically or educationally disadvantaged persons. The inclusion of vulnerable populations must be justified and conducted in compliance with Federal Regulation 45 CFR 46.

Research Involving Children

The IRB must document the appropriate risk/benefit category for research involving children.

- 45 CFR 46.404 - Research that involves no more than minimal risk.
- 45 CFR 46.405 - Research that involves greater than minimal risk but also presents the prospect of direct benefit to individual subjects.
- 45 CFR 46.406 - Research that involves greater than minimal risk and no prospect of direct benefit to the individual subjects, but is likely to yield generalizable knowledge about the subject's disorder or condition.
- 45 CFR 46.407 - Research not otherwise approvable that represents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of children.

3. Risks/Benefits

Risk

A risk is a potential harm or injury associated with the research that a reasonable person in the subject's position would consider injurious. Risks, which can be categorized as physical, psychological, sociological, economic, and legal, must be reasonable in relation to anticipated benefits, if any, to subjects and to the importance of knowledge that may reasonably be expected to result from the research.

“Minimal Risk: the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than that ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests.”

Risk (cont.)

- What potential risks/discomforts/inconveniences are associated with the research?
- Have risks to vulnerable subjects or special populations been fully considered?
- What are the estimated probability, severity, average duration, and reversibility of any given harm?
- Are adequate safeguards in place to minimize the possibility and magnitude of harm?
- Are steps in place to treat subjects who suffer an injury? Is an Adverse Event Plan required?

Benefits

A research benefit is a health-related, psychosocial, or other value realized by the individual subject or the community in which they participate, or will contribute to the acquisition of generalizable scientific knowledge. Compensation is not considered a benefit, but is rather an appropriate incentive for participation.

- What are the potential benefits to the individual subject?
- To the society in which the subject participates?
- To society in general?

Risk/Benefit Assessment

- Is risk to the subject outweighed or balanced by the potential benefit?
- Is the risk/benefit relationship acceptable according to Federal regulations for vulnerable subjects?
- Is the research designed to maximize benefits and minimize risks to subjects?
- What is the magnitude and importance of the risks and benefits to the subject?
- How does the Principal Investigator assess risk/benefit?

4. Informed Consent

The Consent Process

- Who will solicit informed consent?
- Will the timing and setting be conducive to rational and thoughtful decision-making?
- Will subjects review the consent with family members beforehand?
- Is there anything in the process that might be perceived as undue influence or coercion?
- Should subjects be reeducated and/or re-consented at periodic intervals?
- Do mitigating factors exist that might inhibit a subject's desire or ability to withdraw from participation? If so, have appropriate steps been taken to minimize this problem?
- Are subjects physically and mentally competent to consent? If not, is there an acceptable alternative?
- Should a subject advocate be present during the consent process?
- Is assent required for children?
- Is a waiver or alteration of the consent justified?

The Consent Form

- The Informed Consent is written clearly at the appropriate level and includes, at a minimum:
 - Purpose of the research, expected results, and information that will be provided to subjects.
 - Clear explanation of procedures
 - Risks and/or discomforts
 - Potential benefits
 - Emergency care
 - Extent to which privacy will be protected. Methods employed to protect privacy
 - Instructions that the subject is free to withdraw consent and discontinue participation at any time.
 - Contact information

5. Data Collection/Protection of Privacy/Confidentiality

- How will the data be collected and recorded?
- How sensitive will the data be?
- Are privacy and confidentiality issues properly addressed, e.g. use of genetic information?
- Will personal identifiers or codes be associated with the data?
- How will the data be stored and maintained? Disposed of? Secured?
- Who will have access to the data?
- How will data be handled if more than one site is involved?
- Is there potential for medical and research data to be mixed?
- Will data be provided to other agencies or individuals in an ethical and legally acceptable manner?
- To what extent would a breach of confidentiality or invasion of privacy constitute harm? Do adequate provisions exist to protect subjects from these risks?
- Does this study require a Data Management Plan? Should all project staff sign off?

6. Biological Samples, Tissues, DNA, Cells or Cell Lines

- What type of specimens are being used in the study?
- How will they be collected?
- What/who is the source of the specimens?
- Was consent obtained? For this specific purpose? Should it be required?
- Could personal identifiers or links reveal the identity of the subject?
- Would revelation of identity cause serious harm to the subject?
- Are linking identifiers removed at the source? Adequately protected at PNNL?
- How long will specimens be retained?
- Will they be shared with other researchers?
- Will they be used for genetic research?
- Will they be used for any other purpose than this research?
- Will subjects or their families receive results of the study? Should they?

7. Other Considerations

- Is there potential for controversy or public concern?
- Is there potential for conflict of interest? Collaboration with other institutions? Financial gain?
- Is ionizing or non-ionizing radiation used? Chemical, biological or physical risk?
- Is IRB review required at collaborating institution?
- Where will involvement of subjects take place?
- Is this FDA-regulated research? Investigational New Device (IND) or Investigational Device Exemption (IDE) involved?
- Is more than annual continuing review required? Conformance review?
- International considerations?

8. Items for Discussion: