Human Research Protection Unit

Standard Operating Procedures (SOP)

Institutional Review Board

Faculty of Medicine Siriraj Hospital

Mahidol University

Version 7.1

19 April 2017
STANDARD OPERATING PROCEDURES

Sriraj Institutional Review Board
Human Research Protection Unit
Faculty of Medicine Siriraj Hospital, Mahidol University

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Version 7.1 became effective on 19 April 2017

Approved by ........................................
(Prof. Prasit Watanapa, MD., PhD.)

Dean, Faculty of Medicine Siriraj Hospital, Mahidol University

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<td>Stated in the policy for expedited reviewer(s) to determine if the protocol needs verification from sources other than the investigators that no material changes had occurred since previous IRB review in the continuing review process.</td>
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<th>Full Board Initial Review of Research Protocol</th>
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<td>Described in the policy on notification of IRB findings to the Deputy Dean of Research (or designated Associate Dean) as ‘Institutional Officials’, by using the electronic copy of IRB minutes.</td>
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<td>Described in the policy on Suspension or Termination of IRB Approval notifications to the Department Chair, Deputy Dean of Research and the funding agencies as ‘relevant others’, and description of how to report for the research studies that are regulated by US FDA.</td>
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<td>Added in the policy for the research protocol related documents to be retained by IRB of which include:</td>
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<td>• The justification for exempt determination.</td>
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<td>• The justification for using the expedited procedure.</td>
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<td></td>
<td>• Actions taken by the reviewer.</td>
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<td></td>
<td>• Any findings/determinations required by laws, regulations, codes, and guidance to be documented.</td>
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<td>• Records of initial and continuing review activities.</td>
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<th>Topic 10.1</th>
<th>Quality Assurance and Quality Improvement Program</th>
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<td>Specified in the QA/QI policy for periodic evaluation of the outreach activities, and process description in brief detail.</td>
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Regulations require that Institutional Review Boards (IRBs) have written policies and procedures, and that activities at the institution are carried out as described in the written policies and procedures document. These Standard Operating Policies and Procedures (SOP) are written to enable the Faculty of Medicine Siriraj Hospital, Mahidol University to maintain a system of compliance. The SOPs of an IRB reflect not only the laws and regulations, but also the underlying ethical principles that are the basis of the IRB's mandate. Finally, these policies also reflect the overarching commitment of the Faculty of Medicine Siriraj Hospital Human Research Protections Unit (HRPU) to provide protection for all human subjects involved in research conducted under the direction of its students, trainees, staff and faculty.

The ethically responsible researcher is expected to carry the dual burden to advance knowledge that can improve the human condition or generate new knowledge and, at the same time, to recognize the absolute imperative to treat human research subjects with the utmost care and respect. It is not unreasonable to ask others to share this burden, indeed, the institutions, sponsors, and society as a whole who expect to benefit from this research should be expected to share in the responsibility of conducting ethical research. This burden also falls, then, to those who sit on IRBs. These individuals are expected to share the responsibility of protecting the human subjects in research conducted under the auspices of the Faculty.

These SOPs apply to all the day-to-day operations of the IRB and HRPU. The SOPs apply to all members and staff of the IRB who serve on it as part of their overall institutional responsibilities, and all others who must subscribe to its decisions and its requirements (e.g., the clinical Investigators, research managers/coordinators, research assistants, support staff).

These SOPs are reviewed every three years or as necessary to ensure that they are up-to-date, that new legislation or regulations are reflected in the policies and that daily activities are being performed as described in the SOPs. These policies are based on current regulations, ethical principles, and guidelines for the protection of the human subjects of biomedical and behavioral research. As guidelines and regulations change in response to new technologies, new interpretation of principles, and other emerging issues, it is recognized that policies and procedures are evolving through the practice of human research protection. These evolving policies and procedures require an implementation period for assessment prior to standardizing them in the SOP. The policies state what the Faculty of Medicine Siriraj Hospital requires for the ethical conduct of clinical research. The procedures detail how these policies are carried out.
The SOPs are not an end unto themselves. They are the framework upon which research activities in the Faculty of Medicine Siriraj Hospital are conducted. Therefore, all members of the research enterprise who are working within the Faculty or under its oversight are expected to read, understand, and comply with them. This way, the responsibility of conducting sound, effective and ethical research can be shared.
1. PURPOSE
This policy establishes the abbreviations and terms followed by the Human Research Protection Unit at the Faculty of Medicine Siriraj Hospital.

2. POLICY
2.1 Abbreviations Used

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<th>Abbreviation</th>
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<td>AAHRPP</td>
<td>Association for the Accreditation of Human Research Protection Programs</td>
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<tr>
<td>AE</td>
<td>Adverse event</td>
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<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
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<tr>
<td>CRF</td>
<td>Case Record Form</td>
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<tr>
<td>COA</td>
<td>Certificate of Approval</td>
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<tr>
<td>COI</td>
<td>Conflict of Interest</td>
</tr>
<tr>
<td>DSMB</td>
<td>Data Safety Monitoring Board</td>
</tr>
<tr>
<td>FDA</td>
<td>Food and Drug Administration</td>
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<td>FWA</td>
<td>Federal wide Assurance</td>
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<td>GCP</td>
<td>Good Clinical Practice</td>
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<tr>
<td>HIPAA</td>
<td>Health Information Portability and Accountability Act</td>
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<td>HRPU</td>
<td>Human Research Protection Unit</td>
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<tr>
<td>HUD</td>
<td>Humanitarian Use Device</td>
</tr>
<tr>
<td>ICF</td>
<td>Informed Consent Form</td>
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<tr>
<td>IDE</td>
<td>Investigational Device Exemption</td>
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<tr>
<td>IND</td>
<td>Investigational New Drug</td>
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<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>LAR</td>
<td>Legally Authorized Representative</td>
</tr>
<tr>
<td>NSR</td>
<td>Nonsignificant Risk designation for medical device</td>
</tr>
<tr>
<td>PI</td>
<td>Principal Investigator</td>
</tr>
<tr>
<td>QA/QI</td>
<td>Quality Assessment/Quality Improvement</td>
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<td>SAE</td>
<td>Serious Adverse Event</td>
</tr>
<tr>
<td>SOP</td>
<td>Standard Operating Procedures</td>
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<tr>
<td>SR</td>
<td>Significant Risk designation for medical device</td>
</tr>
<tr>
<td>UAE</td>
<td>Unexpected Adverse Event</td>
</tr>
<tr>
<td>UPRISTO</td>
<td>Unanticipated Problem Involving Risks to Subjects or Others</td>
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</table>
2.2 Terms Used and Definition

**Administrative Committee**
The committee responsible for IRB administration at the Faculty, comprised of IRB Chair as a chairman, vice-chairman, committee, secretary and assistant secretary.

**Adverse Event**
Any untoward or unfavorable medical occurrence in a human subject, including any abnormal sign (e.g. abnormal physical exam or laboratory finding), symptom, or disease, temporally associated with the subject’s participation in the research, whether or not considered related to the participation.
* Internal adverse event is an adverse event experienced by subjects enrolled by the investigator(s) at the Faculty, or at a site for which the Faculty has oversight.
* External adverse event is an adverse event experienced by subjects enrolled by investigators at other institutions engaged in a multi-site clinical trial.

**Allegation**
An assertion made by a party which has not yet been proven or supported by evidence.

**Assent**
A child's affirmative agreement to participate in research. Mere failure to object should not, absent affirmative agreement, be construed as assent.

**Clinical Investigation**
The Food and Drug Administration (FDA) has defined clinical investigation as any experiment that involves a test article and one or more human subjects, and that either must meet the requirements for prior submission to the FDA or the results of which are intended to be later submitted to, or held for inspection by the FDA, as part of an application for a research or marketing permit.

**Conflict of Interest**
Any interest that could reasonably be expected to affect the objectivity of an IRB member or consultant in relation to an application or other matter under IRB review.

**Consent Document, or Consent Form**
A structured, written description in understandable terms of relevant research project information. It is the document that ensures all regulatory elements are present and communicated to a potential research participant.
* Short-Form Consent Document is a written consent document stating that the elements of consent have been presented orally. A witness to the oral presentation is required.
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<th>Term</th>
<th>Definition</th>
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<td>Continuing Non-Compliance</td>
<td>A pattern of Non-Compliance that indicates a deficiency likely to result in further Non-Compliance or a circumstance in which an investigator fails to cooperate with investigating or correcting Non-Compliance.</td>
</tr>
<tr>
<td>Continuing Review</td>
<td>Periodic review of research activities at intervals appropriate to the degree of risk, but not less than once per year.</td>
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<td>Data Repository</td>
<td>A database or a collection of databases that have been created or organized to facilitate the conduct of multiple research protocols, including future protocols not yet envisioned. It also may have been created for other purposes such as administrative and clinical purposes. Note: The terms “Data repository” and “data warehouse” are used interchangeably in this document.</td>
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<tr>
<td>Data Safety Monitoring Board</td>
<td>A set up specifically to monitor data throughout the duration of a study to determine if continuation of the study is appropriate scientifically and ethically.</td>
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<td>Designated Reviewer</td>
<td>The IRB Chair or an Experienced IRB Member designated by the IRB Chair to conduct Non-Committee Reviews.</td>
</tr>
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<td>Ethical approval for research in human</td>
<td>Approval of research that concerns the rights, welfare, safety and well-being of human participants.</td>
</tr>
<tr>
<td>Experienced IRB Member</td>
<td>An IRB member is considered experienced if the member has a minimum of six (6) months of IRB experience as an IRB member, or working in the field of human research administration, and is considered to be knowledgeable by the IRB Chair.</td>
</tr>
<tr>
<td>Expiration Date</td>
<td>The first date that the protocol is no longer approved, the date after the end date of the approval period.</td>
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<tr>
<td>Faculty</td>
<td>Hereinafter referred to the Faculty of Medicine Siriraj Hospital, Mahidol University.</td>
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<td>Generalizable Knowledge</td>
<td>Investigations designed to draw general conclusions (i.e. knowledge gained from a study may be applied to populations outside of the specific study population), inform policy, or generalize findings. Such knowledge is intended to be disseminated for broad use.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Human Biological Specimens</td>
<td>Materials derived from human individuals, such as blood, urine, tissue, organs, hair, nail clippings, buccal swabs, or any other materials that are either collected specifically for research purposes or as residual specimens from diagnostic, therapeutic, or surgical procedures. Bacteria, fungi, or viruses obtained from human biological specimens are not considered human biological specimens, as long as the human material has been removed.</td>
</tr>
<tr>
<td>Human Participant, or Human Subject</td>
<td>A living individual about whom a researcher conducting research obtains data through intervention or interaction with the individual, or identifiable private information.</td>
</tr>
<tr>
<td>Human Research, or Human Subjects Research</td>
<td>Any activity that meets the definition of “research” and involves “human subjects” as defined by either the Common Rule or FDA regulations. Note: The terms “subject” and “participant” are used interchangeably in this document.</td>
</tr>
<tr>
<td>Human Research Protection Unit Office</td>
<td>The Office that consists of IRB Operations, Education, and Quality Assessment/Improvement Program for Human Research Protection. Staff of HRPU Office help to support, manage and oversee all human subjects research conducted by faculty personnel, students and trainees of the Faculty.</td>
</tr>
<tr>
<td>Identifiable Information</td>
<td>Information that is individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information).</td>
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<tr>
<td>Immediate Family</td>
<td>Spouse, domestic partner; and dependent children.</td>
</tr>
<tr>
<td>Informed Consent</td>
<td>An ongoing process of communication between the participant and the study team. Informed consent is a continuing process by which a participant, after having been informed, voluntarily confirms his/her willingness to participate in a research project and can demonstrate understanding of all aspects of the research project that are relevant to the participant's decision to participate.</td>
</tr>
<tr>
<td>Institutional Official</td>
<td>A high-level official with the authority to represent the Faculty to ensure compliance with regulations governing protection of human subjects.</td>
</tr>
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<td><strong>Standard Operating Procedures</strong></td>
<td><strong>Glossary of Abbreviations and Terms Used in the SOPs</strong></td>
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<td><strong>Title:</strong> Institutional Review Board</td>
<td>A committee designated by an institution to review, approve, require modification in, disapprove, and conduct continuing oversight of human subject’s research. Hereinafter referred to Siriraj Institutional Review Board (SIRB).</td>
</tr>
<tr>
<td><strong>Interaction</strong></td>
<td>Communication or interpersonal contact between investigator and subject.</td>
</tr>
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<td><strong>Intervention</strong></td>
<td>Physical procedures by which data are gathered (e.g., venipuncture) and manipulations of the subject or the subject’s environment that are performed for research purposes.</td>
</tr>
<tr>
<td><strong>Legally Authorized Representative</strong></td>
<td>An individual or judicial or other body authorized under applicable law to consent (Surrogate Consent) on behalf of a prospective subject to the participant's participation in the research procedure(s).</td>
</tr>
<tr>
<td><strong>Material Transfer Agreement</strong></td>
<td>A contract that governs the transfer of tangible research materials between two organizations when the recipient intends to use the material for his/her own research purposes.</td>
</tr>
<tr>
<td><strong>Minimal Risk</strong></td>
<td>The probability and magnitude of harm or discomfort anticipated in the research that 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.</td>
</tr>
<tr>
<td><strong>Non-Committee Reviewer</strong></td>
<td>A Designated Reviewer that conducts any of the following: (1) Determination of whether an activity is Human Research; (2) Determination of whether Human Research is exempt from regulation; (3) Reviews of non-exempt research using the expedited procedure; or (4) Determination of which subjects can continue in expired research.</td>
</tr>
<tr>
<td><strong>Non-Compliance</strong></td>
<td>Failure to follow applicable regulations/directives, or the requirements or determinations of the IRB. * Continuing Non-Compliance: A pattern of Non-Compliance that indicates a deficiency likely to result in further Non-Compliance or a circumstance in which an investigator fails to cooperate with investigating or correcting Non-Compliance. * Serious Non-Compliance: Non-Compliance that affects the rights or welfare of participants.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
<td>Off-Label</td>
<td>Use of an approved drug, an approved or cleared device, or a licensed biologic for an indication not in the approved labeling. Most research involving off-label uses requires IND or IDE applications.</td>
</tr>
<tr>
<td>Private Information</td>
<td>Information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (e.g., a medical record).</td>
</tr>
<tr>
<td>Protocol Deviation</td>
<td>Any change, divergence, or departure from the study design or procedures defined in the IRB approved protocol which has no substantive effect on the risks to research participants, the scientific integrity of the research plan or the value of the data collected. A protocol deviation does not result from willful misconduct on the part of the investigator(s), and is generally noted after it occurs.</td>
</tr>
<tr>
<td>Protocol Violation</td>
<td>Any change, divergence, or departure from the IRB-approved protocol that significantly impact the quality or completeness of the data, accuracy and/or reliability of the study data, or that may significantly affect a subject's safety, rights or welfare. A protocol violation may result from serious or continuing noncompliance or willful misconduct on the part of the investigator(s).</td>
</tr>
<tr>
<td>Recruitment</td>
<td>A process of distributing or presenting information that describes the research project and eligibility criteria so that a prospective subject may consider enrollment.</td>
</tr>
<tr>
<td>Related Adverse Event, Related Problem</td>
<td>An Adverse Event or Problem that may reasonably be regarded as caused by, or probably caused by, the research.</td>
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</table>
| Related to the Research                   | An incident, experience or outcome that is likely to have resulted from participation in the research study.  
  * Possibly related to the research refers to the reasonable possibility that the adverse event, incident, experience or outcome may have been associated with the procedures involved in the research. |
<table>
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<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Research</td>
<td>A systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalized knowledge. Activities which meet this definition constitute research whether or not they are conducted or supported under a program which is considered research for other purposes.</td>
</tr>
<tr>
<td>Serious Adverse Event</td>
<td>Any Adverse Event that (1) results in death; (2) is life-threatening (places the subject at immediate risk of death from the event as it occurred); (3) results in inpatient hospitalization or prolongation of existing hospitalization; (4) results in a persistent or significant disability/incapacity; (5) results in a congenital anomaly/birth defect; or (6) based upon appropriate medical judgment, may jeopardize the subject’s health and may require intervention to prevent one of the other outcomes listed in this definition (e.g. allergic bronchospasm requiring intensive treatment at home or in the emergency room, blood dyscrasias or convulsions that do not result in inpatient hospitalization, or the development of drug dependency or drug abuse).</td>
</tr>
<tr>
<td>Serious Problem</td>
<td>A problem in human research that may reasonably be regarded as (1) Involving substantive harm, or a genuine risk of substantive harm, to the safety, rights, or welfare of human research subjects, research staff, or others; or (2) Substantively compromising the effectiveness of the Faculty for human research protection.</td>
</tr>
<tr>
<td>Steering Committee</td>
<td>The committee responsible for setting up the policy to evaluate the HRPU implementation at the Faculty, and coordinate the faculty executive members.</td>
</tr>
<tr>
<td>Surrogate</td>
<td>An individual authorized to make decisions on behalf of a subject who lacks decision-making capacity.</td>
</tr>
<tr>
<td>Suspension of IRB Approval</td>
<td>An action of the IRB, IRB Chair or Institutional Official and/or designee to temporarily or permanently withdraw IRB approval of some or all research procedures short of a Termination of IRB Approval. Suspended studies remain open and are subject to continuing review.</td>
</tr>
<tr>
<td>Systematic Investigation</td>
<td>An activity that involves a prospective research plan which incorporates data collection, either quantitative or qualitative, and data analysis to answer a research question.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Termination of IRB Approval</td>
<td>An action of the IRB to permanently withdraw IRB approval of all research procedures. Terminated studies are permanently closed and no longer require continuing review.</td>
</tr>
<tr>
<td>Test article</td>
<td>Any drug for human use, biological product for human use, medical device for human use, human food additive, color additive, electronic product, or any other article.</td>
</tr>
<tr>
<td>Unanticipated Problem Involving Risks to Participants or Others</td>
<td>Any incident, experience, or outcome that (1) is unexpected (in terms of nature, severity, or frequency); (2) is related or possibly related to participation in the research; and (3) suggests that participants or others are at greater risk of harm related to the research than was previously recognized.</td>
</tr>
<tr>
<td>Unexpected Adverse Event</td>
<td>Any adverse event, the specificity or severity of which is not consistent with the current Investigator Brochure; or, if an Investigator Brochure is not required or available, the specificity or severity of which is not consistent with the risk information described in the general investigational plan or elsewhere in the current application, as amended.</td>
</tr>
<tr>
<td>Usual Care</td>
<td>Medical or other treatment or services a research subject would receive if not participating in the research study (e.g. the chemotherapy an oncology patient would receive whether or not the patient was participating in a research study).</td>
</tr>
</tbody>
</table>
3. SPECIFIC POLICIES
None

4. RESPONSIBILITY
4.1 Individuals writing policies and procedures are to indicate abbreviations and terms defined in this policy.
4.2 Individuals using policies and procedures are to consult this policy for the definitions of terms used.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.102;
21 CFR 50.3, 56.102, 312.3, 812.2(a), 812.3(p)

6. APPLICABLE DOCUMENTS
None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY
Not applicable
1. PURPOSE
The purpose of this policy is to establish a uniform process for the preparation including review and writing the Standard Operating Procedures (SOPs).

2. POLICY
In the operation of the Human Research Protection Unit (HRPU), Institutional Review Board (IRB) and those conducting or supporting human research, it is critical to define and adhere to uniform process standards that are consistent with the applicable and up-to-date policies, and regulatory requirements. Through clear and concise definitions and standard procedures that fit well into the work process, an operation can function with consistency, efficiency, and good quality.

3. SPECIFIC POLICIES
3.1 Definition of Terms used for the preparation of the SOP

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPLICABLE DOCUMENTS</td>
<td>Supplemental forms or templates, either internal (within the HRPU) or external (between the HRPU and stakeholders), providing information to support Policy implementation</td>
</tr>
<tr>
<td>APPROVAL DATE</td>
<td>The date on which the SOP is approved and signed by the final authority for use</td>
</tr>
<tr>
<td>EFFECTIVE DATE</td>
<td>The date on which a new or revised SOP is first implemented</td>
</tr>
<tr>
<td>GUIDELINES</td>
<td>General recommendations, or instructions that provide a framework to implement procedures related to Policy's objectives</td>
</tr>
<tr>
<td>POLICY</td>
<td>A formal, brief, and high-level statement or plan that embraces institutional general principles, goals, objectives, and acceptable procedures for a defined area</td>
</tr>
<tr>
<td>PROCEDURES</td>
<td>The process employed to implement the Policy: who does what, when they do it, and under what criteria</td>
</tr>
<tr>
<td>PURPOSE</td>
<td>A statement of the reason for writing the procedure</td>
</tr>
<tr>
<td>RESPONSIBILITY</td>
<td>An individual or group who is accountable for the overall actions to implement the Policy</td>
</tr>
</tbody>
</table>
Title: 1.1 Preparation of the Standard Operating Procedures (SOPs)

REGULATIONS The principle or rule (with or without the coercive power of law) employed in controlling, directing, or managing an activity, institution or system

STAKEHOLDER An individual or group who is involved in or affected by a course of action

STANDARD OPERATING PROCEDURE (SOP) An established or prescribed method to be followed routinely for the performance of designated operations or in designated situations

SUBJECT MATTER EXERT The individual(s) who exhibit the highest level of expertise in performing a specialized job, task, or skill within the institution

3.2 Policies of Other Constituents
The IRB will be responsible for knowing the policies of internal constituents and voting processes of Committees and Departments that also responsible for research approval prior to initiation of a project, e.g., Biosafety Committee, Radiation Safety Committee.

4. RESPONSIBILITY
The Administrative Committee is responsible for establishing and regularly reviewing and modifying (as appropriate) the SOP. In addition, any IRB members and the stakeholders involved in human research may bring forward suggestions or recommendations for the addition or revision retirement of the SOP.

The IRB Chair and Vice Chair are responsible for permitting approval to required changes to regulations, guidelines, or research practice as well as the policies and procedures for development of a new or revised SOP, and the assignment of SOP writing team.

The SOP writing team should be consisted of IRB Chair and/or Vice Chair, IRB Secretary, HRPU Staff and subject matter expert, as needed.

5. APPLICABLE REGULATIONS AND GUIDELINES
WHO Operational Guidelines for Ethical Review Committee that Review Biomedical Research (Geneva 2000);
International Conference on Harmonization, Guidance on Good Clinical Practice (ICH GCP) (1996)

6. APPLICABLE DOCUMENTS
None
# 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Administrative Committee</td>
<td>• Meet regarding review of SOP on pre-determined schedule.</td>
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<td>• Discuss changes and determine if additional policies or procedures are required or revised.</td>
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<td></td>
<td>• Outline a revision process, major or minor, for the new SOP.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Chair</td>
<td>• Assign the SOP writing team.</td>
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<tr>
<td></td>
<td></td>
<td>• Endorse the draft SOP from the team, date and sign as Reviewer.</td>
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<tr>
<td></td>
<td></td>
<td>• Submit the reviewed SOP to the approval process.</td>
</tr>
<tr>
<td>3</td>
<td>The SOP Writing Team</td>
<td>• Ensures all routine operations and activities are documented by SOP.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Propose a new, or modification in existing SOP as outlined by the Administrative Committee.</td>
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<tr>
<td></td>
<td></td>
<td>• Collaborate with Subject Matter Experts to develop appropriate content.</td>
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<tr>
<td></td>
<td></td>
<td>• Select the format, and draft the SOP and associated documents.</td>
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<tr>
<td></td>
<td></td>
<td>• Review the draft SOP and submit the draft for endorsement by IRB Chair.</td>
</tr>
</tbody>
</table>
1. PURPOSE
The purpose of this policy is to define the process for approving, distributing and training the Standard Operating Procedures (SOP) within Siriraj Human Research Protection Unit (HRPU) and Institutional Review Board (IRB).

2. POLICY
Research involving human subjects conducted at the Faculty of Medicine Siriraj Hospital should meet the highest ethical standards, and in line with applicable laws/regulations and current research practices in the field. Written SOP must be reviewed to ensure the up-to-date quality and integrity of the review and oversight of research involving human subjects, and for the operating guidelines to be followed by those conducting or supporting research.

3. SPECIFIC POLICIES
3.1 Approval of SOP
3.1.1 Changes to regulations, guidelines, or research practice as well as the policies and procedures that require a revision to a previously issued SOP or new SOP edition are classified as:
- Minor revision: to amend or improve the IRB implementation by remaining the structure and important content of the previous SOP.
- Major revision (Draft a new SOP edition): to replace the previous SOP by updating the policy, procedures and related document as appropriate. The new edition/major revision should be done at least within 3 years starting from the effective date of the latest version. However, if the Administrative Committee has not seen the necessity for major revision after 3 years, the committee may present the current SOP to obtain the approval for further use.

3.1.2 A minor revision type can be done periodically with the review and approvals are made in the meeting of the Administrative Committee on ethics for research in humans.

3.1.3 A new version of the SOP must be submitted to obtain the acceptance from the Administrative Committee and to get final approval in the Faculty Executive Committee meeting.

3.1.4 Documentation of review and approval is required by signature of the responsible and authorized individuals. The new SOP edition will be counted in decimal order next to the
version (for example, version 1, version 2) and count the minor revision by adding the decimal point after the latest SOP version number (for example, version 1.2, version 1.3).

3.2 Implementation

3.2.1 After approval, a new or revised SOP will be formally disseminated to every IRB members and responsible individuals, and made available on the Siriraj HRPU website and Faculty of Medicine Siriraj Hospital intranet (SiNet). Any substantive changes will be listed and informed as appropriate. A new or revised SOP will be effective on the date on which it is first implemented, and will supersede all earlier versions.

3.2.2 Training will be provided to all IRB members and staffs on any new or revised policies and/or procedure.

3.2.3 Each new IRB member or staff must review all applicable SOP prior to undertaking any responsibilities at the IRB. Evidence of training will be documented and filed with the IRB Chair or Vice Chair.

4. RESPONSIBILITY

The IRB Chair is responsible for submission of the reviewed SOP made by the SOP writing team for approval by the Administrative Committee and the Faculty Executive Committee. The Administrative Committee is responsible for assurance of regularly review and adequate training as needed by IRB member, IRB Staff and stakeholders in human research conduct.

5. APPLICABLE REGULATIONS AND GUIDELINES

21 CFR 56.108, 56.109, 56.113;
45 CFR 46.108;
WHO Operational Guidelines for Ethical Review Committee that Review Biomedical Research (Geneva 2000);
International Conference on Harmonization, Guidance on Good Clinical Practice (ICH GCP) (1996)

6. APPLICABLE DOCUMENTS

None
# 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1   | Administrative Committee    | ● Approve the revised SOP after minor revision, or permit acceptance of the new SOP version after major revision.  
    |                             | ● Permit acceptance to the new SOP version after major revision.                             |
| 2   | Faculty Executive Committee | ● Approve the new SOP version as the final authority.                                         |
| 3   | IRB Chair                   | ● Confirm that the new SOP version is properly documented, and the involved individuals have access to the SOP  
    |                             | ● Ensure that the IRB members and staff are working according to the new SOP version          |
| 4   | IRB Staffs                  | ● Notify IRB committee and research community, and distribute a revised or new version of SOP and related documents to IRB members and appropriate individuals.  
    |                             | ● Maintain on file all current and previous SOP, and the list of all SOP.                    |
1. PURPOSE
The purpose of this policy is to overview the mission, structure and institutional authority for the Human Research Protection Unit to protect the rights, dignity, welfare, and privacy of human research subjects at the Faculty of Medicine Siriraj Hospital.

2. POLICY
2.1 Mission
It is the policy of the Faculty of Medicine Siriraj Hospital that human research activities conducted by faculty staff, students, or other trainees, and any others conducting research using the patients, medical records, or facilities of the faculty must receive prior approval of Siriraj institutional review board (IRB). The Human Research Protection Unit (HRPU) was settled up to support the activities of Siriraj IRB in promoting ethical conduct of human involving research, and ensure the faculty commitment to the compliance with all applicable regulations and accreditation standards.

2.2 Structure and Institutional Authority
The HRPU at the Faculty of Medicine Siriraj Hospital is responsible for the administrative, quality improvement, and educational activities. These functions administer independently in the form of two committee groups, the Steering Committee and Administrative Committee on ethics for research involving humans. The Steering Committee is a policy and decision making body that is responsible for overall development of HRPU. The Administrative Committee is in charge of the administration and management of all HRPU activities.

The HRPU office is also the central administrative workplace for Siriraj IRB, serving as the central repository of all information affecting the protection of human involving research. It is located at Room 210 of His Majesty the King's 80th Birthday Anniversary 5th December 2007 Building. The HRPU has full-time staff who are responsible for coordinating and supporting all research approval processes by IRB committee until final decision is made, the post-approval and continuing review processes, as well as the quality improvement and educational program. The HRPU staff, IRB members, research staff, and investigators are expected to understand, adhere and apply their obligation to protect the rights and welfare of participants guided by the ethical and legal principles governing human subject research.

The HRPU office is directly under the authority of the Faculty Dean as shown in the structure charts below. The faculty retains ultimate responsibility for the maintenance, supporting and improvement of the HRPU. The resources are granted separately including budget, equipment, personnel, venue and space to ensure sufficient capacity to operate at all levels.
2.1 Overview and Structure of Siriraj Human Research Protection Unit

Administrative Structure of Human Research Protection Unit

Faculty Dean
Faculty of Medicine Siriraj Hospital

Steering Committee

Human Research Protection Unit

Administrative Committee

IRB Chair

Institutional Review Board

4 IRB Committees

Human Research Protection Office

HRPU Staffs

Organizational and Functional Structure of Human Research Protection Unit
2.3 Independence of the IRB
Sriraj IRB is independent and retains the final authority for all decisions regarding the protection and welfare of humans participating as subjects in research activities. Institutional officials may not approve the research if it has not been approved by the IRB. Inappropriate efforts to influence the IRB process, individual IRB members, or HRPU staff will be reported to the Administrative Committee, Steering Committee and Faculty Dean respectively. The faculty will cease any efforts at inappropriate influence, and the Faculty Dean has the authority to limit or remove an investigator’s privilege to conduct research.

3. SPECIFIC POLICIES
3.1 Steering Committee
The Steering Committee on ethics for research involving humans consist of 8 to 10 representatives that are considered partners or stakeholders in the HRPU, including the Faculty Dean, Deputy Dean of Research, Head of Department, internal experts and at least one external expert, with IRB chair as the secretary. They are appointed by the Faculty Dean for four-year terms. The Steering Committee organizes the meeting at least once a year. Their authorities and responsibilities are as follows:
1. Evaluate the activities and achievements of HRPU.
2. Assess compliance with HRPU policies and procedures.
3. Determine potential conflict of interest of organization.
4. Review and approve the policy and continuous quality improvement plan of HRPU.

The Faculty Dean as the chair of Steering Committee:
1. Has the authority at the organization to implement the human research protection program,
2. Regulates all researches involving humans in accordance with applicable national and international regulations,
3. Be responsible to ensure the protection of the rights, safety and well-being of human research participants in the faculty, under the operation of IRB,
4. Chooses and appoints the IRB chair, appoints the IRB members and directly involves in allocation of resources to HRPU.

3.2 Administrative Committee
The Administrative committee on ethics for research involving humans are appointed by the Faculty Dean to a 4-year term, consisting of the chair, vice-chair, secretary, assistant secretary, and HRPU staff, with a total of 9 or more members. The IRB chair will be designated as the chair of Administrative Committee, and be responsible for nominating the committee members. The Administrative committee will organize an official meeting at least 4 times per year, and on an as needed basis. The IRB chair is responsible to bring the resolution from the meeting to inform all IRB members in the panel meeting, as appropriate. Their authorities and responsibilities are as follows:
1. Set up the policy of HRPU,
2. Operate and evaluate the HRPU activities, and make quality improvement plan at least once a year,
3. Report activities and achievements annually to the Steering Committee and Faculty Executives,
4. Administer the office operations, budget, staffs as well as the operating guideline for the officers,
5. Formulate the SOP, researcher handbook and revise them periodically as appropriate,
6. Organize the training on ethical research in humans and details of the IRB operating process for the IRB committee, investigators, faculty personnel, and the trainees,
7. Manage and monitor post approval process of the research project,
8. Determine and solve the HRPU problems in case of emergency,
9. Determine and manage conflict of interest of IRB members, researchers and organization/senior executives.

3.3 Relationship to Other Institutional Constituencies Activities

**Activities**
- Legal Counsel (risk management unit)
- Research pharmacy (linkage with the Pharmacy Department)
- Radiation safety

**Activities**
- IRB (scientific & ethics)
- Conflict of Interest Management
- Monitoring and Compliance oversight
- Quality Improvement
- Education/Training program
- Research related injury investigation

**Activities**
- Research Grants
- Clinical Trial Agreement (CTA)
- Material Transfer Agreement (MTA)
- Siriraj Biosafety Risk Management
- Scientific integrity of research protocol
Faculty of Medicine Siriraj Hospital
1. Legal counsel (risk management unit)
   1.1 Prevent the organization’s risk from the effects or consequences of the processes conducted by the faculty personnel, trainees, researchers and students
   1.2 Provide advice regarding to legal issues upon request to HRPU and IRB
   1.3 Assist in the resolution of conflicts among applicable laws
2. Research Pharmacy
   The Research Pharmacy is responsible for: (i) assuring appropriate storage and handling of all investigational drugs; (ii) assuring inventory accountability of all investigational drugs; (iii) serving as a central source of information for all investigational drugs used for humans; (iv) dispensing medications only for protocols that have approval of the IRB and only in a manner consistent with the requirements of those protocols; and (v) distributing appropriate information about investigational drugs and their use in particular study protocols to individuals with direct care responsibilities for patients enrolled in those studies.
3. Radiation Safety Subcommittee
   The subcommittee is settled up, by the Faculty to oversees the use of radioactive materials and radiation-producing devices at the Faculty, and promotes radiological safety in both research and service activities through safety training, professional guidance, and technical support.
   The Radiation Safety Subcommittee has the vested authority to act immediately in all matters pertaining to radiation safety for the purpose of assuring individual well-being and the integrity of Faculty property.

Human Research Protection Unit
1. Institutional Review Board (See chapter 3 Siriraj Institutional Review Board)
2. Conflict of Interest Management (See section 3.4 Conflict of Interest Disclosure and Confidentiality Agreement)
3. Quality Improvement (See chapter 10 Quality Assessment and Quality Improvement)
4. Monitoring and Compliance oversight (See section 10.3 Site Visit and Compliance Monitoring)
5. Education/Training in human research ethics (See chapter 9 Education/Training in Human Research Ethics)
6. Research pharmacy (linkage with the Pharmacy Department)
   According to the ICH GCP recommendation in research used pharmacy, the faculty assigned the HRPU to take responsibility in this regard to:
   6.1 Provide oversight and direction for use of investigational medications in the Clinical Research Units and throughout the clinic facilities
   6.2 Provide expert consultation to investigators on medication-related issues
7. Research related injury

For injury that may occur as a result of participation in research activities covered by the Human Research Protection Unit,

7.1 Studies in which a commercial sponsor holds the IND or IDE and also controls the protocol must provide indemnification coverage and defense of the Faculty for performing the study, including its trustees, officers, investigators, employees and students, for all claims arising from the institution’s conduct of the study that are not due to negligence or willful misconduct.

7.2 Investigator-initiated investigational studies and Non-commercial entities sponsoring and/or providing investigational products do not require provision of medical costs from research related injury. The Faculty will be responsible for medical care costs stemming from research related injuries, as is indicated in the Informed Consent Document.

Research Division

1. Research Grants

1.1 Assure that agreement with external parties funding the research are consistent with the faculty and university requirement related to the ethical conduct of human research
1.2 Negotiate agreement with external parties funding the research are consistent with the faculty and university requirement related to the protection of research participants
1.3 Guarantee that research grant and contract funds are not expended for human research prior to approval
1.4 Ensure that clinical trial agreement terms do not conflict with the IRB approved protocols
1.5 Scientific and propose output assessment of research protocol prior to funding approval

2. Clinical Trial Agreement (CTA)

CTA will be negotiated between the Research Division (endorsed by the President of Mahidol University) and the sponsor or other funded agency. Contracts or other funding agreements in written form require the sponsor to:
2.1 Provide care and payment for research related injury.
2.2 Promptly (no longer than 30 days) report to organization any findings that could.
   - Affect the safety of participants or data
   - Influence the conduct of the study or alter IRB’s approval to continue the study
2.3 Send data and safety monitoring plans and reports to the organization.
2.4 Specify the timeframe for providing routine and urgent data and safety monitoring reports to organization as indicated in the data and safety monitoring plans approved by the IRB.
2.5 Regarding the publication of findings from sponsored research, the Division of Research representative makes the decision with the sponsor under case by case basis
2.6 Describe the steps followed to communicate findings from a closed research study to the researcher or organization when those findings directly affect participant safety.
2.7 Specify a time frame after closure of the study during which sponsor will communicate such findings. This should be based on the appropriate timeframe for each individual study.
3. Material Transfer Agreement (MTA)

One academic interchange and collaboration is the sharing by researchers in academia, industry and government of various biological materials (i.e. cell lines, antibodies, plasmids, DNA libraries, etc.). Faculty of Medicine Siriraj Hospital researchers who wish to obtain such materials from outside persons or entities or provide them to others should understand that issues of ownership and liability may arise from such transfers.

In most transfers of a "significant" biological material, the providing institution will require that the recipient institution sign an MTA. This is done to establish ownership of the material, give some legal protection to the institution and the providing scientist from potential liability resulting from the use of the material, and assure that the source of the material is identified and given appropriate credit in any resulting publications. Materials owned by a company or resulting from research sponsored by a company, either at another institution or at the faculty, may involve additional obligations to be assumed by the recipient. An MTA is a contract that spells out the conditions under which one organization agrees to transfer to another organization tangible research materials for use in the recipient’s research program, excluding clinical trials.

In both the receipt and provision of material, it is the responsibility of the Deputy Dean of Research Office to represent the researcher and Faculty of Medicine Siriraj Hospital. All MTAs involved must be reviewed by the Deputy Dean of Research Office staff.

4. Siriraj Biosafety Risk Management

The taskforce includes:

4.1 Preparation and provide the bio safety manual for laboratory work to laboratory personnel.

4.2 Cooperation with researchers having research involving microorganism/genetic modification type 1-3 or others, including assisting in proposal preparation for the protocol related to biosafety issues.

4.3 Approval of the laboratory research proposal involving microorganism/genetic modification type 1-2 according to the regulation of Mahidol University (www.mahidol.ac.th/green/Researcherf/Biosafety.Researcherf) and notify the result to the Institutional Biosafety Committee, Mahidol University.

4.4 Research involving genetic modification type 3, after consideration, the protocol will be sent to the Institutional Bio safety Committee, Mahidol University.

4.5 Training and/or coordination for training about bio safety for laboratory personnel

4.6 Control the quality for documents related to bio-safety laboratory.

4.7 Regularly tracking and monitoring the implementation of research laboratory bio-safety, according to rules and regulations previously described.

4.8 Regularly monitor and supervise the laboratory for its maintenance and safety.

4.9 Report the operating results of the risk management in microorganism and gene modification researches to the Risk management Committee and Research Development Committee, Faculty of Medicine at least once per year.

4.10 Perform other works related to the safety in research as assigned by the Faculty of Medicine, Siriraj Hospital.
5. **Scientific Integrity of Research Protocol**
   Department of Research and Development is responsible for
   5.1 Providing regular training course in research methodology, statistics and good clinical practice
   5.2 Providing consultation in statistical analysis of research project.

4. **RESPONSIBILITY**
   The Steering Committee is responsible for making management-level decisions for the policy and operations of the HRPU, which includes the IRB.
   The Administrative Committee is responsible for overseeing and making management-level decisions for day-to-day operations of the HRPU, which includes the IRB.
   The IRB Chair has the responsibility of managing and supervising the IRB work.
   The HRPU Staff has the responsibility of the cooperation and daily secretarial work of the HRPU and the IRB.

5. **APPLICABLE REGULATIONS AND GUIDELINES**
   21 CFR 56.108, 56.109, 56.113;
   45 CFR 46.108, 45 CFR 160 & 164;
   Belmont Report;
   Mahidol University Biosafety Guideline; 2011.

6. **APPLICABLE DOCUMENTS**
   6.1 Material Transfer Agreement form (can be download from the website www.si.mahidol.ac.th/th/research-academics/research/Downloads_form.asp)
   6.2 Clinical Trial Agreement form (can be download from the website www.si.mahidol.ac.th/th/research-academics/research/Downloads_form.asp)
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1   | Steering Committee        | • Ensure adherence to the ethical standards and compliance with international/national and institutional policy and regulations, to guarantee the protection of human subjects participating in research.  
• Investigate and acts on reports of any inappropriate efforts to influence the IRB process. |
| 2   | Administrative Committee  | • Establish and support IRB operations in complied with the highest ethical standards and applicable policy and regulations.  
• Develop and implement initial and continuing training and education of those involved in Human Research Protection: investigators, research staff, HRPU and IRB administrators, and IRB members.  
• Evaluate the HRPP through a Quality Assurance and Quality Improvement component.  
• Communicate with the internal and external constituencies. |
| 3   | IRB Chair, IRB Members, HRPU Staffs | • Perform and evaluate on a day-to-day and on-going basis for the review and approval of all research involving human subjects.  
• Report to the Administrative and Steering Committee any inappropriate efforts to influence the IRB process. |
1. PURPOSE
The purpose of this section is to state the ethical principles and regulatory mandates applied to human research protection, and adherence to the up-to-date policies and procedures at the Faculty of Medicine Siriraj Hospital.

2. POLICY
All human subject research conducted by or under the auspices of the Faculty of Medicine Siriraj Hospital will be performed in accordance with the applicable international/national and institutional ethical, legal and regulatory standards and policies. In addition, to ensure that the rights and welfare of the human research participants will be protected in a uniform manner, up-to-date standard operating procedures (SOPs) will provide such framework for the review and oversight of research.

3. SPECIFIC POLICIES
3.1 Ethical Principles
The HRPU at Faculty of Medicine Siriraj Hospital is grounded in foundational ethical principles. These ethical principles are embodied in the Nuremberg Code of 1947, the Declaration of Helsinki of 1964 and its subsequent revisions (World Medical Association), and particularly in the “Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research” in 1979. The Belmont Report's principles of respect for persons, beneficence and justice are accepted as critical for the ethical conduct of human subject research.

1. Respect for Persons (applied by obtaining informed consent, giving respect to privacy and confidentiality, and adding protections for vulnerable populations)
2. Beneficence (applied by weighing risks and benefits, thus to reduce or eliminate possible risks to subjects and maximize possible benefits)
3. Justice (applied by the equitable selection of participants and not unduly involvement of populations unlikely to be benefit of subsequent research applications)

Ethical principles from other sources may also apply to research covered by the HRPU as appropriate. These include but not limited to The International Conference on Harmonization - Good Clinical Practice (ICH-GCP) standards, International Ethical Guidelines for Biomedical Research Involving Human Subjects, The Council for International Research Involving Human Subjects, and The Council for International Organization of Medical Sciences (CIOMS) in the Collaboration with World Health Organization. Ethical principles are the essential issues covered in the internal training/educational program arranged by the
HRPU, and also Collaborative Institutional Training Initiative (CITI) tutorial for investigators, IRB members, and HRPU staff. In addition, all parties involved in the human research conduct are also expected to adhere to the principles of expertise (“competent to do the work”) and integrity (“faithfully adhere to professional principles”).

3.2 Regulatory Mandates
The fundamental laws and regulations governing human subject research in Thailand, covered by the HRPU and applicable to individual protocols are:

2. Thai Medical Device Act of B.E. 2531 (A.C. 1988)
4. The Medical Council Regulations on Medical Ethics Preservation, B.E. 2549 (A.C. 2006), Part 9 Research Study and Experiment on Human
5. National Health Act by the National Research Council of Thailand, B.E. 2550 (A.C. 2007); Chapter 1, section 7 and 9
7. National Policy and Guidelines for Human Research 2015 by the National Research Council of Thailand

These regulatory mandates as well as other relevant laws, rules and regulations covering good tradition, culture and value of Thai society also apply in particular circumstances.

3.3 Adherence to the Current Policies and Procedures
Annually, at the minimum, the policies and procedures will be revised by the Administrative Committee in accordance with the up-to-date ethical, legal and regulatory standards. Any new information or changes in the policies and procedures, identified as being pertinent to the protection of research participants, will be notified to the investigators using official letter to the Head of Department/Unit, and distributed via the Faculty of Medicine Siriraj Hospital intranet (SiNet) as well as HRPU website posting.

Significant changes may require a new standard operating procedures (SOP) or revision of a previous issue will also be judged by the Administrative Committee. When the new or revised SOPs are approved, they will be distributed to the appropriate individuals and Department/Unit via e-mail, SiNet and listed on the HRPU website page. Training will be provided to all IRB members and staff on any new or revised SOP. Evidence of training must be documented and filed.

4. RESPONSIBILITY
The Faculty Dean is responsible for granting final approval to new and revised IRB policies. The Administrative Committee is responsible for establishing and periodically reviewing and modifying the standard operating procedures.
5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56 108(a)(1), (b)(3), 115(6);
45 CFR 46 103(b)(4)(5),108;
Belmont Report;
ICH-GCP standards;
Thai Medical Profession Act of B.E. 2525 (A.C. 1982);
The Medical Council Regulations on Medical Ethics Preservation, B.E. 2549 (A.C. 2006),
Part 9 Research Study and Experiment on Human;
National Health Act by the National Research Council of Thailand, B.E. 2550 (A.C. 2007),
Chapter 1, section 7 and 9;
Thai Drug Act and its Amendments of B.E. 2510 (A.C. 1967);
Thai Medical Device Act of B.E. 2531 (A.C. 1988);
Thai Medical Council Regulation for maintenance of ethical issues in medical profession:
Stem cell implantation for treatment B.E. 2552 (A.C. 2009);
CIOMS guideline 2012;
National Policy and Guidelines for Human Research 2015 by the National Research Council
of Thailand

6. APPLICABLE DOCUMENTS
None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>IRB Chair, Vice Chair, Secretary</td>
<td>• Monitor appropriate sources and contacts for policy updates.</td>
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<tr>
<td></td>
<td></td>
<td>• Revise policies and procedures, forms as needed.</td>
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<tr>
<td>2</td>
<td>Administrative Committee Faculty</td>
<td>• Approve the revised SOP.</td>
</tr>
<tr>
<td></td>
<td>Administrative</td>
<td>• Approve the new version of SOP, and signed by the Faculty Dean.</td>
</tr>
<tr>
<td>2</td>
<td>HRPU Staff</td>
<td>• Distributes new SOP and forms.</td>
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<tr>
<td></td>
<td></td>
<td>• Updates the website with revised or new SOP.</td>
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</tbody>
</table>
1. PURPOSE
The purpose of this SOP is to define the goal and objectives of the Human Research Protection Unit (HRPU) at Faculty of Medicine Siriraj Hospital, and to state the institutional authority under which HRPU is established and empowered.

2. POLICY
2.1 Goal and Objectives of HRPU
The Goal of Siriraj HRPU is to support the Faculty’s dedication to excellence in research by providing the highest standards of human research protection via reviewing, training, and monitoring of compliance.

The Objectives of Siriraj HRPU include mechanisms to:
1. Provide administrative support to facilitate the efficient review and approval of research protocols by Siriraj Institutional Review Boards (IRB);
2. Provide education and training to faculty, staff, trainees and students in matters related to the ethical conduct of human subjects research and other relevant areas as required by applicable laws and regulations and Faculty policies;
3. Promote an effective approach to evaluate, monitor, and continually improve the protection of human research participants; and
4. Participate in ensuring the safe and ethical conduct of research that will protect human subjects, in an atmosphere of SIRIRAJ culture, for the benefit of mankind. (S-Seniority, I-Integrity, R-Responsibility, I-Innovation, R-Respect, A-Altruism, and J-Journey to excellence and sustainability)

2.2 Statement of Institutional Authority
Siriraj HRPU is established and empowered under the direct authority of the Dean of Faculty of Medicine Siriraj Hospital, Mahidol University. The Faculty requires that all research projects involving humans as subjects be reviewed and approved by the Faculty IRBs prior to initiation of any research related activities, including recruitment and screening activities.

3. SPECIFIC POLICIES
3.1 Vision and Mission
Vision: Siriraj Institutional Review Board operates with quality up to the international standard in compliance with the context of Thai society.

Mission: To ensure dignity, rights, safety and well-being of human research participants according to the ethical principles of human research, to enhance ethics and quality of biomedical research.
3.2 Authority of HRPU
Sriraj HRPU operates under the authority of this policy. The operating procedures in this document govern the conduct and review of all human research conducted under the supports of the institution. This policy is made available to all investigators and research staff by being posted on the website (www.si.mahidol.ac.th/sirb).

The Faculty Dean has the power and authority to designate the individual within the Faculty who may serve as the Administrative Committee responsible for carrying out the activities of Siriraj Human Research Protections Unit (HRPU), and the Steering Committee as a policy and decision making body of the HRPU. The Faculty Dean also designated the IRB as the body that has jurisdiction over all human subjects research conducted by the Faculty staff/personnel/trainees/students; within the Faculty or under the auspices of the Faculty.

The HRPU, by the IRB, has the authority to ensure that research conducted under its jurisdiction is designed and conducted in such a manner that protects the rights and welfare and privacy of human research subjects. Specifically, but not exclusively:

- The IRB has sole authority to grant IRB approval for human subjects research application;
- If the IRB does not grant IRB approval or suspends or terminates IRB approval, these decisions may not be overturned at any higher level;
- The IRB has authority to suspend or terminate approval of research that is not being conducted in accordance with the IRB’s requirements or that has been associated with unexpected serious harm to subjects;
- The IRB has the authority to observe or have third parties observe the consent process and the conduct of the research; and
- In certain cases, implementation of a research study may be prevented or terminated by decision of the Faculty Dean, despite IRB approval.

3.3 Independence of HRPU
- The HPRU and IRB are independent and do not report to any individuals or Department that rely on the IRB review of their research.
- The IRB is the final authority for all decisions regarding the protection and welfare of humans participating as subjects in research activities. Any officials in the Faculty may not approve the research if it has not been approved by the IRB.
- Inappropriate attempts to influence the HRPU or IRB processes, individual IRB members or staff will be reported to the IRB Chair (and the Faculty Dean as necessary). The IRB Chair will respond to and stop any attempt at inappropriate influence and has the authority to limit or remove an investigator’s privilege to conduct human subjects research.

4. RESPONSIBILITY
4.1 Faculty Dean, as the Chair of the Steering Committee, has overall responsibility for supervision of the HRPU work in compliance with the applicable laws and regulations, and Faculty policy concerning Human Subjects Research. The Dean appoints the IRB Chairs, IRB Members and the Administrative Committee after consultation with proper constituencies and has delegated the control of daily HRPU operation to the Administrative Committee.
4.2 Institutional Review Board (refer to Chapter 2.1 Overview and Structure of Siriraj Human Research Protection Unit)

4.3 Quality Assessment/Quality Improvement Unit (refer to Chapter 10.1 Quality Assurance and Quality Improvement Program)

4.4 Education and Training Unit (refer to Chapter 9.2 Education and Training for Human Research Protection)

4.5 Principal Investigator (PI)
   - Must submit research application to the IRB for review and approval before initiating, modifying, or extending any human subjects research;
   - Must meet the criteria for PI eligibility, as defined by the Faculty;
   - Shall consider racial, cultural, and gender diversity among the subject populations and be sensitive to community attitudes in both the design and conduct of any human subjects research;
   - Has the ultimate responsibility for the conduct of the study, the ethical performance of the project, the protection of the rights and welfare of Human Subjects involved in the Research, and strict adherence to any stipulations imposed by the IRB;
   - Is responsible for ensuring that all personnel performing the project are qualified, appropriately trained, and will adhere to the provisions of the approved protocol;
   - Shall implement no changes in the approved protocol or consent without prior IRB approval, except in an emergency if necessary to safeguard the well-being of human subjects;
   - Shall assure that adequate resources to protect research subjects are in place before implementation and that the research project will stop if adequate resources become unavailable (No COA will be granted without evidence of grant application);
   - Shall report to the IRB any serious or unexpected adverse event on-site related to research participation experienced by a subject within the specified time period of recognition. The PI also must report any problems or incidents related to the conduct of a study or patient participation, including those in the recruitment or consent process;
   - Shall report to the IRB any violation of an experimental protocol or any use of subjects not approved by the IRB.

4.6 Department Chair
   - Support that the research has scientific merit and that research is designed to answer the proposed question with sound research design, and the reasonably expected knowledge from the research is important.
   - Certify that the PI has necessary and sufficient expertise, facilities, resources, and staff to conduct the research as described in the protocol;
   - Determine that proper reviews and approvals have been obtained.

4.7 The Faculty is legally responsible for the acts and omissions of its employees or trainees acting in the course and scope of their duties or studies. In the event of a suit against an employee in connection with an IRB-approved human subjects research activity, the Faculty assumes the defense and indemnification.
5. APPLICABLE REGULATIONS AND GUIDELINES
   21 CFR 56.108, 56.109, 56.113;
   45 CFR 46.108, 45 CFR 160 &164;
   Belmont Report

6. APPLICABLE DOCUMENTS
   None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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</table>
| 1   | IRB Chair      | • Ensure compliance with applicable laws and regulations, and Faculty policies and procedures to guarantee the protection of human subjects participating in research.  
• Investigates, acts and reports of inappropriate attempts to influence the IRB process to the Faculty Dean.  
• Evaluate on an on-going basis the HRPP program for adherence and compliance.  
• Ensure that resources needed by HRPU and IRB are provided.  
• Update policies and procedures, forms as needed. |
| 2   | HRPU Staff     | • Ensures effective communication methods between IRB and other unit, committee or institutes.  
• Appropriate documentation according to the guidance. |
1. PURPOSE
This policy describes specific activities that require IRB review and the applicable regulations as determined by HRPU.

2. POLICY
2.1 Human research activities under the following scopes must be reviewed and approved by Siriraj IRB:
- Being funded by the Faculty of Medicine Siriraj Hospital.
- Using the patients, medical records, biological specimens, resources, or other facilities of the faculty. If the principal investigator is not the faculty personnel, prior permission from the Faculty dean is required, and there must be at least one Faculty personnel as coordinator or co-investigator.
- Using non-public information and identifiable data that belong to the Faculty.
2.2 No intervention/interaction with human subjects in research, including recruitment, may commence until the IRB has approved the research protocol.
2.3 Under certain conditions, the Faculty may rely upon the determination of another qualified IRB, or make similar arrangements for review and approval of research activities. These agreements are designed to reduce duplication and increases efficiency by designating a single IRB review when more than one site is involved in a research project. The cooperation is hitherto one of the collaboration activities outlined under the Memorandum of Understanding (MoU) at the Faculty or University level while an IRB Authorization Agreement can be agreed.
2.4 Specific determinations as to the definition of research or human subject, and their implications for the jurisdiction of the IRB under the Faculty of Medicine Siriraj Hospital policy are determined by the HRPU.

3. SPECIFIC POLICIES
3.1 Human subjects research
Activities are human subjects research subject to HRPU regulations when they meet the International/National Policy for the Protection of Human Subjects definition of both “research” and involve a “human subject”.
• Research is defined under the Common Rule as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge." For purposes of human research at the Faculty of Medicine Siriraj Hospital, a “systematic investigation” is an activity conducted in pursuit of answering a specific research question or to permit conclusions to be drawn. The research is described in a formal protocol that sets forth an objective and a set of procedures to reach that objective, and results in the formulation of generalizable knowledge based on conclusions drawn. In turn, “generalizable knowledge” is knowledge based on the findings of a particular research study that may be applied more broadly with the expectation of predictable outcomes. Generalizable knowledge is usually created to share with others through presentations and publications and typically requires that the results or conclusions of the activity are intended to be extended beyond a single individual or an internal program.

• Human subject is defined under the Common Rule as "a living individual about whom an investigator (whether professional or student) conducting research obtains

(1) data through intervention or interaction with the individual, or

(2) identifiable private information."

Intervention includes both physical procedures by which data are gathered and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. Private information includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (e.g. a medical record).

3.2 Activities that Covered by the HRPU
Specific activities subject to Siriraj HRPU regulations and IRB approval include, but are not limited to:

3.2.1 Activities involving the medical devices, prosthetic and orthotic equipment including intervention procedure in clinical trial.
3.2.2 Activities involving medical radiation and imaging
3.2.3 Activities involving surgical procedures
3.2.4 Activities involving biological samples
3.2.5 Activities involving medical record
3.2.6 Activities involving epidemiological studies
3.2.7 Activities involving social science studies
3.2.8 Activities involving psychological studies
3.2.9 Activities involving case series (≥ 2 cases) (required by Mahidol University for the promotion of academic position)
3.3 Activities that Not Covered by the HRPU

Activities not subject to Siriraj HRPU regulations and review include, but are not limited to:

3.3.1 Activities determined not qualify as human subjects research. Researchers may ask the IRB to find out if the activities constitute human subjects research, and have the option to obtain documentation that the activity is not subject to IRB review.

3.3.2 Activities such as quality improvement or quality control, program and fiscal audits, and certain disease monitoring as National policy, with no intent to contribute to generalizable knowledge.

If at a future date, an opportunity arose to contribute previously collected identifiable or coded survey data to a new study producing generalizable knowledge; IRB review may be required before the data could be released to the new project.

3.3.3 Information-gathering interviews where questions focus on things, products, or policies rather than people or their thoughts regarding themselves.

3.3.4 Course-related activities designed specifically for educational or teaching purposes, where data are collected as part of a class exercise or course requirement, but are not intended for use outside of the classroom.

3.3.5 Research involving cadavers, autopsy material or biospecimens from now deceased individuals unless the research study includes both living and deceased individuals. Also, some research in this category which may provide private or medical information or particular concerns from live relatives require IRB review. The examples include but are not limited to genetic studies, studies in the newly dead, studies constitute a physical intervention on a deceased person, or studies with access to the deceased medical records. IRB member and staff are available to consult with researchers regarding their research projects.

3.3.6 Innovative therapies/clinical practice except when they involve "research" as defined by the above criteria. However, when innovative therapies differ significantly from routine practice it should be viewed and treated as such with appropriate safeguards in place to protect the rights and welfare of the patients.

3.3.7 Activities involving a single case report.

3.3.8 Research involving publicly available data (e.g. census data, labor statistics).

3.3.9 Coded private information or biological specimens that were not collected for the currently proposed projects as long as the investigator cannot link the coded data/specimens back to individual subjects.

If the data/specimen provider has access to the subject identity (e.g. subjects’ names, addresses), the investigator must enter into an agreement with the data/specimen provider that states under no circumstances will the subject identity be released to the investigator.

3.4 Collaboration of IRB Approval

The collaborative IRB review is the process used when the Faculty and other institutions may enter into joint review arrangements, rely upon the review of another qualified IRB, or make
similar arrangements for avoiding duplication of effort. One institution’s IRB serves as the Lead IRB to carry out the regulatory review while the others conduct an expedited facilitated review. Initiation of research activities may begin at the local institution only after the Lead IRB approves the study and the Local IRB has completed its review and accepted the study. Reliance agreement is currently documented under the memorandum of understanding (MOU) for multicenter research activities within Mahidol University and the Central Research Ethics Committee (CREC). (see detail in Chapter 5.5)

3.5 Failure to Submit Protocol for IRB Review

3.5.1 Results from the activities that qualify as human subjects research may not be published unless IRB approval was granted prior to the data collection. To do so is in violation of the Faculty policy. It is also against the Faculty and University policy to use that data to satisfy thesis or dissertation requirements.

3.5.2 If a researcher begins an activity and later finds that the data gathered has changed in some fashion as to now require IRB review, could contribute to the existing knowledge base or that he/she may wish to publish the results, the researcher should submit a proposal to the IRB for review as soon as possible. If the IRB does not approve the research, data collected cannot be used as part of a study, thesis or dissertation nor may the results of the research be published.

4. RESPONSIBILITY

The IRB Chair or designee is responsible for determining whether research activities require IRB review.

5. APPLICABLE REGULATIONS AND GUIDELINES

21 CFR 50, 56, 312, 812;
45 CFR 46.102, 46.103

6. APPLICABLE DOCUMENTS

None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>IRB Chair (or Designee)</td>
<td>• Assists in determining if institution is engaged in research.</td>
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<td></td>
<td>• Makes determinations whether research activities require IRB review.</td>
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<tr>
<td></td>
<td></td>
<td>• If an activity is determined not be human subjects research,</td>
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<tr>
<td></td>
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<td>a formal letter is sent to the researcher explaining the reason</td>
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<tr>
<td></td>
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<td>for the determination.</td>
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<tr>
<td>2</td>
<td>IRB Staff</td>
<td>• Provide researchers with guidance on appropriate IRB submission</td>
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<tr>
<td></td>
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<td>requirements.</td>
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</tbody>
</table>
1. PURPOSE
The purpose of this section is to set forth the authority, roles and responsibilities of Siriraj Institutional Review Board (IRB) in human research protection. It also contains procedures for identifying and reporting any instances of individuals attempting to exert undue influence on the IRB or any of its members.

2. POLICY
2.1 Authority The IRB derives its authority from the Faculty in both regulatory and institutional sources to:

2.1.1 Review, approve, disapprove, require to modify human subjects research submitted for consideration both initial and continuing protocols;
2.1.2 Conduct continuing review of research at intervals appropriate to the degree of risk of the research, but not less than once per year;
2.1.3 Audit and monitor the informed consent process and the progress of human subjects research after IRB approval;
2.1.4 Suspend or terminate the enrollment and/or ongoing involvement of human subjects in research, as necessary for the protection of those participants (e.g. when research has been associated with unexpected serious harm to participants);
2.1.5 Suspend or terminate an Investigator’s privilege to conduct human subjects research (e.g. when research not being conducted in accordance with IRB requirements); and
2.1.6 Set the regulation or restriction to increase the safety of research activities.

2.2 Roles and Responsibilities The primary role of the IRB is to ensure adequate protection of the rights and welfare of potential and actual research participants, through the review of human subjects research. The IRB is responsible for:

2.2.1 Ensuring the competent review and evaluation of all scientific and ethical aspects of human subjects research proposal in compliance with the appropriate laws, regulations and ethical standards;
2.2.2 Continuing review, such as the evaluation of progress updates of research projects and adverse event reports provided by researchers, to ensure the continued validity of ethical standards for the safety and well-being of research subjects;
2.2.3 Reporting to the respective individuals any unusual or unexpected events arising from the research, in accordance with the SOP; and
2.2.4 Creation, development, revision and implementation the guidelines for the human subjects research in the Faculty;
2.2.5 Performing its functions according to the SOP, maintenance of activities records, and compliance with all relevant institutional and regulatory requirements.
2.2.6 Providing feedback to, and maintaining dialogue about applicable standards with, the researchers; and
2.2.7 Understanding in-depth of the basic ethical principles governing research, and being familiar with existing national regulations, legislative requirements and institutional policies governing the conduct of human subjects research.

3. SPECIFIC POLICIES
3.1 Specific Roles and Responsibilities

3.1.1 IRB Chair
1. Conduct and lead the effective and productive convened IRB meeting according to the agenda. If the Chair cannot attend the meeting, the Vice-Chair may then be appointed in place. If both Chair and Vice-Chair cannot attend, the attending committee can select the most appropriate member to be the ad hoc Chair;
2. Sign the following documents
   2.1 Certificate of approval
   2.2 A notification informing the result of consideration
   2.3 Invitation letter for meeting
   2.4 Announcement or other important documents of the IRB;
3. Select the appropriate person to be the regular and alternate IRB member, Administrative Committee, Monitoring Sub-Committee and Sub-Committee for other specific duty (e.g. for investigation of the research related complaints);
4. Report the Annual IRB Report to the Steering and the Faculty Administrative Committees;
5. Be a member and secretary of the Steering Committee; and
6. Engage as leader or member in other IRB related activities.

3.1.2 IRB Vice Chair
1. Conduct the convened IRB meeting in the absence of IRB Chair;
2. Sign the documents as assigned by chair;
3. Account for duties assigned by the IRB Chair;
4. Be a Vice-Chair of the Administrative Committee; and
5. Engage as member in other IRB related activities.

3.1.3 IRB Secretary and Assistant Secretary
1. Be an IRB panel Secretary and Assistant Secretary of the convened meeting;
2. Triage an appropriate review categories (i.e. exempt, expedited, full board) and select Primary Reviewers for the new research proposals;
3. Complete the research project primarily determined as ‘requiring for minor change before approval’ by expedited procedure;
4. Arrange the research project primarily determined as ‘requiring for major change before approval’ to the convened meeting to determine;
5. Raise the issue of serious adverse events and corrective action plan by the researcher to the meeting to acknowledge and determine;
6. Present the amended protocol to the meeting to acknowledge and determine;
7. Summarize the progress report, the close-out report, or the request for approval extension to the convened meeting to acknowledge and determine;
8. Edit the meeting minutes which is primarily prepared by the IRB staff;
9. Be a member of the Administrative Committee; and
10. Engage as member in other IRB related activities.
3.1.4 Regular and Alternate IRB Members

- **Regular Members**:
  1. Determine the full board review as primary reviewer and present to the convened meeting as scheduled agenda;
  2. Perform expedited review as an experienced IRB member;
  3. Attend the scheduled convened meeting as member and provide an input on area germane to the knowledge, expertise and experience, professional and otherwise;
  4. Give advice to the IRB if additional expertise may be required to assess a protocol for adequate protection of the rights and welfare of subjects;
  5. Provide knowledge and understanding about ethics for research in human to the researchers in the Faculty; and
  6. Engage as member in other IRB related activities.

- **Alternate Members**
  1. Determine the full board review as appointed with advanced notification;
  2. Attend the IRB meeting in place of regular member to make a quorum;
  3. Perform expedited review as the specialist;
  4. Provide opinion as consultant to the IRB per request.
  5. Be the ad hoc member in other IRB related activities.

3.1.5 Expedited Reviewers

1. Determine the minimal risk project for the expedited review as the experienced expert on ethics and/or related research content;
2. Be the ad hoc member in other IRB related activities.

3.2 Adherence to the Current Policies and Procedures

Annually, at the minimum, the policies and procedures will be revised by the Administrative Committee in accordance with the up-to-date ethical, legal and regulatory standards. Any new information or changes in the policies and procedures, identified as being pertinent to the protection of research participants, will be notified to the investigators using official letter to the Head of Department/Unit, and distributed via the Faculty of Medicine Siriraj Hospital intranet (SiNet) as well as HRPU website posting.

Significant changes may require a new standard operating procedures (SOP) or revision of a previous issue will also be judged by the Administrative Committee. When the new/revised SOP is approved, it will be distributed to the appropriate individuals and Department/Unit via e-mail, SiNet, and listed on the HRPU website page. Training will be provided to all IRB staff and members on any new/revised SOP. Evidence of training must be documented and filed.

3.3 Separating Competing Business Interests from Ethics Review Functions

The IRB recognizes that officials who administer research programs, and individuals who are responsible for development activities (including raising funds), may represent competing business interests, or be in a position to influence programmatic and budgetary decisions and exert undue influence on IRBs or individual IRB members.

To avoid such influence on IRB determination, the Faculty Dean, Deputy Dean of Research will not serve as IRB members.
3.4 Reporting and Investigation of Allegations of Undue Influence

The IRB is independent and does not require to answer to any individuals or Department/Unit that rely on the IRB review of their research. The IRB is the final authority for all decisions regarding the protection and welfare of humans participating as subjects in research activities. Any Faculty officials may not approve the research if it has not been approved by the IRB.

Inappropriate attempts to influence the IRB processes, individual IRB members or staff will be reported to the IRB Chair. The IRB Chair will respond to and stop any attempt at inappropriate influence and has the authority to limit or remove an investigator’s privilege to conduct human subjects research. If the IRB Chair is involved in the allegation, the Faculty Dean will be informed and will be responsible for the manner in which the report is handled. If a committee is delegated the authority to conduct the investigation, they may convene a meeting and/or otherwise obtain additional information as necessary.

The outcome of the investigation will be documented by the person or responsible committee, and a record will be maintained by the HRPU office. The complainant will be provided with a response and the corrective plan if applicable. The IRB will be informed of the findings.

4. RESPONSIBILITY

The Faculty Dean (as the Chair of Steering Committee) is responsible for the oversight of the HRPU, which includes the IRB.

The IRB Chair (as the Chair of Administrative Committee) is responsible for the oversight of the operations of the HRPU and IRB.

The IRB members are responsible for fulfilling their duties as specified.

The IRB Staff has the responsibility of the daily clerical operations of the IRB.

5. APPLICABLE REGULATIONS AND GUIDELINES

- 21 CFR 56.108, 56.109, 56.113;
- 45 CFR 46.108, 45 CFR 160 & 164;
- The Declaration of Helsinki;
- The Belmont Report;
- International Conference on Harmonisation (ICH) Good Clinical Practice (GCP) Guidelines;
- The Council for International Organizations of Medical Sciences (CIOMS) Guidelines, 2012;
- Thai Drug Act and its Amendments of B.E. 2510 (A.C. 1967);
- Thai Medical Device Act of B.E. 2531 (1988);
- Thai Medical Profession Act of B.E. 2525 (1982);
- The Medical Council Regulations on Medical Ethics Preservation, B.E. 2549 (A.C. 2006);
- Code of Conduct of Researcher by the National Research Council of Thailand, National Health Assembly 2007; Act 7 and 9.

6. APPLICABLE DOCUMENTS

None
7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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</table>
| 1   | IRB Chair, Vice Chair, Members, Staff | • Ensure compliance with federal regulations, policy and procedures to guarantee the protection of human subjects participating in research.  
   • Report to the IRB Chair (or Faculty Dean) any inappropriate attempts to influence the IRB process |
| 2   | Faculty Dean, and/or IRB Chair | • Investigates and acts on reports of inappropriate attempts to influence the IRB process.  
   • Evaluate on an on-going basis the HRPU for adherence and compliance with local policy and applicable regulations.  
   • Evaluate (at least yearly) the IRB workload regard to timely, thorough and competent review. |
| 3   | IRB Staff | • Update the website with a revised or new SOP.  
   • Ensure effective communications between IRB and researcher or related individuals.  
   • Ensure that resources needed by HRPU and IRB are provided.  
   • Maintain documentation according to the policies. |
1. PURPOSE
This policy states the requirements for the composition of the IRB responsible for reviewing research conducted at the Faculty of Medicine Siriraj Hospital.

2. POLICY
The role of the IRB is to assess the acceptability of proposed research in terms of Faculty commitments and regulations, applicable law, and standards or professional conduct and practice. The IRB should also be able to promote respect for its advice and counsel in safeguarding the rights and welfare of human subjects.

Therefore, each IRB will consist of at least five regular, voting members. Qualified persons from multiple professions and of both sexes will be considered for membership.

The Faculty will make every effort to have a diverse membership appointed to the IRB, within the scope of available expertise needed to conduct its functions.

3. SPECIFIC POLICIES
3.1 IRB Member Responsibilities
IRB members have the following general responsibilities while serving an IRB appointment:

1. Obtain the training of ethical research in human, and develop the ethical knowledge in human continuously by attending the training at least once in every two years.
2. Operate the duty in accordance with the ethical principles of research in human in order to ensure the dignity, right, safety and well-being of the research participants.
3. Disclose their names, profession, age, working organization, income, expenses relating to the working as committee, to the public if there is any request.
4. Sign a “Confidentiality Agreement” to keep confidentiality of the IRB determination, discussion inside/outside the meeting, research protocols, volunteer’s information and other relevant documents;
5. Sign a “Conflict of Interest (COI)” Form and announce COI with research under review and recuse themselves from the review of studies where conflicts of interest exist or may appear to exist.
6. Complete assign duties to review the research protocols in a timely fashion, attend the convened meeting, and be prepared to participate and contribute to discussion in the monitoring and/or determination processes to approve the protocol;
7. Work collegially with investigators and other IRB members to facilitate human subjects protection.
3.2 Membership Selection Criteria
The members of IRB shall be sufficiently qualified through experience and/or expertise in various fields of medical science, social science, including research process, epidemiology, and other regulations relating to ethical research, professional conduct and practice, as well as the relevant law and regulations, to provide evaluation to the research project appropriately.

Therefore, the IRB shall include persons knowledgeable in these areas. The membership shall be diverse, so selection shall include consideration of gender (both male and female), cultural backgrounds, clinical experience, healthcare experience and sensitivity to such issues as community attitudes to assess the research submitted for review. At least one member should be knowledgeable and experienced in patient care profession, and be able to provide advice or treatment such as physician, psychiatrist and nurse. Each panel of the IRB has at least one member who has no affiliation with the Faculty and University, either self or family member. Each panel of the IRB has at least one member who represents the perspective of special groups of participants.

3.3 IRB Composition: Designation and Length of Service
The Faculty Dean is responsible for appointing members to the IRB. The IRB members have a 4-year term but can be re-designated independent to the working position, time, and authorized organization. The IRB member may resign before completing the term and new member may be appointed in place. Siriraj IRB comprises of 4 individual review panels of which member in each panel is composed of:

3.3.1 IRB Chair
The Faculty Dean selects and appoints the IRB Chair from the experienced IRB members who is the full time government official/pensioner, regular teaching staff, university employee, or special instructor of the Faculty. The IRB Chair should be fully capable of providing leadership to the IRB and the matters brought before it with fairness and impartiality. The IRB Chair is considered a Chair and regular member of every IRB panels with all applicable responsibilities of motions.

3.3.2 IRB Vice-Chair, Secretary and Assistant Secretary
The IRB Chair is responsible for selecting a Vice-Chair, Secretary and Assistant Secretary and present them to the Faculty Dean for designation. They should be the experienced IRB members with the capability to review and recommend policies, procedures, guidelines and other matters to the IRBs for review and approval.

3.3.3 Regular IRB Members
The IRB Chair selects the regular IRB members in each panel with various backgrounds in order to promote appropriate review of diverse types of research activities usually conducted in the Faculty. The IRB members must include both scientific members, non-scientific member(s)
and at least one non-affiliated member from the community (i.e. not an employee of the Faculty or Mahidol University).

### 3.4 Alternate IRB Members, Expedited Reviewers and Expert Consultants

#### 3.4.1 Alternate IRB Members

Alternate IRB members replace regular IRB members who are unable to attend convened meetings. Alternates have the same qualifications and characteristics of expertise and diversity as the regular IRB members and may be alternates for more than one IRB member. When an alternate substitutes for a regular member, the IRB staff provides the same material that the regular member received or would have received. Alternates may be asked to attend a meeting when their expertise is needed and/or when they are needed to establish a quorum. Alternate IRB member shall provide the concurrence only when officially replacing a regular member.

The designation, terms, length of service, and duties are exactly as for regular IRB members. Alternate members must adhere to the same conflict of interest standards and documentation requirements as regular IRB members.

#### 3.4.2 Expedited Reviewers

In order to determine the minimal risk project quickly and comply with the increasing number of research projects, the IRB Chair selects experienced members to serve as expedited reviewers. The IRB Chair also considers professional discretion when making selection and additional criteria include:

- Attendance and participation in convened IRB meetings for six months or more;
- Previous experience on this or another IRB; and
- Demonstration of independent decision-making related to IRB review.

The selected members will be designated by the Faculty Dean for a 4-year-term as Expedited Reviewer Committee.

#### 3.4.3 External Consultants

At its discretion, the IRB Secretary, in consultation with the IRB Chair, will invite individuals to assist in reviewing issues that require expertise beyond or in addition to that available on the IRB. Reasons for seeking consultants’ opinions may include (but are not limited to) the need for additional scientific, clinical, or scholarly expertise; the need for particular knowledge and understanding about potentially vulnerable subject populations; the desire to ensure appropriate consideration of race, gender, language, cultural background, and sensitivity to such issues as community attitudes. The IRB staff will forward the research project to the external consultant to determine and provide the opinion in the consultation form (Following Review) before the convened meeting.

If appropriate, the IRB panel may invite external consultant as guest to the convened meeting. She/he shall have access to all documents submitted to the IRB relevant to the project under review, may participate in the discussions and make recommendations on the project, but may
not provide concurrence. All consultants, internal or external to the Faculty, must comply with the IRB conflict of interest and confidentiality policy.

3.5 Compensation for IRB Members

- As primary reviewer, the IRB member receives 500 Baht (17 US$) in compensation for each protocol.
- The IRB Secretary or the IRB Assigned Reviewer to review the protocol modifications receives 200 Baht (7 US$) in compensation for each protocol.
- The IRB Secretary or Reviewer designated to review the adverse event reports and protocol amendments receives 300 Baht (10 US$) per protocol after being recognized in the convened meeting.
- The non-affiliated member receives 1,500 Baht (50 US$) for meeting allowance per time.

4. RESPONSIBILITY

The IRB Chair is responsible for recruiting and evaluating new IRB members including regular/alternate IRB members and expedited reviewers.

The IRB Vice-Chair and IRB Secretary are responsible for nominating individuals as IRB regular and alternate members including expedited reviewers.

The IRB Staff is responsible for supporting the IRB processes with selection and designation of new IRB members.

5. APPLICABLE REGULATIONS AND GUIDELINES

21 CFR 56.107;
45 CFR 46.107

6. APPLICABLE DOCUMENTS

Confidentiality Agreement Form (Internal Document No.21)
IRB Member’s Conflict of Interest Declaration (Internal Document No.22.1)
Conflict of Interest Statement Form for IRB member (Internal Document No.22.2)
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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| 1   | Faculty Dean   | - Designated the regular and IRB alternate members.  
- Follows the established criteria for regular/alternate IRB members and expedited reviewer committee appointment. |
| 2   | IRB Chair      | - Ensures the overall diversity of the IRB membership (gender, race, age, ethnicity community affiliation and professional experience) through non-discriminatory selection procedures.  
- Reviews all incoming protocols to determine if consultants may be required  
- Contacts consultants, and follows up as needed |
| 3   | IRB Staff      | - Maintains a roster of all regular/alernate IRB members and expedited reviewers  
- Maintains a file on all members, to include their curriculum vitae, education, letters of nomination, and other evidence of professional ability  
- Maintains a roster of available consultants who are eligible and qualified to attend meetings as external consultants.  
- Sends/ensures consultants have all study information and have signed and sent back confidentiality agreement and COI Form.  
- Contacts external consultants and follows up as needed. |
1. PURPOSE
This policy describes financial relationships with possible conflicts of interest (COI) disclosure and confidentiality agreement for the Faculty, IRB members, consultants and IRB Staff.

2. POLICY
In the environment of research, transparency and honesty are indicators of integrity and responsibility, characteristics that promote quality research and can only strengthen the research process. Thus, confidentiality should be arranged and COI should be eliminated when possible and effectively disclosed and managed when they cannot be removed for ensuring that the rights and welfare of research participants is protected.

3. SPECIFIC POLICIES
3.1 Financial and Non-Financial Criteria of COI for IRB Member and Consultant
A conflict of interest involves any situation where an IRB member or Consultant has a significant personal or financial interest in the proposed research or study sponsor which has the potential to bias the reporting or reviewing of the research. Examples would be if the IRB member or Consultant:

- is a Principal or Co-investigator, as listed on IRB application, or who has a significant role in the investigation;
- receives funding from the research study, as listed in the research study budget;
- is in an immediate supervisory role over the PI of the research study;
- is a family member of an Investigator listed on the IRB application;
- has financial or managerial interest in a sponsoring entity or product being evaluated in the research study; or
- has a management position such as board member, director, officer, partner, or trustee of an entity that is affiliated with the research study.

An IRB member is prohibited from reviewing, participating in the final discussion of, or determining upon any research protocol sponsored by a company in which the member holds significant financial interest, meaning anything of monetary value, including, but not limited to:

- Salary or other payments for services (e.g., consulting fees or honoraria);
- Equity interests (e.g., individual stocks, stock options or other ownership interests);
• Intellectual property rights (e.g., patents, copyrights and royalties from such rights);
• Financial interest in the sponsor, product or service being tested;
• Executive position of the agency or company sponsoring the research regardless of the amount of compensation;
• Any compensation that could be affected by the outcome of the research regardless of the amount of compensation.

Significant financial interest does not include:
• Salary, royalties, or other remuneration from the Faculty;
• Income from seminars, lectures, or teaching engagements sponsored by public or non-profit entities with proper approval, as applicable;
• Income from service on advisory committees or review panels for public or non-profit entities;
• An equity interest that when aggregated for the IRB member or consultant and the IRB member’s or consultant’s spouse and dependent children, meets both of the following tests: Does not exceed $US 10,000 (300,000 baht) in value as determined through reference to public prices or other reasonable measures of fair market value, and does not represent more than a 5% ownership interest in any single entity; or,
• Salary, royalties or other payments that when aggregated for IRB member or consultant and the IRB member’s or consultant’s spouse and dependent children over the next 12 months, are not expected to exceed $US 10,000.

3.2 IRB Member Disclosure and Documentation of COI and Confidentiality Agreement
Upon appointment to the IRB, the IRB member is to complete the IRB Member’s Conflict of Interest Declaration and the Confidentiality Agreement Forms. The completed form will be reviewed by the IRB Chair or designee. No IRB member with a conflict of interest may participate in the review of the following, except to provide information as requested:
• Initial Review (Full Board or Expedited)
• Continuing Review
• Unanticipated problems involving risks to participants or others
• Non-compliance with regulations or requirements of the IRB.

It is the responsibility of each IRB member to disclose any COI in a study submitted to the IRB and recuse him or herself from discussions and decision. The IRB member at the discretion of the IRB may be in the room to provide information requested, but must leave during discussions and decision. When an IRB member leaves the room for a conflicting interest, the minutes will state the name and the reason of absence of the IRB member due to COI. Such IRB member will not be counted towards quorum.
All material received by the IRB and consultant will be considered confidential and will be distributed only to meeting participants for the purpose of review. All application materials will be stored in HRPU, which is a secured site, with access limited to the responsible IRB members and staff.

3.3 Consultants
Consultants will be required to complete the Conflict of Interest Declaration and the Confidentiality Agreement Forms prior to providing consultation. The IRB chair or designee will review the form for potential COI. Consultants will receive printed copies of applicable documents as necessary. Any consultants with a declared COI may provide information as requested after review and determination by the IRB chair. The IRB members will be notified of the conflict during the meeting.

3.4 IRB Staff
The IRB Staff whose job status or compensation may be affected by research that is reviewed by the IRB must recuse themselves from any meeting at which such a protocol is reviewed.

3.5 Organizational Conflict of Interest
An organizational COI is created if the researcher at organization undertakes to do human subjects research on a drug, device, biologic or other item on which organization has a patent, has licensed the intellectual property (IP), or receives royalties or other fees.

An organization including the officials, must balance many competing pressures. It engages in relationships with a variety of sponsors that may lead to financial benefit for the institution in many forms, including gifts, business ventures, royalty payments and equity from licensing IP, as well as sponsored educational and research agreements. In addition, organization-industry relationships are essential for advancing scientific frontiers and enabling the development of academic discoveries to the benefit of the public. Nonetheless, while generally part of legitimate educational, research, and service activities, relationships with individuals or external entities cannot be allowed to compromise, or appear to compromise, integrity of the organization mission, including the safety and integrity of its research, education, and clinical care.

Organizational COI may occur when the Faculty or its Senior Executive involving research (Dean, Deputy Dean, and Deputy Dean of Research) have financial interest in the IP or business enterprises that may get benefits or disadvantages from researcher activities conducted in the Faculty. The IRB will ensure that these COI will be disclosed and managed properly, so that they will not affect the research and the welfare of research participants.

Significant financial interest that may constitute COI for Senior Executives is defined as income from IP and remuneration from a business entity that exceed an annual accumulation of $US 25,000 (approximately 750,000 baht); or an ownership of more than 5% of a business entity. While this defines reportable significant financial interest of the Senior Executives, Organizational COI will be determined on a case-by-case basis by the Administrative
Committee and some cases might have to be considered by the Steering Committee. Disclosure form must be completed by the Senior Executives annually or substantially changed.

An annual accumulation of US$ 25,000 include:
- Any financial interest in a non-publicly traded company (e.g., in a 'start up' company); or
- Current or pending ownership interests (e.g., shares, partnership stake, or derivative interests such as stock options) in a public company of US$ 25,000 or more; or
- Income of US$ 25,000 or more including consulting, honoraria, licensing or royalty income, or employment of an immediate family member.

In accordance with Mahidol University regulation, IP licensing, and technology transfer of the Faculty are handled by the University agency, Mahidol Institute of Technology Transfer and Innovation (MITI), which operates independently from and has no influence over the IRB. This ensures that IP management will have no influence over the protection of research participants.

Significant financial interest must be reported to the Steering Committee. The report is being done annually for the Senior Executives. The Committee has a duty to identify and manage organizational COI by reviewing the disclosing and determining whether there is a potential COI. The Committee will suggest to the IRB measures to eliminate or minimize COI. In the process of IRB review and approval, the research protocols that are involved in potential organizational COI shall be considered by external reviewers.

The management strategies when organizational COI is identified include but are not limited to monitoring of research activities by independent reviewers, ending the relationships that create actual or potential conflicts, and not approving the research protocols.

4. RESPONSIBILITY
The HRPU is responsible for articulating and enforcing the COI and confidentiality policy at the Faculty of Medicine Siriraj Hospital, Mahidol University.
HRPU Director (or designee) is responsible for monitoring the COI and confidentiality status and disclosures of IRB members and consultants.
IRB Chair or designee is responsible for identifying COI disclosures before beginning every IRB meeting.
IRB Members are responsible for declaring a COI at the beginning of the convened meeting or before the review of the research protocol.
IRB Staff is responsible for documenting all COI disclosures in IRB meeting minutes.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 46.103, 107;
21 CFR 56.107, 21 CFR 54;
Faculty of Medicine Siriraj Hospital Announcement, Policy of Ethics for Research in Human 2014, page: 7, section 14
6. APPLICABLE DOCUMENTS
Confidentiality Agreement Form (Internal Document No.21)
Conflict of Interest Statement Form for IRB member (Internal Document No.22.1)
Conflict of Interest Statement Form for Senior Executives (Internal Document No.22.2)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Members    | • Disclose all financial and professional conflicts of interest (COI) and confidentiality agreement to the HRPU when joining the IRB, and annually update that information.  
      |                | • Recuse themselves from IRB discussions where a COI exists or may appear to exist. |
| 2   | Consultants    | • Document COI disclosures and confidentiality agreement to the HRPU when joining the IRB. |
| 3   | IRB Staff      | • Document COI disclosures and IRB members in the meeting minutes.  
      |                | • Maintain documentation of IRB member COI and confidentiality via the agreement form and meeting minutes. |
| 4   | IRB Chair      | • Meet in person or by e-mail with potential consultants to review the COI and confidentiality agreement, and assist with completing the form.  
      | (or Designees) | • Ensure that IRB members with a COI do not participate in the IRB discussions subject to their COI disclosures. |
1. PURPOSE
This policy describes standards for evaluation of the performance of IRB Chair and Vice Chair, Secretary and Assistant Secretary, Members, Staff, and IRB Committee activities.

2. POLICY
The Faculty conducts periodic evaluations of IRB Chair and Vice Chair, IRB Secretary and Assistant Secretary, IRB members, IRB Staff, and IRB Committee activities to assure that Siriraj IRB complies with applicable regulatory requirements and Faculty policy and procedures. Evaluations serve to validate performance, identify areas that need improvement, both in function and knowledge, and to justify changes in membership and training efforts when appropriate.

3. SPECIFIC POLICIES
Chair and Vice Chair, Secretary and Assistant Secretary, members, Staff, and IRB activities are evaluated at least annually to assess their abilities to perform based on the basic regulatory requirements and policies; attendance at, preparedness for and participation in convened IRB meetings; reviews conducted; and participation in continuing education/training opportunities. The evaluation should take place at the end of each year.

Each individual will be asked to complete the Self-Evaluation Checklist annually. The form is designed to obtain information about their experience in IRB duties in order to improve the training program for IRB Members and Staff, thus to ensure that all individuals have the tools needed to perform this important work. Contents of the Self-Evaluation Checklist are specified in accordance with those recommended in AAHRPP Tip Sheet for Evaluation of IRB Chairs, Vice-Chairs, IRB Members and IRB Staff. The results will be kept anonymous and only de-identified data will be presented to the IRB Chair for Improvement Plan.

3.1 Evaluation of IRB Chair
- The IRB Chair is evaluated annually by the Faculty Dean, HRPU Consultant, and self-evaluation by using the IRB Chair/Vice Chair Evaluation Checklist.
- If at any time, issues related to the IRB Chair’s leadership, knowledge or performances are identified, the Faculty Dean will discuss them with the IRB Chair. If appropriate, a plan for improvement may be implemented, including but not limited to additional educational and/or mentoring activities.
• Inability to perform acceptably despite an improvement plan may result in being removed as IRB Chair as determined by the Steering Committee.

3.2 Evaluation of IRB Vice Chairs
• The IRB Vice Chairs are evaluated annually by the IRB Chair, HRPU Consultant, and self-evaluation by using the IRB Chair/Vice Chair Evaluation Checklist.
• Any issues related to the IRB Vice Chairs’ performance will be discussed and a plan for improvement may be implemented.

3.3 Evaluation of IRB Secretary and Assistant Secretary
• The IRB Secretary and Assistant Secretary are evaluated annually by the IRB Chair, HRPU Consultant, and self-evaluation by using the IRB Secretary/Assistant Secretary Evaluation Checklist.
• Any issues related to the performance of IRB Secretary or Assistant Secretary will be discussed and a plan for improvement may be implemented.

3.4 Evaluation of IRB Members
• The IRB Members are evaluated annually by the IRB Chair, IRB Secretary and self-evaluation by using the IRB Member Evaluation Checklist. The evaluation aims to assess their knowledge of ethical principles and basic regulatory requirements, attendance at, preparedness for and participation in the convened IRB meetings.
• If needed, the IRB Chair will work with each individual to develop a plan to improve his/her knowledge, skills and/or performance.

3.5 Evaluation of IRB Staff
• The IRB staff are routinely evaluated twice a year according to the Faculty human resources policies and procedures.
• In addition, evaluation pertaining specifically the unique requirements and knowledge necessary for IRB work is also conducted by the IRB Chair, peers and self-evaluation by using the IRB Staff Evaluation Checklist.
• The IRB Chair and Vice Chair, in conjunction with the Head of IRB Staff, will discuss with each IRB Staff to develop a plan to improve individual’s knowledge, skills and/or performance.

3.6 Evaluation of IRB Committee Activities
While carrying out the IRB activities, the QA/QI Team is responsible for utilizing a systematic, disciplined approach to evaluating and improving the effectiveness and compliance of IRB committee which include the following:
3.6.1 Developing and maintaining an internal audit operations for evaluation of IRB Chair, Vice Chair, Members and Staff to ensure compliance with applicable regulations, policies and procedures; sampling audit of completed reviewer assessment form, agendas, minutes and approval documents; and online satisfaction survey of the investigator to the IRB;

3.6.2 Participating in the external audit/review and accreditation program that involve:

- Mahidol University annually;
- Thai Food and Drug Administration (Thai FDA) every 2 years;
- The Strategic Initiative for Developing Capacity in Ethic Review/ Forum for Ethical Review Committee in Asia and the Western Pacific (SIDCER/ FERCAP) every 4 years; and
- The Association for Accreditation of Human Research Protection Programs (AAHRPP) every 3 years.

3.6.3 The Annual Report of the HRPU operations and IRB activities will be reported and discussed in the Administrative and Steering Committees on ethics for research in humans, and the Faculty Administrative Committee. The Quality Improvement and Educational plans will be made and use through the year.

3.6.4 Communicating to the IRB Members and Staff the results of internal/external audits and reviews, as well as the improvement and educational plans as warranted by audit findings and recommended by the Committees.

4. RESPONSIBILITY

IRB Chair and the QA/QI Team are responsible for developing and maintaining the internal and external evaluation program.

The Administrative Committee is responsible for identification of deficiencies and implementing the improvement plans.

The Steering Committee review and approve the improvement plans set up by the Administrative Committee.

HRPU staff is responsible for supporting the evaluation program from preparation of the Checklist to the final report and feedback.

5. APPLICABLE REGULATIONS AND GUIDELINES

Mahidol University Announcement Policy of Ethics for Research in Human, 2008
6. APPLICABLE DOCUMENTS
IRB Chair/Vice Chair Evaluation Checklist (Internal Document 30.1)
IRB Secretary/Assistant Secretary Evaluation Checklist (Internal Document 30.2)
IRB Member Evaluation Checklist (Internal Document 30.3)
IRB Staff Evaluation Checklist (Internal Document 30.4)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>IRB Chair</td>
<td>• Fills the IRB Chair evaluation form for self-evaluation</td>
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<td>• Evaluates the IRB Vice Chair, Secretary, Assistant Secretary, Members and Staff</td>
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<td>• Maintains the Evaluation Program according to the policies and procedures.</td>
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<td>• Implement the improvement plan and educational program as indicated.</td>
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<td>2</td>
<td>QA/QI Team</td>
<td>• Fill the evaluation form for self-assessment.</td>
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<td></td>
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<td>• Conduct sampling audits of relevant files and documents.</td>
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<td>• Assess the self-evaluation checklists and evaluation forms, summarize and feedback suggestion.</td>
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<td>• Prepare for the external audit/review and accreditation program.</td>
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<tr>
<td>3</td>
<td>IRB Secretary, Assistant Secretary, Members</td>
<td>• Fill the evaluation form for self-assessment.</td>
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<td>• Support the activities of QA/QI Team, improvement plan and educational program.</td>
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<td>4</td>
<td>IRB Staff</td>
<td>• Prepare the evaluation form and send to the related individuals.</td>
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<td>• Fill the IRB staff evaluation form for self-assessment.</td>
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<td>• Support the administrative work of the QA/QI Team.</td>
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1. PURPOSE
This policy outlines relationships of Siriraj IRB with other organizations in order to enhance the implementation of the IRB to maintain the standards of operation in the Faculty. It also describes specific procedures associated with each action.

2. POLICY
The IRB functions independently of, but in coordination with, other Faculty committees, Faculty officials and other Institutions. The IRB is required at times to participate with other programs or research compliance committees that also have responsibility for the ethical oversight of research within the Faculty. In some cases, the approval of another committee may be required prior to or in addition to IRB review, thus to comply with the Faculty policies, as well as with all applicable regulations and requirements.

3. SPECIFIC POLICIES
3.1 Relationship with the Faculty of Medicine Siriraj Hospital
- The Faculty, through the Steering Committee and its ad-hoc and sub-committees, will provide legal protection for IRB to accomplish the mission independently and fairly, without intervention from any parties.
- The Faculty will provide adequate resources which are the supporting personal, training, materials, venue and budget to the IRB for effective operation.
- The Faculty must be responsible for the legal issues occurred to the IRB members who work faithfully and pay compensation to the members if they engage in a lawsuit.
- The research that has been reviewed and approved by the IRB may be subject to review and disapproval by Faculty officials or other committees. However, those officials or committees may not approve research if it has been disapproved by an IRB.
- If the IRB committee has the evidence of research misconduct which will affect the research subjects or society seriously, the IRB Chair will report the issue to the relevant authorized officials and the Faculty Executive Committee.

3.2 Relationship with Other Faculty Committees
3.2.1 Biosafety Committee: Research involving the direct and deliberate transfer of biologically derived products listed below into human participants shall receive approval from the Biosafety Committee. The IRB may grant final approval of study, but the approval letter will state that the research cannot commence until approval of the Biosafety Committee.
The investigator is responsible for providing the IRB with the approval before the start of the study. The final approval will be listed on the next month’s agenda. The following is a list of biologically derived products:

- Human gene therapy even if the recombinant DNA is produced elsewhere.
- Recombinant DNA.
- Somatic cell therapy.
- Experimentation using carcinogenic (known/suspected) or highly toxic compounds.
- Experimentation using BL2 or BL3 infectious microorganisms.

3.2.2 Radiation Safety Committee: Research involving exposing human participants to radioisotopes or radiation-producing machines for which the participants would otherwise not have been exposed except for the research must receive approval from the Radiation Safety Committee or Radiation Safety Officer. The IRB may grant final approval of study, but the approval letter will state that the research cannot commence until approval by the Radiation Safety Committee. The PI is responsible for providing the IRB with the approval before the start of the study. The final approval will be listed on the next month’s agenda.

3.3 Relationship with Other Institutions outside the Faculty

The IRB shall coordinate its review processes with other regulatory committees both inside and outside Mahidol University (e.g. The Medical Council of Thailand, Thai Food and Drug Administration, Ministry of Public Health) that are charged with reviewing other aspects of Human Subjects Research protocols. The IRB’s approval shall remain pending until the IRB has received documentation of approval from all other regulatory-required committees, persons, or offices charged with reviewing any aspects of the protocol. For example, protocols that involve the use of human stem cells, human embryos, or their derivatives must be reviewed and approved by the Stem Cell Research Oversight Panel (Thai Medical Council) before the certificate of approval will be granted.

In case of conflicts of laws arise from differences between legal systems, Siriraj IRB considers according to the stricter laws. IRB will consult with Siriraj legal counsel in making determination.

3.4 Relationship with Industry Sponsors

Unless specifically required by the FDA or requested by the sponsor, the IRB will not routinely provide written notification of IRB decisions to industry sponsors (and other holders of INDs or IDEs). The investigators generally serve as the link between the IRB and the sponsor, and are required to do so by the FDA in compliance with their obligations as clinical investigators.

 Occasionally, direct communication with the sponsor may facilitate resolution of concerns about study procedures or specific wording in an informed consent document. The IRB Staff may engage in such direct communication on behalf of the IRB when the IRB Chair considers it desirable. The investigator will be told of such communication. Direct communication
between the IRB and the sponsor may be appropriate since the IRB does not accept a sponsor’s Nonsignificant Risk (NSR) designation of a medical device.

3.5 Relationship with other Faculty/University Committees
For the multicenter research which is under the MOU assignment, i.e. CREC and other faculties inside Mahidol University, the joint IRB review will be allowed. However, to avoid duplication of review efforts, Siriraj IRB may choose to conduct joint IRB reviews, accept the review of another qualified IRB, or make other arrangements to establish oversight responsibilities. In such case, the researcher must notify the IRB that he/she has submitted to another IRB. Determination will be made by the IRB Chair on a case by case basis.

4. RESPONSIBILITY
The Faculty Dean, through the Steering Committee, is responsible for the oversight of the HRPU, which includes the IRB.
The Administrative Committee is responsible for the oversight of the HRPU operations. This position is also responsible for contacting and following up with responsible signatories in regards to assuring contracts contain required language.
The IRB Chair is responsible for the oversight of the IRB meeting.
The IRB Staff has the responsibility of the daily clerical operations of the IRB.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.108, 45 CFR 160 &164

6. APPLICABLE DOCUMENTS
None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<tr>
<th>No.</th>
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<th>Activity</th>
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| 1   | IRB Chair      | • Ensure compliance with federal regulations, policy and procedures to guarantee the protection of human subjects participating in research.  
     | IRB Members    | • Ensures communications between IRB and any additional IRB where approval is being sought. |
| 2   | IRB Staff      | • Contacts the person or office responsible for communication, to ensure appropriate relationship between IRB and other institutions. |
1. PURPOSE
This policy describes what the IRB requires of investigators in the conduct of human subjects research including eligibility, roles, and responsibilities.

2. POLICY
The IRB holds all research personnel responsible for meeting certain obligations. All research personnel are required to conduct the research in compliance with the Faculty policies, and to acknowledge and accept their responsibility for protecting the rights and welfare of human research subjects. The Principal Investigator is expected to have the appropriate background and training to carry out sound ethical research consistent with research plans approved by the IRB.

3. SPECIFIC POLICIES

3.1 Eligibility of the Principal Investigator
The Principal Investigator (PI) bears ultimate responsibility for all activities associated with the conduct of a research project, including compliance with applicable laws and regulation, Faculty policies and ethical principles. The PI remains eventually responsible even when some aspects of the research are delegated to other members of the study team.

In general, undergraduate students/trainees may be permitted to serve in the role of PI on minimal risk studies only and must have a Faculty advisor who shares in the student’s responsibility for the conduct of the research. A full-time appointment at the rank of instructor or higher, or research scientist (or equivalent) may only serve as a PI on a clinical research protocol. However, qualified trainee in Residency or Fellowship program who have a substantial role in a research project may serve as a Co-PI with the Faculty advisor serves as the PI for the project. Exception may be considered by the IRB Chair or Vice-Chair on a case-by-case basis.

3.2 Principal Investigators Responsibilities
The PI has primary responsibility for protecting the rights and welfare of human subjects in research. As a general condition for the approval of a research study, the IRB holds the PI of the study responsible for ensuring that:

- Risks to human research subjects are minimized by using procedures which are consistent with sound research design and which do not unnecessarily expose the subjects to risk; and, whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes;
- Risks to human subjects are reasonable in relation to the anticipated benefits (if any) to the individual, and the importance of the knowledge that may be expected to result;
- Selection of human subjects and patients for research participation is equitable;
• Individuals are adequately informed of the risks and benefits of research participation and the procedures that will be involved in the research, and that informed consent will be obtained from each prospective human subject, or his/her legally authorized representative, in accordance with the applicable laws and regulations;

• Informed consent of human subjects will be obtained in advance of research participation and appropriately documented in accordance with, and to the extent required, by the applicable policies and regulations (only IRB approved informed consent document can be used);

• Where appropriate, there is routine monitoring of the data collected to ensure the safety of human research subjects;

• The privacy of human research subjects is protected and the confidentiality of data is maintained;

• Appropriate additional safeguards are included in the study to protect the rights and welfare of human subjects who are likely to be vulnerable to coercion or undue influence.

3.3 Specific Responsibilities of Principal Investigators

The IRB holds the PI of an approved research study responsible for:

• Promptly responding to all requests for information or materials solicited by the IRB, including the timely submission of the research study for IRB renewal;

• Ensuring that adequate resources and facilities are available to carry out the proposed research study;

• Abstaining from enrolling any individual in a research study (i) until such study is approved in writing, by the IRB; (ii) during any period when the IRB or sponsor/PI has suspended study activities; or (iii) following IRB or sponsor/principal investigator-directed termination of the study;

• Ensuring that all associates, colleagues, and other personnel assisting in the conduct of the research study are appropriately informed of (i) the study procedures; (ii) informed consent requirements; (iii) the potential adverse events associated with study participation and the steps to be taken to reduce potential risks; (iv) adverse event reporting requirements; and (v) data collection and record-keeping criteria;

• Conducting the study in strict accordance with the current IRB-approved research protocol except where a change may be necessary to eliminate an apparent immediate hazard to a given human research subject;

• Reporting promptly to the IRB any deviations from the currently approved research protocol;

• Requesting IRB approval of any proposed amendment to the research protocol or informed consent documents prior to implementing such modifications;

• Obtaining prospectively and documenting informed consent in accordance with the current IRB-approved informed consent documents (i.e., unless the IRB has granted a waiver of the consent process) maintaining adequate, current, and accurate records of research data, outcomes, and adverse events to permit an ongoing assessment of the risk/benefit ratio of study participation;
• Reporting promptly to the IRB (and, if applicable, the sponsor and FDA) any internal or external adverse event that is considered to be (i) unexpected; (ii) serious and (iii) possibly or definitely related to the study;
• Reporting promptly to the IRB any significant changes in the risk/benefit of study participation;
• Ensuring that, in the event a research subject experiences a significant adverse event, every reasonable effort is made to provide the subject with adequate care to correct or alleviate the consequences of the adverse event to the extent possible;
• Ensuring that human research subjects are kept fully informed of any new information that may affect their willingness to continue to participate in the research study;
• Ensuring that all listed investigators have the appropriate credentials to conduct the portion of the study in which they are involved;
• Ensuring that conduct of the research study adheres to GCP guidelines, if applicable;
• Maintaining adequate and accurate research subject records to reflect adherence to protocol specific requirements. These include but are not limited to all correspondence with the IRB, copies of forms submitted to the IRB, original IRB stamped informed consent document (all versions), signed consent documents, protocols and amendments (all versions), any other documentation requested by sponsor (for funded research).

3.4 General Responsibilities of the Co-Investigators and Research Staff
Appropriately qualified co-investigators and research staff may perform tasks as delegated by the PI but they do not accept primary responsibility for the research study. General responsibilities of the co-investigators and research staff may include:
• Completing required institutional and protocol specific training;
• Adhering to the applicable laws and regulations, Faculty policies and procedures surrounding the safety and protection of human research subjects;
• Assuring privacy and confidentiality according to the applicable regulations and guidelines.

3.5 Investigators’ Conflict of Interest
In granting approval, the IRB should oversee the conflict of interest (COI) of researchers by considering the researcher’s financial support involving the pharmaceutical company or medical device manufacturer who grants the research funding in several patterns, for example financial support for being consultant to the company, or being a lecturer of the company, attending national and international scientific conferences. Significant financial interest that may constitute conflict of interest is defined as income from IP and remuneration from a business entity that exceed an annual accumulation of $US 10,000 (approximately 300,000 baht); or an ownership of more than 5% of a business entity.
Potential COI must be disclosed in a disclosure form to be submitted with the application for IRB protocol approval. The IRB may take any following actions involving the conflict of interest of researcher if they see the possible effect on carrying out the research.
Researchers declare COI of themselves and their immediate family members to IRB by using the researcher COI declaration form.

The researcher should disclose COI in research in the participant information sheet.

If COI is greater than acceptable, the IRB may ask the researcher to eliminate the conflict, or refuse to approve the protocol.

Individuals who have COI in research should not be the one to provide the information sheet and consent form to the participant.

Approved protocol with significant potential COI will be audited to ensure compliance and minimize intellectual bias and prevent research misconduct.

4. RESPONSIBILITY
IRB Chair is responsible for providing the training and education for the Investigator and research team, thus to ensure understanding of their ethical obligations and investigator responsibilities.

IRB Staff is responsible for checking if investigators have qualifications and educational background appropriate to be the investigator and PI.

Investigator is responsible for the ethical conduct of the research study and for assuring compliance with IRB policies and procedures and with Federal regulations.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56, 312.50, 600, 812.100, 812.110;
45 CFR 46.109, 46.111

6. REFERENCED DOCUMENTS
Researcher’s Disclosure of Conflict of Interests Form (Document No.14)
7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<tr>
<td>1</td>
<td>IRB Chair</td>
<td>• Provides investigators with appropriate training in preparing IRB submissions, conducting the informed consent process, fulfilling ethical obligations and investigator responsibilities.</td>
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</table>
| 2   | IRB Staff      | • Provides investigators with complete information package on preparing IRB submissions, securing initial and ongoing approval of research, and providing all required reports.  
• Secures all necessary information for ongoing IRB review and approval  
• Provides guidance to investigators on IRB process.  
• Checks all incoming studies to confirm if PI and key personnel have completed the CITI training and, if not, e-mail PI reminder to complete the training before study approval can be given.  
• Distributes communications to and from investigators to appropriate IRB staff and members in a timely manner |
| 3   | Investigator   | • Conduct all activities associated with the ethical conduct of a research project. |
1. PURPOSE
This policy outlines the required documents and supporting information required from investigators for IRB review.

2. POLICY
IRB members often rely solely on the documentation submitted by investigators for initial and continuing review. Therefore, this material must provide IRB members with enough information about a study to assess if it adequately meets the criteria for approval. A protocol requiring review will be scheduled for IRB review when staff has determined that the information and materials submitted present an adequate description of the proposed research.

3. SPECIFIC POLICIES
3.1 Submission Requirements for Initial Review
3.1.1 Required: Investigators applying for initial approval of a proposed non-exempt research protocol must submit (as relevant to the research under consideration):
- IRB Submission Form
- Research protocol
- Participant Information Sheet (including assent)
- Consent Form
- Case Record Form (CRF)/Questionnaires and assessment instruments
- Recruitment materials, proposed subject instructions
- Investigator Brochure, Leaflet or device specifications
- Letters of permission
- Curriculum Vitae and documentation of completion of required training
- IRB application fee receipt
- Any other relevant documents
- A CD of all documents
In addition, applicants may be required to submit if applicable:
- Grant application notice
- Material transfer agreement request form
- Conflict of Interest form,
- If additional IRB review being sought at another institution: name, address and telephone number of IRB.
3.1.2 Submission Requirements for Modifications (Major and Minor) before Approval:
Investigators must submit documentation to inform the IRB about changes in the status of
the study within 60 days from the date of the written notification. The documents include:
- A cover letter to send the modified documents
- Comparative table of modification
- Revised IRB submission form and related documents with highlighted changes
- Any other documents requested by the IRB

3.2 Submission Requirements for Continuing Review
3.2.1 During the approval period, investigators must submit documentation to inform the
IRB about changes in the status of the study which include but may not be limited to the
following activities: Reportable Events, Significant New Findings, Protocol Amendments,
and Site Visits Report. All continuing review submissions must be submitted at least 14
days before the convened IRB meeting. The documents should contain a cover letter that
describes the purpose and all the required materials particularly indicated for each
continuing review activity.
3.2.2 Progress Reports and/or Request to Renew IRB Approval
Thirty (30) days prior to IRB approval expiration date, investigators requesting renewal
of an approved research project must submit but not be limited to:
- Annual Report/Close-out Report/Approval Extension Request Form
- IRB application fee receipt
- Any other relevant documents provided by the investigator.
The IRB decides the frequency of continuing review for each research project necessary
to ensure the continued protection of the rights and welfare of research subjects. The IRB
shall communicate to the investigators in advance if more frequent progress reports are
required (i.e., more than annually).

3.3 Action Taken If Documentation is Not Adequate or Added Information is Required
If the IRB Secretary or staff determines that the submitted documents are not adequate,
investigators may be required to submit supplementary information, or their presence may
be required to answer questions or explain the details of the study.
No incomplete submissions will be reviewed by the IRB.

4. RESPONSIBILITY
IRB Chair and Vice-Chair are responsible for maintaining current research submission
requirements for interested investigators.
IRB Secretary is responsible for preparing member review materials and reviewing
submission elements.
IRB Staff is responsible for submission receipt, check the completeness of documents,
tracking and acknowledgements.
5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.115;
21 CFR 56.108 (a)(4), 312, 812;
ICH Good Clinical Practice (GCP) Guideline

6. APPLICABLE DOCUMENTS
Initial Review Checklist (For the IRB Staff)  (Internal Document No.1)
IRB Submission Form  (Document No.2)
Protocol amendment form  (Document No.6)
Comparative table of modification  (Document No.9)
Annual Report/Close-out Report/Approval Extension Request Form (Document No.8.1)
Progress Report Form  (Document No.8.2)
Acknowledgement form for protocol review (via e-mail)  (Internal Document No.16)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Staff      | • Date stamp and document receipt of all submissions.  
|     |                | • Review submission for completeness and request additional information if missing.  
|     |                | • Enter study into the database.  
|     |                | • Inform the protocol code, type of review and the date of consideration to the PI (via email).  |
| 2   | IRB Secretary  | • Ensure that complete submission information is available and provided to all investigators.  
|     |                | • Evaluate and review claims for exemption from document.  
|     |                | • Evaluate submission that fit requirements for expedited review.  
|     |                | • Determine the appropriate action for IRB review.  |
| 3   | IRB Staff      | • Prepares and submits document for IRB review, as determined by IRB Secretary.  
|     |                | • Contacts primary reviewer(s) to check on status of study review and/or approval at appropriate time.  
|     |                | • Add new submissions to agenda for the next convened meeting.  |
| 4   | IRB Chair      | • Contacts the investigator for any problems with the submitted documents, as needed.  |
1. PURPOSE
The policies in this section describe the requirements for document pre-review and distribution prior to IRB review.

2. POLICY
The efficiency and effectiveness of the IRB is supported by administrative procedures that ensure that IRB members not only have adequate time for thorough assessment of each proposed study, but that the documentation they receive is complete and clear enough to allow for an adequate assessment of study design, procedures, and conditions.

3. SPECIFIC POLICIES
3.1 Incomplete Submissions
Incomplete applications will not be accepted for review until the investigator has provided all necessary materials as determined by the IRB Staff. The IRB Staff will notify the submitting investigator and request all necessary materials or will return the submission to the investigator, if necessary, to provide the materials needed for a complete application. Incomplete submissions will be logged into the database and assigned an IRB protocol number for tracking, but not assigned for review and/or approval.

3.2 Scheduling for Review
In addition to the IRB Chair, the IRB Secretary and IRB Staff may review and approve Claims for Exemption submitted by investigators. Such Claims of Exemption will be logged and filed. The reviewer (IRB Chair or IRB Secretary) reviews all requests for exemptions, and determines whether the request meets the definition of research involving human participants. If it does, the reviewer determines whether the research qualifies for exempt status using the Assessment Form for Research with Exemption, and document determination of whether the study qualifies for exempt status under which category/categories, usually within 7 days.

If a complete submission meets expedited review requirements, the review will be performed as described in SOP Chapter 4.5 (Expedited Review). All other applications requiring a full-board review will be placed on an appropriate agenda for the earliest meeting possible. Copies of application materials will be distributed to designate primary reviewers, generally at least 2 weeks prior to the meeting, unless deemed urgent by the IRB Chair or Secretary.
3.3 Assignment of Primary Reviewer(s)

The IRB uses a “primary reviewer” system. The IRB Secretary, in consultation with the IRB Chair where appropriate, assigns protocols to primary reviewers, based on each individual’s scientific, scholarly, professional, or clinical expertise. Primary reviewers must have the relevant expertise to conduct an in-depth review of the protocols to which they are assigned. When the IRB reviews research that involves participants vulnerable to coercion or undue influence, the review process includes one or more individuals who are knowledgeable about or experienced in working with these participants (children, pregnant women, critically ill patients, students, etc.). The IRB Secretary or designee reviews each application to determine whether it involves vulnerable participants, and considers the participant population when assigning reviewers.

Primary reviewers are expected to conduct an in-depth review, and it is the responsibility of primary reviewers to notify the IRB Secretary or IRB Chair should they feel unqualified or unable to do so. In such cases, the IRB Secretary will assign primary review responsibilities to another member who is appropriately qualified.

If the IRB Chair or IRB Secretary cannot identify a primary reviewer with appropriate scientific or scholarly expertise, the IRB Chair will invite individuals with competence in the specific areas needed to assist in reviewing issues that require expertise beyond or in addition to that available on the IRB. On an as-needed basis, an IRB primary reviewer may consult the IRB Chair to invite individuals with competence in special areas to assist in evaluating specific issues. The IRB Chair or designee will forward the research protocol to the expert consultant to determine and provide the opinion in writing with signature and date of determination in the consultation form (The Following Review) back before the convened meeting. If appropriate, the committee may invite the consultant to give opinion in the meeting.

3.4 Distribution to Members for Review

File of application materials will be distributed to all IRB members, generally at least seven (7) days prior to the meeting, unless deemed urgent by the IRB Chair. Each regular member of the IRB, and any alternate members attending the meeting in place of a regular member, will receive a copy of the initial application material. Lay Persons and Expert Consultants will only receive copies of material that pertain to their requested input.

3.5 Confidentiality

All material received by the IRB will be considered confidential and will be distributed only to meeting participants (regular members, alternate members, and expert consultants) for the purpose of review. All application materials will be stored in a protocol study file with access limited to the IRB members and HRPU staff.
4. RESPONSIBILITY
IRB Secretary and IRB Staffs are responsible for conducting appropriate assessment of submissions for triage purposes.
IRB staff is responsible for providing complete review material packets to IRB members and other relevant parties.
IRB Chair and IRB Secretary are responsible for supporting and assisting the reviewers in submission triage activities.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.109;
45 CFR 46.109

6. APPLICABLE DOCUMENTS
None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Secretary and IRB Staff | • Conduct assessment of submission adequacy and contact investigators for any missing elements.  
                                   • Conducts preliminary assessment of submissions claiming exemption from IRB review, and deliver to the exempt reviewer.  
                                   • Assign primary reviewers for expedited or full-board review. |
| 2   | IRB Staff            | • Assembles study information for primary reviewers.  
                                   • Send pertinent protocols to expert consultants for review, and invited to the meeting where appropriate.  
                                   • Distribute the application materials to members for review prior to the convened meeting. |
| 3   | IRB Chair            | • Contact expert consultant to assist in evaluating specific issues.  
                                   • Allow an appropriate assignment for primary reviewer and pre-review process being conducted according to the guidance. |
1. PURPOSE
The policy describes the levels of human subjects research review, and determination process for IRB initial review type.

2. POLICY
Before any research takes place with human participants, the investigator must obtain initial review and approval by the IRB. There are three levels of IRB Review—full board, expedited, and exempt—determined by the nature of the research protocol, the make-up of the subject population, and the degree of potential risk to human subjects.

3. SPECIFIC POLICIES
3.1 Initial Review Categorizations
All proposed activities that involve human subjects and that satisfy the definition of research must be reviewed and approved prior to the beginning. The levels of initial review are categorized as Exempt, Expedited and Full Board.

3.1.1 Exempt Review
The following standards must be met in order to review research as exempt:
- The research involves no more than minimal risk to subjects;
- In accordance with Exempt Categories of Review;
- There are adequate provisions to maintain the privacy interests of subjects; and
- There is an appropriate consent process if the research involves interaction or intervention with research subjects who can consent.

3.1.2 Expedited Review
The following standards must be minimally met in order to approve research as expedited:
- The research involves no more than minimal risk to subjects, and risks to human research subjects are reasonable in relation to the anticipated benefits.
- Eligible for review under an Expedited Research Category(s);
- The research must not be a clinical investigation nor classified research involving human subjects;
- The research must not be the cause of legal risk (such as drug addicted), or damage, or discredit the finance reputation, social status of the participants or making them lose their jobs, or invasion of privacy and breach of confidentiality; and
• The research activities adhere to the basic ethics principles from the Belmont Report including the standard requirements for informed consent.

3.1.3 Full Board Review (i.e., review conducted by a convened IRB committee)
The review is required for research studies that involve greater than minimal risk or vulnerable subjects who require special protection by the IRB. Full board reviews are conducted at the next available committee meeting, and must be scheduled in advance.

3.2 Determination of Review Levels
As completing as application for new research activity, investigators can make a preliminary request for exempt or expedited review in the self-assessment form. However, the IRB has the prerogative to determine the level of review.
Upon receipt of complete documents and determination that the activity is human subjects research required IRB review and approval, the IRB Secretary and IRB Staff, in consultation with the IRB Chair or an experienced member, screens the protocol to verify the preliminary request. The protocol is then placed into the appropriate queue for review. The IRB Chair and/or IRB Secretary (or authorized designee) makes the final determination of the type of review required, and the appropriate reviewer based on the review expertise of the IRB member.

4. RESPONSIBILITY
IRB Chair and/or IRB Secretary is responsible for determination of the type of review (exempt, expedited or full board), and for conducting and documenting exempt or expedited review on the appropriate checklists.
IRB Secretary and/or Assistant Secretary are responsible for selection and appointment of appropriate reviewers.
IRB Staff is responsible for providing review materials and a listing of experienced members to IRB Chair, IRB Secretary (or designee), and sending research documents and assessment form to primary reviewers.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.101, 46.110;
21 CFR 56.104, 110

6. APPLICABLE DOCUMENTS
Request for Expedited Review and Exemption Review (Document No.1d)
7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Chair, IRB Secretary or Assistant secretary | • Determines the level of review (exempt, expedited, full board) for the new research application.  
• Designates the appropriate member to review the research protocol according to the level of review. |
| 2   | IRB Staff                          | • Provide complete document for new research application (including self-assessment form) to IRB Chair or IRB Secretary.  
• Maintains list of IRB members, and provides a list to the IRB Secretary (or designee).  
• Assembles review materials to the designated reviewer(s).  
• Enter study into the database. |
1. PURPOSE
The policy describes the process for determining that human research is exempt from further review by the IRB.

2. POLICY
Research activities in which the only involvement of human subjects will be in one or more specific categories listed in the Exemption Checklist are exempt from the requirement for IRB approval. Exempt research is subject to review for determination of exemption status, based on regulatory and institutional criteria and documented.

3. SPECIFIC POLICIES
3.1 Exempt Research Activities
Research can be approved as exempt if it is no more than “minimal risk” and fits in one or more of the following characteristics:

1. Research conducted in established educational settings, involving normal educational practice such as research on regular and special education instructional strategies, research on the effectiveness of the comparison among instructional techniques, curricula, or classroom management methods.

2. Research involving the use of educational tests: cognitive, diagnostic, aptitude, achievement; the information obtained cannot identify or link to individual subject, and the result is reported as the whole information.

3. Research involving the use of survey procedures, interview procedures, or observation of public behavior; the information obtained is recorded in such a manner that human subjects cannot be identified individually, and the research could not be damaging to the subjects, reputation, employability, financial standing, or reasonably place the subjects at risk of civil liability.

4. Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

5. Customer’s satisfaction for quality development of the division’s operation.

6. Research involving the quality assessment or inspection which cannot identify or link to individual subject.

7. Research involving the taste and food quality evaluation and consumer acceptance
   7.1 Foods without additives are consumed.
   7.2 Food is consumed that contains a food ingredient at or below the level found to be safe, or agricultural chemical or environmental contamination at or below the level found to be safe by the Food and Drug Administration.

8. Research is exempted according to the national security.
3.2 Limitations on Exemptions
The following limitations on exemptions apply to:
1. Research Involving Children
   The exemption for research involving survey or interview procedures or observations of public behavior does NOT apply to research in children, except for research involving observations of public behavior when the investigator does not participate in the activities being observed.
2. Research Involving Prisoners
   Exemptions do NOT apply to research involving prisoners. Review is required by either a convened IRB (with a prisoner representative present) or by expedited review with review by a prisoner representative.

3.3 Procedures for Exempt Determination
In order to obtain an exemption determination, the following document and a CD with the electronic files (in PDF format) should be submitted:
1. A completed IRB Submission Form;
2. Research protocol or protocol summary;
3. All surveys, questionnaires, instruments, case record form;
4. All recruitment materials, consent form, patient information sheet (as appropriate);
5. Any other relevant documents;
6. Request for Expedited Review and Exemption Review

The reviewer (IRB Chair or IRB Secretary) reviews all requests for exemptions, and determines whether the request meets the definition of research involving human participants. If it does, the reviewer determines whether the research qualifies for exempt status using the Assessment Form for Research with Exemption, and document determination of whether the study qualifies for exempt status under which category/categories, usually within 7 days.

If applicable, the reviewer also evaluates to assure that there is minimal risk to the subject, and determines whether to require additional protection for research participants in keeping with the guidelines of the Belmont Report (See Chapter 5.1 Approval Criteria for Initial Review). Policies do not allow exemption of research involving video or digital recordings, and surveys or interviews that are extremely sensitive or personal. Allowance of recording is dependent on the research and is determined on a case-by-case basis and documented.

The reviewer may request for additional documentation or clarification from the investigator before determination. Once exemption review is completed and approved, IRB Staff issue the Documentary Proof of Exemption, signed by the IRB chair, to the Principal Investigator. The exempt application, review form, and determination letter are recorded and maintained in the same manner and for the same length of time as other IRB review documentation.

If the protocol does not meet the exemption criteria, the researcher will be notified prior to being reviewed by expedited or full-board review.
3.4 Exempt Period
Studies receiving an exemption by the IRB will not receive an expiration date. However, the investigator must submit any proposed modifications to the research for a determination of whether or not the modified activity still qualifies for exemption and must notify the IRB staff in writing when an exempt research protocol is complete so that the organization can maintain an accurate database of active research.

4. RESPONSIBILITY
IRB Chair and IRB Secretary are responsible for review of the project to determine if the research qualifies for exemption.
IRB Staff is responsible for sending out the Documentary Proof of Exemption or other related documents to Principal Investigator, and reporting exemption to IRB members via IRB meeting agenda.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.104, 105; 45 CFR 46.101, 46.102

6. APPLICABLE DOCUMENTS
Request for Expedited Review and Exemption Review (Document No.1d)
IRB Submission Form Faculty of Medicine Siriraj Hospital (Document No.2)
Assessment Form for Research with Exemption (Internal Document No.4)
Documentary Proof of Exemption (Outgoing Document No.8)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Secretary             | - Provides a basic screening to determine whether it meets the requirement for exempt research review.  
    |                            | - Triage research protocol either expedited or full Board review when research does not meet the exemption criteria. |
| 2   | IRB Chair, IRB Secretary | - Reviews submitted projects to determine claims of exemption using the Assessment Form for Research with Exemption from IRB.  
    |                            | - Considers the appropriateness of research exempt activities based on the approval guidelines and Belmont Report. |
| 3   | IRB Staff                 | - Confirms by Documentary Proof of Exemption to the Principal Investigator.  
    |                            | - Maintains and makes available submission information regarding research that is exempt from IRB review.  
    |                            | - Reports exemption determinations on IRB meeting agenda. |
1. PURPOSE
This policy describes and outlines the process to determine if the research meets criteria for expedited review, and initial review of expedited research.

2. POLICY
An expedited review procedure consists of a review of research involving human subjects by the experienced IRB members, who have a minimum of six (6) months experience as an IRB member, or working in the field of human research administration. An experienced member is considered by the IRB Chair to have a consistent and comprehensive pattern of protocol review and has demonstrated a dedication to the protection of human subjects with his/her actions and comments.

To be eligible for expedited review, the research must include only activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures that fit within the expedited review categories specified by the applicable regulations. This policy pertains to initial review, and also continuing IRB review. The expedited reviewer(s) will also determine, as part of continuing review, if the protocol needs verification from sources other than the investigators that no material changes had occurred since previous IRB review. Eligibility for expedited review is determined by the IRB Chair and IRB Secretary.

3. SPECIFIC POLICIES
3.1 Expedited Research Activities for Initial Review
The activities listed in an application for expedited review should, at the minimum, meet the following criteria:

1. The research must not be a clinical trial and no clinical intervention.
2. The research must not be the cause of legal risk (such as drug addicted), or damage, or discredit the finance reputation, social status of the participants or making them lose their jobs, or invasion of privacy and breach of confidentiality.
3. The research must be the minimal risk with the following characteristics.
   a) If the research needs the participant’s blood sample, the blood will be collected from the fingertip, or heel, or earlobe of the infant or venipuncture. The amount of blood drawn and times for collection should be as follows:
      • Blood collection in adult participants: must be healthy and non-pregnant adult who weigh at least 50 kg. The amounts drawn may not exceed 550 ml in an 8 weeks period and collection must not occur more frequently than 2 times per week.
• Blood collection in children or adults who weigh less than 50 kg. The amount of blood drawn must not exceed 50 ml or 3 ml per kg in an 8 weeks period and collection must not occur more frequently than 2 times per week.

b) The collection of biological specimens for research purposes by noninvasive means is as the following examples.

• Hair and nail clippings in a non-disfiguring manner,
• Deciduous teeth at time of exfoliation or if routine patient care indicates a need for extraction,
• Permanent teeth if routine patient care indicates a need for extraction,
• Excreta and external secretions such as sweat and saliva,
• Supra and subgingival dental plaque and calculus from routine prophylactic scaling,
• Mucosal cells collected by buccal scraping or swab, or mouth washings,
• Amniotic fluid obtained at the time of rupture of the membrane during labor,
• Placenta removed at delivery, or
• Sputum collected.

c) Collection of data through noninvasive procedures (excluding procedures involving x-ray or microwaves) not involving general anesthesia or sedation routinely employed in clinical practice. Where medical devices are employed, they must be approved for marketing.

• Physical sensors that are applied either to the surface of the baby or at a distance,
• Testing sensory acuity,
• Magnetic resonance imaging without using gadolinium,
• Electrocardiography, echocardiography, doppler blood flow, ultrasonography, diagnostic infrared imaging, electroencephalography, electroretinography, detection of naturally occurring radioactivity, or
• General physical check-up (e.g. muscular strength testing, body composition assessment, flexibility testing) where appropriate given the age, weight, and health of the individual.

d) Research involving data, documents, records, or specimens that have been collected for diagnosis or medical treatment not for research purposes.

e) Collection of data from voice, video, digital or image recordings.

f) Research on individual or group behavior observation or interview, excluding the research studies in the vulnerable subjects or sensitive issues.

g) Sending specimens for examination must not be the genetic examination which can be reached to the data or specimen owner
3.2 Determination of New Research Protocol for Expedited Review

In order to obtain an expedited review determination, the following document and a CD with the electronic files (in PDF format) should be submitted (if applicable):

1. A completed IRB Submission Form;
2. Research protocol
3. Case Record Form (CRF)/Questionnaires and assessment instruments
4. Participant Information Sheet (including assent)
5. Consent Form
6. Proposed subject instructions, recruitment materials, and advertisements
7. Investigator Brochure, Leaflet or device specifications Letters of permission
8. Letters of permission
9. Curriculum Vitae and documentation of completion of required training
10. Grant application and IRB application fee, if applicable
11. Any other relevant documents;
12. Request for Expedited Review and Exemption Review (Document No. 1d)

The IRB Chair, IRB Secretary (or designee) is authorized to determine which protocol is eligible for expedited review. If the protocol meets the regulatory criteria for an expedited review, two experienced reviewers will be appointed as expedited reviewers.

The IRB Staff contact the appointed expedited reviewer(s) to confirm that they do not have a conflict of interest and the review can be completed in a timely manner (i.e., within 10 days). All submitted materials will be delivered to the reviewer, though additional documentation or clarification may be requested from the investigator before determination.

3.3 Approval process and IRB Notification

In reviewing the research, the two expedited reviewers may exercise all of the authorities of the full IRB. The approval guideline for initial review is the same as the protocols eligible for full-board review. The reviewer(s) may determine that the protocol requires full-board review by the IRB as warranted. In addition, determination for ‘Disapproval’ or ‘Major Revisions Required before Approval’ can only be granted by full-board IRB review. The IRB Secretary will raise the protocol for consideration in the agenda item 4.3 of the convened IRB meeting.

If the expedited reviewers make a final determination that minor modifications are needed before approval, a written notification letter, signed by the IRB Chair, will be sent to the Principal Investigator within 10 days describing the requests by reviewers. The investigators shall respond to revisions requested by the IRB in writing and forward to the IRB Secretary for additional review. Upon satisfactory review, approval will be issued as of the date that the requested information or materials are approved. The investigators may start the research study once being confirmed that IRB approval is obtained.

The IRB members will be informed of such actions via the IRB meeting agenda.
4. RESPONSIBILITY
IRB Chair or IRB Secretary is responsible for identifying submissions that qualify for expedited review, and for assuring expedited reviewer has the expertise to provide a quality review. Experienced reviewer is responsible for conducting and documenting expedited review based on the applicable regulation and ethical standards. IRB Secretary and IRB staffs are responsible for providing a listing of expedited reviews performed to IRB members at convened meetings, and for presenting the research for full-board review according to the policies.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.102, 46.110; 21 CFR 56.102, 56, 110

6. APPLICABLE DOCUMENTS
Initial Review Checklist (For the IRB Staff) (Internal Document No.1)
Request for Expedited Review and Exemption Review (Document No.1d)
Reviewer Assessment Form (Internal Document No.2)
Patient Information Sheet and Consent Form Element Checklists (Internal Document No.3.1)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
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<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>IRB Chair or IRB Secretary</td>
<td>Makes initial determination regarding qualification for expedited review.</td>
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<tr>
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<td></td>
<td>Appoint experienced IRB Members (or external consultants, as necessary) as Expedited Reviewers.</td>
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<td></td>
<td>IRB Staff</td>
<td>Enter study into the database.</td>
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<td></td>
<td>Assemble submitted materials and place on schedule for review by the designated Expedited Reviewers.</td>
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<tr>
<td>3</td>
<td>IRB Members as Expedited Reviewers</td>
<td>Perform primary review; using all appropriate materials.</td>
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<td>Document result of review, comment and determination.</td>
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<tr>
<td>4</td>
<td>IRB Secretary and IRB Staff</td>
<td>Upon completion of the review, prepare the written notification letter – signed by IRB Chair, to the Principal Investigator.</td>
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<td></td>
<td></td>
<td>Informed the IRB members via the IRB meeting agenda.</td>
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<tr>
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<td></td>
<td>After approval criteria are met, study is granted for COA.</td>
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</table>
1. PURPOSE
This policy describes and outlines the process to determine if the research meets criteria for full board review, and initial review of expedited research.

2. POLICY
All proposed activities that involve human subjects and that satisfy the definition of research must be reviewed and approved prior to the activity beginning. Except when an expedited or exempt review procedure is used, the IRB will review proposed research as Full Board at a convened meeting at which a majority of the members and appropriate expertise are present.

The Primary Reviewers present an overview of the research and lead the IRB through the completion of the approval criteria, in accordance with all applicable standards and regulations. A full and complete discussion regarding ethical concerns and issues impacting research subjects takes place, and final determination is made after achieving consensus by all eligible members, and recorded in the minutes.

3. SPECIFIC POLICIES
3.1 Research Activities that Require Full Board Initial Review
Categories of research activities that require Full Board Review at the convened meeting include:

1. Initial applications that appear to involve more than minimal risk or research using vulnerable human research participants who do not specifically fit an exempt or expedited review category (see Chapter 4.4 and 4.5);
2. All other protocols that are determined by the IRB Chair or an Expedited Reviewer to require Full Board Review; and
3. Revisions to initial protocols that contain non-minor changes.

3.2 Determination Processes for Full Board Initial Review
3.2.1 If all information and required materials for IRB application appear present, the IRB Secretary or Assistant Secretary under the designation of the IRB Chair will assign each protocol two primary reviewers and a lay person/non-medical member to review the consent form. The primary reviewers are the IRB members with the applicable scientific and non-scientific expertise in the area of research. For studies that involve participants from vulnerable populations, one of them should have knowledge of or experience with that
population, or an appropriate consultant should be assigned. No IRB member who may have a conflict of interest is assigned to a study as Primary Reviewer.

3.2.2 All application materials will be delivered to the Primary Reviewers 2 weeks prior to the next scheduled convened IRB meeting. The Primary Reviewers will provide an exhaustive review of the applications based on the scientific integrity and ethical standards fill out the Reviewer Assessment Form, itemize the suggested modification or additional information required to achieve an acceptable benefit/risk ratio, and finalize their reviews by categorizing their recommendation for approval. The Reviewer Assessment Forms should be available prior to the convened meeting.

3.2.3 Except for unusual circumstances, all IRB members will be provided initial submission documents describing each proposed research project to be discussed at the convened meeting at least one week earlier. During the IRB meeting, the Primary Reviewer(s) and/or IRB Secretary will provide a brief summary of the study and identify significant concerns. All members are expected to discuss the concerns, provide necessary clarifications, and/or propose solutions or modifications. The Principal Investigator may be present if requested by any IRB member to clarify particular issues or concerns.

3.2.4 Upon satisfactory discussions, the Board will summarize the levels of risk/benefit and determine to approve, disapprove, or require minor or major modifications to secure approval based on the meeting consensus. The minutes of IRB meetings will document key discussion points, proposed actions, and determinations for each protocol undergoing initial review by the convened IRB.

3.3 Notification and Approval
A written notification letter, prepared by IRB secretary and IRB Staff, signed by the IRB Chair, will be sent to the Principal Investigator within 10 days describing the determination results and requests by the IRB. The investigators shall respond in writing not later than 60 days after the informed letter date.

If the Board requests minor modifications which do not substantially impact the risk/benefit analysis, the IRB may approve the study contingent on final review and approval by the IRB Secretary. Changes that are substantive in nature (i.e. major modifications) will be brought back to the Full Board at a convened meeting. The date that approval is granted by the IRB Secretary (for minor modifications) or by the Board at a convened meeting is the IRB approval date.

The IRB also notify its findings, determination and actions to the Institutional Officials, i.e. Deputy Dean of Research (or designated Associate Dean), through the electronic copy of IRB minutes after approval in the meeting.
4. RESPONSIBILITY
IRB Chair or IRB Secretary is responsible for identifying submissions that qualify for Full Board review, and for assuring Primary Reviewers and/or consultants have the expertise to provide a quality review.

IRB Secretary and IRB staffs are responsible for ensuring that Primary Reviewers have all the tools and resources necessary for the reviews, and for providing a completed Reviewer Assessment Form for presentation to the members at convened meeting.

The IRB Chair is responsible for making proper recommendations on approval determinations by the IRB.

IRB Members are responsible for conducting a thorough review and making all appropriate recommendations for consideration at the convened meeting.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.108, 46.111;
21 CFR 56.108, 56.110, 56.111

6. APPLICABLE DOCUMENTS
Initial Review Checklist (For the IRB Staff) (Internal Document No.1)
Reviewer Assessment Form (Document No.2)
Patient Information Sheet and Consent Form Element Checklists (Internal Document No.3.1)
Patient Information Sheet and Consent Form Element Checklists (for Lay Person) (Internal Document No.3.2)
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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</table>
| 1   | IRB Chair or IRB Secretary          | • Appoint IRB Members (or external consultants, as necessary) as Primary Reviewers with appropriate expertise for the research to be reviewed.  
    |                                    | • Provide Primary Reviewers with appropriate application materials and Reviewer Assessment Form | |
| 2   | IRB Staff                           | • Enter study into the database.                                          |
|     |                                     | • Assemble submitted materials and place on schedule for review in the meeting agenda. |
| 3   | Primary Reviewers and Lay Person    | • Perform primary review and summarize findings; using all appropriate materials.  
    |                                    | • Document result of review, comment and determination.                    |
|     |                                     | • Prepare summary of findings and recommendations for presentation at the convened IRB meeting. |
| 4   | IRB Secretary and IRB Staff         | • Upon completion of the review, prepare the written notification letter – signed by IRB Chair, to the Principal Investigator.  
    |                                    | • Notify the determinations to the Deputy Dean of Research through the electronic copy of IRB minutes.  
    |                                    | • Inform the IRB members of the progress via the IRB meeting agenda.      |
1. PURPOSE
This policy describes the minimal requirements that all research proposals involved human subject participation must meet in order to be approved for conduct at the Faculty of Medicine Siriraj Hospital.

2. POLICY
All research proposals that intend to enroll human participants must meet certain criteria before study related procedures can be initiated. The criteria are based on the principles of beneficence, justice and autonomy as discussed in the Belmont Report and are specified below. In addition, certain other criteria that are unique to the Faculty of Medicine Siriraj Hospital may also apply and must be met before any involvement of human participants can begin.

3. SPECIFIC POLICIES
3.1 Minimal Criteria for Research Approval
In order for the IRB to approve research proposals involved human subjects, via either expedited or full board review, the IRB must determine that the following requirements are satisfied. These criteria also apply to all categories of IRB reviews including initial reviews, continuing reviews, and modifications of previously approved research.

3.1.1 Risks to subjects are minimized. Participants may experience a variety of risks of harm while participating in research. These may be categorized as:
- Physical risks (e.g. pain, injury, discomfort, allergic reactions)
- Psychological risks (e.g. stress, depression, guilt, loss of self-esteem)
- Sociological risks (e.g. stigma, embarrassment, damage to reputation)
- Economic risks (e.g. loss of employment or health insurance, financial costs)
- Legal risks (e.g. criminal prosecution)
All reasonably foreseeable risks of harm that participants may experience shall be identified so that the research is designed to minimize these risks as much as possible. These can be done by using procedures that are consistent with sound research design and which do not unnecessarily place subjects at significant risk, and, whenever appropriate, by using procedures already being performed on the subjects for diagnostic or treatment purposes.
3.1.2 Risks to subjects are reasonable in relation to anticipated benefits, if any, to subjects, and the significance of the knowledge that may be expected to result.

- In the risk/benefit assessment, the IRB will consider only those risks and benefits that may result from the research (other than the risks and benefits of therapies that subjects would receive even if not participating in the research). The IRB should not consider possible long-range effects of applying knowledge gained in the research (for example, the possible effects of the research on public policy) as among those research risks that fall within the purview of its responsibility.

3.1.3 Selection of subjects is equitable.

- In making this assessment the IRB should take into account the purposes of the research and the scientific and ethical justification for either excluding classes of persons who might benefit from the research or including vulnerable populations (children, prisoners, pregnant women, handicapped, or mentally disabled persons, or economically or educationally disadvantaged persons) based on the inclusion/exclusion criteria, and the processes intended for the identification and recruitment of potential subjects. (see detail in Chapter 5.2)

3.1.4 When some or all of the subjects, such as children, prisoners, pregnant women, handicapped, or mentally disabled persons, or economically or educationally disadvantaged persons, are likely to be vulnerable to coercion or undue influence, additional safeguards are in place to protect the rights and welfare of these subjects. (see detail in Chapter 5.4)

3.1.5 Recruitment methods and advertising material are appropriate

- The IRB should review to assure that it is not coercive, unduly optimistic, nor creating undue influence. Such material should be limited to the information needed to the prospective subjects to determine their eligibility and interest in research participation. (see detail in Chapter 5.2)

3.1.6 Informed consent will be sought from each prospective subject or the subject's legally authorized representative, and appropriately documented in accordance with and to the extent required by applicable regulations.

- The IRB should review the informed consent process and document to assure that prospective human subjects will understand nature of the research and can knowledgeably and voluntarily decide whether or not to participate without undue inducement or any form of force, fraud, deceit, duress or other form of constraint or coercion. (see detail in Chapter 5.3)

3.1.7 Where appropriate, the research plan makes adequate provision for monitoring the safety of subjects.

- For clinical research studies with greater than minimal risk, the researcher must have a safety monitoring plan, describing the procedures for monitoring, evaluating (the appropriate parameters) and plans for reporting of Unanticipated Problems Involving Risks to Subjects or
Others to the IRB. The methods and degree of monitoring may vary from continuous, close monitoring by the researcher team in a small, low risk study to the establishment of an independent Data and Safety Monitoring Board (DSMB) for a large clinical trial. In general, it is desirable for a DSMB to be established by the study Sponsor for Research that is blinded, involves multiple sites, involves vulnerable subjects, or employs high-risk interventions.

- The IRB will consider in determining whether the safety monitoring plan is adequate from nature, complexity, size and risk involved in the study; potential risks; parameters to be monitored; mechanism to assess the critical endpoints at intervals in order to determine when to continue, modify, or stop a study; frequency of monitoring and procedures for reporting to the IRB. The IRB has the authority to require a DSMB as a condition for research approval where it determines that such monitoring is needed.

3.1.8 Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.

- In order to protect the subjects’ Privacy, the IRB shall determine:
  1. methods used to identify and contact potential participants;
  2. settings in which an individual will be interacting with an investigator;
  3. Appropriateness of all personnel present for research activities;
  4. Methods used to obtain participants’ information and nature of the information;
  5. Information obtained other than the “target participants,” and whether such individuals meet the regulatory definition of Human Subject (e.g. information about a family member); and
  6. How to access the minimum amount of information necessary to complete the study.

- In reviewing Confidentiality protections, the IRB shall consider the nature, probability, and magnitude of harms that would be likely to result from a disclosure of collected data outside the Research. It shall evaluate the effectiveness of proposed De-Identification techniques, coding systems, encryption methods, storage facilities, access limitations, and other relevant factors in determining the adequacy of Confidentiality protections.

3.1.9 Potential conflict of interest of investigators is eliminated, mitigated or managed.

3.1.10 Studies are reviewed at periods appropriate to the degree of risk exposed to the research subjects and other certain ethical issues, but at least annually.

3.2 Additional Requirements

3.2.1 In the risk/benefit analysis, the IRB will also consider:

- The qualifications of the research team, including their technical and scientific expertise, as well as their knowledge and understanding of their obligation to protect the rights and welfare of research participants
• The adequacy of the resources necessary for human research protection, care of research participants, and safety during the conduct of the research
• The appropriateness of research site, including the adequacy of research assistant staff, facilities and the readiness for emergency management

3.2.2 For research subject to ICH-GCP guideline, the IRB will also consider:
• Policies and procedures include the evaluation of the available non-clinical and clinical information on an investigational product is adequate to support the proposed clinical trial
• Clinical trials are scientifically sound and described in a clear, detailed protocol

4. RESPONSIBILITY
Administrative Committee is responsible for conducting an internal review and ensuring that IRB reviewers have all the tools and resources necessary to complete their research reviews.

IRB Chair (or designee) is responsible for providing IRB members sufficient initial research protocol review training and ongoing guidance.

IRB Secretary is responsible for selecting two primary reviewers (and/or consultants) with the relevant expertise to perform reviews and make necessary recommendations on approval decisions by the IRB.

IRB Reviewer is responsible for conducting a thorough review and making all appropriate approval recommendations for consideration by the IRB.

IRB members are responsible for review of IRB materials in the meeting.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 50.20, 50.27, 54, 56.107, 56.109, 56.111
45 CFR 46.109, 46.111, 46.116, 46.117

6. APPLICABLE DOCUMENTS
Researcher's Disclosure of Conflict of Interests Form (Document No. 14)
Reviewer Assessment Form (Internal Document No.2)
Patient Information Sheet and Consent Form Element Checklists (Internal Document No.3.1)
Patient Information Sheet and Consent Form Element Checklists for Lay Person (Internal Document No.3.2)
# 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<tr>
<th>No.</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>• Conduct internal pre-review checking prior to providing the research protocols for review.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Secretary</td>
<td>• Select the review type, and the reviewers (and/or appropriate expertise consultant) for the research protocols.</td>
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<tr>
<td>3</td>
<td>IRB Members</td>
<td>• Review the research protocol independently according to the approval criteria.</td>
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<td></td>
<td>• Ascertain whether any special considerations exist that may influence the review of a protocol.</td>
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<td>• Prepare summary of findings and recommendations for presentation at the convened IRB meeting.</td>
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<tr>
<td>4</td>
<td>IRB Chair, Vice chair</td>
<td>• Allow an appropriate peer review for approval processes being conducted according to the guidance.</td>
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</table>
1. PURPOSE
This policy describes the general requirements and concerns for recruitment of human subjects in the research studies, and for study advertisements to help ensure equitable selection of subjects.

2. POLICY
The recruitment of human subjects is considered the beginning of the informed consent/assent process. The IRB and researchers at the Faculty of Medicine Siriraj Hospital share the responsibility for creating a recruitment milieu that is effective, ethical and complies with the international/national regulation and guidance. The process must not be coercive, or present undue influence and that the confidentiality and privacy of potential participants are well protected.

3. SPECIFIC POLICIES
3.1 The Recruitment Process
The IRB reviews the recruitment process and materials to ensure that recruitment of human research subjects is fair, equitable, and appropriate to the setting in which the research will be conducted. Every protocol submitted for review must include a recruitment section that clearly describes the identification, initial contact, screening and recruitment processes of potential human participants, including whether third party will assist with recruitment of subjects and how. Ethical Consideration for the recruitment process must include:

• Equitable selection of participants: The recruitment plan ensures the selection of research participants is equitable and appropriate for the study.

• Respect for persons: The recruitment plan ensures appropriate procedures are used for the study population, particularly if the population presents any special problems requiring specific safeguards. These include not only vulnerable populations such as children, prisoners, pregnant women, those lacking of decision-making capacity, economically disadvantaged and cognitively impaired persons, but also subject group vulnerable to coercion or undue influence (e.g., employees, students, etc.) depending on their circumstances in relation to the research.

• Respect for privacy: Recruitment plans should respect an individual’s reasonable expectations for privacy. Researchers should consider the sensitivity of the private, identifiable information needed to prepare for recruitment, the target population, the recruitment setting, eligibility windows, and plan accordingly. If the research also involves
information that could be stigmatizing (e.g., HIV status, illicit drug use, etc.) additional considerations for privacy is needed.

- Avoid coercion: Recruitment strategies should be developed in such a way to limit undue pressure because of the timing of the request, who makes the request (e.g., personal physician), how the request is made, or the offering of excessive inducements.

- Avoid unbiased presentation and misconception: All information used for recruitment should be accurate, balanced, and free of misleading emphases that make the study unduly attractive. Moreover, subjects tend to believe that they will directly benefit from participation in a research study, even if they are told there is no assured benefit. This “misconception” can affect the decisions to participate, and require appropriate way to counteract this issue.

- Avoid ‘cold-calling’: The IRB prohibits the practice of which researchers or staff, unknown to the potential research subject, initiate contact based on their prior knowledge of confidential information. Instead, the research study should be introduced by an individual who, by virtue of his/her position, would normally have access to the potential subject’s private information (e.g., personal physician) as the third party.

Other unacceptable methods for recruitment include, but are not limited to, use of incentives, or bonuses of any type in exchange for referrals of potential participants (finder’s fees) and payments designed to accelerate recruitment tied to the rate or timing of enrollment (bonus payment); sharing of names and contact information of previous participants without permission; access to medical record with protected health information; and access to identifiable student/trainee education records other than directory information for research purposes without prior consent or receipt of an exception granted by the authorities.

- If someone other than the researchers conducts the recruitment (and/or consent) process, the researcher needs to formally delegate this responsibility, and the person so delegated must have received appropriate training to perform this activity.

### 3.2 Recruitment Materials

Recruitment materials can be used to inform potential subjects of a research activity and to provide them with an opportunity to contact the researcher. They should be limited to the information needed to the prospective subjects to determine their eligibility and interest in research participation. Such materials may include, but is not limited to, post-cards, flyers, printed advertisements, audio/video tape, phone call script, press releases, brochures, and postings on the Internet.

The recruitment materials should be included with the initial protocol proposal for IRB review and approval. If the material is not ready at the time, researchers may submit the material as an amendment to an already approved research proposal. Only the finally approved materials can be used.
In general, the recruitment materials must be at a reading level accessible to a lay person, and
minimally include:

- Name and address of the investigator and/or research facility conducting the research;
- Statement that a proposed activities are ‘research’;
- Statement of the purpose of the research;
- Study eligibility (inclusion/exclusion criteria);
- A brief list of benefits to subjects (if any);
- Time and other commitment costs to subjects;
- Any compensation or remuneration provided to subjects;
- Where the research activity will take place; and
- The person(s) or office to contact for more information about or to sign up for the study.

Recruitment materials should not include the following:

- State or imply a certain favorable outcome or other benefits beyond those outlined in
  the protocol and informed consent materials;
- Include exculpatory language, or language that could be perceived as contractual in nature;
- Emphasize payment/incentives for participation (e.g. bold, underlined, or oversized font);
- Promises of ‘free treatment (or medicine)’, ‘free testing’, ‘free counseling’, etc. when
  the intent is only to imply ‘no charge’ for taking part in the investigation;
- Use phrases such as ‘new treatment’, ‘new drug’, ‘new device’, etc. without clarifying
  that the test article is investigational;
- Make claims or imply as to the superiority, safety or effectiveness of the investigational
  drug, device, intervention, program, etc;
- Include misleading or inaccurate information;
- Contain language or graphics that appeal directly to the sensibilities of children; or
- Contain links to sites/resources that are not IRB approved.
- Due to contractual obligations, recruitment materials should not include any proprietary
  identifiers, contain therapeutic or outcome claims or mention the corporate sponsor by name.

### 3.3 Payment Arrangements and Recruitment Incentives to Subjects

Researchers must disclose any proposed payment or compensation to participants in the
protocol application form and information including the method, type, amount and schedule
of payments. The IRB must review the proposed payment arrangements to judge whether
they fulfill the requirements of consent, and determine that:

- The proposed method, amount and timing of payment should not be coercive or present
  undue influence to the subjects to enroll into a study or stay in a study;
- Payment to research participants should not be included as a benefit in the risks/benefits
  analysis, but a recruitment incentive;
- The payment should not be contingent upon study completion, but should be prorated;
- Payment to participants who withdraw from the study should be made at the time they would have completed the study (or completed a phase of the study) had they not withdrawn, unless it creates inconvenience or a coercive practice;
- Any amount paid as an incentive or a bonus for completion should be reasonable and not so large as to unduly induce participants to stay in the study when they would otherwise have withdrawn;
- Compensation for research participation offered by the sponsor should not include a coupon good for a discount on the purchase price of the product once approved for marketing;
- All information concerning payment, including the amount and schedule of payments should be set forth in the informed consent document;
- Payments to the organization or research staff designed to accelerate recruitment and are tied to the rate or timing of enrollment is prohibited.

4. RESPONSIBILITY
IRB Reviewers and Participant Information Sheet/Informed Consent Lay Person Reviewer are responsible for careful review of the recruitment processes and materials, and for communicating revisions at the IRB meeting needed to bring documents into compliance.

IRB Chair (or designee) is responsible for overseeing that recruitment of human subjects in the research studies are being considered according to the guidance.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.111, 46.116;
21 CFR 50.20, 50.25, 56.107, 56.111

6. APPLICABLE DOCUMENTS
A Waiver of Consent Form (Document 1e)
Participant Information Sheet (Document 3a)
Informed Consent Form (Document 3b)
Participant Information Sheet and Assent Form for children ages 7-12 years (Document 4.1)
Participant Information Sheet and Assent Form for children ages over 12-under 18 years (Document 4.2)
Patient Information Sheet and Consent Form Element Checklists (Internal Document 3.1)
Patient Information Sheet and Consent Form Element Checklists for Lay Person (Internal Document 3.2)
7. **PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY**

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>• Review the presence of the Patient Information Sheet and advertising materials (if any) upon receipt of the protocol proposal.</td>
</tr>
</tbody>
</table>
| 2   | IRB Reviewers and Lay Person    | • Review the recruitment process, the Patient Information Sheet, and other recruitment materials (if presence) according to the guidance.  
  |                                |   • Prepare summary of findings and recommendations for presentation at the convened IRB meeting. |
| 3   | IRB Secretary                   | • Request to researcher for adjustment, inclusion of missing elements, and suggested language where appropriate. |
| 4   | IRB Chair, Vice chair           | • Allow an appropriate evaluation for the recruitment processes and advertising materials being conducted according to the guidance. |
1. PURPOSE
This policy describes the general requirements for obtaining informed consent and subject authorization, documentation, waiver of some or all the elements of informed consent procedures and waiver of requirements for obtaining informed consent.

2. POLICY
Informed consent must be legally effective and prospectively obtained. In general, no researcher may involve a human being as a research subject without obtaining prior informed consent of the subject or the subject's legally authorized representative (LAR). If the informed consent process will involve an LAR, obtaining surrogate consent must be approved. Consent shall be sought only under circumstances that provide the prospective subject or the representative sufficient opportunity to consider whether or not to participate and that minimize the possibility of coercion or undue influence.

The IRB requires documentation of informed consent by use of a written informed consent form approved by the IRB, and signed and dated by the participant or the participant’s LAR. In studies involving children, the subject's LAR is the parent or court-appointed guardian.

The IRB may approve a consent procedure that does not include, or which alters, some or all of the elements of informed consent or may waive the requirement to obtain informed consent if the IRB finds that the research meets specific criteria.

3. SPECIFIC POLICIES
3.1 The Informed Consent Process
Informed consent is a continuing process whereby the researcher and research subject have an on-going dialogue about all aspects of a research study that might inform a subject’s decision to take part in the study and their decision to continue their involvement as a participant. The purpose of the consent process is to assure knowledgeable decision-making and voluntary participation. This process generally includes:
- Bringing the research study to the notice of potential participants;
- Presentation and explanation of the study activities to the subject or their LARs;
- Documentation of the informed consent via a signed and dated written consent form;
- Ongoing discussions between the researcher and the subject regarding continued participation in the study.
The consent process must:

• Provide sufficient opportunity for the subject or the subject’s LARs, to consider whether to participate;
• Minimize the possibility of coercion or undue influence;
• Be free of exculpatory language; and
• Be in language understandable to the subject or their LARs.

The IRB also requires that circumstances of the consent process be culturally and linguistically appropriate for the prospective participants, and that he/she (or LARs) has an adequate opportunity to read and understand the consent document before it is signed and dated.

3.2 The Participant Information Sheet and Informed Consent Document

3.2.1 Information provided as part of the interaction with the prospective participant and in the documentation of the consent process, unless waived or altered, must include:

• A statement that the study involves research;
• An explanation of the reason, necessity and objectives of the research;
• The expected duration of the participant’s participation and number of participants;
• A description of the processes to be followed. If the placebo is used, the proportion of placebo comparing to the real treatment group must be informed;
• Identification of any processes which are in the research study and which processes are in the regular treatment;
• A description of any reasonably foreseeable risks or discomforts to the participant;
• A description of any benefits directly to the participant or to community as a whole which may reasonably be expected from the research;
• A disclosure of appropriate alternative procedures or courses of treatment, if any, that might be advantageous to the participant;
• A statement describing the extent, if any, to which confidentiality of records identifying the participant will be maintained;
• An explanation of whom to contact for answers to relevant questions about the research;
• An explanation of whom to contact for answers to pertinent questions about the research participant’s rights;
• An explanation of whom to contact in the event of a research-related injury to participant;
• Contact information for the research team for questions, concerns, or complaints;
• Contact information for someone independent of the research team for problems, concerns, questions, information, or input;
• A statement that participation is voluntary;
• A statement that refusal to participate will involve no penalty or loss of benefits to which the participant is otherwise entitled; and
• A statement that the participant may discontinue participation at any time without penalty or loss of benefits to which the participant is otherwise entitled.
3.2.2 Additional information, to be provided to each subject, when appropriate:

- A statement that the particular treatment or procedure may involve risks to the participant (or to the embryo or fetus, if the subject is or may become pregnant) which are currently unforeseeable. If measures to prevent pregnancy should be taken while in the study, that should also be explained;
- Anticipated circumstances under which the participant’s participation may be terminated by the investigator without regard to the participant’s consent;
- Any additional costs to the participant that may result from participation in the research;
- The amount and schedule of all payments to the participant;
- The consequences of a participant’s decision to withdraw from the research;
- Procedures for orderly termination of participation by the participant;
- A statement that if the participant wish to withdraw from the study, already collected data from research cannot be removed from the research database;
- A statement that significant new findings developed during the course of the research which may relate to the participant’s willingness to continue participation will be provided to the participant.

3.2.3 For research involving more than minimal risk, one or more of the following additional statements are required in the informed consent:

- An explanation as to whether any compensation is available if injury occurs;
- If compensation is available, what it consists of, or where further information may be obtained;
- An explanation as to whether any medical treatments are available if injury occurs;
- If medical treatments are available if injury occurs, what it consists of, or where further information may be obtained.

3.2.4 For the US FDA-regulated research, the informed consent document embodies the basic and required additional elements of disclosure include:

- A statement noting the possibility that the FDA may inspect the records that will be provided to each participant; and
- A statement that the results of the research will be posted on clinicaltrials.gov.

“This clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.”

3.2.5 Other requirement:

- Second person: The language should be in the second person style so the consent form conveys a dialogue with information being provided and that there is a choice to be made by the subject rather than presumption of the subject’s consent with the use of the first person style.
• Language should be simple: The informed consent document should not include complex language that would not be understandable to all subjects. Technical and scientific terms should be adequately explained using common or lay terminology.

• Exculpatory language: Informed consent documents may not contain any exculpatory language through which the subject is made to waive or appear to waive legal rights, or release or appear to release the researcher, the sponsor, or the Faculty from liability for negligence.

3.3 Informed Consent in Special Population

Additional protections regarding informed consent (both process and document) to participate in a research study are required in special vulnerability of certain subject population (including children, pregnant women, prisoners, and decisionally/cognitively impaired individuals).

3.3.1 Informed Consent in Children (under 18 years old)

"Assent" in research involving children means a child's affirmative agreement to participate in research. Mere failure to object should not be construed as assent.

"Permission" in research involving children means the agreement of the parent(s) or guardian to the participation of their child or ward in research. Informed legal consent for children must meet the following:

- In children, informed consent is obtained from the parent(s) or legal guardian.
- Research involving no more than minimal risk or more than minimal risk with or without the prospect of direct benefit requires both parents’ signatures when both are available. Both parents must give their permission unless one parent is deceased, unknown, incompetent, or not reasonably available, or when only one parent has legal responsibility for the care and custody of the child.
- For some types of research where documentation of informed consent would normally be waived (such as survey), documentation may be required for children.
- The IRB may waive the requirement for parental permission under the same conditions of informed consent waiving in Section 3.5 below, if it determines:
  - The research is designed to study conditions in children or a participant population for which parental or guardian permission is not a reasonable requirement to protect the participants (e.g., neglected or abused children);
  - There is an appropriate mechanism in place to protect the children; and
  - The waiver is not inconsistent with the international/national law and regulations.
- Assent from the child is usually required unless:
  - The minor participant is too immature or incapacitated to be consulted;
  - The intervention/procedure involved in the research holds out the prospect of direct benefit that is important to the health or well-being of the child and is available only in the context of the research; and
  - The assent document would be the only link between the participant and the research and would pose a confidentiality risk.
• Assent is documented depending on the age, maturity, and psychological state:
  - Age <7 years old with normal IQ development, assent is waived or verbal
    assent is obtained, as determined by the IRB;
  - Age 7-12 years old with normal IQ development, a simple assent statement is
    obtained;
  - Age >12-under 18 years old with normal IQ development, the IRB approved
    informed consent document is used, with a statement of assent added.
• Assent may be obtained verbally or as a written document or a combination of
  both as appropriate to the age, maturity, and psychological state as well as the
  nature of the research project.

3.3.2 Informed Consent in Research Involving Pregnant Women
For research involving pregnant women and/or fetuses, consent must be obtained
from both the pregnant woman and father unless:
• The purpose of the research is to meet the health needs of the mother;
• The identity or whereabouts of the father cannot reasonably be ascertained or he
  is otherwise unavailable; and
• The pregnancy resulted from rape or incest.

3.3.3 Informed Consent in Research Involving Prisoners
• The informed consent will be presented in language that is understandable to the
  prisoner population; and
• The informed consent document shall include language to clearly inform
  participants in advance that parole boards will not take into account a prisoner’s
  participation in research in making decisions regarding parole.

3.3.4 Informed Consent in Research Involving Other Special Populations
Other special populations may include, but not limited to decisionally/cognitively
impaired persons, HIV +ve subjects, employees of the sponsor or investigator,
terminally ill patients, and the elderly (≥65 years old). The IRB will determine
special protections for these groups on a case-by-case basis, taking into account the
risks and benefits and other protections afforded by applicable faculty policies and
international/national laws and regulations. Consent in the subjects suspected of
lacking decision-making capacity, researchers must address appropriately how
they will determine when surrogate consent (i.e., LAR) will be required.

3.4 Documentation of Informed Consent
• Each subject or LAR (if the subject lacks capacity to consent) must sign and date a copy
  of the current IRB-approved written informed consent form prior to enrollment or any
  participation in any phase of the research study, unless the requirement is waived by the IRB;
• The information given to a subject or a subject’s representative shall be in language understandable to the subject or the representative. If the subject is illiterate, the witness who can communicate and explain the research information must be provided and signs the name in the consent form;
• The person conducting the consent interview must also sign and date the informed consent document as the “person obtaining consent”;
• If the subject wishes to take the consent document home for review before signing, the person conducting the consent interview may sign the consent document at that time, signifying that the consent interview took place. Once the subject has decided to participate, he/she (or LAR) will sign the consent document at the later time.
• One copy of the signed document shall be given to the person signing the form while the other will be kept by the researcher for at least three years beyond the end of the study.
• The IRB may require that researchers periodically re-consent participants after taking into account the study’s anticipated length and/or the participants’ changing condition (including decision making capacity) to ensure that a participant’s continued involvement is voluntary.
• Revision of the consent document (e.g., when important new data relevant to the subject’s willingness to participate become available) requires IRB approval prior to use. While newly enrolled subjects must sign this new approved version of the consent document, re-consent in already enrolled subjects will be needed only if changes are major and/or the risk/benefit ratio of the participants is affected (e.g., discovery of a priori unknown serious side effect). When an enrolled subject re-consents, a note should be made in the subject’s record. The original signed new consent document must be retained and a copy provided to the subject (or LAR). Any previously signed consent documents should also be kept and not discarded.

3.5 Waiver of Informed Consent
The IRB may waive the requirement for the researcher to obtain a signed informed consent form for some or all participants if all of these requirements are met including:
3.5.1 The research procedure involves no more than minimal risk to the subjects;
3.5.2 The waiver or alteration will not adversely affect the rights and welfare of the subjects;
3.5.3 The research could not practically be carried out without the waiver or alteration; and
3.5.4 Whenever appropriate, the subjects will be provided with additional pertinent information after participation.
Additionally, the IRB may waive the requirement to obtain a signed informed consent form in the minimal risk research of which the only record linking to the subject would be the consent document and the principle risk would be potential harm resulting from breach of confidentiality.
In cases in which the documentation requirement is waived, the IRB may require the investigator to provide subjects with a written statement regarding the research.
4. RESPONSIBILITY
IRB Reviewers and Participant Information Sheet/Informed Consent Lay Person Reviewer are responsible for careful review of all incoming informed consent documents, and for communicating revisions at the IRB meeting needed to bring documents into compliance.

IRB Chair (or designee) is responsible for overseeing the informed consent process being considered according to the guidance.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 50.20, 50.24, 50.25, 50.27, 56.109, 56.111;
45 CFR 46.101, 46.111, 46.116, 46.117

6. APPLICABLE DOCUMENTS
A Waiver of Consent Form (Document 1e)
Participant Information Sheet (Document 3a)
Informed Consent Form (Document 3b)
Participant Information Sheet and Assent Form for children ages 7-12 years (Document 4.1)
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Patient Information Sheet and Consent Form Element Checklists (Internal Document 3.1)
Patient Information Sheet and Consent Form Element Checklists for Lay Person (Internal Document 3.2)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>● Review the proposed informed consent or assent forms upon receipt of the protocol proposal, and confirm that they are present.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Reviewers and Lay Person</td>
<td>● Review ICF process, and informed consent document using the Consent Form Element Checklists.</td>
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<tr>
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<td>● Determine if waiver of consent and/or authorization of disclosure satisfy the criteria. If so, indicate on the IRB agenda.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>● Prepare summary of findings and recommendations for presentation at the convened IRB meeting.</td>
</tr>
<tr>
<td>3</td>
<td>IRB Secretary</td>
<td>● Request to researcher for adjustment, inclusion of missing elements, and suggested language where appropriate.</td>
</tr>
<tr>
<td>4</td>
<td>IRB Chair, Vice chair</td>
<td>● Allow an appropriate evaluation for informed consent process and document being conducted according to the guidance.</td>
</tr>
</tbody>
</table>
1. PURPOSE
This policy describes special consideration in reviewing the research involving groups that could be potentially vulnerable to undue influence or coercion in regard to autonomy, and present conditions that may affect risk/benefit determinations or bear an unequal burden in research.

2. POLICY
The IRB shall apply additional protections as necessary to protect potentially vulnerable research participants. Not every human being is capable of self-determination. The capacity for self-determination matures during an individual's life, and some individuals lose this capacity wholly or in part because of illness, mental disability, or circumstances that severely restrict liberty. The extent of additional protection afforded should depend upon the risk of harm and the likelihood of benefit. The judgment that any individual lacks autonomy should be periodically reevaluated and will vary in different situations.

In addition, when an IRB regularly reviews research involving a vulnerable population consideration will be given to inclusion of one or more individuals who are knowledgeable about and experienced in working with these participants. The IRB requires documentation of informed consent by use of a written informed consent form approved by the IRB, and signed and dated by the participant or the participant’s legally authorized representative (LAR).

3. SPECIFIC POLICIES
3.1 Pregnant Women, Fetuses and Neonates
3.1.1 Pregnant women or fetuses prior to delivery may be involved in research if all of the following conditions are met including informed consent requirements and the following ethical and scientific criteria:
   a) Where scientifically appropriate, preclinical studies, including studies on pregnant animals, and clinical studies, including studies on non-pregnant women, have been conducted and provide data for assessing potential risks to pregnant women and fetuses;
   b) The risk to the fetus is not greater than minimal, or any risk to the fetus, which is greater than minimal, is caused solely by interventions or procedures that hold out the prospect of direct benefit for the woman or the fetus;
   c) Any risk is the least possible for achieving the objectives of the research;
   d) If the research holds out the prospect of direct benefit to the pregnant woman, the prospect of direct benefit both to the pregnant woman and the fetus, or no prospect of benefit for the woman nor the fetus when risk to the fetus is not greater than minimal and the purpose of the research is the development of
important biomedical knowledge that cannot be obtained by any other means, the woman’s consent is obtained OR

e) If the research holds out the prospect of direct benefit solely to the fetus, then the consent of the pregnant woman and the father is obtained except that the father's consent need not be obtained if he is unable to consent because of unavailability, incompetence, or temporary incapacity or the pregnancy resulted from rape or incest;

f) Each individual providing consent is fully informed regarding the reasonably foreseeable impact of the research on the fetus or neonate;

g) For children who are pregnant, assent and permission are obtained in accord with the regulations for children in research;

h) No inducements, monetary or otherwise, will be offered to terminate a pregnancy;

i) Individuals engaged in the research will have no part in any decisions as to the timing, method, or procedures used to terminate a pregnancy;

j) Individuals engaged in the research will have no part in determining the viability of the neonate; and

k) The medical facility has sufficient expertise in women’s health to conduct the proposed research.

3.1.2 When a child is screened in a study or participating in study procedures that require a pregnancy test be administered, additional consent and assent information must be provided in the Informed Consent Document. The IRB has determined that children in research must be afforded the same rights they would normally have in a clinical setting with regard to the privacy of results from pregnancy testing. Thus, minors 12 years of age would have the choice as to whether or not pregnancy results would be shared with their parents/legal guardians. For children who have a positive pregnancy test and are less than 12 years of age, or if abuse is expected at any age, the proper authorities must be informed and parents or guardians will be informed of the pregnancy.

3.1.3 After delivery, neonates may be involved in research if all of the following conditions are met:

a) Where scientifically appropriate, preclinical and clinical studies have been conducted and provide data for assessing potential risks to neonates;

b) Each individual providing consent under the applicable regulations is fully informed regarding the reasonably foreseeable impact of the research on the neonate;

c) Individuals engaged in the research will have no part in determining the viability of the neonate; and

d) The regulatory requirements have been met as applicable.

3.1.4 Until it has been ascertained whether or not a neonate is viable, a neonate may not be involved in research unless the IRB determines that the following additional conditions have been met:

a) The research holds out the prospect of enhancing the probability of survival of the neonate to the point of viability, and any risk is the least possible for achieving that objective; OR
b) The purpose of the research is the development of important biomedical knowledge which cannot be obtained by other means and there will be no added risk to the neonate resulting from the research; AND

c) The legally effective informed consent of either parent of the neonate or, if neither parent is able to consent because of unavailability, incompetence, or temporary incapacity, the legally effective informed consent of either parent’s LAR is obtained (except that the consent of the father or his LAR need not be obtained if the pregnancy resulted from rape or incest).

3.1.5 After delivery, nonviable neonates may not be involved in research unless all of the following additional conditions are met:

a) Vital functions of the neonate will not be artificially maintained;

b) The research will not terminate the heartbeat or respiration of the neonate;

c) There will be no added risk to the neonate resulting from the research;

d) The purpose of the research is the development of important biomedical knowledge that cannot be obtained by other means; and

e) The legally effective informed consent of both parents of the neonate is obtained (note: waiver or alteration of the consent does not apply here) if either parent is unable to consent because of unavailability, incompetence, or temporary incapacity, the informed consent of one parent of a nonviable neonate will suffice to meet the requirements except that the consent of the father need not be obtained if the pregnancy resulted from rape or incest. The consent of the LAR of either or both of the parents of a nonviable neonate will not suffice to meet the requirements.

3.1.6 Research involving human fetal tissue (placenta, or tissue from abortion or from a stillbirth) is evaluated as tissue specimen research, using the guidelines for research involving specimens. Studies using human fetal tissue for transplantation research and studies of human embryos involve very explicit regulations concerning consent and study procedures. Investigators wishing to conduct transplantation research with human fetal tissue should contact the IRB in advance of submission to discuss applicable regulations.

3.2 Children

By regulatory definition, a child is a person who has not attained the legal age for consent to treatments or procedures involved in the research (or clinical investigation), under the applicable law of the jurisdiction in which the research will be conducted. For purposes of research conducted in the Faculty of Medicine Siriraj Hospital, the term “child” as used is viewed as “a person under the age of eighteen years.”

The IRB approves a research project involving children after determining which of the following categories applies, and only if the project satisfies all of the conditions related in the applicable category:

3.2.1 Research that does not involve greater than minimal risk may be approved if the IRB finds that adequate provisions are made for soliciting the assent of the children and the permission of their parents or guardians. The IRB may determine that permission of one parent or guardian is sufficient.
3.2.2 Research involving greater than minimal risk, but presenting the prospect of direct benefit to an individual subject, or a monitoring procedure that is likely to contribute to the subject's well-being, may be approved if the IRB finds that:

- the risk is justified by the anticipated benefit to the subject;
- the relationship of anticipated benefit to risk is at least as favorable as that presented by available alternative approaches; and
- adequate provisions are made for soliciting the assent of the children and permission of their parents or guardians.

3.2.3 Research involving greater than minimal risk with no prospect of direct benefit to individual subjects, but likely to yield generalizable knowledge about the subject's disorder or condition, may be approved if the IRB finds that:

- the risk represents a minor increase over minimal risk;
- the intervention or procedure presents experiences to subjects that are reasonably commensurate with those inherent in their actual or expected medical, dental, psychological, social, or educational situations;
- the intervention or procedure is likely to yield generalizable knowledge about the subject's disorder or condition which is of vital importance for the understanding or amelioration of the subject's disorder or condition; and
- adequate provisions are made for soliciting assent of the children and permission of their parents or guardians.

3.2.4 Research that is not otherwise approvable which presents an opportunity to understand, prevent, or alleviate a serious problem affecting the health or welfare of children may be approved if the IRB, after consultation with a panel of experts in pertinent disciplines and following an opportunity for public review and comment, find that:

- the research satisfies one of the above three conditions; or
- the research presents a reasonable opportunity to further the understanding, prevention, or alleviation of a serious problem affecting the health or welfare of children;
- the research will be conducted in accordance with sound ethical principles; and adequate provisions are made for soliciting the assent of children and the permission of their parents or guardians.

In accordance with the applicable regulations, the IRB must determine that permission of both parents is required, unless one parent is deceased, unknown, incompetent, or not reasonably available, or unless only one parent has legal responsibility for the care and custody of the child.

In addition, children who are wards of any institution, agency, or entity can only be included in research in this category if the research is related to their status as wards or conducted in schools, camps, hospitals, institutions, or similar settings in which the majority of children involved as subjects are not wards. If one of these criteria is met and the research is approved, the IRB must require appointment of an advocate for each child who is a ward in addition to the person acting as guardian or in loco parentis. One person may serve as the advocate for multiple wards, however this advocate must have the background and experience to act in, and agrees to act in, the best interests of the child for the duration of the
child’s participation in the research and cannot be associated in any way (except as advocate or member of the IRB) with the research, the investigator(s), or the guardian organization.

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<tr>
<th>Risk determination</th>
<th>Benefit assessment</th>
<th>IRB’s action</th>
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<tbody>
<tr>
<td>Minimal</td>
<td>With or without direct benefit</td>
<td>Approvable</td>
</tr>
<tr>
<td>More than minimal risk*</td>
<td>Potential benefit to child</td>
<td>Approvable</td>
</tr>
<tr>
<td>Greater than minimal risk*</td>
<td>No direct benefit to child, offers general knowledge about the child’s condition or disorder</td>
<td>Approvable case-by-case*</td>
</tr>
<tr>
<td>Greater than minimal risk</td>
<td>No direct benefit to child, offers potential to “understand, prevent, or alleviate a serious problem affecting the health and welfare of participants”</td>
<td>Not approvable**</td>
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</table>

*IRB will make determination if consent of one or both parents is required.

* Respect for persons require oral communication with children younger than age seven (7) about the research and what they will experience to the extent their development permits.

**Approval to proceed with this category of research must be made only by the IRB with input from selected experts, and following opportunity for public review and comment.

3.3 Prisons

Because incarceration could affect a person’s ability to make a truly voluntary and uncoerced decision whether or not to participate in a research project, the federal regulations provide additional safeguards for the protection of prisoner (individual involuntarily confined or detained in a penal institution). At the Faculty, any project that recruits prisoners must be reviewed at a full IRB meeting with a prisoner representative present.

3.3.1 When a prisoner is a subject, in addition to the usual criteria for approval, the IRB must find the following:

- Any possible advantages accruing to the prisoner(s) through participation in the study, when compared to the general living conditions, medical care, quality of food, amenities and opportunity for earnings in the prison, are not of such a magnitude that her/his ability to weigh the research risks against the value of such advantages in the limited choice environment of the prison is impaired;
- The risks involved in the research are commensurate with risks that would be accepted by non-prisoner volunteers;
- Procedures for subject selection within the prison are fair to all prisoners and immune from arbitrary intervention by prison authorities or prisoners. Unless the principal researcher provides to the IRB justification in writing for following some other procedures, control subjects must be selected randomly from the group of available prisoners who meet the characteristics needed for that particular research study;
- The informed consent information is presented in language understandable to the subject population;
- Adequate assurance exists that parole boards will not take into account a prisoner's participation in the research in making parole decisions, and each prisoner is clearly informed in advance that research participation will have no effect on her/his parole; and
• Where the IRB finds there may be a need for follow-up examination or care of participants after their participation ends, adequate provision has been made for such examination or care, taking into account the varying lengths of individual prisoners' sentences, and for informing participants of this fact.

Four categories of research involving prisoners are permitted:

• Studies of the possible causes, effects, and processes of incarceration, and of criminal behavior, provided that the study presents no more than minimal risk and no more than inconvenience to the subjects;

• Studies of prisons as institutional structures or of prisoners as incarcerated persons, provided that the study presents no more than minimal risk and no more than inconvenience to the subjects;

• Research on conditions particularly affecting prisoners as a class (e.g. vaccine trials, research on hepatitis which is higher prevalent in prisons); and research on social and psychological problems such as alcoholism, drug addiction, and sexual assaults; or

• Research on practices, both innovative and accepted, which have the intent and reasonable probability of improving the health or well-being of the subject.

3.3.2 The investigator may not enroll a prisoner into a study unless the research project was initially approved to recruit prisoners. If a potential need for recruitment of prisoners has been identified, the principal investigator (PI) must submit an amendment to the IRB providing information necessary to review the research for the inclusion of prisoners.

3.3.3 When participants become prisoners during a research study, e.g. after the research has commenced. If a subject becomes a prisoner after enrollment in research, the PI is responsible for reporting in writing this situation to the IRB immediately.

• At the earliest opportunity after receiving the PI’s notice or otherwise becoming aware of the prisoner status of a subject the IRB will review the protocol again with a prisoner representative as a member of the IRB.

• The IRB will take special consideration of the conditions of being a prisoner. Upon this review, the IRB can either (a) approve the involvement of the prisoner-subjects’ in the research in accordance with this policy and all applicable regulations; or (b) determine that this subject must be withdrawn from the research.

• The IRB should confirm that, when appropriate, the informed consent process includes information regarding when subsequent incarceration may result in termination of the subject’s participation by the PI without regard to the subject’s consent.

3.4 Other Vulnerable Groups
The IRB will consider additional protections as part of the criteria for approval in other vulnerable populations and those within potentially compromised autonomy include:

3.4.1. Adults with Impaired Decision-Making Capacity: Decisionally impaired adults are individuals who have a diminished capacity for judgment and reasoning due to a psychiatric, organic, developmental, or other disorder that affects cognitive or emotional functions. Other individuals may be considered decisionally impaired or have limited decision-making ability because they are under the influence of or dependent on drugs or
alcohol, suffering from degenerative diseases affecting the brain, are terminally ill, or have severely disabling physical handicaps.

There are no regulations specific to research involving adults with impaired decision making capacity. The IRB takes special care to consider issues such as the selection of participants, privacy and confidentiality, undue influence, and risk-benefit analysis. The following criteria may be taken into consideration for adult participants with impaired decision-making capacity involved in a research protocol:

- The objectives of the research cannot be met by conducting the research in a population that does not have the disorder that may affect decision making capacity.
- The research is designed for a disease or condition relevant to the vulnerable population under study.
- The research is either minimal risk, more than minimal risk with a prospect of direct benefit, or more than minimal risk without a prospect of direct benefit, but of vital importance to the vulnerable population.
- Adequate provisions are made for obtaining consent from the participant’s legally authorized representative.
- Adequate provisions are made for obtaining assent from the participant, unless the IRB determines that assent is not appropriate as a condition of participation or that some or all participants are not capable of providing assent.
- The protocol must describe when and how the participants will be assessed for capacity for formal consent or assent and understanding of the proposed research, and the process for a second confirming assessment. Competency should be evaluated on an individual basis to avoid incorrect assumptions as to an ability to make decisions. Criteria for determining competence might vary according to the degree of risk or discomfort presented by the research procedures and the extent to which therapeutic gain can be anticipated.

The IRB will consider additional safeguards to protect participants. These include:
- Requiring the involvement of participant advocates
- Requiring independent monitoring
- Requiring waiting periods
- Appointing a monitor to supervise the informed consent process

Such decisions may be based on the amount of risk involved in the research and the likelihood that participants will derive health benefits from their participation.

3.4.2 Terminally Ill and Chronic Dependent Patients: These patient groups are considered as vulnerable population of human subjects, and therefore, require additional protection against coercion and undue influence. It is generally considered unacceptable to ask terminally ill and chronic dependent patients to participate in research for which non-vulnerable populations of human subjects exist. Nevertheless, it may often be necessary to involve these patient groups in research concerning their disease and its treatment. Further, they should not be excluded from research in which they may want to participate simply because of their status.
• Terminally ill and chronic dependent patients may be vulnerable to coercion or undue influence because of a real or perceived belief that participation is necessary to receive continuing care from health professionals or because the receipt of any treatment is perceived as preferable to receiving no treatment.

• The IRB needs to distinguish between risks that may be justified by anticipated benefits for the human subjects and risks associated with procedures performed purely for research purposes.

• Special consideration should be given to Phase I drug trials in which the drugs involved are known to be particularly toxic. In some of these studies, any benefit to the human subject is, at best, highly unlikely.

• Provisions should be made to assure that prospective human subjects be clearly informed of the nature and likelihood of the risks and benefits associated with this kind of research.

3.4.3 Non-National Language Speaking Human Subjects

Any research involving non-Thai speaking human subjects must have specific approval for their participation. If these human subjects will be a targeted part of the human subject population, the study must be explained in a language that is understandable to the human subject. Documents (such as participant information sheet, informed consent, children’s assent, medication and dosing instructions, etc.) should be translated so that the continual process of informed consent may be addressed to ensure that the human subject can fully understand the study.

• Thai versions of all documents to be used in the study shall be submitted to the IRB for approval;

• Following approval, the translated documents will be submitted along with a statement from the individual or professional translation service that performs the translation for IRB approval;

• Costs associated with translation of the required documents shall be the responsibility of the principal investigator (PI), either through negotiation with the study sponsor or other funding source.

3.4.4 Research involving students or employees of the Faculty.

When research involves students or employees of the Faculty, the IRB requires researchers to provide information regarding the measures that will be put into place to reduce the likelihood of undue influence, unintentional/subliminal coercion, and to address confidentiality concerns.

In instances where researchers wish to use their own students or employees as research subjects, a good scientific reason should be provided other than convenience. For research involving students, the research project should be relevant to the topic of the class, and participation should be part of the learning experience.

In such case, the IRB generally requires that someone other than the researcher (instructor) obtain informed consent and collect the data. When this is not possible, the IRB will consider other methods for obtaining consent and collecting data that would not reveal to the instructor whether or not a student participated in the research project until after final
grades have been determined. The students should be informed of what these procedures are in the Informed Consent Document.

4. **RESPONSIBILITY**
IRB Chair is responsible for providing the PI with guidance to ensuring the rights and welfare of the human subject.
IRB members are responsible for the review of the project, consent; assent; other study documents and ensuring appropriate safeguards are in place.

5. **APPLICABLE REGULATIONS AND GUIDELINES**
The Belmont Report; CFR 56.111
21 CFR 56.107, 56.111;
45 CFR 46 Subpart B-D, 46.107, 46.109, 46.111, 46.116, 46.117, 46.122, 46.305;
50 CFR Subpart D

6. **APPLICABLE DOCUMENTS**
Reviewer Assessment Form (Document No.2)
Patient Information Sheet and Consent Form Element Checklists (Internal Document 3.1)
Patient Information Sheet and Consent Form Element Checklists for Lay Person (Internal Document 3.2)

7. **PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY**

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>IRB Chair and Vice chair</td>
<td>● Maintains and updates the policy to conform to applicable regulations and guidelines.</td>
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<td>● Provide guidance to PIs, as needed.</td>
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<td>● Assure adequate documentation and information is present for adequate IRB Member review.</td>
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<td>● Ensure appropriate determinations are discussed during convened meetings and documented.</td>
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<td>2</td>
<td>IRB Member</td>
<td>● Review study and evaluate if sufficient safeguards are in place for vulnerable populations.</td>
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<td>● Present recommendations at convened meeting.</td>
</tr>
<tr>
<td>3</td>
<td>IRB Staff and IRB Secretary</td>
<td>● Prepare the notification correspondence to PI, as appropriate.</td>
</tr>
</tbody>
</table>
1. PURPOSE
This policy describes specific categories of research requiring additional considerations before IRB approval at the Faculty of Medicine Siriraj Hospital.

2. POLICY
The categories of research defined in these policies involve either research with mandated determinations that IRB are required to make and document or the methodologies that might need additional considerations from expert consultant(s). These categories of research include, but are not limited to:
- Clinical research involving investigational new drugs
- Clinical research involving devices
- Research involving humanitarian use devices
- Clinical Research of Herbal Medicines
- Research in emergency settings
- Genetic research
- Residual body fluids, tissues and recognizable body parts
- Prospective tissue banking
- Community research
- Medical records and chart review
- Protocols lacking plans for human involvement
- Multi-center research and Research under Memorandum of Understanding

3. SPECIFIC POLICIES
3.1 Clinical Research Involving Investigational New Drugs
Following US FDA regulations, investigators or sponsors of the research involving investigational new drugs (IND), or approved drugs used off-label, must apply for IND registration and obtain the IND status before importing the tested drugs. Accordingly, the IRB will perform the following functions:
- Determine whether the regulatory status of the drug as used in the proposed research is clearly indicated in the materials submitted to IRB, with appropriate FDA documentation if necessary.
- If the regulatory status is not clear, the IRB will request one of the following from the investigator or sponsor:
  1) A letter from FDA that documents the status;
  2) A copy of the sponsor’s protocol or investigator’s brochure that reflects the IND number; or
  3) Other appropriate documentation of the need for an IND or exemption there of.
For the application process at Thai FDA, it is required that the research project is provisionally approved and gets certificate of approval (COA) by the recognized IRB. During its review, the IRB will consider, in addition to the review criteria previously described that applies to all reviews:

- Whether an IND Application to the FDA is required, if one has not been obtained (meets one of the US FDA exemptions from the requirement to have an IND);
- Whether the investigational drug shall be stored and dispensed in accordance with the Siriraj Investigational Drug Policy;
- Whether special handling is required by research staff, subjects, or others; and
- Whether specific information regarding birth control measures must be provided to subjects with reproductive capacity.

### 3.2 Clinical Research Involving Medical Devices

Following US FDA regulation, clinical research with devices falls into 3 categories based on information from the investigator and/or the sponsor. The IRB determines whether the study presents a significant risk or a non-significant risk of harm to study participants as follow:

**3.2.1 Investigations of significant risk (SR) devices:** Applications for research must be accompanied by documentation from the FDA that includes a valid IDE number. The IDE number must either match the number on the sponsor protocol with the same title as the proposed research, or be listed on communication from the sponsor specific to the proposed research, or on communication with the FDA.

**3.2.2 Investigations of non-significant risk (NSR) devices:** When research involves use of a device and the investigators/sponsor indicates that the device may qualify as non-significant risk, the organization either confirms that appropriate documentation is provided from the FDA to classify the device as non-significant risk or determine whether the device qualifies as a non-significant risk device, following the criteria:

- Is not intended as an implant and presents a potential for serious risk to the health, safety, or welfare of a subject;
- Is not purported or represented to be for use supporting or sustaining human life and presents a potential for serious risk to the health, safety, or welfare of a subject;
- Is not for a use of substantial importance in diagnosing, curing, mitigating, or treating disease, or otherwise preventing impairment of human health and presents a potential for serious risk to the health, safety, or welfare of a subject; or
- Does not otherwise present a potential for serious risk to the health, safety, or welfare of a subject.

**3.2.3 Investigational device exemption (IDE) regulations:** A medical device in human participants’ research that is exempted from the regulations must fall into one of the categories listed by FDA. Clinical investigations of that device still require IRB review and approval without significant/non-significant risk determination.

The IRB’s risk determination will be documented in the meeting minutes. If an investigator submits a NSR research protocol that is determined by the IRB to be a SR study, the investigator and the sponsor, if necessary, will be notified in writing. No further action will be taken by the IRB until the sponsor or investigator has met the requirements for a SR study.
Thai FDA does not allow importing IDE prior to getting COA by the recognized IRB.

3.3 Research Involving Humanitarian Use Devices
Humanitarian Use Devices (HUDs) are intended to benefit subjects in the treatment or diagnosis of rare diseases or conditions that affect or manifest in fewer than 4,000 individuals in the United States per year. HUDs are considered by the FDA to be approved for marketing. The degree of safety and efficacy testing required for FDA approval of an HUD is less than that required for other medical devices, because more rigorous testing prior to marketing is not feasible for devices that affect a relatively small subset of the population. Therefore, IRB review is required for these approved devices since safety and efficacy data will be collected while it is marketed.

Two situations exist for which a protocol that utilizes an HUD is submitted to the IRB:

- Where the HUD will be used as described and for the indication approved in the humanitarian device exemption (HDE);
- Where the HUD will be used in a manner, for an indication, or in a population other than that approved in the HDE.

The former does not constitute research and the informed consent is not required for use of an HUD in accordance with its FDA approved indication. However, the IRB may require consent in such instances at its discretion.

The latter is considered using an HUD for research (i.e., out of the FDA-approved indications) and the informed consent is required.

All research involving HUDs will be reviewed at a convened meeting of the full Board.

3.4 Clinical Research of Herbal Medicines
Clinical research of herbal medicines may have two types of objectives. One is to validate the safety and efficacy that is claimed for a traditional herbal medicine. The other is to develop new herbal medicine or examine a new indication for an existing herbal medicine or a change of dose formulation, or route of administration. In some cases, researches may be designed to test the clinical activity of a purified or semi-purified compound derived from herbal medicines. Good Clinical Practice should be applied in all stages of clinical trials to ensure that quality and ethical requirements for clinical studies are met. Information needed to support a clinical research for the herbal product should also include:

- Chemistry-manufacturing-control (cmc) considerations
  Unlike standard chemically-defined drugs, herbal products have often had substantial human use prior to clinical trial evaluation. To capitalize on the use of this information in protocols to evaluate these products, it is important that the chemistry, manufacturing, and control of the product to be used mimics that for the traditionally-used formulation. Herbal products intended for administration to humans are clinical trial materials, and they should therefore be made following the principles of GMP. Since herbal products are sourced from plants, levels of contaminating herbicides and pesticides as well as toxic contaminations must particularly be addressed.
- Non-clinical considerations for herbal products
  Non-clinical information generally needed to support a clinical investigation of a conventional drug consists of data on:
1. Efficacy: Appropriate literature sources should be searched for all available evidence on efficacy. Only if there are obvious gaps in the information or the total amount of data is insubstantial should it be necessary to perform new efficacy experiments.

2. Toxicity: Appropriate literature sources should be reviewed for the toxicities in prior human experiences or existing animal data. The need for additional non-clinical studies prior to clinical trials depends on the similarities between the new and old preparations, in terms of product characteristics, and usages in clinical settings; scale and exposure (dosage/duration) of the proposed new clinical studies; and the frequency and severity of any known toxicity.

3. Pharmacokinetics: It is technically difficult to work in this area as often the APIs are unknown and there are likely to be a large number present. Also, the dosing regimen needed for the clinical studies can be deduced from traditional methodology, rather than deduced from animal pharmacokinetics. Therefore non-clinical pharmacokinetics is not absolutely required.

Concerns that particularly apply to clinical trials with herbal products include:
- Product adulteration (has it been documented?)
- Interactions between herbal remedies and other entities (rarely understood)
- Reproductive and organ toxicity data (may be minimal)
- Prior dose finding (likely to be incomplete).

The uncertainty in these areas must be clearly disclosed to all concerned, particularly during the informed consent process.

3.5 Research in Emergency Settings

Most emergency research projects cannot be planned ahead in details, as a result, it cannot request for IRB approval in regular time before commencing. This will result the lack of opportunity in academic development. The characteristics of those projects are as follows:
- Research for survey of the physical and mental effects after the disaster or serious accident, or the diagnosis and methods for physical and mental treatment after disaster or serious accident, or
- Researcher is the expertise in the above mentioned field and acquires adequate knowledge to perform research in human subjects after the occurrence, as well as having tendency to conduct the research in the future.

It is necessary that the researcher submits the research proposal with the above mentioned characteristics to the IRB for basic consideration without specifying the subject group period or duration of research performance. The protocol application must include appropriate details required in the research such as the implementation, the methodologies, questionnaire, and the protection for risk and damage to the subjects, including the number of patients. The IRB will designate the special expertise members to review the proposal as fast as required by the situation. Upon receipt of approval, the researcher may begin the research once the incidence occurs. However, the researcher is required to provide the protocol modification, if any, with additional details for the IRB’s consideration in the first opportunity that can be done.

For the protocol funded by US or plan to ask marketing permit in the US, the researcher should follow US FDA regulations. The reviewer is the concurrence of a licensed physician who is a member of or consultant to the IRB and is not otherwise participating in the investigation.
Regarding the research in emergency situation which has been prepared in advance, the researcher should make public announcement before conducting the research. The IRB may waive the informed consent in certain emergency research if it finds and documents the following:

3.4.1 The human subjects are in a life-threatening situation, available treatments are unproven or unsatisfactory, and 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.

3.4.2 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;
- The intervention under investigation must be administered before consent from the subject’s legally authorized representatives is feasible; and
- There is no reasonable way to identify prospectively the individuals likely to become eligible for participation in the clinical investigation.

3.4.3 Participation in the research holds out the prospect of direct benefit to the subjects because:
- Subjects are facing a life-threatening situation that necessitates intervention;
- Appropriate animal and other pre-clinical 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 subjects; and
- 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.

3.4.4 The clinical investigation could not practicably be carried out without the waiver.

3.4.5 The proposed investigational or research 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.

3.4.6 The IRB has reviewed and approved informed consent procedures and an informed consent document consistent with the elements of informed consent. These procedures and the informed consent document are to be used with subjects or their LARs in situations where use of such procedures and documents is feasible.

The IRB has reviewed and approved procedures and information to be used when providing an opportunity for a family member to object to a subject's participation in the clinical investigation consistent with applicable regulations.

3.4.7 Additional protections of the rights and welfare of the subjects will be provided, including, at least:
• 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;

• Public disclosure to the communities in which the clinical investigation will be conducted and from which the subjects will be drawn, prior to initiation of the investigation, of plans for the investigation and its risks and expected benefits;

• Public disclosure of sufficient information following completion of the clinical investigation to apprise the community and researchers of the study, including the demographic characteristics of the research population, and its results;

• Establishment of an independent DSMB to exercise oversight of the clinical investigation; and

• 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 clinical investigation. The investigator will summarize efforts made to contact family members and make this information available to the IRB at the time of continuing review.

The study plan must ensure that, at the earliest feasible opportunity, each subject, or if the subject remains incapacitated, the LAR of the subject, or if such a representative is not reasonably available, a family member is informed of the subject's inclusion in the clinical investigation, the details and other information contained in the informed consent document.

The study plan must ensure that there is a procedure to inform the subject, or if the subject remains incapacitated, the subject’s LAR, 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. If the LAR or family member is told about the clinical investigation and the subject's condition improves, the subject is also to be informed as soon as feasible. If a subject is entered into a clinical investigation with waived consent and the subject dies before the LAR or family member can be contacted, information about the clinical investigation is to be provided to the subject's LAR or family member, if feasible.

If the IRB determines that it cannot approve a clinical investigation because it does not meet the criteria in the exception provided above or because of other relevant ethical concerns, the IRB will document its findings and provide these findings promptly in writing to the investigator and to the sponsor of the clinical investigation.

When emergency care is initiated without IRB review or approval, the patient may not be considered a research subject. Such emergency care may not be claimed as research, nor can the outcome be included in any report of a research activity.

3.6 Genetic Research
Genetic research may require special considerations. At first consideration, much genetic research may appear to meet the criteria for expedited review. This includes Pedigree studies,
Positional cloning studies, or Diagnostic studies. However, these studies may create a vulnerable population and participants' autonomy may be compromised. Therefore, the following need to be considered prior to determination of level of review:

- Will the samples be made anonymous to maintain confidentiality? If not, to what extent will the results remain confidential and who will have access to them?
- Will the samples be used for any additional studies not made explicit at the time of donation, or will the samples be destroyed after specified, one-time use?
- Will the donor be informed of any and all results obtained from his or her DNA?
- Will the sample be sold in the future?
- Will the donor be paid for his/her sample now or in the future?
- Will the donor be informed of the results of the entire study?
- Will family members be implicated in the studies? If so, they are subjects.

Clinical research on Advanced Therapy Medicinal Products (ATMP), comprising gene therapies, tissue engineered products and somatic cell therapies, require special considerations. Such protocols require use of external consultants to provide independent guidance to the IRB. In addition, the research project may need to be approved by the Medical Council of Thailand or other external compliance agencies in parallel with the IRB approval. Monitoring must be adequate, and a DSMB will be required. Because there is still little regulatory guidance and relatively few ethical precedents, ATMP research will require close scrutiny, and the input of experts in this area.

3.7 Residual Body Fluids, Tissues and Recognizable Body Parts
Research on existing specimens (“on the shelf” or frozen) without identifying information (e.g., names, initials, hospital number, etc.) may be submitted to the IRB for exempt or expedited review, to include a short description of the research activity and where the tissue is coming from.

3.8 Prospective Tissue Banking
A proposal must be submitted to the IRB describing the policies and procedures for the collection and handling of stored specimens. The IRB must be able to evaluate the procedures to ensure confidentiality and protection of the participants. The proposal must address the following items:

- How the specimens will be obtained, processed and stored?
- How the specimens will be labeled?
- How the clinical data will be associated with the specimen, and how the clinical data will be collected?
- What identifying information will be collected?
- How identifiers will be linked to specimens?
- What steps will be followed to maximize the confidentiality of linked identifiers?
- How specimens will be distributed?
- How the secondary distribution of specimens will be controlled?
- How the participants’ rights will be protected with any future use of specimens not previously approved by the IRB?
- If results will be shared with participants, how will they be shared?
• If minor participants are used, how will future adult consents be secured?
• A separate consent form must be used to obtain permission for specimen banking.

3.9 Community Research
The elements need to be concerned in Community Research include but are not limited to application of ethical principles on community or population and justification on using particular community in the research. The IRB must be able to evaluate the appropriateness of informed consent process from individual to community leader’s permission or community consensus, thus to ensure voluntariness and undue influence in recruitment. In addition, certain communities are sensitive to exploitation and should be considered as vulnerable ones. For example, study in minority society, minor religion, ethnic group, indigenous commune, and legal or illegal migrants. The IRB must consider grounded evidences on the need of such study including the impact of the research that should be beneficial towards the studied community.

3.10 Medical Records and Chart Review
Studies involving the use of existing publicly or privately held records may qualify for exempt status or expedited review. However, if the nature of the research could reasonably put participants’ confidentiality at risk, the study will be reviewed by the full IRB. Studies that involve only chart and record review can sometimes pose significant risk to patients. The most common breach of confidentiality is exposure of possible embarrassing information without the knowledge or consent of the patient. Such studies may also lead to recruitment of patients into future non-therapeutic studies in a manner, which may provoke the patient to ask how his/her record was revealed to someone not part of his/her therapeutic team. The present policy is to require IRB review of studies involving chart review or data collection and analysis.

If identifiers were to be recorded, the research would require IRB review to ensure that, among other things, procedures for protecting privacy and confidentiality are adequate. Furthermore, the investigator studying cancer risk factors may propose to go on to contact the participants (if still living) or family members (if the participant is deceased) to gather additional information, which may or may not be participant to the regulations.

3.11 Protocols Lacking Plans for Human Involvement
Certain types of activities are planned and written with the knowledge that human subjects may be involved, but without definite plans for such involvement. Examples of such proposed activities are:
• Training programs in which individual training projects remain to be selected or designed.
• Research, pilot or developmental studies in which the involvement of human subjects depends on such things as the completion of survey instruments or prior animal studies.
• Institutional Support Programs where the selection of the project is the responsibility of the institution or program administrator. When supporting agencies requires review and certification for such programs, protocols are to be submitted to IRB with as much
information as is available. The protocols must include assurances that additional information will be submitted when developed and, in the case of training grants, that all trainees will submit individual protocols if human subjects are to be used.

The IRB can give "General Expedited Approval" to programs like those mentioned above with the understanding that the specific research protocol will be submitted to them once it has been developed. "General Expedited Approval" is not appropriate for individual projects or to meet grant deadlines.

3.12 Multi-center Research and Research under Memorandum of Understanding

“Multicenter Research Projects” is a clinical trial conducted at more than one institute, or having research sites in several institutes/divisions and they are under the administration of the IRB committee of those institutes/divisions. When Faculty of Medicine Siriraj Hospital is serving as the coordinating institution, the researcher must describe the communicating plans relevant to the protection of participants among the participating sites and institutions as part of the protocol application, including the adverse outcomes, unanticipated problems, protocol modifications, and interim results.

When completing the protocol application, researcher must indicate if the Faculty is serving as the coordinating institution. The researchers must list all other sites involved with the proposed research, and the contact information of each participating sites (e.g. person, phone number and email address). The researchers must indicate if each site has an IRB and if that IRB has reviewed and approved the protocol.

When Faculty of Medicine Siriraj Hospital is the coordinating institution receiving data or tissue samples from other sites the researcher must submit the following documentation for each of the other participating sites along with the protocol application to the IRB before receiving any data or tissue samples from other site:

- Material transfer agreement between our institution and other site;
- Letter of IRB approval from each participating site that includes the review type; and
- When appropriate, the consent forms from all participating sites. The Siriraj IRB will keep this information on file for all internal and external reviews.

By submitting the protocol application form, the researcher documents his/her acceptance of the responsibility of ensuring that all participating sites have obtained IRB approval prior to initiation of the research at that site. The allowance to start the study in other sites after approval from IRB depends on the individual site’s internal policy.

The Faculty of Medicine Siriraj Hospital, with the approval of the Institutional Official, may enter into joint review arrangements, rely upon the review of another qualified IRB, or make similar arrangements to reduce the working repetition and approval time for the multicenter research projects under the Memorandum of Understanding (MOU).

- As for the multicenter research study which is being conducted among faculties inside Mahidol University, the privilege may be transferred to the IRB of the main faculty where the activities initiated (Lead IRB) to review, approve and oversight over research conducted in other faculties. The operating guidelines are as follows:
1. Application of the IRB multi-center research review shall be stamped to acknowledge
   the Mahidol University MOU Project on the first page of the proposal;
2. The IRB Secretary distributes the project for expedited review (unless the Faculty
   IRB is the Lead, the project will be reviewed based on regular policy);
3. The IRB Reviewer determines the project within the agreement time frame; and
4. The IRB send the comments and determination to the Lead IRB, as stated in the
   agreement. Final approval must be made by both the Lead and the Faculty IRB.
5. Issuing the certificate of approval and monitoring the research project until the
   close-out, will be under the agreement condition and in compliance with the
   applicable regulations and ethical standards.
   • MOU with other institutions under the Central Research Ethics Committee (CREC)
     provided by National Research Council (Thailand). For the review of multicenter
     research projects applied to CREC, the IRB will provide the determination based on
     the expedited facilitated review upon receipt of notification from CREC. The operating

4. RESPONSIBILITY
The IRB Chair (or designee) is responsible for ensuring the IRB members are well versed in
new and evolving regulations and guidelines pertaining to these categories, for selecting
primary reviewers with appropriate expertise to conduct the reviews of such research, and for
securing appropriate consulting expertise as needed for selected reviews.

The IRB Reviewer is responsible for conducting appropriate review of research planned for
these categories in consultation with any appropriate experts and resources.

The IRB Staff is responsible for maintaining up-to-date review tools for review of research
pertaining to these categories based on new and evolving applicable regulations and guidelines.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 50.23, 50.24, 50.25, 56.104, 812.66;
45 CFR 46.101, 46.103, 46.118, 46.119
Operational guidance: Information needed to support clinical trials of herbal products.

6. APPLICABLE DOCUMENTS
None
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Chair and Administrative Committee | • Maintains and updates the policy to conform to applicable regulations and guidelines.  
    |                                        | • Provide investigators with appropriate guidelines regarding research in particular categories.  
    |                                        | • Assure adequate documentation and information is present for adequate IRB Member review.  
    |                                        | • Ensure appropriate determinations are discussed during convened meetings and documented.                                                |
| 2   | IRB Member                            | • Review study and evaluate if sufficient safeguards are in place for research in particular categories.  
    |                                        | • Present recommendations at convened meeting.                                                                                          |
| 3   | IRB Secretary                         | • Determine review categories, primary reviewers,  
    |                                        | • Identify appropriate expert consultant(s) who may assist the IRB in its deliberations.  
    |                                        | • Prepare the notification correspondence to PI, as appropriate.                                                                      |
1. PURPOSE
This policy describes the categories of IRB determination for initial review, the process for notifying the IRB determinations and after review actions.

2. POLICY
As a result of its initial review, the IRB may determine to approve or disapprove the proposed research activity, or to specify minor or major revisions required to secure IRB approval. Notification will be in written document, including reasons for the determination and any action required from the Principal Investigator (PI) within the specified time periods.

3. SPECIFIC POLICIES
3.1 IRB Determination for Initial Review
The IRB may make one of the following determination categories after its initial review:

- **Category 1 Approval:** The protocol and accompanying documents are approved as submitted without changes. The IRB may request for minor protocol corrections that are only administrative in nature (e.g. correction of typographical and spelling errors) that do not need additional IRB review.

- **Category 2 Minor Revisions Required Before Approval:** The IRB determines that a study may be approved with stipulated minor modifications or clarifications, of which do not involve potential for increased risk or decreased benefit to the human subjects, or changes in the study design. These stipulations will be clearly delineated so that subsequent review requires simple verification of concurrence.

- **Category 3 Major Revisions Required Before Approval:** The IRB requests substantive changes including modifications in the protocol and/or consent document(s), clarifications, or additional information that would affect the IRB determination with regards to the approval criteria (for scientific and/or ethical reasons). These types of responses from the investigator must be returned for re-review at the next convened IRB meeting.

- **Category 4 Disapproval:** The IRB determines that the research project does not meet the regulatory criteria for approval (for scientific and/or ethical reasons) and cannot provide modifications that may allow the research protocol to be approved.

Except when the expedited review procedure is used, the determination will be made by a consensus from the members physically present at the convened IRB meeting. With the
expedited review, a determination for requiring major revision before approval or disapproving a research activity may only be given by the IRB at a convened meeting.

3.2 Communication of IRB Determination and Actions

The IRB will report of its findings and determination to the PI in written document, including the actions required as follows:

- **Category 1**  If the IRB decides that the research study can be approved without changes, the research may proceed once the PI receives a written documentation of IRB approval.

  The Certificate of Approval (COA), co-signed by the IRB chair and the Faculty Dean, will be issued to the PI 1-2 weeks hereafter as well as the operating guidelines 11 items for the approved research project (a pink sheet) and the IRB committee member list (per request). The COA principally consists information of the running protocol number/year A.D. (such as 001/2016), Title of the Protocol (in English and Thai), PI’s Name, Research Site, the IRB Approved Items, the Approval date, and the Expiry Date.

  The IRB approved items (with IRB-stamped approval on each sheet) can only be used in the study which include but are not limited to the participant information sheet, any recruiting materials, all consent/assent documents, the case record form, and questionnaire.

  Unless otherwise specified, the approval period for research is one year from the date at which approval was granted.

- **Category 2**  If the IRB decides to approve a research study subject to minor revisions, the written notification will include the specific suggestions or comments in order to obtain full approval to conduct the research.

  The PI shall revise the research proposal and informed consent document(s) or resolve such issues in accordance with the specific comments stipulated by the IRB, and resubmit for final IRB approval within 60 days after the notification.

  The IRB Secretary (or designee) will expedited review the modification/clarification issues on behalf of the IRB. The reviewer may ask for additional revisions, or send the response back for consideration in the convened meeting. Upon satisfactory review, approval will be issued as of the date that the requested information or materials are approved. The period of approval is usually one year from the approval date.

- **Category 3**  If a convened IRB determines that major modifications or substantial clarifications required before a determination can be made, the written notification to the PI will include a statement of the primary reason(s) for the decision, a listing of additional problems and/or deficiencies to be addressed, and instructions relating to a revision of the research proposal.

  Responsive documents, including any changed materials from the PI should be returned within 60 days after the notification. The IRB assign the Assistant Secretary (or designee) to summarize the revisions and present at the convened meeting, by the same IRB panel. At the IRB’s discretion, the investigator(s) may appear in person to address additional questions or concerns at the meeting.
• **Category 4** If a convened IRB determines to disapprove a research activity, the written notification will include the decision to disapprove the research application, the justification for reaching the decision, and information for the PI to respond.

The PI is permitted a chance to respond to the IRB action and concerns either in person or in writing within 60 days after the notification. (see 3.3 Appeal of IRB determination)

The written IRB notification of its determination must be signed by the IRB Chair, and sent to the PI within 1 to 2 weeks after the decision is made. For actions that have been specified in the document, the IRB Staff will send a reminder notice to the PI, 7 days in advance of the deadline. Failure to respond within 90 days after the notification date may result in withdrawal of the project by the IRB. If the investigator wishes to conduct a study that has been withdrawn, he/she must resubmit an application addressing prior comments, and return to the IRB committee who conducted the initial review.

### 3.3 Appeal of IRB Determination

3.3.1 By the PI: If the investigators disagree with a decision of the IRB, the PI may submit a written appeal to the IRB Chair within 60 days of being notified of the decision. The appeal should include information supporting any disagreement made in the appeal. An appeal of a disapproved research project must be reviewed at the convened meeting, by the same IRB panel that disapproved. The investigator may request to address the board at the meeting to provide clarification or additional information to the IRB.

3.3.2 By other Faculty Officials: In certain cases, a decision to conduct a research study may be concerned (procedural problems, under-funded, etc.), despite IRB approval. Also, the Faculty Officials may request for re-evaluation of a research project that has been disapproved with cause of concern. The appeal must be reviewed at the convened meeting, by the same IRB panel that made a decision.

3.3.3 The Faculty Dean may override the IRB’s decision to approve research; however, the decisions of the IRB to disapprove the research cannot be overruled.

### 4. RESPONSIBILITY

IRB Chair is responsible for ensuring the appropriateness of all IRB determination, notification and after review actions as well as any appeal processes based on institutional and regulatory requirements.

IRB Secretary and Assistant Secretary are responsible for preparing the written notification, reviewing the responsive materials, and correspondence to the PI.

IRB staffs are responsible for coordinating administrative actions after primary review and communication with the investigators.
5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.109, 46.118;
21 CFR 56.109, 56.111, 56.113

6. APPLICABLE DOCUMENTS
Follow-up form for the project that lost contact after reviewed (Internal Document No.27)
Certificate of Approval (Outgoing Document No.1)
Operating guidelines for the approved research project

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>• Document the comment, discussion and determination from primary reviewers, and the convened IRB meeting.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Secretary</td>
<td>• Prepare the written notification to the PI (with IRB Staff).&lt;br&gt;• Corresponding with the PI for research protocol revision.</td>
</tr>
<tr>
<td>3</td>
<td>IRB Chair</td>
<td>• Ensure that all communications follow established procedures and format.&lt;br&gt;• Review and sign the IRB determination document with the cover letter being delivered to the PI.&lt;br&gt;• Ensure that the determinations and requirements for actions of the IRB are communicated at the earliest.</td>
</tr>
</tbody>
</table>
1. PURPOSE
This policy describes the continuing review of approved research and the procedure for renewal at the expiration of the IRB approval period.

2. POLICY
“Continuing Review” refers to the regularly scheduled complete reappraisals of a project. The goals of this review are to ensure that the risk/benefit ratio is still acceptable, that the measures in place to safeguard subjects are adequate, that the approved protocol is followed, and that the project reflects any changes that have been made in the regulations for human subjects research since the last approval.

The IRB conducts a continuing review of ongoing research at intervals that are appropriate to the level of risk for each research protocol, but not less than once per year including:

- Research which remains active for long term follow-up of participants even when research is permanently closed to enrollment of new participants and all participants had completed all research-related interventions.
- The remaining research activities include collection or analysis of private identifiable data.

3. SPECIFIC POLICIES
3.1 Interval for Review for Renewal Purpose
The IRBs must conduct continuing review of protocols for purposes of renewal of the IRB approval period at intervals appropriate to the degree of risk, which is determined at the time of initial review, but not less than once per year. However, the review interval can be changed as necessary to conform to the risk level, law and policy.

The IRB may approve a protocol for a shorter period if warranted by the risks presented to participants. For example, the IRB may stipulate IRB review occurs after a defined number of participants have been enrolled (e.g. review after the first three participants receive a Phase I first-in-human studies).

Investigators are required to submit an Annual Report/Close-out Report/Approval Extension Request Form at least 30 days and not sooner than 60 days before expiration date of IRB approval. There is no grace period extending the conduct of the research beyond the expiration date of IRB approval. If an investigator fails to provide continuing review
information to the IRB, or the IRB has not reviewed and approved a research study before the expiration date specified by the IRB, no research related activities may occur after the expiration date unless the Principal Investigator contacts the HRPU Office and the IRB Chair (or authorized designee) determines that it is in the best interest of individual participants to continue during the lapse in IRB approval.

3.2 Process for Conducting Continuing Review

Continuing review will take place at a convened IRB meeting, unless the research qualifies for review under an expedited review procedure. In order for research undergoing continuing review to be approved, it must receive the approval as a consensus at a convened meeting. Continuing reviews that meet the requirements for expedited review may be renewed by the IRB Chair or IRB Secretary using expedited procedure. Generally, if research did not qualify for expedited review at the time of initial review, it will not qualify for expedited review at the time of continuing review except in limited circumstances as follows:

- When the research is permanently closed to the enrollment of new subjects, all subjects have completed all research-related interventions, and the research remains active only for long-term follow-up of subjects, or
- When no subjects have been enrolled and no additional risks have been identified, or
- When the remaining research activities are limited to data analysis only, or
- For research not conducted under an investigational new drug application or investigational device exemption where the IRB has determined and documented at a full board meeting that the research involves no greater than minimal risk and no additional risks have been identified.

If the expedited reviewer feels that there has been a change to the risks to more than minimal as determined by the IRB, the study may be referred for review at a convened IRB meeting.

3.3 Criteria for Renewal/Continuation

Continuing review must be substantive and meaningful. When considering whether or not to renew a study, the IRB revisits the same criteria used to grant initial approval. Particular attention to the following aspects include but not limited to, the following:

- The ongoing level of risks and benefits;
- The need for special safeguards to protect subjects;
- The adequacy of ongoing protection of potentially vulnerable subjects;
- The adequacy of the informed consent process and document;

Additionally, there are:

- Appropriate investigator and institutional issues where research being conducted;
- Acceptable report and resolution of any research related issues (e.g. amendments, unanticipated problems, protocol deviations, complaints, personnel and financial resources);
• Protections to ensure the privacy of subjects and confidentiality of data;
• Any significant new information that would necessitate revision of the protocol and/or the informed consent document; and
• Appropriate research progress based on the total subject enrollment, subject withdrawal and a summary of the reasons for the withdrawals, if known.

3.4 Possible Outcomes of Review for Continuation
As an outcome of continuing review of active protocol, the IRB may approve the study continuation, request for any changes (clarification or additional documentation) conditional for approval, or disapprove. A consensus is needed to pass a motion. Any changes required to obtain continued renewal approval shall be provided to the Principal Investigator by the IRB Staff, and approved by expedited review.

If the continuing review is conducted via expedited procedure, a decision shall be presented to the convened IRB. Continuing review requests cannot be disapproved using an expedited review.

After continuation of the research has been granted, the approval letter and renewed Certificate of Approval (COA) will be provided to the Principal Investigator within two weeks. If the IRB disapproves the study continuation, a written notification will be sent along with reasons to the Principal Investigator within two weeks. Consequently, the Principal Investigator can provide more explanation and re-submit the new request. Without the extension of approval, the investigator will not be able to enroll new participants; in the same manner with temporary suspension. However, the investigator may continue the research until its completion by using the participants who have been enrolled earlier. The new participants can be enrolled only when continuation of the research has been approved.

3.5 Continuing Review: Approval Date and Expiration Date
If the IRB grants a one year approval of the continuation, the date of continuation will be determined by the date the protocol was approved by the convened IRB or the date that all minor or prescriptive changes or conditions were determined to be met. If the study is reviewed by expedited review process, the approval date will be determined by the date the study is approved.

The expiration date for all renewal approvals is calculated by adding the approval period to the previous expiration date (e.g., the current expiration date is 8/20/2016 – the project is approved on 8/16/2016 for a one year period -- the new approval period will be from 8/21/2016 to 8/20/2017).

However, when approval does not take place prior to expiration, the expiration date is calculated by adding the approval period to the new approval date (e.g., the current expiration date is 8/20/2016 – the project is approved on 8/26/2016 for a one year period – the new approval period will be from 8/26/2016 to 8/20/2017).
4. RESPONSIBILITY
IRB Chair is responsible for establishing and implementing processes for making research renewal decisions.
IRB Secretary is responsible for the expedited review of continuations.
IRB Members are responsible for the review of continuations in the convened meeting.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.108, 56.111;
45 CFR 46.108, 46.109, 46.111

6. APPLICABLE DOCUMENTS
Annual Report/Close-out Report/Approval Extension Request Form (Document No.8.1)
Progress Report Form (Document No.8.2)
The Acknowledgement of Progress Report (Outgoing Document No.10)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>• Generate a monthly summary of the studies with IRB approvals due to expire in 60 and 30 days.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Send 60-day and 30-day advance written notifications (and Annual Report/Close-out Report/Approval Extension Request Form), signed by IRB Chair, to the Principal Investigator.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Notify the investigator as to the outcome of the review.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Send the renewed Certificate of Approval, co-signed by the IRB Chair and Faculty Dean, to the Principal Investigator, after approval.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Secretary</td>
<td>• Review the report and associated materials to determine the status of continuation of the study:</td>
</tr>
<tr>
<td></td>
<td>(or designee)</td>
<td>- Full Board studies will be put on next meeting agenda,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Expedited review of the appropriate protocol according to the criteria.</td>
</tr>
<tr>
<td>3</td>
<td>IRB Member</td>
<td>• Determine continuing review at a convened IRB meeting.</td>
</tr>
<tr>
<td>4</td>
<td>IRB Chair, Vice Chair</td>
<td>• Allow an appropriate evaluation for the continuing review being conducted according to the policy.</td>
</tr>
</tbody>
</table>
1. PURPOSE
This policy describes how amendments to previously approved protocol are managed and reviewed by the IRB.

2. POLICY
Changes in approved research protocol, during the period for which approval has already been given, may not be initiated without prior IRB review and approval, except where necessary to eliminate apparent immediate hazards to human subjects. In such cases, the investigator must inform the IRB of the implemented change within 5 business days.

3. SPECIFIC POLICIES
3.1 Information Required for Protocol Amendments
The Principal Investigator (PI) is responsible for submitting the requests for changes to the IRB on the Protocol Amendment Form. Each Protocol Amendment/Change includes:
- Description of the change and reason;
- Whether or not changes affect the consent document;
- The impact the change will have on the study and/or the participants;
- All appropriate documents;
- Revised informed consent (if applicable);
- Revised Key Personnel Listing (if applicable);
- Sponsor correspondence concerning the amendment (if applicable);
- Highlighted amended protocol (if appropriate).

3.2 Review of the Protocol Amendments and Action Taken by the IRB
Upon receipt of the protocol amendments, the IRB Secretary with the assistance of the IRB Staff will determine if the revision meets the criteria for minimal or more than minimal risks. After initial review, one of the following determinations will be made:

3.2.1 The protocol change is considered minor and shall be reviewed by the IRB Secretary or the Assigned Amendment Reviewer according to the Expedited Review procedures. Minor modification is defined as a change that entails no more than minimal risk, does not affect an assessment of the benefits and risks of the study, does not change the aims of the study design, and is not directly relevant to the determination required for prior approval criteria.

The Expedited Review procedure should take approximately less than one week and approval of a minor amendment will be issued on the meeting agenda for reporting purposes.
3.2.2 The protocol change is considered major and shall be reviewed by the Full Board in the next convened IRB meeting. Major modification is defined as a change that involves greater than minimal risk, likely increases the risk or discomfort or decrease the benefit, or affects the determination required for prior approval criteria.

The examples of minor changes and major changes include, but are not limited to:

**Minor Protocol Amendment**
- Administrative changes
- Minor consent form changes
- Minor changes to recruitment procedures, or recruitment materials or submission of new materials to be used in accordance with approved recruitment methods
- Minor changes to study documents such as surveys, questionnaires or brochures
- New study documents to be distributed to or seen by subjects that are similar in substance to those previously approved
- Changes in payment to subjects or the amount subjects are paid or compensated that are not significant enough to affect the risk/benefit ratio of the study
- Decrease in the number and volume of sample collections as long as they do not negatively alter the risk/benefit ratio of the study
- Editorial changes that clarify but do not alter the existing meaning of a document
- Addition of or changes in the investigators
- Addition of a new study site (in many but not all cases)
- Translations of materials already reviewed and approved by the IRB

**Major Protocol Amendment**
- Changes that adversely affect the risk/benefit ratio of the study or specifically increase the risk to subjects
- Changes in inclusion/exclusion criteria that impact the risk/benefit ratio of the study
- Significant changes in study design, such as the addition of a new subject population or the elimination of a study arm
- New risk information that is substantial or adversely affects the risk/benefit ratio of the study
- Significant changes to the study documents to be distributed to or seen by subjects
- New study documents to be distributed to or seen by subjects that include information or questions that are substantively different from materials already approved by the IRB.
- New or revised financial conflict of interest management plans (e.g., change in PI or change to study design).

The IRB Secretary or the Assigned Amendment Reviewer will review the proposed changes and make initial suggestion of which will be presented to the IRB at the meeting. The IRB will review and determine whether to approve the amendment, request for more information pending final decision or other actions as deemed appropriate. In the case of a change implemented to eliminate an immediate hazard to participants, the IRB will review the change to determine that is consistent with the ensuring the participant’s continued welfare. The discussion and determination will be documented in the meeting minutes.
3.3 Notification
The investigator will be notified of the IRB determination by a written report. If the protocol amendment might affect the willingness of a participant to continue in the study, or if it changes the risk/benefit for the participants already enrolled, the investigator will be directed to notify the participants.

4. RESPONSIBILITY
IRB Chair is responsible for establishing the processes for conducting research amendment review.
IRB Staff is responsible for pre-review amendment requests to assist the IRB Secretary to determine if the investigator submitted all necessary information.
IRB Secretary is responsible for the first review of the amendment and either triaging for expedited review or reviewing at the convened meeting.
IRB Assigned Amendment Reviewer is responsible for expedited review and decision about the approval of minor protocol changes, or summarizes related information regarding greater than minimal risk amendments for discussion at the meeting.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.108, 56.109, 56.113, 812.64;
45 CFR 46.103, 46.109, 46.115

6. APPLICABLE DOCUMENTS
Protocol Amendment Form (Document No.6)
Protocol Amendment Review (Internal Document No.13)
The Approval for Protocol Amendment (Outgoing Document No.4)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>• Prepares all information received from Principal Investigator and prepares reviewer packet.</td>
</tr>
</tbody>
</table>
| 2   | IRB Secretary                         | • Determine whether amendment can be reviewed via expedited review and which are to be placed on the agenda for the next meeting for report or full board review  
  |                                         | • Lead the discussion at a convened IRB meeting.                         |
|     |                                       | • Completes processing of protocol amendments.                          |
| 3   | IRB Assigned Amendment Reviewers      | • Review amendments or changes in the research proposal and make summary for expedited review or discussion at a convened IRB meeting. |
| 4   | IRB Chair, Vice Chair                 | • Allow an appropriate evaluation for the amendment being conducted according to the guidance. |
1. PURPOSE

The purpose of this policy is to establish the process to determine serious adverse events (SAE) and unanticipated problems involving risks to participants or others, and the reporting requirement.

2. POLICY

The Principal Investigator (PI) is required to promptly report to the IRB if there are serious adverse events or unanticipated problems during the course of the research that involve risks to participants or others. The Principal Investigator and IRB must determine whether the reportable event requires changes in the protocol or consent and whether other actions are needed to protect the safety, welfare, or rights of study participants or others.

(For the Term’s Definition see Section: Glossary of Abbreviations and Terms Used in the SOP)

3. SPECIFIC POLICIES

3.1 Deciding if an event meets the criteria for Unanticipated Problem

• Is it unexpected?

An event is unexpected if it occurs in one or more subjects or others participating in a research protocol, and the event’s nature, severity or frequency is not consistent with either:
- The known or foreseeable risk of adverse events associated with the procedures involved in the research that are described in (a) the protocol-related documents, such as the SIRB-approved research protocol, any applicable investigator brochure, and the current IRB-approved informed consent document, and (b) other relevant sources of information, such as product labeling and package inserts; or
- The expected natural progression of any underlying disease, disorder, or condition of the subject(s) experiencing the adverse event and the subject’s predisposing risk factor profile for the adverse event.

• Is it related or possibly related to a subject’s participation in the research?

Events that may be caused by one or more of the following:
- The procedures involved in the research;
- An underlying disease, disorder, or condition of the subject;
- Other circumstances unrelated to the research or any underlying disease, disorder, or condition of the subject.
In general, events that are determined to be at least partially caused by the procedures in a study would be considered related to participation in the research, whereas events determined to be solely caused by the subject’s condition or state of illness or other circumstances clearly outside of the study would be considered unrelated to participation in the research.

• **Does it suggest that the research places subjects or others at greater risk of harm than was previously known or recognized?**

Adverse events that are unexpected, related or possibly related to participation in research, and serious are the most important subset of adverse events representing unanticipated problems, because such events always suggest that the research places subjects or others at a greater risk of physical or psychological harm than was previously known or recognized. These events warrant consideration of substantive changes in the research protocol or informed consent process/document or other corrective actions in order to protect the safety, welfare, or rights of subjects.

- If the answers are that the event is a) unexpected, b) related or possibly related and c) serious, it should be reported to the IRB.

- Internal adverse events which are unexpected, fatal or life-threatening must be reported within 24 hours from when the researcher learns of the event. The formal report must be submitted within 7 calendar days.

Other adverse events that are unexpected and related or possibly related to participation in the research, but not serious, would also be unanticipated problems if they suggest that the research places subjects or others at a greater risk of physical or psychological harm than was previously known or recognized. These events should also be reported, for consideration of changes or corrective actions.

Determining whether a particular incident, experience, or outcome is unexpected and whether it is related or possibly related to participation in the research may be difficult. When making this assessment, the investigator should take into consideration whether substantive changes in the research protocol or informed consent document, or other corrective actions may be warranted in order to protect the safety, welfare, or rights of subjects or others. Generally, if the problem is considered an unanticipated problem involving risks to subjects, substantive changes to the protocol and/or consent form may be warranted.
### 3.2 Required Reporting of SAE and Unanticipated Problems

<table>
<thead>
<tr>
<th>Events/Problems</th>
<th>Time Frame *</th>
<th>Report Forms</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal SAE: Fatal/Life threatening</td>
<td>Immediately, no later than 24 hrs.</td>
<td>The Same form report to Sponsor (if any)</td>
<td>PI to Sponsor, PI to IRB</td>
</tr>
<tr>
<td>Internal SAE: Non-Fatal/ Non-Life threatening</td>
<td>No later than 7 calendar days</td>
<td>Documents No. 5.1 or CIOMS form</td>
<td>PI to Sponsor, PI to IRB</td>
</tr>
<tr>
<td>Internal SUSARS: Fatal/Life threatening</td>
<td>No later than 7 calendar days</td>
<td>Documents No. 5.1 or CIOMS form</td>
<td>Sponsor to IRB, Relevant follow-up information, within an additional 8 calendar days (if initial report is incomplete), Significant new information as a follow-up report, within 15 calendar days,</td>
</tr>
<tr>
<td>Internal SUSARS: Non-Fatal/ Non-Life threatening</td>
<td>No later than 15 calendar days</td>
<td>Documents No. 5.1 or CIOMS form</td>
<td>Sponsor to IRB, Further relevant follow-up information, as soon as possible</td>
</tr>
<tr>
<td>Any significant changes on risk to subjects, or IDMC Recommendation</td>
<td>No later than 15 calendar days</td>
<td>Documents No. 5.2 or Sponsor form</td>
<td>Sponsor to IRB</td>
</tr>
<tr>
<td>External SUSARS</td>
<td>Periodically reported at least every 6 months</td>
<td>Sponsor form</td>
<td>Sponsor to IRB, With a brief report highlighting the significant points, in electronic document file and 2 hard copies, at least 7 calendar days before the meeting</td>
</tr>
<tr>
<td>Other adverse reactions that may increase risks to subjects</td>
<td>No later than 15 calendar days</td>
<td>Sponsor form</td>
<td>Sponsor to IRB</td>
</tr>
</tbody>
</table>

* After the event had been made known to the PI or sponsor

Abbreviation: IDMC: independent data monitoring committee, SAE: Serious Adverse Event, SUSAR: Suspected Unexpected Serious Adverse Reaction

Other examples of unanticipated problems that investigator should report to the IRB, even though they are not adverse events, include:

- Publication in the literature, safety monitoring report, interim result, or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- Breach in confidentiality resulting from a disclosure of confidential information or from lost or stolen confidential information, that may involve risk to that individual or others;
- Laboratory or medication errors that may involve potential risk to that individual or others;
- Complaint of a participant or family member that indicates an unanticipated risk;
- Change in FDA labeling because of adverse consequences or withdrawal from marketing of a drug, device, or biologic used in a research protocol;
- Disqualification or suspension of investigators;
- Accidental or unintentional change to the IRB-approved protocol that involves risks or has the potential to recur;
- Deviation from the protocol taken without prior IRB review to eliminate apparent immediate hazard to a research participant
- Any deviation from the IRB-approved protocol that increases the risk or affects the participant's rights, safety, or welfare.

Note: "Harm" does not need to occur for an event to be an unanticipated problem; an unanticipated problem places subjects or others at increased risk of harm.

3.3 Review of the Event or Problem and Action Taken by the IRB

The IRB Secretary, or Assigned Reviewer, will review the event or problem within 5 business days of receiving a report to determine whether the incident was serious, unanticipated, and related to the research. If appropriate, the reviewer will also review the protocol, consent form, and any other relevant documents pertaining to the event or problem. After initial review, one of the following determinations will be made:

- The event is NOT an unanticipated problem involving risk to participants or others (because the event is either anticipated or does not indicate that the participants are at increased risk of harm). The IRB will take no action, document the review, and put the event on the meeting agenda for reporting purposes, or
- The event or problem is considered an unanticipated problem involving risks to participants or others because the problem (1) is unanticipated and (2) indicated that the participants are at increased risk of harm and needs to be discussed with the IRB.
- The event or problem is considered an adverse event and needs to be discussed with the IRB.

The IRB Secretary, in consultation with the IRB Chair, may determine that immediate action is needed to ensure the participants’ safety. The IRB Chair may temporarily suspend some or all of the research pending review of the event at the next convened IRB meeting. The IRB Secretary will present the event or problem to the IRB at the next convened meeting. Appropriate documentation will be made available in the meeting.
The IRB will review and determine whether the event represents an unanticipated problem involving risks to participants or others. If does, the IRB may consider the following actions:

- Modification of the research protocol.
- Modification of the information disclosed during the consent process.
- Additional information provided to past participants.
- Notification of current participants (required when such information may relate to participants’ willingness to continue to take part in the research).
- Requirement that current participants re-consent to participation.
- Modification of the continuing review schedule.
- Modification of the inclusion/exclusion criteria.
- Monitoring of the research.
- Implementation of additional procedures to monitor the participants.
- Monitoring of the consent.
- Suspension of the research.
- Termination of the research.
- Request for more information pending final decision.
- Refer to other organizational entities (e.g., legal counsel, institutional official), or
- Other actions as deemed appropriate.

The discussion and determination of the IRB will be documented in the meeting minutes.

3.4 Notification
The investigator will be notified of the IRB determination by a written report. If the event is determined not to be an unanticipated problem involving risks to participants or others, no action will be required.

If the IRB requires additional actions, the PI will be notified as soon as possible, but not later than ten (10) business days after the meeting. Response from the PI must be reached to the IRB office including appropriate actions within 90 days. To fail submitting the response, the IRB might consider further actions for suspension or termination of the protocol.

In addition, the event will be reported to the Deputy Dean of Research and responsible individuals, as necessary, within 30 days. Summary of the event report will be discussed in the Serious Adverse Event Committee meeting, thus to ensure that the investigation has appropriately established the facts, addressed all issues and the recommendations and actions are robust. A means for sharing lessons from the event will be conducted.
4. RESPONSIBILITY
IRB Secretary or Assigned Reviewer is responsible for initial review of unanticipated
problems reports involving risks to participants and others.
IRB Chair and Secretary will make the initial determination and present the event to the full
IRB at a convened meeting.
IRB Members are responsible for determining the event and actions to be taken.
IRB Staff is responsible for sending out letters to PI, appropriate individuals and agencies.

5. APPLICABLE REGULATIONS AND GUIDELINES
45 CFR 46.103;
21 CFR 56.108, 312.32, 812.3(s);
Achieving Guidance in Clinical Trial Safety Information among Stakeholder (FERCIT, 2011)

6. APPLICABLE DOCUMENTS
Adverse Event Report Form     (Document No.5.1 and 5.2)
Adverse Event Report Checklist   (Internal Document No.12)
The Acknowledgement of Adverse Event Report  (Outgoing Document No.3)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<th>No.</th>
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<th>Activity</th>
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| 1   | IRB Chair      | • Make initial determination pending review of the event at the next convened IRB meeting.  
|     |                | • Communicate with the PI and appropriate individuals for actions being taken after the event. |
| 2   | IRB Secretary, or Assigned Reviewer | • Reviews all reports of adverse events and unanticipated problems involving risks to participants or others form, and triages as appropriate.  
|     |                | • Determines if the event is (1) serious, (2) unanticipated and (3) related within 5 days or receipt.  
|     |                | • If applicable, presents the facts to the IRB member at a convened IRB meeting. |
| 3   | IRB Members    | • Review the facts and make determinations, establish an action plan and timeline for the investigator. |
| 4   | IRB Staff      | • Check the correctness and completeness of Safety Report, List and send the documents to the IRB Secretary/Assigned Reviewer.  
|     |                | • Arrange the documents for event report at the meeting.  
|     |                | • Notifies the PI within 10 business days of IRB determination, including appropriate individuals and agencies. |
1. PURPOSE
The purpose of this policy is to establish procedures for handling the reports of non-compliance, allegation of noncompliance and serious and continuing noncompliance with IRB policies and procedures.

2. POLICY
All researchers are required to conduct research projects in accordance with the protocol as approved by the IRB, and in accordance with applicable laws and regulations and Faculty policies. Failure to do so constitutes noncompliance in the research endeavor, irrespective of the magnitude or intent. The PI is primarily responsible for reporting incidents of serious or continuing noncompliance to the IRB along with any proposed corrective action plan to ensure the safety of research participants and others and future compliance with the approved protocol and to prevent reoccurrence.

Reports of noncompliance to the IRB will be appropriately reviewed and resolved in a fair process and in accordance with all applicable regulatory requirements and Faculty policies.

(For the Term’s Definition see Section: Glossary of Abbreviations and Terms Used in the SOPs)

3. SPECIFIC POLICIES
3.1 Reporting and Receiving of Noncompliance and Allegation of Noncompliance
3.1.1 Reports of noncompliance in human research come from many sources including, researcher, a member of the research team, a study monitor, a sponsor, a research subject, responsible Faculty officer, IRB member, a Department Head, or a person not directly involved with the research.

The Principal Investigator (PI) is responsible for prompt self-reporting of any events or problems of serious or continuing noncompliance using the Report of Protocol Deviation Form (Document No.7). Protocol deviation, a common form of noncompliance typically occur when changes to research are initiated without IRB approval, must be reported to the IRB within 2 weeks of occurrence or identification. This report should include a memorandum to the IRB describing the deviation, any reasons for deviation, and any corrective actions priory taken by the Investigator.

Suspected deviations and concerns of noncompliance by any individual are encouraged to express in writing to the IRB. However, verbal concerns and/or anonymous complaint or a request for confidentiality will be received and documented in the Complaint/Recommendation Form (Document No.13) accordingly.

3.1.2 Upon receipt of noncompliance or alleged noncompliance report, the IRB staff will make a record and forward it to the IRB Chair or the IRB Secretary for reviewing process.
Communications to the PI may be initiated, including request for action, information, or instructions, for the appropriate initial determinations.

3.2 Reviewing Noncompliance and Protocol Violation

3.2.1 The alleged noncompliance report will be determined as described in Chapter 6.5 (Reporting and Handling of Complaints, Concerns and Comments).

3.2.2 For noncompliance report, the IRB Secretary, as assignee of the IRB Chair, will begin evaluation to determine if the report constitutes a minor deviation, noncompliance, or serious or continuing noncompliance. Minor deviations or noncompliance that is neither serious nor continuing will typically be reviewed by the IRB Assigned Reviewer. If the deviation may constitute serious or continuing noncompliance, then the IRB Chair may suspend the study pending IRB review.

3.2.3 Review of reported noncompliance will be determined at the convened IRB meeting.

- The noncompliance which is neither serious nor continuing and Protocol Deviation will be summarized and reported to the IRB at the time of continuing review.
- The noncompliance constitutes an unanticipated problem or adverse event will be followed as described in Chapter 6.3 (Handling and Monitoring of Safety Report).
- The serious and/or continuing noncompliance and Protocol Violation will be placed on the agenda of the next scheduled meeting for discussion and determination. A subcommittee may be assigned to investigate, prepare a written report and give recommendations to present at the convened IRB meeting.

3.2.4 The IRB will also consider which of the following actions should be taken. The action(s) may include but is (are) not limited to the following:

i. For minor deviation, a letter of acknowledgement will be sent to the PI, and no further action will be required;
ii. For noncompliance that is neither serious nor continuing, a written warning with instructions may be issued;
iii. For noncompliance that constitutes an unanticipated problem, the procedures as described in will be followed.
iv. The PI may be required to submit an amendment.
v. The PI may be required to submit a corrective action plan and time frame to address rights, safety, and welfare of research subjects including a data and safety monitoring plan if necessary.
vi. The PI may be required to submit more frequent continuing report to the IRB.
vii. The PI may be required to notify research subjects of the deviation and provide further relevant information to these individuals.
viii. The PI may be required to contact subjects and consent/re-consent them as needed.
x. All project team members may be required to complete further education.
x. The IRB may require monitoring by the PI’s Department Head and/or Director.
xi. The IRB may require that data be destroyed and not used in reporting research results.

xii. The IRB may consider temporary suspension or early termination of the protocol following the criteria and procedures as described in Chapter 6.7 (Suspension or Termination of IRB Approval).
3.3 Notification of IRB Determination

- IRB determinations and requirements will be documented in the IRB meeting minutes.
- IRB determinations and requirements will be provided to the PI in a letter.
- Deviation letters will typically only be directed to the PI.
- For serious continuing noncompliance, and Protocol Violation, written notices of IRB determination, the basis for the determination and requirements will be communicated to the PI, with copies to the PI’s Department Head, sponsors and the appropriate person within the Faculty within ten (10) business days of the IRB determination.
- The letter may include an IRB request for the investigator to respond in writing within 30 days. Any response required may be reviewed using expedited procedure or may be referred to the convened IRB meeting.

3.4 Single patient/subject exceptions

When an Investigator anticipates a one-time, intentional action that departs from an IRB approved protocol, he/she may request a one-time exception from the IRB. An example would include enrollment of a single subject who does not meet all eligibility criteria for a study, but the investigator and sponsor have agreed this subject should be enrolled. Under these circumstances the investigator should request this exception by submitting a Protocol Modification Form. The IRB should note that this modification applies to one subject only and not to the study as a whole.

3.5 Appeal process

In cases where there is disagreement between the IRB and the Investigator regarding the nature and extent of the determination and/or requested corrective action plan, and these disagreements cannot be resolved amicably in an informal manner, the Investigator may make an appeal. To do so, a written justification must be submitted to the IRB.

Any such appeal must be reviewed by the full IRB at a convened meeting. If the appeal is denied, none can override the IRB’s decision.

4. RESPONSIBILITY

IRB Staff is responsible for receiving and completing the reports of noncompliance/protocol deviation (and violation).

IRB Secretary and the IRB Assigned Reviewer are responsible for reviewing the reports of noncompliance/protocol deviation (and violation) and triage.

IRB Secretary is responsible for IRB meeting procedural conduct and documentation.

IRB Chair is responsible for making temporary suspension of the study pending IRB review, and ensuring that all reviewing and resolving processes follow established procedures and format.

5. APPLICABLE REGULATIONS AND GUIDELINES

21 CFR 56.108(b)(2), 56.113;

45 CFR 46.113;

WHO Operational Guidelines for Ethical Review Committee that Review Biomedical Research (Geneva 2000);

International Conference on Harmonization, Guidance on Good Clinical Practice (ICH GCP) (1996)
6. APPLICABLE DOCUMENTS

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<tbody>
<tr>
<td>Report of Protocol Deviation Form</td>
<td>1 IRB Secretary and IRB Assigned Reviewer</td>
</tr>
<tr>
<td>A Complaint/Recommendation Form</td>
<td>2 IRB Chair</td>
</tr>
<tr>
<td>Additional Document Review Form</td>
<td>3 IRB Members</td>
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<tr>
<td>The Acknowledgement of Deviation Report</td>
<td>4 IRB Staff</td>
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7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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| 1   | IRB Secretary and IRB Assigned Reviewer | - Reviews the Report of Protocol Deviation Form, and triages as appropriate (minor noncompliance & protocol deviation, noncompliance with unanticipated problems, serious/continuing noncompliance & protocol violation)
|     |                             | - Summarize findings on appropriate document review                      |
|     |                             | - Presents the facts and findings to the IRB upon completion of the investigation. |
|     |                             | - Contacts the researcher for more available information                 |
|     |                             | - Conduct an initial investigation, as a committee as necessary          |
| 2   | IRB Chair                   | - Conduct an initial review for serious/continuing noncompliance, protocol violation with assignees. |
|     |                             | - Immediate suspension or termination as necessary.                      |
|     |                             | - Present the fact of the case to the IRB at a convened IRB meeting.     |
| 3   | IRB Members                 | - Review the information at a convened IRB meeting, make determination, establish a corrective action plan and timeline. |
| 4   | IRB Staff                   | - Document the Report of Protocol Deviation Form.                        |
|     |                             | - Inform the IRB Secretary and/or IRB Chair.                             |
|     |                             | - Document an IRB determination in the meeting minutes.                  |
|     |                             | - Notify the researcher and the appropriate individuals as appropriate.  |
|     |                             | - Keep the document in the protocol file.                               |
1. PURPOSE
The purpose of this policy is to describe the process for reporting and reviewing complaints, concerns or comments from researchers, research staff, participants, and any other person with concerns to the IRB.

2. POLICY
2.1 All complaints or concerns regarding the conduct of human research at the Faculty will be handled and investigated appropriately. Comments will be evaluated and implemented as appropriate.

2.2 Complainants may include research participants (past, present, or potential), participant family members, researchers or other research staff, or any person (inside or outside Faculty) with concerns.

2.3 If the concern or complaint is an allegation of noncompliance, the matter will be handled and investigated as described in Chapter 6.4 (Reporting and Handling of Non-Compliance and Protocol Violation).

2.4 Reports of attempts to unduly influence IRB Chair, members and staff will be handled and investigated appropriately as described in Chapter 3.1 (Authority, Role and Responsibilities of Institutional Review Board).

3. SPECIFIC POLICIES
3.1 Information regarding noncompliance, subject complaints and other concerns
The Faculty is committed to the protection of research participants. Research participants are encouraged to express any concerns or complaints regarding the involvement in a research study. Consent documents must also include contact information for the IRB office, as well as from the website, thus available for the reporting of questions, complaints and/or concerns.

The IRB will investigate all complaints or concerns received regarding human subject research conducted under its jurisdiction. All complaints or concerns will be handled in a confidential manner. This includes any reporting of an alleged violation of investigator compliance.

3. SPECIFIC POLICIES
3.1 Reporting of Complaints or Concerns
The IRB Chair will promptly handle, or delegate member to handle, and, if necessary, investigate all complaints, concerns, including appeals, received by the IRB. All complaints,
written or verbal (including telephone complaints), and regardless of point of origin, are recorded on the Complaint/Recommendation Form (Document No.13) and forwarded to the IRB Chair.

**3.2 Reviewing Complaints or Concerns**

Upon receipt of the complaint, the IRB Chair will make a preliminary assessment whether the complaint warrants immediate Suspension of the Research project. The research or study procedures will be suspended pending a timely investigation if the alleged practices appear to:

1. Cause injury or any other unanticipated problems involving risks to subjects or others, or
2. Constitute serious or continuing noncompliance with the approved protocol, IRB determinations or regulations.

If a Suspension is warranted, the procedures as described in Chapter 6.7 (Suspension or Termination of IRB Approval) will be followed.

If the complaint meets the definition of Non-Compliance, it will be considered an Allegation of Non-Compliance according to Chapter 6.4 (Reporting and Handling of Non-Compliance and Protocol Violation).

If the complaint meets the definition of an Unanticipated Problem, it will be handled according to Chapter 6.3 (Handling and Monitoring of Safety Report).

Within 10 business days upon receipt of the complaint, the IRB Chair shall generate a letter to acknowledge that the complaint has been received and is being investigated, providing a follow-up contact name.

Investigations by the IRB focus on the protection of human research subjects. In cases that involve allegations of scientific misconduct, the IRB chair shall contact the Office of Deputy Dean of Research for further action. Inquiries or investigations into scientific misconduct do not preclude IRB review and actions.

The following are chronological sequence of procedures for resolving alleged noncompliance:

- When receive any non-compliant report or any potential problem of research protocol (complaint, concerns), IRB Staff complete the Complaint/Recommendation Form and presents to the IRB Chair (Vice Chair or Secretary in the absence of IRB Chair).
- The IRB Chair determines whether to pursue the matter with the researcher via e-mail, telephone call, paper memo, or in person. The purpose of such contact is fact-finding, i.e., to determine whether a problem exists and if so, its magnitude and significance relative to the rights and welfare of human subjects.
- When the initial inquiry does not result in resolution of the matter, a meeting with the researcher may be scheduled.
The IRB Chair will determine whether the noncompliance requires additional review at a convened IRB meeting. All serious or continuing noncompliance will be reviewed by the convened IRB.

For allegations that are referred to the convened IRB, all relevant members will receive the relevant information of noncompliance and any investigation to date.

The IRB has the authority to suspend or terminate IRB approval of protocols that are found to pose unanticipated or heightened risk or are out of compliance with Faculty policies and procedures, laws and/or regulations.

Actions taken by the IRB may include but are not limited to:

i. modification of the research protocol;
ii. modification of the information disclosed during the consent process;
iii. additional information provided to past participants;
iv. notification of current participants, which is required when such information might relate to participants’ willingness to continue to take part in the research;
v. requirement that current participants re-consent to participation;
vi. modification of the continuing review schedule;
vii. monitoring of the research;
viii. monitoring of the consent;
ix. obtaining more information pending a final decision;
x. compliance audits;
xii. requirements for additional training for investigators and/or research staff.

Determinations from the convened IRB meeting are documented in the minute, emphasizing whether it is serious and continuing.

In cases where the IRB determines that the allegations, complaints or concerns are unwarranted or resolved, relevant parties should be notified.

If the IRB takes action regarding the noncompliance, the IRB sends written notification of these actions to the researcher, Head of Department/Unit and relevant others. To the extent that any action includes suspension or termination in cases of externally funded programs, the Faculty official will communicate with the relevant sponsors.

If the allegations of noncompliance come from a subject complaint, the complaint should be acknowledged and the subject informed of the steps taken, as appropriate. Depending on the circumstances, this correspondence will come from the IRB, the researcher or other designated individual.
3.3 Communication
A variety of mechanisms including telephone call, face to face with HRPU officer, fax, e-mail, letter, website are available for contacting relevant individuals who bring complaints, concerns or, comments including suggestions and concerns about the processes involving the HRPU and IRB operations. An ongoing survey about the service provided by the IRB; researchers may comment or provide suggestions on any aspect of the IRB or HRPU, either anonymously or by requesting discussion with HRPU officer or the IRB Chair.

The IRB chair, or assignee, receives and evaluates the input from any of these sources, with review by other individuals as needed (e.g. legal counsel). If the input is submitted non-anonymously, the complainant receives a direct response. If the outcome of the review shows a need for ongoing monitoring or education, then the appropriate individuals are asked to contribute their expertise.

If the IRB action in relation to the suspension or termination involves the withdrawal or modification of participation of current participants from the research, the IRB will direct the researcher to contact the participants to:
- Make such notification with an explanation, after its review and approval by the IRB;
- Describe any monitoring and follow-up for safety reasons that will be conducted;
- Provide contact information for the researcher and the IRB where the participant may report any adverse events or unanticipated problems.

4. RESPONSIBILITY
IRB Chair or assignee is responsible for the investigation and review of reports of complaint or concerns, and determination of actions needed to be taken by the IRB and researcher.
IRB Members are responsible for reviews the information at a convened IRB meeting.
IRB Staff is responsible for complete the Complaint/Recommendation Form and presents concerns to the IRB Chair.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 50.25(a)(6), 50.25(a)(7);
45 CFR 46.116(a)(6), 46.116(a)(7)

6. APPLICABLE DOCUMENTS
A Complaint/Recommendation Form (Document No.13)
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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</table>
| 1   | IRB Chair (or Assignees) | • Reviews all Complaints, Concerns and Comments, and triages as appropriate.  
     |                       | • Generates a letter to acknowledge within 10 business days.                
     |                       | • Contacts the researcher for more information and conduct an initial investigation.  
     |                       | • Presents the facts and findings to the IRB upon completion of the investigation. |
| 2   | IRB Members           | • Review the information at a convened IRB meeting and make determination, establish an action plan and timeline. |
| 3   | IRB Staff             | • Complete the Complaint/Recommendation Form upon receipt of complaints, concerns and comments.  
     |                       | • Inform the IRB Chair immediately.                                        
     |                       | • Notify the researcher and the relevant individuals when appropriate.      
     |                       | • Document complaints/concerns and IRB determination in the meeting minutes. |
     |                       | • Keep the document in the protocol file.                                  |
1. PURPOSE
This policy describes closing a research protocol.

2. POLICY
The completion, premature completion, or termination of a research project is a change in activity that must be reported to the IRB. Although subjects will no longer be at risk under the study, a final report to the IRB allows it to close its files as well as provide information that may be used by the IRB in the evaluation and approval of related studies.

3. SPECIFIC POLICIES
3.1 Criteria for Closure
A research project may be closed when all of the following apply:

3.1.1 All collection of data involving interventions and interactions has been completed for all study participants. No further contact with participants is necessary and the only remaining activity is analysis of the de-identified data;
3.1.2 All collection of individually identifiable private information has been completed for all study participants. No further collection of data/information from or about the individuals will be obtained;
3.1.3 All publications, presentations, additions to web sites derived from individually identifiable private information have been completed;
3.1.4 If the study is funded, there are no active financial transactions to be completed and the sponsor agrees to or recommends closure.

The Protocol Principal Investigator cannot close a protocol as long as any use of individually identifiable private data is being collected as part of the protocol.

If after a protocol is closed, the Principal Investigator seeks to engage in an activity such that one of the above criteria would no longer be met, a new protocol must be submitted for IRB approval.

3.2 Close-Out Reports
The IRB Close-Out Report Form and related documents should be submitted to the IRB within 30 days after study completion. The related documents could include the approved protocol, any documentation received from the sponsor regarding closure of the study, and any new findings or publication citations that relate to the study. The Investigator still needs to submit the Close-Out Report even though the approval period is expired.
The IRB Staff and Secretary will review the Close-Out Report to determine whether closure of the protocol is proper. If closure is determined to be improper or if further documentation is required, the IRB will communicate to the Protocol Principal Investigator, thus to make project closure appropriate.

Notice of the Close-Out Report submission will be reported at the convened meeting. The report copies and any supplement information will be made available for the members.

If closure of the protocol is appropriate, the IRB will send an Acknowledgement of the Close-Out project to the Principal Investigator, and update the status of the protocol in the database.

4. RESPONSIBILITY
IRB Staff is responsible for ensuring that all study completion documentation is received, presented to the IRB, and filed appropriately.
IRB Chair and members are responsible for reviewing the study completion documentation and administratively closing the research project.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.108, 56.109;
45 CFR 46.103, 46.109;
WHO Operational Guidelines for Ethical Review Committee that Review Biomedical Research (Geneva 2000);

6. APPLICABLE DOCUMENTS
Annual Report/Close-out Report/Approval Extension Request Form (Document No.8.1)
The Acknowledgement of the Close-Out Project (Outgoing Document No.5)
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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| 1   | IRB Staff      | • Inform investigators to submit a Close-Out Report upon completion of the study.  
     |                | • Send out correspondence of action or an Acknowledgement of the Close-Out project to the Principal Investigator.  
     |                | • Update the database. |
| 2   | IRB Secretary  | • Reviews protocol closure report and obtains any outstanding information or documentation from the Principal Investigator to close the study.  
     |                | • Requests additional information, if needed.  
     |                | • Present the protocol closure report to the meeting to acknowledge and determine. |
| 3   | IRB Members    | • Review the information at a convened IRB meeting, and consensus on close out protocol. |
| 4   | IRB Chair      | • Signs an Acknowledgement of the Close-Out project, letter and IRB member list during consensus. |
1. PURPOSE
The purpose of this policy is to establish determination processes and IRB actions associated with the suspension or termination of previously approved research.

2. POLICY
The IRB has the authority to either suspend or terminate its approval of human subjects research when it determines that the research is not being conducted in accordance with the IRB requirements; may be in serious or continuing non-compliance with the applicable regulations or Faculty policies; or when it determines that the research is reasonably likely to cause serious harm to human subjects or others. Suspension and termination represent an action by the IRB to temporarily or permanently withdraw approval for some or all research procedures related to concerns regarding the safety, rights, or welfare of human participants, researchers, research Staff, or others.

(For the Term’s Definition see Section: Glossary of Abbreviations and Terms Used in the SOPs)

3. SPECIFIC POLICIES
3.1 Temporary Suspension
Upon receipt of the information, the IRB Chair and designees shall conduct an initial review. If there is reason to believe that Research is not being conducted in accordance with IRB requirements or if there is concern that research might be associated with unexpected serious harm to participants, but there is not yet enough evidence to arrive at a final conclusion, the convened IRB may temporarily suspend approval of any or all research activities in order to protect participants.

Temporary suspension or early termination of a research project may be given for the following reasons:

- Severe danger to the participants with unexpected cause which may reoccur to others and yet have no regulation for protection or suitable treatment.
- Intention not to follow the research protocol already approved by the IRB without giving any reasons, or making repetition or causing harmful to the participants;
- Intention not to follow the regulation on the researcher’s responsibility according to the SOP, or having behavior which indicates the lack of ethics in human research; or
- The auditor’s and site visit’s results indicate temporary suspension or early termination of the protocol.
3.2 Immediate Suspension
When circumstances require an immediate suspension of research to protect the rights or welfare of human subjects, the IRB Chair (or a designated Vice Chair in the IRB Chair’s absence) may immediately suspend IRB approval of the research pending an inquiry. Such suspensions of IRB approval will be reported to and evaluated by the convened IRB at the next meeting when the inquiry report is available.

The IRB Chair (or knowledgeable designee) will present the study to the convened IRB and may make recommendations. The IRB will decide on the next appropriate action to any of the following:
- Uphold the suspension
- Terminate the study
- Renewal of approval of the Research
- Request changes or additional information

3.3 Termination
If the report on research problem is very serious and the IRB has inspected that the information received is correct, the IRB may terminate the protocol in the following cases:
- The researcher intends to conduct the research deviating from the one presented to the IRB committee without any reasonable reasons or making the repetition;
- The research causes violently harmful to the participants such as death, life threatening event, inpatient hospitalization, longer hospitalization, permanent disabled or congenital disease; or
- The research is threatening to the safety and well-being of human such as the research relating to the secondary subject.

In general, termination of approval should be done by the convened IRB, but in some cases the IRB Chair may take this action and report to the next convened IRB meeting.

3.4 Actions Taken after Determination
When the IRB suspends or terminates the research, the determination must be reported within five (5) business days to the Principal Investigator, Department Chair, Deputy Dean of Research, the funding agencies, and other relevant organizations. The following information will be included:
- List of research activities for which IRB approval is suspended or terminated;
- Rationale for the IRB’s decision;
- Actions to be taken by the investigator and a time frame for implementation;
- Any additional actions to be taken by the investigator (e.g. informing current subjects of the suspension or termination); and
- A request to immediately notify the IRB if participants might be harmed by stopping research activities and a rationale for why they might be harmed.
For studies that are regulated by US FDA, suspensions or terminations of IRB approval will be reported to the US FDA, in the appropriate format to the appropriate contacts identified on the FDA website. The information will include the IND or IDE number, the full name of the research protocol, the name(s) of the investigators, and the reason(s) for the suspension or termination.

Following the report, the IRB should ensure that the Principal Investigator stops the related research activities and that all human subjects currently participating in the research is notified that IRB approval for the study has been suspended or terminated. In addition the IRB shall consider taking the following steps to protect the rights and welfare of current participants:

- Transfer of subjects to another investigator;
- Arrangement for clinical care outside the research;
- Continuation of some research activities under supervision of an independent monitor;
- Permitting follow-up of subjects for safety reasons;
- Notifying current participants of the suspension or termination if it is determined that such information might relate to their willingness to continue to take part in the research.

In case that the investigator would like to continue the project, she/he is required to send the corrective action plans to the IRB for consideration. Two sets of document must be submitted within 30 days from the issue date of the notification letter for suspension or termination.

### 3.5 Investigator/Sponsor-initiated hold

“Investigator/Sponsor-initiated hold” refers to a voluntary action by the investigator or sponsor of the study to place some or all research activities associated with that study on hold. Investigator/sponsor-initiated holds may be the result of interim data analysis, inadequate drug availability, response to a DSMB report/recommendation, pre-planned stopping point or other information.

An investigator/sponsor-initiated hold is not a suspension or termination of IRB approval; therefore a study placed on “hold” remains subject to continuing review by the IRB. It is considered a protocol modification and should be reported to the IRB, including the following information:

- Basis for the hold.
- Description of actions implemented prior to submission of this modification, in order to eliminate apparent immediate harm to subjects.
- Description of all research activities that will be halted. Research activities may include but are not limited to recruitment, screening/enrollment, research intervention/interaction, and follow-up.
- Consideration of whether current research participants should be notified of the hold.
- Proposal for conditions that must be satisfied in order to lift the hold.
The IRB will review the investigator/sponsor-initiated hold in the convened IRB meeting and may do any of the following:

- Approve the hold
- Request additional changes or information
- Suspend IRB approval

Research activities that are placed on hold by the investigator/sponsor may not resume until the investigator submits and the IRB approves a modification that is satisfactory to lift the hold. If, in addition to the hold, IRB approval is suspended, research activities may not resume until the processes outlined for suspension of IRB approval are followed.

4. RESPONSIBILITY

IRB Chair or convened IRB has the authority to immediately suspend or terminate research. IRB Chair is responsible for presenting the case to the IRB at a convened IRB meeting. IRB members are responsible for determining if the facts are sufficient to require suspension or termination of the research and for determining course of action and establishing a timeline for completion of that action. IRB staff is responsible for notifying the researcher and relevant others (Department Chair, Deputy Dean of Research and the funding agencies) of the suspension or termination.

5. APPLICABLE REGULATIONS AND GUIDELINES

45 CFR 46.103, 46.113;
21 CFR 56.108, 56.113;
WHO Operational Guidelines for Ethical Review Committee that Review Biomedical Research (Geneva 2000);
International Conference on Harmonization, Guidance on Good Clinical Practice (ICH GCP) (1996)

6. APPLICABLE DOCUMENTS

None
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1   | IRB Chair      | • Conduct and initial review with designees to acquire more information about the case.  
• Immediate suspension or termination as necessary.  
• Present the fact of the case to the IRB at a convened IRB meeting. |
| 2   | IRB Members    | • Review the facts and make determination, establish an action plan and timeline for the investigator. |
| 3   | IRB Staff      | • Notifies the researcher and relevant others within five (5) business days of IRB determination. |
1. PURPOSE
This policy establishes the process to schedule and notify individuals of convened meetings for reviewing research conducted at the Faculty of Medicine Siriraj Hospital.

2. POLICY
2.1 Whenever possible the IRB schedules meetings at least 30 days in advance.
2.2 Scheduled meetings are to occur at intervals appropriate for the quantity, complexity, and frequency of required actions, and to permit adequate oversight of the progress of the approved research.

3. SPECIFIC POLICIES
3.1 IRB Meeting Schedule
The IRB full board meetings are to be scheduled in December for the next whole year. Each of four (4) panels will meet monthly, or at some other frequency determined by the IRB Chair. The meeting schedule for each IRB is posted on the Faculty’s HRPU website.

3.2 IRB Meeting Notification
At least seven (7) days prior to the scheduled meeting, the IRB Members are to be notified via an invitation letter (signed by the IRB Chair), the last meeting minute for approval and the meeting agenda. All panel members scheduled to attend the meeting also receive the e-mail with a link to the share docs containing the schedule information, the meeting agenda and all required materials including the prior meeting minutes, applicable business items, continuing and initial research submission documents.

Cancellation of IRB meetings will be communicated to the IRB Members by a letter of notification, e-mail and/or personal contact. If there are agenda items listed for the meeting, the investigators will be notified of the rescheduling of their submissions for another meeting.

3.3 Observers
Attendance at a meeting is acceptable as a training and education opportunity. Permission for an observer or guests (e.g. students, trainees, new faculty members, members of other IRBs or faculty personal who are not affiliated with a particular research protocol) to attend must be sought in writing from the Chair, via the IRB Staff, at least one week prior to the meeting. Upon entering the meeting, all observers or guests must sign the Confidentiality Agreement concerning discussions and information presented at the IRB meeting. Also, any individual may be asked to leave if the IRB Chair determines a sufficient need.
4. RESPONSIBILITY
IRB Staff carries out these procedures.
IRB Chair is responsible for ensuring the IRB meetings have been conducted as scheduled, and for their appointment to all panel members.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.107;
45 CFR 46.107

6. APPLICABLE DOCUMENTS
Confidentiality Agreement Form (Internal Document No.21)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff</td>
<td>● Creates a schedule of meetings for each IRB panel.</td>
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<tr>
<td></td>
<td></td>
<td>● Posts the meeting schedule on the HRPU Web site.</td>
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<tr>
<td></td>
<td></td>
<td>● Reserves locations for each meeting.</td>
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<tr>
<td></td>
<td></td>
<td>● Notifies each IRB panel members using written document signed by IRB Chair and e-mail, 7 days prior to the meeting.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Panel Members</td>
<td>● Send the response to the meeting request.</td>
</tr>
<tr>
<td>3</td>
<td>IRB Chair</td>
<td>● Ensures that overall procedures for the meeting scheduling and notification deem appropriate according to the policies.</td>
</tr>
</tbody>
</table>
1. PURPOSE
This policy describes the procedure used to ensure efficient, effective, compliant convened meetings of the Institutional Review Board at Faculty of Medicine Siriraj Hospital.

2. POLICY
Except when an expedited or exempt review procedure is used, the IRB reviews proposed research at convened meetings at which a quorum and appropriate expertise is present. Each of the four (4) IRB panels meets monthly, or at some other frequency determined by the IRB Chair.

The efficiency and effectiveness of the IRB convened meeting is supported by administrative procedures to ensure that IRB members have adequate time for thorough review of each proposed study with complete and clear documentation.

3. SPECIFIC POLICIES
3.1 Meeting Preparation
At least 2 weeks prior to the scheduled panel meeting, IRB staff identify approximately 20 new research protocols for determination in the meeting and, in consultation with the IRB panel secretary, assign to the meeting agenda. Agenda items will consist of:

(1) Announcement and short message from the IRB Chair;
(2) Approval of minutes of prior convened IRB meetings;
(3) Continuing Protocol Reviews and Determinations;
(4) Initial Protocol Reviews and Determinations; and
(5) Other Business.

At least seven (7) days prior to the meeting, the IRB staff deliver an invitation letter (signed by the IRB Chair), the last meeting minute for approval and the meeting agenda to the IRB panel members scheduled to attend the meeting which include the meeting request letter. All members also have access to the complete IRB protocol file for all agenda items in the electronic file. The letters in response to meeting request are to be kept in the minutes of meeting file as evidence. The IRB staff will ask by person to the members without reply, 3 working days before the meeting.

Prior to the meeting the primary reviewers are expected to review their assigned items and identify any questions or concerns that may affect approvability of the study, and submit the Reviewer Form to the IRB staff prior to the start of the meeting. Reviewers are encouraged to
provide written comments to ensure that the IRB secretary conveys the modifications required and/or questions and concerns raised by the IRB completely, accurately and precisely.

3.2 Meeting Materials
The following items are included on a convened IRB agenda:

- Previous Meeting Minutes
- Continuing Review Materials
  - Completed adverse event report form
  - Completed protocol amendment form and relevant documents
  - Completed non-compliance report form
  - Any newly proposed document(s)
  - Progress report and Request for extension of approval period
  - Protocol closure or termination
  - Information/Educational items
- Initial (Full Board) Review Materials
  - Completed IRB submission form
  - Full research protocol
  - Recruitment Materials
  - Participant Information Sheets and Consent Documents
  - Permission to use medical records or specimens in research, Copies of surveys, questionnaires, case record form, disclosure of financial interest, if applicable
- Exempt and Expedited Review Summaries (which include all actions taken)

3.3 Quorum
A quorum consists of a simple majority; more than fifty percent (50%) of the IRB panel members expected to attend the meeting, including at least one member whose primary concern is in a non-scientific area, and one unaffiliated. Consultants and IRB members who leave the room due to a conflict of interest will not be used to establish a quorum.

Additionally, when the IRB reviews research that involves participants vulnerable to coercion or undue influence, at least one person (member or consultant) who is knowledgeable about or experienced in working with such participants must be present at the convened meeting.

If quorum is lost during a meeting, the IRB will not make any determination or discuss any agenda items until quorum is restored, even if that means deferring the vote to next month’s meeting. The Chair will not resume the meeting until a Quorum has again been achieved or the non-scientist Lay Person is present.

For research to be approved it has to receive a consensus approval from members physically present at the meeting. If a regular IRB member and his/her alternate member are present at the meeting, only one count towards the quorum and the regular IRB member (not the alternate) is the only one entitled to vote.
3.4 Meeting Conduct

Procedures of a convened IRB meeting conduct comprise:

3.4.1 Call to Order and Quorum: The IRB Chair (or designee in the event that the IRB Chair is absent) calls the IRB meeting to order, once an appropriate quorum has been achieved and a non-scientist Lay Person is present.

3.4.2 Conflict of Interest of IRB Members: Where there is a conflict of interest involving an IRB member, the IRB Chair (or designee) will remind the IRB member to recuse him/herself from the discussion and make a consensus by leaving the room when there is a conflict for the particular action item under review. Known conflicts of interest of an IRB member will be made available to all members prior to the review process in the meeting.

3.4.3 Review and Approval of Prior Meeting Minutes: The IRB reviews and discusses the IRB meeting minutes from the previous meeting and determine if there are any revisions or corrections to be made. If there are no changes to be made, the minutes are to be accepted as presented and considered final. If it is determined that revisions or corrections are required, the Chair will conditionally approve the minutes and approve the final version with the requested changes. A majority of the members present at a duly constituted IRB meeting are required to accept the minutes.

3.4.4 Continuing Review / Requests for Modification: The IRB Secretary (or designee) presents to the members a brief synopsis and significant concerns from the reviewer, if any, for continuing review of individual research, as well as requests for modifications. All IRB members present at a duly convened IRB meeting discuss thoroughly before making a determination. In order for the research to be approved, it must receive a consensus approval from the members physically present at a duly constituted IRB meeting.

3.4.5 Initial (New) Protocol for Full Board Review: The first reviewer summarizes to the members the research protocol, covering the scientific background and rationale, study design, how the research differs from and compares to standard care, appropriateness of the study population and the inclusion/exclusion criteria, the recruitment and informed consent processes/materials, the risks and potential benefits to subjects, alternative treatments or procedures, as well as the criteria for IRB approval and, when applicable, additional protections for vulnerable subjects. The second reviewer (or designee) present any additional clarifications or commentary on the study plan or informed consent, as well as questions, concerns, or modifications required for approval. Additionally, designated Lay Person will comment on the reading level and style of the participant information sheet and consent form, and provide suggestions for improvement. Reviewers may contact the principal investigator prior to the meeting if they have queries about the study, particularly if they have significant concerns or believe additional information is needed to assess the risks and anticipated benefits, if any, to subjects and the importance of the knowledge that may be expected to result from the research. After the presentation, the Chair opens the protocol up for discussion including specific questions to the assigned reviewers or to other members with specific expertise or
viewpoints. At the end of the discussion, the IRB Chair call for consensus determination of the approval level, see Chapter 5.6 (IRB Determination for Initial Review: Categories and Actions). A quorum must be present in order for the IRB to take a determination. The IRB staff documents in the meeting minutes the determination level and total number of IRB members present.

3.4.6 Initial (New) Protocol for Expedited or Exempt Review: The IRB Secretary only presents the reviewer’s decision to the convened IRB for acknowledgments. However, in cases where there is discordance between the reviewers or determination in category 3 (Major Revisions Required before Approval) or category 4 (Disapproval), the protocol must be raised to the convened meeting for committee’s resolution.

3.4.7 Conclusion of Meeting: After completion of the last agenda without any other issues, the Chair will adjourn the meeting.

All material received by the IRB considered to be confidential and in excess of the required original documentation and appropriate uncontrolled forms will be collected at the end of the meeting and destroyed by a method deemed appropriate by the IRB staff. The responsible IRB staff will prepare the recorded minutes.

4. RESPONSIBILITY
IRB Chair (or Vice Chair in the absence of the Chair) is responsible for IRB meeting procedural conduct and documentation, and ensuring the appropriateness of all IRB decisions and actions are based on institutional and regulatory requirements.

IRB Secretary (or designee) is responsible for conducting the continuing protocol review and initial protocol for expedited/exempt review.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 50.20, 50.25, 50.27, 56.108(b), 56.109, 56.111, 56.113;
45 CFR 46.108(b), 46.109, 46.116, 46.117

6. REFERENCED DOCUMENTS
A Record Form of the Minutes of Meeting (Internal document No.18)
Worksheet: Invitation and Meeting Request Letter
IRB Meeting Agenda
Quorum Documentation
# 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IRB Staff and IRB Secretary</td>
<td>• Prepare IRB meeting agenda and deliver to the IRB panel members with the invitation and meeting request letters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Upload study files and all relevant materials for the IRB members as electronic files</td>
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<tr>
<td></td>
<td></td>
<td>• Invite the alternate IRB member(s) to replace regular member(s), as necessary to maintain the quorum.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Chair and IRB Secretary</td>
<td>• Evaluate each protocol to ensure that at least one IRB member is knowledgeable about or experienced in working with participants vulnerable to coercion or participants who may be subject to undue influence.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Obtain Expert Consultant, if necessary</td>
</tr>
<tr>
<td>3</td>
<td>IRB Staff</td>
<td>• Attends the IRB meeting and assist the IRB Chair/Secretary to conduct the meetings.</td>
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<tr>
<td></td>
<td></td>
<td>• Prepare the computers and upload the electronic documents to be used in the meeting.</td>
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<tr>
<td></td>
<td></td>
<td>• Completes draft minutes for review at least one week before the next meeting.</td>
</tr>
<tr>
<td>4</td>
<td>IRB Chair</td>
<td>• Uses the IRB agenda/minutes as a guide to conduct the meeting.</td>
</tr>
<tr>
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<td></td>
<td>• Ensures that quorum is met, expertise is present and all business is addressed, that proceedings are recorded, and that any member who has a conflict of interest does not participate in the IRB’s consideration of the study for determination, except as requested by the IRB.</td>
</tr>
<tr>
<td>5</td>
<td>Primary Reviewers</td>
<td>• Provide research protocol review according to their scientific or scholarly expertise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Suggest to the meeting for consideration of the research, and regulatory criteria for approval.</td>
</tr>
<tr>
<td>6</td>
<td>IRB Members</td>
<td>• Attend the scheduled meeting when available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Discuss / determine the approval level of the research proposal</td>
</tr>
</tbody>
</table>
1. PURPOSE
To describe policies and procedures for completing the minutes of the convened IRB meetings at the Faculty of Medicine Siriraj Hospital.

2. POLICY
Minutes of IRB meetings shall be in sufficient detail to enable a reader who was not present at the meeting to determine how and with what justification the IRB arrived at its decision, and to show attendance at the meeting; actions taken by the IRB; the reasons on these actions; the basis for requiring changes in or disapproving research; and a written summary of the discussion of controverted issues and their resolution.

3. SPECIFIC POLICIES
3.1 Agenda of Minutes
IRB minutes shall include documentation of quorum and appropriate contents (see below) according to the agenda items 1 to 5 which are:
   (1) Announcement and short message from the IRB chair
   (2) Approval of minutes of prior convened IRB meetings
   (3) Continuing Protocol Reviews and Determinations
      3.1 Adverse event report
      3.2 Protocol amendment
      3.3 Progress report and extension request
      3.4 Close-out report
      3.5 Protocol deviation report
      3.6 Withdrawal report
      3.7 Additional document
   (4) Initial Protocol Reviews and Determinations
      4.1 The protocol that previous determination was category 3 (deferred protocol)
      4.2 The protocol considered as full board initial review
      4.3 The protocol considered as expedited review
      4.4 The protocol considered as exemption
   (5) Other Business.

3.2 Minutes Content
The IRB Staff will take minutes of each meeting. Minutes will be written in sufficient detail to show the following:
3.2.1 Meeting attendees and invitees

- Regular or alternate IRB members attending through documenting that they have received all materials and can actively and equally participate in the discussion;
- Status of each attendee (regular member, consultant, etc.);
- Alternate members and whom they are replacing;
- The IRB members who leave the meeting because of a conflicting interest;
- The IRB members who leave the meeting briefly, are not present during a consensus determination, and are not counted as part of the quorum; and
- Any others present (e.g. invited guests, investigators invited to address the IRB, and consultants).

3.2.2 Discussions and Actions Taken by the IRB on each agenda item requiring full IRB action, including the separate deliberations and basis for each action, such as:

- Discussion of protocol events – new, continuing review, modifications, reports of unanticipated problems and events and information requiring prompt review;
- The basis for requiring research amendment and determination;
- Deferred protocols follow up;
- Determination of approval category (1 to 4, as a consensus), the frequency of review for each protocol (approval period), level of risks and potential benefits, and the criteria that justify these determinations;
- The rationale for significant risk/non-significant risk device determinations;
- Report of expedited and exempt review, and determination of approval category;
- If applicable, summary of key information from consultant’s verbal in-person report if a written report was not provided;
- Determinations required by the regulations, and protocol-specific evidence justifying those determinations for:
  - Waiver of alteration of informed consent
  - Use of short form process for consent
  - Research involving vulnerable subjects.
- The IRB Chair or Vice Chair as designated by the Chair must sign off when these conditions are met.
- Suspensions and terminations of previously approved research
- Disapproval of research
- Discussion of controverted issues and their resolution or disposition
- Requests for consultant review or input from an expert in the field (e.g. requests made during a convened meeting)
- Actions resulting from review of reports of unanticipated problems involving risks to participants or others, or other reportable events and information
- Actions resulting from determinations of serious or continuing non-compliance
3.2.3 Other issues requiring convened IRB review or acknowledgment including:

- Approval of minutes of prior convened IRB meetings;
- Approval of research formerly contingent on specific minor conditions by the chair or secretary;
- Approval of research contingent on specific minor conditions, and the designee appointed to sign off on the condition when met. If the condition is met after the minutes for that meeting are approved, the approval is documented in the minutes of the first IRB meeting that takes place after the contingency is met.
- DSMB reports
- Presentation of information from an outside consultant or expert as previously requested by the IRB
- Special situations such as use of a test article and humanitarian use devices
- The names of IRB members who withdraw for reasons other than conflict of interest
- Other items as applicable

3.3 Distribution of Minutes

- The IRB staff writes minutes and makes them available for IRB review at least one week before the next meeting;
- Corrections requested by the IRB member will be made by the IRB staff and the minutes will be available in final form on request;
- The IRB staff, as recorder, will maintain copies of the minutes, as well as the agenda and pertinent materials on file;
- The minutes of convened IRB meetings are considered confidential, and access to them is restricted and secured; and
- Once approved by the IRB members at a subsequent IRB meeting, the minutes may not be altered by anyone including a higher authority.

4. RESPONSIBILITY

IRB Staff is responsible for carrying out these procedures.
IRB Chair and IRB Secretary are responsible for supervision of these procedures, according to the policies.

5. APPLICABLE REGULATIONS AND GUIDELINES

21 CFR 56.108, 56.109, 56.111, 56.113, 56.115;
45 CFR 46.103, 46.108, 46.109, 46.115

6. REFERENCED DOCUMENTS

Meeting Minutes Template
7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
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</thead>
</table>
| 1   | IRB Staff                       | • Draft detailed notes to document IRB discussions, determinations and other relevant information use the minute’s template as a guide.  
    |                                 | • Complete draft minutes for IRB review at least one week prior to the next meeting, and uploads as electronic file for review in the meeting. |
| 2   | IRB Members                     | • Check correctness and completeness draft of the minutes of meeting, and request for changes as appropriate. |
| 3   | IRB Staff (as Recorder)         | • Makes correction per request by IRB members.                          
    |                                 | • Maintains copies of the final minutes, as well as the agenda and pertinent materials on electronic file. |
| 4   | IRB Chair, Vice Chair           | • Ensures that all pertinent or applicable information is recorded in the minutes of meeting. |
1. PURPOSE
The purpose of this policy is to describe the requirements for document management, retention, and archiving.

2. POLICY
The IRB files must be maintained in a manner that contains a complete history of all IRB actions related to review and approval of a protocol, including continuing reviews, amendments, and adverse event reports. All records regarding a submitted study (regardless of whether it is approved) must be appropriately retained as required by legal and regulatory requirements and/or Faculty policy.

Records must be accessible for inspection and copying by authorized representatives at reasonable times and in a reasonable manner.

3. SPECIFIC POLICIES
3.1 Document Retention
3.1.1 The HRPU office must retain all IRB records regarding an application (regardless of whether it is approved) for at least 3 years after the completion of the research, either electronically or as hard copy.

3.1.2 The IRB assessment document, adverse event report analysis, protocol amendment, including the deviation report and additional document which have been reviewed by the IRB Assigned Reviewer must be kept in the research file.

3.1.3 All documents relating to research protocol are retained for the whole period of the ongoing protocol and at least 3 years after completion of the research. If the researcher loses to contact, the protocol will be withdrawn and kept for another 3 years. The IRB staff will separate the close-out or withdrawal protocols from the active files, and keep in the locked cabinet waiting for destruction in due date.

3.1.4 Adequate documentation of the IRB activities will be prepared, maintained and retained in a secure location.

There are 4 storage rooms, three closed to HRPU office are secured by personal key card and the other within the office is locked by key. The door is always locked. The Central room and cabinets’ master keys are kept by the Head Officer and in the secured cabinet in IRB Chair’s room.

External persons are not allowed to enter the IRB office without permission.
Retained documents include but are not limited to:

3.1.4.1 Document related to the IRB

- A list of IRB Members including signed and dated of full CV, Training Certificate, COI, and Confidentiality agreement for each individual.
- A list of IRB Staff including responsibility, signed and dated CV, Training Certificate, COI, and Confidentiality agreement for each individual.
- Announcement of IRB Committee’s designation and resignation.
- IRB Committee’s compensation.
- Copies of all correspondence between the IRB and other Committee.

3.1.4.2 Document related to the research protocol

- Research Protocol file (separately kept in order by years according to the code, using the color-coded filing system for each year)
- Scientific evaluations, when provided by an entity other than the IRB.
- Recruitment materials.
- Consent documents.
- Investigator brochure, if any (in electronic file).
- The justification for exempt determination.
- The justification for using the expedited procedure.
- Actions taken by the reviewer.
- Any findings/determinations required by laws, regulations, codes, and guidance to be documented.
- Progress reports submitted by researchers.
- Reports of injuries to participants.
- Data and safety monitoring reports, if any.
- Modifications to previously approved research.
- Unanticipated problems involving risks to participants or others.
- Documentation of non-compliance.
- Significant new findings.
- All correspondence between the IRB and researchers.
- Records of initial and continuing review activities.
- Auditing and occurrence report (stored in the locked cabinet in the office).

3.1.4.3 Minutes of Meeting and related documents

- A list of attendees (regular and alternate IRB members).
- Member(s) with COI.
- Decision making for each issue, with reason and recommendation, if any.
- Discussion regarding ethical problems for each issues and resolution.
3.1.4.4 References
- Guidelines.
- Regulations, announcement, approval document of the relevant institute.
- Every version of SOP and Reference Book (stored in chronological and alphabetical order respectively in the locked cabinet in front of the office).

3.1.4.5 Other documents (e.g., documents for visitors, surveillance guideline, organizing the meeting and seminar, organizing the faculty training in human research ethics, meeting attendance outside by IRB members, etc.).
These documents are also stored in the locked cabinet in front of the office.

3.2 Destruction of Copies
All materials received by the IRB, which are considered confidential and in excess of the required original documentation and appropriate controlled forms, will be collected at the end of the meeting and destroyed.

3.3 Archiving and Destruction
Three (3) years after research protocol closure or contact loss, all documents and materials germane to IRB determinations will be archived by the HRPU. After 3 years, the documents and materials will be destroyed.

4. RESPONSIBILITY
IRB Staffs are responsible for maintaining complete files on all research reviewed by or submitted to the IRB and for all applicable regulatory compliance requirements.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.115;
45 CFR 46.115

6. APPLICABLE DOCUMENTS
None
7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1   | IRB Staff      | • Ensures study information is entered in the database.  
      |                | • Organizes the submitted material in an appropriate manner.  
      |                | • Proceeds as described in the policies and procedures.  
      |                | • Retains all records regarding a submitted study as required by regulatory requirements and Faculty policy. |
| 2   | IRB Chair      | • Supervises an appropriate documentation and document management being conducted according to the guidance. |
1. PURPOSE
The purpose of this policy is to outline management of the IRB for security and confidentiality in the electronic data.

2. POLICY
To enhance efficiency and effectiveness of HRPU work processes, Siriraj IRB collects, transmits, and stored data electronically at some point. The IRB is responsible for ensuring that all relevant data to the research protocol, including continuing reviews, amendments, and adverse event reports, is safe when it is processed thus to protect the subjects privacy and to maintain the security and confidentiality of data.

3. SPECIFIC POLICIES
3.1 Database System
The electronic files are stored on secure file server with access control using complex password protection. A reliable internal data tracking system has been developed and used from the protocol input to tracking for different purposes (such as current review status, previous incidents, amendments etc.).

3.2 Desktops, Shared Drive and Backup
All electronic devices for entering and storing IRB information are secure servers and stand-alone PCs which are kept physically secured in locked offices with access restricted only to the owner.

The Information including the work files, letter and document formats as well as file of other relevant data is being circulated in the office by the shared drive from the server (i.e. drive Y and Z). Sending, changing and storing the research relevant data may be done simultaneously via the server. Precautions will be used to maintain the confidentiality of identifiable information.

All important data (such as Protocol files, COA, Acknowledgement of Adverse Event and Additional Document, Approval of Amendment, Exemption, Minuets of Meeting etc.) will be backup to the external hard disk 4 times per month, and stored in the locked cabinet in separate locations.
3.3 Antivirus
Security and data protection receive the highest priority from the IRB. To ensure that infrastructure level security be enforced, firewalls and the virus scanning, system (Symantec antivirus) are installed to every desktops and devices used for IRB work. The antivirus will automatically take action, remove infectious threats, and update every noon time.

3.4 Data Confidentiality
All identifiable data should not be stored on CDs or DVDs unless the entire CD or DVD is encrypted.
Flash drives are only to be used for storing and analyzing de-identified data, or password protected files.
All identifying data should not be contained in email communications that are sent outside of the Mahidol University firewall.

4. RESPONSIBILITY
IRB Staff with IT excellence is responsible for making regular check-up of the system for security and report to the HRPU Office Head.

5. APPLICABLE REGULATIONS AND GUIDELINES
None

6. APPLICABLE DOCUMENTS
None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1   | IRB Staff           | • Ensures that study information is entered in the electronic database, and confidentiality protection is conducted in compliance with the policies and procedures.  
|     |                     | • Regular backup the important data file.  
|     |                     | • Use firewalls and antivirus software for protection of data security.  
|     |                     | • Regular checkups for security of the hardware, computers and devices as scheduled.  |
| 2   | IRB Chair or Designee | • Supervises an appropriate security and confidentiality management of electronic data according to the guidance.  |
1. PURPOSE
This policy describes the training and education requirements for IRB Members, IRB Staff and Investigators at the Faculty of Medicine Siriraj Hospital.

2. POLICY
Completion of human subjects research training by the IRB Members and Staff, Principal Investigators and research team members (including all individuals who are responsible for the design, conduct, data analysis or reporting) is important if the IRB is to fulfill its mandate to protect the rights and welfare of research subjects. The Faculty provides the access to the required training for Ethics in Human Research Course as an Internal Training Program and an online tutorial Course. It is the responsibility of these individuals to have certificates of the required training completion available for audits.

3. SPECIFIC POLICIES
3.1 Required Training Completion for IRB Members and Staff
The HRPU maintains record on training of all IRB Members and Staff, including completion and expiration dates. The certificates and training documents are stored in the individual member’s files. The assigned HRPU officer tracks the documents regularly to fulfill the general training requirements, and to provide special training course, if needed.

<table>
<thead>
<tr>
<th>Required Training Certificate</th>
<th>Renew</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. IRB Chair, Vice Chair, Secretary and Members (medical)</td>
<td>1. Ethics in Human Research Course or 2. According to requirement in CITI program (basic course) and 3. The Good Clinical Practice (GCP) course</td>
</tr>
<tr>
<td>2. IRB members (non-medical)</td>
<td>1. Ethics in Human Research Course or 2. According to requirement in CITI program (basic course)</td>
</tr>
<tr>
<td>3. HRPU Officers</td>
<td>1. Ethics in Human Research Course or 2. According to requirement in CITI program (basic course)</td>
</tr>
</tbody>
</table>
• Each new IRB Member or Staff must study the SOP prior to undertaking any responsibilities. Evidence of training will be documented and filed.
• CITI (Collaborative Institutional Training Initiative) offers an interactive online tutorial with a basic (initial) course and then a refresher course.
• If an IRB member does not meet the minimum requirements (1 or 2), he/she may not be assigned to review any research protocol.

3.2 Investigator Required Training
The Faculty requires that the PI and other key personnel involved in the design or conduct of a project, including those projects that may be deemed exempt, provide evidence of training and qualifications by submitting relevant documentation as requested by the IRB. Investigators must complete the required training before submitting an application for IRB review. The IRB staff checks all Investigator’s training certificates when prescreening the application for review. If an Investigator does not meet the training requirements, the IRB will not approve the research protocol.

<table>
<thead>
<tr>
<th>Required Training Certificate</th>
<th>Renew</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Investigator and Research Assistant</td>
<td>1. Ethics in Human Research Course</td>
</tr>
<tr>
<td>or 2. According to requirement in CITI program (basic course)</td>
<td></td>
</tr>
</tbody>
</table>

• All postgraduate medical trainees are encouraged to attend the Internal Training Program for Ethics in Human Research Course instead of the self-study CITI program.
• The PI of clinical trial involving more than minimal risk is also encouraged to attend and hold up to date GCP certification.

4. RESPONSIBILITY
IRB Members, HRPU Officer, IRB Staff and Researcher

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.107;
45 CFR 46.107;
International Conference on Harmonization, Guidance on Good Clinical Practice (ICH GCP) (1996)

6. APPLICABLE DOCUMENTS
None
### 7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
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</tr>
</thead>
</table>
| 1   | IRB Chair      | • Review (annually) IRB members’ knowledge, understanding, and experience relevant to their roles and provide feedback.  
      |                | • Notifies the IRB members of available training materials, methods, and scheduled meeting/seminar.  
      |                | • Determines training and educational schedule for the whole year in advance.  
      |                | • Establishes training, educational requirements and content for IRB Members and Staff. |
| 2   | IRB Members    | • Maintains and renew certification for education and training |
| 3   | IRB Staff      | • Maintains documentation of all training and education completed. |
1. PURPOSE
This policy describes the education and training provided to all individuals at the Faculty regarding human research protection.

2. POLICY
The HRPU policy specifies education requirement in human research protection for the IRB members, IRB Staff, and Investigators. Thus, education and training must be available to all personnel, students, trainees, involved or potentially involved, in human subjects research. The Faculty provides access to the required training for Ethics in Human Research Course as an Internal Training Program, a self-study online course and Continuing Education that covers important and common issues for the majority of research being conducted in the Faculty.

3. SPECIFIC POLICIES
3.1 Internal Training Course
With the increasing number of researches and clinical trials being conducted in the Faculty, there is a need to address both issues related to Faculty policies/regulations and ethical/good clinical practice standards. With support from the Faculty, the HRPU/IRB organizes an internal training course on human research protection for Faculty personnel, trainees and students as well as the researcher outside. The course discuss practical solutions for ethical issues and challenges in human subjects research through lectures and case studies/discussions. The Program includes:

- A one day basic course in “Human Research Ethics” for researcher/investigator, student, trainee three (3) times per year,
- A basic “Human Research Ethics” 6-hours course for postgraduate medical trainee (medical residents), and
- A half-day refreshing interactive course for experienced investigators (used to have a certificate for basic course).

In December, the IRB Chair schedules the education plan for the next whole year. The topic also incorporates input received from the IRB members, IRB staff, Investigators as well as the research trends being reviewed by the IRB. The attendants shall receive the Faculty certification upon completion of the course.

3.2 Self-Study Online Program
The Faculty provides human research ethics training course for Faculty’s personnel, students and trainees as well as the self-study online program “the Collaborative Institutional Training...
Initiative (CITI) course”. The required training for basic (initial) course has been customized for different learner groups (biomedical and social & behavioral sciences Investigators, Investigators conducting exempt research, IRB members, and staff).

CITI also offers a refresher course, which must be taken every three (3) years. A certificate issued (within 3 years) upon completion of the course is an obligatory condition for IRB approval of the research project.

3.3 Continuing Education for the IRB Members and Staff
To ensure that oversight of human research is ethically grounded and the decisions made by the IRB are consistent with current regulatory and policy requirements, training and education continues for IRB members and staff throughout their service on the IRB.

Beyond the initial training and education requirements, IRB members and HRPU/IRB staff must also satisfy continuing education requirements on an annual basis. The Faculty offers continuing education via a variety of means including, but not limited to, the following:

- In-service education and training at IRB meetings.
- Education and training workshops.
- Distributing copies of appropriate publications.
- Distributing new information that might affect human research protection, including laws, regulations, policies, procedures, and emerging ethical and scientific issues to IRB members via email or during IRB meetings.
- Keep and archive the textbook, articles, newsletter, new guideline and regulation as references in the IRB office.

The Administrative Committee with the IRB chair determine which continuing education activities are mandatory for IRB members and staff in a given year, and establishes a mechanism to track whether each individual has satisfied the requirements. Members and staff who are unable to attend education sessions are provided with the materials provided in the session and, whenever possible. Investigator and research assistants who interest in the issues may follow the information periodically provided on the HRPU website.

3.4 Education for Research Participants
The IRB/HRPU provides resources for research participants, prospective participants, researchers and communities by providing:

- Contact point for queries, complaints, concerns or for additional information concerning rights as a research participant;
- Research participant educational brochure (with clear, concise, easy-to-follow information on a variety of topics important to be research participant);
- Research participant website information;
- Research participant survey;
- Training upon request regarding the rights of research participants.
4. RESPONSIBILITY
HRPU Staff, under supervision of the Administrative Committee, is responsible for developing, communicating, implementing and maintaining all training programs for the Faculty.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 56.107;
45 CFR 46.107

6. APPLICABLE DOCUMENTS
None

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

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<thead>
<tr>
<th>No.</th>
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</table>
| 1   | IRB Chair      | • Based on requirements, determines training and education schedule for all individuals involved in human research protection.  
• Notifies available training materials and schedule.  
• In collaboration with the Administrative Committee and HRPU Staff, establish, conduct and supervise internal training, both initial and continuing, programs. |
| 2   | QA/QI Team     | • Review (annually) knowledge, understanding, and experience relevant to individual roles as an input for providing effective education and training program.  
• Provide feedback, as indicated. |
| 3   | IRB Members    | • Support an effective education and training program. |
| 4   | HRPU Staff     | • Maintains documentation of all training and education completed. |
1. PURPOSE
The purpose is to describe policies and procedures for maintaining and ensuring quality and standards for all human subject research protection procedures.

2. POLICY
Identifying the areas of strengths and opportunities for improvement of human research protection efforts is essential to maintain the effectiveness and quality of the HRPU. The goal of quality assurance (QA) and quality improvement (QI) program is to work collaboratively with IRB members and research community to ensure that the rights and welfare of research subjects are being properly protected in accordance with the applicable laws and regulations, ethical principles, and institutional policies.

The procedures in areas that are essential to the QA/QI plan are as follows:

- Conducting routine and ad-hoc reviews to monitor compliance with HRPU policies and procedures.
- Responding to and tracking questions, complaints and non-compliance to identify areas for improvement.
- Analyzing metrics of the IRB operations, as the input for decision management by the Administrative and Steering Committee.
- Providing education or assistance to IRB members, staffs, investigators in areas pertinent to human subjects’ protection.
- Providing basic knowledge for research participants/prospective participants regarding to human research.
- Periodic evaluation of the outreach activities.

3. SPECIFIC POLICIES
3.1 Institutional Review Board Effectiveness and Compliance
The operations of Siriraj IRB are subject to annual assessment for purposes of the protection of human research subjects and quality improvement. Such assessments will determine the extent to which the IRB complies with applicable regulations and SOP, and the adequacy of its processes and documentation.
3.1.1 Self Evaluation Checklist
Sriraj IRB evaluates procedures for the protection of human subjects of research by using the self-evaluation checklists developed by the Thai Food and Drug Administration (Thai FDA) and Mahidol University. The checklists cover a common core of topics in a systematic way to assess both the effectiveness (e.g. the amount of time from receipt of a submission through pre-review, assignment to the IRB, and final approval) and compliance with both the applicable regulatory requirements and the Faculty SOP. The policies and procedures are reviewed on an annual basis and updated as needed.

3.1.2 Evaluation of IRB Chair, Vice-Chair, Members and Staff
Evaluations of IRB Chair, Vice-chair, members, and staff are performed annually, and scheduled to occur at the time of re-appointment. The process includes both self-assessment and assessment by supervisors. The needed areas of improvement (both in function and knowledge) are defined as the topic for future training.

While IRB staffs are evaluated bi-annually according to the Faculty human resources policies and procedures, the HRPU also performs further evaluation pertaining specifically the unique requirements and knowledge necessary for IRB staff.

3.1.3 File Review
The QA/QI Team will evaluate the on-going activities of the IRB protocols, by reviewing not less than forty-eight proposal files per year. Items to be reviewed will include:

- Information considered during the initial review and approval,
- Use of the appropriate category for review,
- Designation of primary reviewer,
- Analysis of risks and benefits, including determination of minimal risk,
- Privacy and confidentiality protections,
- Use of a waiver or alteration of informed consent,
- Information considered while monitoring ongoing research (amendment, adverse events),
- Information considered at continuing review and approval, and
- Information considered at study closure

3.2 Investigator Compliance
The IRB Chair, Members and Staff will perform site visits to verify information in the study application, or in any interim or continuing review submissions. The criteria for selecting Investigators to be visited may include:

- Investigators who conduct studies that involve a potential high risk to subjects,
- Studies that involve vulnerable populations,
Investigators who conduct studies that involve large numbers of subjects, and
Investigators selected at the discretion of the IRB.

Due to the high variability in research projects, modifications will be made to tailor each audit to the specific project.
The IRB has the authority to observe the informed consent process, and to verify that the study is being conducted as approved and within the institutional policies and procedures. Investigators may be asked to submit copies of signed informed consent forms or other documents to ensure their compliance with IRB requirements. Sponsors may be asked to submit copies of monitoring reports. The purpose of the audit is to ensure protection of the human subjects in the research. The information is used to monitor the implementation of approved protocols, record keeping, identify areas that need improvement, correct of target education for continuous improvement of the audit tool and the audit process.

3.3 Evaluation of Outreach Activities
Evaluation of outreach activities are performed at least bi-annually using the feedback from IRB members, Chair and Staff regarding concurrent actions; Site Visit Review; and results from the annual Research Participant Survey. Suggestion for improvement plan will be issued to the IRB Administrative Committee. When local community issues are concerned, its representatives will be consulted in collaboration with the Faculty Research Administrative Team.

In addition, a specific “human research ethics” course which focus on human research protection and providing sufficient information for the participants and prospective participants prior to recruitment has been organized in a “New Staff Workshop” as a part of First-Year Faculty Development Program, as well as all 1st year medical trainee. Evaluation is conducted the end of the course and, later, during research activities.

3.4 Report of QA/QI Plan
The HRPU tracks internal metrics that are informative in considering IRB and Investigator efficiency and regulatory compliance. Findings/results from the metrics are reviewed at the IRB Administrative Committee Meetings, with emphasis on evaluation of the overall effectiveness and suggestions for corrective action plans for training, education, and outreach activities improvement. An aggregate summary of findings resulting from the noted review activities and the QA/QI plan will be reported to the IRB Steering Committee, at least once per year.
4. RESPONSIBILITY
The Steering Committee review and approve the QA/QI plan of the HRPU, set up by the Administrative Committee.
The Administrative Committee act on supporting the QA/QI team in identification of deficiencies and implementing corrective action plans.
The QA/QI team, with IRB Vice Chair as the Administrator, in collaboration with other members of the HRPU Staff, coordinates the QA/QI efforts.

5. APPLICABLE REGULATIONS AND GUIDELINES
21 CFR 11, 50, 54, 56, 160, 312, 812;
45 CFR 46.109;
International Conference on Harmonization, Guidance on Good Clinical Practice (ICH GCP) (1996)

6. APPLICABLE DOCUMENTS
Evaluation Form for Internal Survey (Internal Document No.24)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Administrative Committee</td>
<td>● Prepare the annual QA/QI plan and present to the Steering Committee for approval.</td>
</tr>
<tr>
<td>2</td>
<td>IRB Chair and IRB Secretary</td>
<td>● Assign and Support the QA/QI working team.</td>
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<tr>
<td></td>
<td></td>
<td>● Implement the QA/QI plan and educational program as indicated.</td>
</tr>
<tr>
<td>3</td>
<td>QA/QI working team</td>
<td>● Assess the self-evaluation checklists and IRB metrics.</td>
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<tr>
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<td></td>
<td>● Conduct periodic assessments of IRB proposal files.</td>
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<tr>
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<td></td>
<td>● Contact the Investigator to set up for site visit.</td>
</tr>
<tr>
<td>4</td>
<td>IRB Secretary and IRB Member</td>
<td>● Conduct a site visit to confirm that the study is being conducted in compliance with the protocol.</td>
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<tr>
<td></td>
<td></td>
<td>● Complete the Site Visit Report.</td>
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</tbody>
</table>
1. PURPOSE
This policy describes Site Visit and Compliance Monitoring of the research study stating in the protocol approved by the IRB.

2. POLICY
The HRPU has the authority and responsibility to conduct site visit to ensure protection of the human subjects involved in research and compliance with the applicable regulations and Faculty policies by providing oversight and if needed, education for the researchers. The goal of compliance monitoring is to confirm, by observation, accurate and consistent protocol performance in a collegial and unobtrusive manner. The HRPU will review human research projects randomly, and for cause, based on the compliance records of the researchers.

Full cooperation by the department, principal investigator (PI) and other members of the research team is expected. The information gathered during the site visit is used to monitor the implementation of research studies, process necessary corrections, identify areas that need improvement, target education, and to gather information for quality improvement of the HRPU.

3. SPECIFIC POLICIES
3.1 Criteria of Selection
Given the large number of active human subject’s research activities at the Faculty, it is not possible for the HRPU to conduct monitoring site visit in every protocol. The HRPU selects research studies for site visit review or investigation based on either “Directed (for cause)” or “Routine” criteria.

3.1.1 Directed (for-cause) Site Visit
The criteria for selecting research protocol for Directed Site Visit may include but are not limited to:
- Protocols with history of poor adherence to regulations and IRB policies;
- Protocols with reports of serious adverse event;
- Protocols with reports of violation, continuing deviation, or regulatory noncompliance;
- Protocols received an internal complaint or concern of potential unethical conduct.

The Site Visit Team may specify whether the review focuses on one aspect of the research (i.e., the consent process) or a broad review of the study conduct.
3.1.2 Routine Site Visit
The HRPU selects active protocols that are greater than minimal risk, have been active for less than 5 years, and are currently enrolling or actively following participants for Routine Site Visit. Additional criteria may include, but are not limited to:
- Protocols that involve a vulnerable subject population or have a potential for increased risk to participants (i.e., phase I trial, gene therapy, etc.);
- Protocol that involve large numbers of subjects;
- Protocols that do not have formal routine provision for on-site monitoring.
- Protocol with random visit as selected at the discretion of the IRB;

3.2 Site Visit Procedures
3.2.1 Notice of the Site Visit
Except in cases where the safety of subjects is a concern or where the IRB specifically requests an unannounced site visit, the HRPU will provide a written notification of site visit. The HRPU staff will contact the PI to schedule the visit at a mutually convenient date and time, with at least fourteen (14) day-notice by phone call.

3.2.2 Site Visit Preparation
Prior to the Site Visit: For a minimum of fourteen (14) days in advance, the HRPU will notify Investigator by a formal letter that the Investigator’s study has been selected for review. Before the site visit, Investigators will collect and make all relevant documentation in the IRB file available for the research conduct assessment.

Site Visit Team Review: IRB Chair will appoint the Site Visit Team of at least 4 persons, consisting of the members in that IRB panel and HRPU staff, to evaluate compliance of such protocol. Depending on the nature of the research study, the member of another IRB panel who has experience in the study topic may participate in the team. The Site Visit Team will be called for preparation of the site visit issues by reviewing the protocols, continuing reports to the IRB, and Checklist of Site Visit Issues. All items on the Checklist may not apply to all research studies and the site visit schedule, time and venue will be adjusted for the suitability of the protocol according to the following:

1) Research protocol
   - The first draft of protocol and the additional amendment protocol which obtained the committee’s approval
   - Obtain the certificate of approval from the SIRB committee

2) Document data
   - Data record form is correct and complete
   - Data recorded in the data record form is the same as in the source data

3) The significant documents, if applicable, such as
   - A list of investigators and assistant investigators and responsibilities
   - The latest version of investigator’s brochure
• Document of transportation of products and substances used in the research
• Document of quantity control of receiving and dispensing the products and substances used in the research
• Record the sample keeping of liquid or tissue
• A copy of progress report sent to the SIRB committee to review
• The site visit report of the Data Safety Monitoring Committee

4) Investigator, co-investigator and assistant
• Having knowledge, understanding and conducting the research according to the SOP strictly stated in the research protocol
• The quantity of research protocol is not too much comparing to the number of investigators and assistant investigators

5) Research site
• The research site is suitable and facilitating to the research project

6) Research product
• Utilize and control the products used in the research as indicated in the protocol which obtained the committee’s approval

7) The volunteers/participants who joined the project received the complete details before giving the consent
• Randomize to inspect the consent forms which are informed that the volunteers have signed the documents with the committee’s approval
• Notice the process of requesting the consent from the volunteers in some cases.
• If there is any significant amendment of data in the research study, the volunteers will be informed and sign the names again.

8) Confidentiality of information
• Keep the volunteer’s information confidentially and limit the persons who can reach the information

9) Adverse event report and protocol deviation, if any
• Compare the adverse event report with the report sent to the committee
• Compare the protocol deviation report with the report sent to the committee

10) Compensation, travelling expenses, remuneration for time wasting, and responsibility for adverse events
• Inspect the documents of travelling expenses and remuneration for time wasting
• Inspect the documents or inquire about the adverse events occurred in the research site with the solution

3.2.3 During Site Visit: Through observation, interviews, and record review, the Site Visit Team evaluates various aspects of the compliance to regulatory requirements as mentioned. The Site Visit will follow the process as follow:
1) The Site Visit Team meets with the Investigator to discuss the objective of the visit;
2) The Investigator briefly talks about the study, and offers the Site Visit Team with the study files for review;
3) The Site Visit Team interviews the Investigator who is familiar with the study, or any research personnel knowledgeable about specific aspects of the study;
4) Throughout the site visit, the Site Visit Team will provide recommendations and educational support to the Investigator and their research personnel based upon the site visit findings;
5) At the conclusion, Head of the Site Visit Team provides a brief summary of findings, and exchange with the Investigator for quality improvement on both sides.

3.2.4 Post Site Visit:

1) The HRPU office will collect all comments and checklist from the Site Visit Team, draft a Summary Report (signed by the IRB Chair) and submit to the Investigator for review. The Summary Report will provide a detailed summary of the review identifying areas of improvement and recommendations.
2) When the Summary Report contains findings of non-compliance, the Investigator will respond with a corrective action plan for each finding within thirty (30) days of the date of the Summary Report.
3) In most cases, serious violations that present the risk of injury to study participants should have been immediately reported to the IRB by the PI. However, if a serious violation involving risk of injury to participants has been detected during site visit without prior report, it must be done immediately to the IRB Chair.
4) The Summary Report, including the Investigator's responses, will be reviewed at the next convened IRB meeting. The IRB may take the following actions with respect to the Summary Report:
   4.1 Acceptable referring to a site visit that result in a finding of no deficiencies or lesser deficiencies that do not appear to involve risk to potential subjects.
   4.2 Acceptable with conditions referring to a site visit that result in findings of multiple lesser deficiencies that presents a potential risk to potential subjects that needs further consideration.
   4.3 Unacceptable referring to a site visit that result in findings of one or more major deficiencies that impacts human subject’s safety and welfare.
5) The Investigator will be informed of further monitoring and educational plan with a decision as Acceptable with Conditions (4.2) or Unacceptable (4.3).

4. RESPONSIBILITY
Administrative Committee and IRB Chair are responsible for the establishment, implementation and oversight of the research study according to the policy.
5. APPLICABLE REGULATIONS AND GUIDELINES

45 CFR 46.109 (e)
21 CFR 56.109(f)

6. APPLICABLE DOCUMENTS

Site Visit Form Checklist (Internal Document No. 23)

7. PROCEDURES EMPLOYED TO IMPLEMENT THIS POLICY

<table>
<thead>
<tr>
<th>No.</th>
<th>Responsibility</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 1   | IRB Chair and Secretary | • Selection of project or venue for the Routine or Directed Site Visit.  
• Select at least 4 suitable IRB member and staff as a Site Visit Team. |
| 2   | HRPU Staff | • Contact the PI or key site personnel to schedule a site visit.  
• Arrange the preparation for the Site Visit Team |
| 3   | Site Visit Team members | • Review the research protocol, relevant documents submitted and the Site Visit Form Checklist.  
• Visit the site and confirm that the study is being conducted in compliance with the regulations, in particular of the safeguards in place for the recruitment of vulnerable subjects, informed consent documents and processes without coercion or undue influence, and the facilities available in an emergency.  
• If appropriate, obtain information about any adverse events that may have been reported and may not have been reported.  
• Complete the Site Visit Checklist and Summary Report. |
| 4   | IRB Secretary and Staff | • Deliver a Summary Report – signed by the IRB Chair, to the Investigator within 2 weeks.  
• Include the Site Visit Summary in the IRB meeting agenda |
| 5   | IRB Chair | • Develop and implement quality improvements as indicated by audits |