RUTGERS CANCER INSTITUTE OF NEW JERSEY

DATA AND SAFETY MONITORING PLAN

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Rutgers Cancer Institute of New Jersey
Data and Safety Monitoring Plan
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I. INTRODUCTION AND BACKGROUND

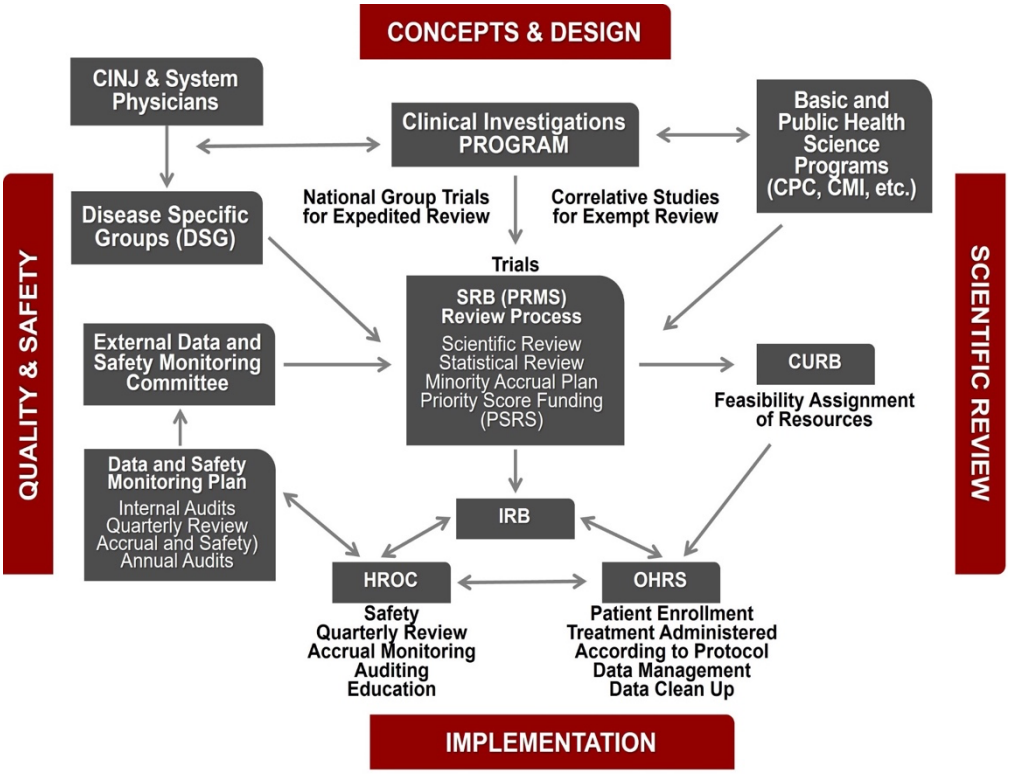
The Rutgers Cancer Institute of New Jersey (CINJ), a Consortium Cancer Center with Princeton University, is dedicated to the development of the highest quality translational cancer clinical and population science trials and the highest level of performance of any trial done under the CINJ aegis. To assure the highest scientific quality in the conduct of trials, it is essential that there is oversight and monitoring designed to ensure the safety of participants, the validity of the data, compliance with adverse events reporting, appropriate closure of trials for which significant risks have been identified, and notification of study termination to the National Cancer Institute (NCI) or sponsor as appropriate.

Data and safety monitoring at CINJ is structured to adhere to the National Institutes of Health (NIH) policies entitled, "Policy for Data and Safety Monitoring", dated June 10, 1998, "Further Guidance on Data and Safety Monitoring of Phase I and Phase II Trials", dated June 5, 2000, Essential Elements of a Data and Safety Monitoring Plan for Clinical Trials Funded by the NCI, dated April 2001, and NIH Policy Updates, as appropriate. This document provides a description of the CINJ policies and procedures related to data and safety monitoring activities at the Center.

The CINJ Data and Safety Monitoring (DSM) Plan applies to all clinical trials conducted through CINJ across our health system and in collaboration with our Consortium partner Princeton University. This DSM Plan is implemented by the Human Research Oversight Committee (HROC, our DSMB), approved by the Scientific Review Board (SRB) and monitored by an External Data and Safety Monitoring Committee (EDSMC). The overall charge of the EDSMC is to oversee the process for patient safety and validity of data, and the appropriate termination of studies for which significant benefits or risks have been uncovered. This is accomplished through institutional adherence to a DSM Plan that includes verification that (1) assures that all clinical protocols are reviewed for scientific merit and statistical validity prior to IRB submission; (2) the protocol is approved for patient enrollment through existing protocol review mechanisms; (3) the patient, principal investigator, research nurse, data manager, research pharmacist and other protocol personnel are in compliance with all protocol specifications; (4) the research record is an accurate reflection of the source documents; (5) the data capture and submission meets protocol specifications and is accomplished within an appropriate time frame; and (6) all toxicity and adverse events are accurately reported within the specified time parameters for such reports to all appropriate regulatory agencies, institutions, and organizations to ensure patient safety.

In November 2018, a Master Affiliation Agreement between Rutgers Biomedical Health Sciences (RBHS) and the RWJBarnabas Health System was executed to form an Academic Health System. As Dr. Steven Libutti serves in dual roles as the Cancer Center and RWJBH Oncology Service Line Director, the RWJBarnabas Health System administration accepted our DSM and Protocol Review System and issued a memo in May 2019 directing all oncology research throughout the Health System be subject to this DSM Plan. Princeton University does not perform its own clinical cancer research. Any clinical cancer research translated from the science performed by our Consortium partner is performed through CINJ at one of our clinical sites and is therefore covered by and subject to this DSM Plan.

The goals highlighted above are accomplished through a system of checks and balances that involves automated monitoring of adverse events via electronic data capture and rule-triggered email alerts, twice monthly meetings of the HROC, weekly and bi-weekly meetings of investigators and the research team of each Disease Specific Group (DSG) and a thorough data and safety monitoring and auditing process, which is overseen by the HROC, CINJ's Data and Safety Monitoring Committee, and reported to the Scientific Review Board (SRB), CINJ's Protocol Review and Monitoring System, the EDSMC and the Rutgers University Institutional Review Board (IRB). The component groups and their procedures within the CINJ DSM Plan is outlined in **Appendix 1**. The relationship of these committees is outlined in the **diagram** on the next page.

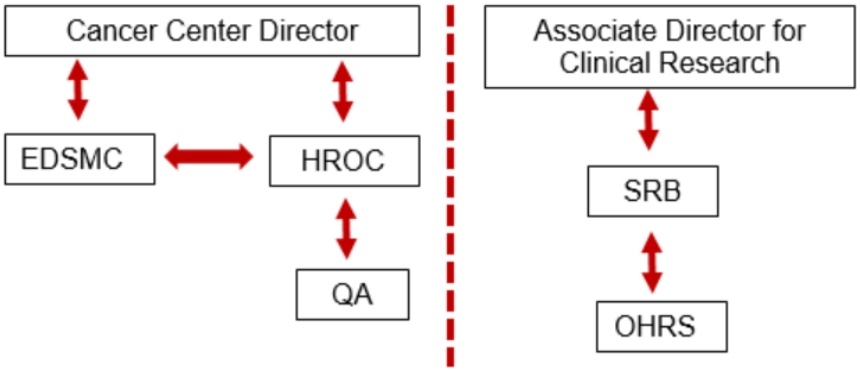


A. "Clinical Investigations" is the seat of investigator-initiated trials, which are sent to SRB for scientific review.
B. Disease Specific Groups submit peer-reviewed National Group trials (NCTN, ETCTN and others) for expedited review to SRB.
C. Basic and Public Health Science Programs can send correlative studies to SRB for exempt determination.
D. Rutgers IRB refers all oncology research back to SRB for review, if not done prior to submission
E. Following SRB review, approved trials are submitted to IRB and once approved are activated and monitored by HROC who sends back all aspects of the data safety monitoring plan to SRB for appropriate review and action.
F. HROC sends all results as well to the External Data Safety Monitoring Committee who provides a report of compliance to Cancer Center leadership.

II. RESEARCH OVERSIGHT SYSTEM ORGANIZATION, ADMINISTRATION AND RESPONSIBILITIES

The Rutgers Cancer Institute of New Jersey has developed a comprehensive system of research oversight, comprised of distinct committees that work collaboratively to provide robust oversight of all aspects of clinical research conducted at the Center. The Scientific Review Board (SRB) comprises the Center's Protocol Review and Monitoring System (PRMS). The Human Research Oversight Committee (HROC), External Data Safety Monitoring Committee (EDSMC) and the Quality Assurance Group are responsible for data safety monitoring and protocol compliance. The review committees are independent of the PRMS (and our OHRS) and report directly to the Cancer Center Director. This structure functions to "firewall" the DSMC, the reviewers, auditors, and oversight mechanisms from the OHRS and those performing research (**Figure 1**). Each committee or team includes a Chair and a Co-Chair as outlined below. Committee responsibilities related to data safety monitoring are described below.

Figure 1: Research Oversight System Organization



A. HUMAN RESEARCH OVERSIGHT COMMITTEE (HROC)

The HROC is the independent institutional body responsible for data and safety monitoring of Rutgers Cancer Institute investigator-initiated clinical trials. The Director of CINJ provides oversight of the administration of the committee and acts as a liaison between other clinical research oversight committees, investigators, and the Office of Human Research Services (OHRS), who report to the AD for Clinical Research. The Center Director has ultimate authority on closing or suspending trials for cause. The Quality Assurance and Data Monitoring Office provides administrative support for the committee, and each Quality Assurance Specialist is responsible for reporting trials they monitor at bi-weekly meetings. Their review focuses on participant safety and toxicity, outcomes/response, compliance issues, and overall data integrity (see **section V** for more information related to monitoring activities).

Members of the HROC are selected for their broad range of operational expertise and possess specific expertise in clinical trials, regulatory affairs, data management, nursing, and biostatistics (**Appendix 4**). The Cancer Center Director appoints the Chairman of the HROC. The Chairman of HROC appoints the Co-Chair.

The HROC reviews each of the following areas at their bi-weekly meeting: quarterly review of each DSG clinical trial portfolio including data completeness, response data (particularly for planned and/or interim analyses), patient enrollment and adverse events, dose limiting toxicity (DLT) reviews, all serious adverse event (SAE) reports occurring on CINJ coordinated trials, all protocol deviation reports, and audit reports (see Human Research Oversight Committee policy).

In the event of excessive toxicities or audit findings suggestive of non-compliance with the protocol, the HROC may recommend suspension of enrollment onto a trial for safety concerns. These recommendations will be communicated to the Cancer Center Director and EDSMC, and to PI for response. All recommendations and any response will also be communicated to the SRB. The Center Director will make a final recommendation regarding the conduct of a clinical trial considering input from the HROC, PI and EDSMC, as well as opinions offered by the SRB. The final recommendation by the Center Director is reported to the EDSMC, IRB and other appropriate regulatory bodies. Although all committees communicate effectively, the authority and responsibilities of HROC for data and safety monitoring under the DSMP are separate and distinct from the SRB, which focuses on scientific merit, priorities, and progress.

Minutes are generated from each HROC meeting, and these minutes and reports (e.g., audit reports, etc.) are provided to the EDSMC in electronic format on a quarterly basis. Members of the HROC External Committee are appointed by the Cancer Center Director and include the Chairman of the HROC. A quorum of six voting members of the HROC is required for each convened meeting.

The HROC Committee reviews quarterly accrual data for each DSG clinical trial portfolio at their routine meetings given its regular data monitoring function, but these data are communicated to the SRB as decisions and authority over termination based on accrual rests with the SRB. In the event that a study is not accruing as expected, the PI will be notified and asked to provide any justification for the low accrual and for a plan to improve enrollment. The PI response will be considered by the HROC Committee, which may recommend to the SRB that a study be terminated based upon lack of patient enrollment without an adequate justification for keeping the trial open or a plan to improve subject accrual.

Minutes are generated from each HROC meeting, and these minutes and reports (e.g., audit reports, etc.) are provided to the EDSMC in electronic format on a quarterly basis.

B. DISEASE SPECIFIC GROUPS

The primary responsibility of each Disease Specific Group (DSG) is to guide in the selection and clinical trial prioritization of high-quality studies. Each DSG includes a lead and co-lead, responsible for ensuring proper functioning of the team. A table of DSGs and their leaders may be found in **Appendix 5**.

DSGs are composed of physician investigators, oncology nurses, research nurse clinicians, oncology clinical research coordinators and support staff. DSGs meet at least monthly, to review patients enrolled, patients being considered for enrollment, protocol violations and SAEs. In addition, DSGs serve as the first level of review for CINJ investigator-initiated trials (IITs). This review is usually completed at the concept or letter of intent (LOI) prior to full protocol development. No protocol may be submitted to SRB without signature of the DSG Leader. The SRB and HROC communicate with the DSG leaders as needed and will inform them of any issues or concerns that impact the DSGs research portfolio.

Behavioral and population-based oncology clinical trials are also monitored by CINJ. The process for prevention and population studies is separately reported below.

C. SCIENTIFIC REVIEW BOARD (SRB)

The SRB of CINJ is the institutional body charged with the responsibility of reviewing all new and enrolling cancer clinical trials. The operations are completely independent of and non-overlapping with our DSMC. The SRB critically reviews all protocols, particularly investigator-initiated trials, to assure scientific merit, scientific priorities, and scientific progress of clinical research at CINJ. The SRB is an independent committee within the CINJ PRMS, chaired by Salma Jabbour, M.D. and co-chaired by Neil Palmisiano, M.D. A table of the committee membership may be found in **Appendix 4**. Please see section on PRMS for details.

The SRB is primarily focused on the scientific design and feasibility of new trials, as well as ensuring there are appropriate data and safety monitoring plans, as well as prioritization for use of CCSG resources. SRB will not approve protocols that do not include an adequate DSMP. SRB review of CINJ includes assignment of risk level, which corresponds to the requirements for monitoring that are described in the final protocol. This decision is communicated to HROC. During ongoing progress reviews, SRB will notify the HROC regarding any decisions that impact protocol status (i.e., suspension or closure) for those studies which are under HROC purview.

The HROC is responsible for informing the SRB of any findings that may impact the scientific integrity of a trial. In the event that the SRB is notified of misconduct or other issues impacting study integrity, the SRB will help ensure that all appropriate authorities are notified as needed (i.e., the IRB, FDA, NCI, funding sponsor, etc.). In the event that a suspension or closure occurs on an NCI funded trial, the SRB will ensure the PI report this to the NCI Program Director.

D. CONFLICT OF INTEREST

The Rutgers University Office of the Vice President for Research monitors financial conflicts of interest through the submission of contracts and grants. Conflict of Interest (COI) can include professional interest, proprietary interest, and miscellaneous interest as described in the NIH Grants Policy statement and 45 CFR Part 94. Rutgers University COI policy, “Investigator Conflict of Interest” outlines rules and reporting requirements governing all types of conflicts, including financial conflicts and disclosures, and outlines policy specifically related to clinical research. Importantly, the policy requires that an investigator disclose if the value of any remuneration received from the entity in the twelve months preceding the disclosure and, in the case of publicly traded entities, the value of any equity interest in the entity as of the date of the disclosure, when aggregated for the investigator and members of his or her immediate family, exceed $5,000. Rutgers University employs an online, electronic system for reporting COI (eCOI web site), and faculty and staff must report all financial interests prior to engaging in research for each protocol on an individual basis at the time of each approval and review. Faculty must also report all conflicts annually; any new financial interests must also be reported within 30 days, and this must be reviewed by the school to determine if serious financial COI exists. If it does, the school will work with the CINJ personnel to develop a plan to manage, reduce or eliminate COI. This policy is located online at https: orra.rutgers.edu/conflict-interest.

All CINJ research oversight committees abide by the COI policy. Any faculty member invited to serve on or review for any of the committees described in this DSM Plan must disclose any potential COI relevant to committee membership, whether real or perceived, to the appropriate CINJ institutional official. Potential conflicts that develop during a member’s tenure on a committee must also be disclosed. Decisions concerning

whether individuals with potential conflicts of interest, or the appearance of conflicts of interest, may participate on a committee or in a particular meeting will be made by the committee Chair and/or Co-Chair.

While the Rutgers University policy outlines general rules related to COI, CINJ has established the following specific committee rules that govern the activity of members who have a conflict:

- A committee member may not vote on a protocol on which he or she serves as a Principal Investigator or sub-investigator. When a trial investigator is present at a meeting and his or her protocol is being discussed in consideration for initial approval, he or she is required to leave the meeting during the discussion and the vote on the trial. The investigator is allowed to be present during the presentation of the protocol rationale and details, discussion related to protocol revisions or data and safety monitoring issues; however, he or she may not vote on these items. He or she may also not serve as an auditor for his or her own trial.

- Any committee member who is not an investigator on a trial, but who has another identified conflict may not be allowed to vote on actions related to the protocol. Conflicts will be determined by the committee Chair and/or Co-Chair. Those individuals found by the Chair and/or Co-Chair to have a significant conflict related to a trial will not be allowed to vote on items related to that trial, as described above.

Conflict of interest in the course of internal monitoring is avoided since the Quality Assurance Monitors are members of the OHRS and, thus, have no reporting relation to the investigator or sponsor and do not participate in direct study management.

E. CONFIDENTIALITY

All discussions that occur within any of the CINJ research oversight committees are confidential and are not disclosed except as outlined in this plan. Committee decisions are conveyed to the respective PI on behalf of the entire committee via the meeting coordinator, but no specifics are given related to the persons involved or details of the discussion that occurred.

Further, the committees are especially aware of issues related to confidentiality of data. The committees abide by and enforce the design of each study; confidentiality of data are maintained when data are presented (i.e., treatment assignment is not disclosed). Blinded studies remain so until they are to be unblinded as per study design, or in response to a safety issue that required knowledge of treatment received by a study participant.

F. OFFICE OF HUMAN RESEARCH SERVICES (OHRS)

The Office of Human Research Services (OHRS) assists investigators in protocol management and study conduct. The OHRS provides service to clinical investigators through six departments that provide necessary infrastructure to maintain protocol approvals and annual renewals, conduct clinical research, ensure timely and accurate data collection, and reporting and maintain compliance with all institutional and federal guidelines. The departments include: (1) Clinical Research Operations (2) Regulatory Affairs; (3) Quality Assurance and Data Monitoring; (4) Informatics; (5) Statewide; (6) Clinical Trial Lab; (7) Protocol Activation Office; (8) Data Management Office; (9) Education; and (10) Clinical Trials Finance. The data and safety monitoring responsibilities of the OHRS are:

1. Pre-study start-up training services including activation meetings prior to activation of each CINJ and CINJ multicenter study, including the Statewide Research Office. Study activation meetings at CINJ occur with the principal investigator, his/her research team and other DSG members prior to initiation of patient enrollment. The OHRS Statewide Office personnel conduct the study activation meetings with research personnel from the CINJ/RWJBH System and other participating institutions prior to enrollment from these sites. Protocol logistics and study responsibilities (e.g., patient registration, case report form completion, SAE reporting, etc.) are discussed at these meetings.
2. Centralized web-based database of all protocols (OnCore®).
3. Provide real-time reports for clinical protocol activation status through the web-based database (OnCore®).

4. Centralized subject registration and accrual reporting.
5. Centralized patient verification of eligibility.
6. Monitoring of protocol evaluations and treatment by research nurses at CINJ.
7. Centralized reporting of SAEs and follow up to the Institutional Review Board (IRB), the sponsoring organization, the NCI, and the FDA and/or NIH Office of Biotechnology Activities (OBA) when appropriate.
8. Centralized electronic collection of clinical trial data from source documentation.
9. Ensuring compliance with Good Clinical Practice guidelines and the regulations of applicable regulatory bodies.
10. Monitoring of CINJ multi-center trials (nationally or internationally) and auditing of clinical trials in accordance with OHRS Standard Operating Procedures.
11. Participation in the auditing and review process of the HROC and the EDSMC.

G EXTERNAL DATA AND SAFETY MONITORING COMMITTEE (EDSMC)

An EDSMC was established to oversee and provide recommendations regarding the clinical research enterprise of all investigator-initiated trials, which primarily consists of phase I and phase II clinical trials. A study-specific Data Safety Monitoring Board (DSMB) is established for all phase III investigator-initiated trials conducted under the aegis of the CINJ.

The Chairman of the EDSMC reports the deliberations and recommendations of the EDSMC to the SRB Chairman and HROC Chairman.

The EDSMC is electronically provided with the following information:

1. Summary of serious adverse events (quarterly and year to date)
2. Copies of all internal and external audit reports
3. HROC meeting minutes
4. List of active protocols and CINJ ITTs that have been closed in the most recent quarter, with reason for closure
5. Notification of all audits for cause
6. Notification of all studies recommended for closure and reason
7. All communications describing changes in consent forms because of new information impacting safety or risk for CINJ IITs

The primary responsibility of the EDSMC is to review the data and safety monitoring procedures and outcomes at CINJ. The EDSMC may request information other than that already provided in order for it to make recommendations regarding data and safety monitoring. The EDSMC reviews interim toxicity from all CINJ investigator-initiated clinical trials. The EDSMC may recommend termination of trials for which significant benefits or risks have been discovered. Recommendations and reviews by the EDSMC are sent to the SRB and the IRB.

The EDSMC is composed of three individuals with expertise in cancer clinical research that are not members or resident faculty of CINJ (**Appendix 6**). The Cancer Center Director appoints EDSMC members. The committee consists of highly qualified medical and/or radiation/surgical/gynecologic oncologists and an oncology nurse researcher or nurse ethicist. The EDSMC may invite ad hoc consultants to provide special expertise if necessary. All members have voting privileges.

A description of EDSMC procedures is provided in **Section VIII of this DSM Plan**.

III. **INVESTIGATOR RESPONSIBILITIES**

Principal investigators are ultimately responsible for the conduct of a clinical trial, including the items described below. It is recognized that principal investigators may delegate certain responsibilities to other CINJ services such as the OHRS and the Research Pharmacy Shared Resource. All PIs are required to complete all institutional training requirements, abide federal policies and guidelines, and abide by those commitments outlined in FDA Form 1572.

To ensure compliance with all federal guidelines regarding research, all CINJ investigators are required to complete the Collaborative IRB Training Initiative (CITI) education course. Proof of this certification must be on file with the IRB prior to participation in any research involving human subjects. The OHRS also maintains a recent curriculum vitae and current Investigator Financial and Other Personal Interests Disclosure form for each investigator as well as all signed Food and Drug Administration (FDA) forms 1572, as required. In addition, a centralized education and training resource has been developed to assist with ongoing safety and monitoring education of investigators.

Investigators are responsible for:

1. Ensuring that the investigation is conducted according to the investigational plan (i.e., protocol), applicable regulations and any conditions of approval imposed by applicable regulatory bodies, such as the IRB, FDA, or NCI.
2. Protecting the rights, safety, and welfare of subjects under the investigator's care.
3. Accountability for investigational drugs and/or devices under investigation and supervising the use of the investigational drugs and/or devices. An investigator shall permit investigational drugs and/or devices to be used only with subjects under the investigator's supervision. An investigator shall not supply investigational drugs and/or devices to any person not authorized under 21 CFR Part 312 or 812, respectively, to receive it.
4. Ensuring that informed consent is obtained from each subject in accordance with 21 CFR Part 50, and that the study is not commenced until IRB and, if pertinent, FDA, NCI or other regulatory approvals have been obtained.
5. Ensuring that subjects are informed of new information that may affect their willingness to participate in the clinical trial in accordance with federal regulations and ICH guidelines for Good Clinical Practice.
6. Maintaining accurate, complete, and current records relating to the investigator's participation in an investigation, including:
    a. Correspondence with other investigators, IRB, the sponsor, monitor(s), and, when applicable the FDA.
    b. Records of receipt use or disposition of investigational drugs and/or devices that relate to the type and quantity of the drugs/devices, dates of receipt, and lot/batch numbers; names of all persons who received, used, or disposed of the drugs/devices; and the number of units of the drugs/devices returned to the sponsor.
    c. Records of each subject's case history and exposure to the investigational drugs/devices, including documents evidencing informed consent; all relevant observations, including records concerning adverse events (whether anticipated or not); information and data on the condition of each subject upon entering, and during the course of the investigation, including information about relevant previous medical history and the results of all diagnostic tests stipulated in the protocol; a record of the exposure of each subject to the investigational drugs or devices, including the date and time of each use and any other therapy.
    d. Any other records that the IRB, sponsor, or FDA requires to be maintained.
7. Permitting the IRB, CINJ audit teams, sponsor and/or the FDA to inspect any records pertaining to the investigation.
8. Submitting complete, accurate, and timely reports to the IRB, sponsor and, if applicable, the FDA. Reports include the items listed below.

9. Serious, unanticipated adverse events occurring during the investigation.
10. Progress reports on the investigation. These reports must be provided at regular intervals if directed by the IRB and sponsor.
11. Any use of investigational drugs or devices without obtaining informed consent.
12. A final report, which is generally due within three (3) months following termination or completion of the investigation (a study manuscript may be used as a final study report).
13. Any additional information requested by the IRB or, if indicated, the FDA.
14. Closing the study to new subject enrollment when criteria, stipulated in the protocol, have been met for this action.
15. In the case where the CINJ PI is an IND/IDE holder, all FDA reporting requirements to maintain the IND/IDE are followed. This is done with the assistance of the Quality Assurance and Regulatory Affairs divisions.
16. All blinded studies describe a randomization scheme and specific criteria and procedures for unblinding.
17. In accordance with federal policy, the investigator is responsible for ClinicalTrials.gov registration and reporting.

IV. **INSTITUTIONAL CLINICAL TRIAL RISK ASSESSMENT AND MONITORING REQUIREMENTS**

All clinical trials conducted under CINJ authority must include provisions for data and safety monitoring. The extent of monitoring varies by the phase of the trial, size and complexity of the trial, degree of risk encountered by the patients on the study, the study sponsor, and the type of investigational agent or agents involved. It is expected that all CINJ IITs will follow the data and safety monitoring procedures and requirements outlined in this plan. This plan also applies to other clinical trials where CINJ faculty serve as the sponsor-investigator (i.e., Big Ten Cancer Consortium) that do not have an alternative approved external or alternate plan.

The HROC assesses the frequency and necessity of monitoring based on the level of risk assigned by the SRB. SRB defines the level of risk for clinical trials, ranging from minimal to high risk. The levels of risk are:

- Minimal Risk:
  The regulations define minimal risk as the "probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examination or tests (45 CFR 46.102(i)). Examples of this type of trial include internet-based strategies aimed at cancer prevention, an exercise study aimed at symptom management, or non-interventional trials. Monitoring by HROC is not required.

- Moderate Risk:
  Moderate risk is defined as the probability of and magnitude of harm anticipated in the research as more than minimal risk, but not significantly greater. There is adequate safety monitoring in the trial to identify events promptly and to minimize their effects. Examples of this type of trial include some imaging trials and post-approval trials of FDA-approved drugs or devices.

- High Risk:
  High risk trials are greater than moderate risk due to the increased probability for generating serious adverse events. The study monitoring and reporting requirements of the trial are such that events or event trends may not be immediately recognized. Examples include trials the involve the use of an investigational agent for which there is limited or no available safety data, cell therapy trials, or any CINJ investigator-initiated IND trial.

V. DATA AND SAFETY MONITORING PROCEDURES

A. MONITORING THE PROGRESS OF TRIALS AND THE SAFETY OF PARTICIPANTS

All clinical trials require monitoring commensurate with the degree of risk involved in participation as well as the size and complexity of each study. Monitoring is an ongoing process, responsibilities for which are assumed by the principal investigator and the clinical trials infrastructure of the Cancer Center. Data monitoring occurs on an ongoing basis through weekly meetings of the high-risk activities (e.g., Phase I trials, vector-based interventions, certain vaccine and biologic trials, and transplant trials), regular meetings of the DSGs, during initiation and annual audits and at twice-monthly meetings of the HROC. All audit reports are reviewed by the HROC and assessed for further action. The twice-monthly meetings of the HROC bring together the leadership of the SRB, the OHRS, and others to review the progress and ongoing conduct of clinical trials. This group provides the oversight of the clinical research process and its resources and is responsible to the Cancer Center Director. Minutes of HROC meetings are transmitted to the EDMSC, SRB, and IRB and the Cancer Center Director for review. Data and safety monitoring activities are described in additional detail in the following sections of this DSM Plan.

B. INVESTIGATOR-INITIATED TRIALS

1. Phase I Trials

   Each high-risk area is handled with increased surveillance and monitoring. For example, in the CINJ phase I unit, every patient being considered for enrollment, every patient enrolled, all considerations for dose escalation or de-escalation, and all dose-limiting toxicities are discussed at the weekly meeting of the phase I team. Participants in this meeting include the phase I principal investigators, an advanced practice nurse assigned to this team, research nurse clinicians, oncology clinical research coordinators, and a research pharmacist.

   Investigator-initiated phase I studies receive the highest level of data and safety monitoring. Weekly meetings of the Phase I team are held to discuss all patient entries, dose-limiting toxicities, and enrollment of patients to new dose levels. Serious adverse events that are reported to all necessary parties, which may include the NCI and/or FDA, are discussed. All cohort-based dose-escalation decisions are reviewed at this meeting and are confirmed in writing. Dose assignment memoranda are posted in OnCore®, the web-based data system. There are some Phase I studies that are specific to a particular tumor type. These trials are reviewed during the Phase I meetings as well as during the meetings held by the specific DSGs.

2. Phase II Trials

   Monitoring of investigator-initiated Phase II trials occurs during meetings of each Disease Specific Group, which occur on a bi-weekly basis. New patient enrollment, SAEs, unexpected adverse events, and protocol status are discussed. These meetings are attended by the principal investigators and the research team (e.g., research nurse clinicians, oncology clinical research coordinators, advanced practice nurses).

   Phase II trials are also monitored closely by HROC. At least quarterly, summary data on the progress, safety, and outcome data of trials in each DSG are reviewed at a HROC meeting. Particular attention is paid to response-based early stopping rules that might result in trial closure.

3. Prevention, Behavioral, and Population-Based Trials

   Cancer prevention, behavioral oncology, and population-based clinical trials are conducted and monitored by CINJ as appropriate. These clinical trials are subjected to similar review processes as other therapeutic clinical trials. In consultation with the Associate Director of Cancer Prevention and Control, a Data and Safety Monitoring Subcommittee with expertise in prevention and supportive care studies is convened as required by the complexity and potential risk of the trial. The HROC determines the necessity of convening the Prevention/Supportive Care DSMC based on an assessment of the possibility of early stopping due to emerging differences in either risk or benefit.

4. CINJ Multi-Center Trials

Multi-Center investigator-initiated studies, which are conducted at other institutions and physician offices, are monitored by CINJ principal investigators, HROC and OHRS personnel. The Quality Assurance and Data Monitoring Office is devoted solely to activation and monitoring of these studies.

a. Activation Meetings

Activation meetings are conducted prior to activation of the study at each institution. Activation meetings are conducted on-site or via Webinar to review the protocol with the local principal investigator and/or his/her research staff, the procedures for centralized patient registration, to teach the local research staff how to properly complete the electronic case report forms, to review data submission expectations, to review adverse event reporting requirements, and any other study-specific issues. If investigational drugs or drugs provided by the sponsor are a part of the study, proper drug accountability procedures are reviewed with the pharmacist or person who will ensure that these procedures are followed. Prior to the activation meeting, regulatory documents are reviewed and verified by the Regulatory Affairs Office of OHRS to ensure local IRB approval.

b. Monitoring Visits – Statewide Institutions

On a minimum of a quarterly basis, or after enrollment of the first two patients, monitoring visits are conducted for the purpose of verifying that documentation in the medical and research records support data recorded in the electronic case report forms. Adherence to the protocol eligibility, treatment plan, response and toxicity evaluation, and SAE reporting criteria are reviewed. The appropriate documentation of informed consent and documentation of administration of protocol therapy for all enrolled patients are reviewed. Ongoing training and research oversight occurs monthly with the RWJBH research staff and "collaborative" meetings and training sessions.

All monitoring visit findings are reviewed with the research staff. Unacceptable monitoring visit findings are immediately communicated to the Principal Investigator and to the Chair and Co-Chair of the HROC. All written reports are presented to the HROC and subsequently forwarded to the local institution's Principal Investigator, study coordinator, the respective IRB. Monitoring visits may be conducted more frequently than every quarter as warranted.

c. Monitoring Visits - Non-Statewide Institutions

Monitoring visits to non-Statewide study participants (i.e., other universities) are conducted at least annually. The monitoring visit agenda is the same as described above for Statewide institutions. Review of electronically submitted data occurs at least monthly. Follow–up training and data queries are employed to ensure timely submission of study data.

d. Audits – Statewide Institutions

Audits of Statewide performance sites are conducted annually. A description of the audit program is described in **Section VII of this DSM Plan**.

C. COOPERATIVE GROUP TRIALS

Cooperative group trials are conducted through CINJs DSGs. The progress of these studies is reviewed at the DSG meetings where the studies reside. For example, an RTOG study in patients with prostate cancer is reviewed during the Genitourinary DSG. Cooperative group trial audits are handled according to the policies and procedures of the cooperative group.

D. INDUSTRY-SPONSORED TRIALS

Trials that are not investigator-initiated and are sponsored by industry are reviewed in the same manner as the cooperative group studies. Several of these trials are phase I studies and as such, will be reviewed as described

for the Phase I investigator-initiated studies. The sponsor's feedback regarding their ongoing monitoring of these studies is reviewed by the Phase I Director with feedback to the HROC on a quarterly basis.

E. DATA ACCURACY, DATA INTEGRITY AND PROTOCOL COMPLIANCE

CINJ uses a system of checks and balances to ensure that each patient meets the eligibility requirements of the protocol. In this procedure, the Principal Investigator or co-investigator evaluates the patient for eligibility and the Research Nurse Clinician and/or Clinical Research Coordinator completes the eligibility checklist. A different member of the OHRS research team then verifies the eligibility checklist for accuracy. The research nurse validates the completeness of the signed consent form. For trials involving drug therapy, a Research Pharmacist verifies the eligibility criteria and the presence of a signed informed consent prior to dispensing any medications. The completed consent form is kept in the patient research record and a copy is scanned into the department's clinical trial management system OnCore® and the electronic medical record. A calendar of interventions and data collection points is generated for each patient in OnCore® to help assure protocol compliance. This assists the healthcare providers in identifying the data points to be collected during each patient visit.

Data accuracy and data integrity is assured through regular review of data by the OHRS oncology clinical research coordinators, OHRS Statewide staff and their managers. In addition, formal quality assurance audits of CINJ patient records and monitoring visits of Statewide and non-Statewide institutions are performed by OHRS Quality Assurance and Data Monitoring staff and to ensure the accuracy and integrity of the data. These audit procedures are described in **Section VII of this DSM Plan**.

VI. REPORTING SERIOUS ADVERSE EVENTS

A. REPORTING PROCEDURES

The procedures and timelines for the reporting of serious adverse events are described within each protocol. Requirements of the IRB, NCI, FDA, industrial sponsor, OBA, etc. are followed and are described in the protocols. In general, the CINJ guidelines for expedited adverse event reporting are those stipulated by the NCI and the IRB.

An adverse event, as defined by the NCI, is any unfavorable and unintended sign (including an abnormal laboratory finding), symptom or disease temporally associated with the use of a medical treatment or procedure regardless of whether it is considered related to the medical treatment or procedure. A serious adverse event is one that is immediately life threatening or results in death, in hospitalization or prolongs hospitalization. All relevant agencies, including study sponsors, the NIH (if NIH sponsored), FDA, HROC, OBA and IRB must receive SAE reports in a timely manner. Summary reports of SAEs are forwarded to the EDSMC.

The OHRS is the central reporting entity for all CINJ coordinated clinical trials. SAE reports are prepared by an OHRS staff member with the investigator assessing toxicity grade, attribution, and causality. All SAEs on CINJ coordinated investigator-initiated studies that occur at participating institutions must be reported to the OHRS within 24 hours of discovery. The OHRS Associate Director of Regulatory Affairs ensures submission of the completed SAE reports to the IRB and appropriate sponsors and updates the SAE database. SAE summary reports are also provided to the EDSMC.

B. REVIEW OF REPORTED SERIOUS ADVERSE EVENTS

Physician members of HROC will review SAE reports (via the centralized database OnCore®) bi-weekly. SAE reports are discussed in further detail at the twice-monthly HROC meetings. In addition, automated notices are sent from the system to HROC physicians whenever pre-determined monitoring rules have been triggered. To ensure that no SAEs are overlooked, results of quality assurance audits are discussed at the twice-monthly meetings of the HROC. Any severe or unusual adverse events are forwarded to the IRB as per IRB reporting criteria for immediate review. Any suggestion of patterns of noncompliance with SAE reporting requirements could result in suspension of enrollment and study termination.

C. IND SAFETY REPORTS/EXTERNAL SERIOUS ADVERSE EVENTS

For multi-site industry-sponsored and cooperative-group protocols in which CINJ is participating, the principal investigator reviews external SAEs (events reported by outside agencies on industry-sponsored or cooperative group trials) received from the sponsor consistent with guidelines issued by the U.S. Office of Human Research Protections (OHRP) and/or the Food and Drug Administration (FDA). The principal investigator reports his/her assessment to the IRB via the OHRS Quality Assurance and Data Monitoring Office when IRB reporting criteria have been met.

D. REPORTING OF TEMPORARY OR PERMANENT SUSPENSION OF AN NCI-FUNDED CLINICAL TRIAL TO THE NCI GRANT PROGRAM DIRECTOR RESPONSIBLE FOR THE GRANT

The HROC may recommend suspending enrollment to a trial if audit results are unacceptable or if there are unanticipated problems identified outside of an audit. The HROC may recommend study suspension based upon audit findings. The recommendations of the HROC are reviewed by the Cancer Center Director, EDSMC and the SRB. If the SRB or Center Director terminates a study, the IRB and the sponsoring agency are notified. The SRB or EDSMC may recommend that a study be audited in more depth or terminated. The principal investigator is notified of termination of the study along with the reason(s) for termination. Accrual is immediately suspended and the IRB and sponsor, including the NCI, are notified by the chair of the SRB if the response is not adequate. The decision of the SRB is communicated to the EDSMC.

The principal investigator has up to 14 days to appeal the suspension and respond in writing relative to the reasons for termination. The investigator's appeal is reviewed by the SRB and/or Center Director. If the Investigator does not or cannot adequately respond to the satisfaction of the Center Director, with advice of SRB, (determined by a majority vote), the protocol is terminated. At that time, the IRB is immediately notified in writing by the Chair of the SRB and no further patients may be enrolled to the study. Temporary or permanent suspension based upon audit findings of an NCI-funded clinical trial is reported to the NCI grant program director responsible for the grant in writing by the principal investigator with a copy to the Chair of the SRB. Temporary or permanent suspension based upon audit findings of any trial, including those that are NCI-funded, is also reported to the IRB by OHRS.

VII. **QUALITY CONTROL AND QUALITY ASSURANCE PROGRAM**

The HROC oversees all quality assurance and audit activities of the cancer center. The Rutgers Cancer Institute of New Jersey has made it a priority to continuously strengthen our internal quality assurance program. Currently there are two procedures in place for quality oversight: quality assurance review and internal audit. Standard Operating Procedures for the conduct of audits and quarterly audit plans have been approved by the Chairs of the SRB and HROC.

Quality assurance review is the responsibility of six Quality Assurance Specialists (QAS) who report directly to the office's Manager for Quality Assurance and Data Monitoring. The QASs are responsible for the ongoing review of all clinical trial data for CINJ IITs, concentrating on data accuracy and completeness, protocol adherence, and safety review. In 2022, this team reviewed data for 27 IITs at scheduled monitoring visits, according to monitoring plans associated with the study's risk level, and they interact directly with each study PI as issues arise. They also work directly with treating physicians and study coordinators, both at the Rutgers Cancer Institute and at participating sites, if there are issues related to study participants and/or data submission. The QASs regularly report all findings directly to HROC during meetings and via email, when needed.

The Quality Assurance and Data Monitoring Office is managed by OHRS administratively but report all results to HROC and the Center Director, independent of OHRS direction. Audit teams are assigned by the Manager of Quality Assurance and Data Monitoring. The audit teams are comprised of members of CINJ with auditing experience. Whenever possible, a physician faculty member is a member of the audit team. When a physician is a part of the audit team, the physician shall not be an investigator of the study to be audited. Audit teams may

include a research nurse and/or clinical research coordinator who also have no real or perceived conflict of interest regarding the particular trial(s) to which they are assigned.

A. MONITORING VISITS

Monitoring visits are conducted for investigator-initiated studies to ensure subject safety and to ensure that the protocol is conducted, recorded, and reported in accordance with the protocol, standard operating procedures, good clinical practice, and applicable regulatory requirements. The Quality Assurance team will conduct routine monitoring after the third subject is enrolled followed by annual monitoring of 1-5 subjects until the study is closed to enrollment and subjects are no longer receiving study interventions that are more than minimal risk.

Additional monitoring may be prompted by findings from monitoring visits, unexpected frequency of serious and/or unexpected toxicities, or other concerns and may be initiated upon request by CINJ leadership, the SRB Committee, the HROC Committee, the sponsor, the principal investigator, or the IRB. All study documents must be made available upon request to the Quality Assurance Monitoring team and other authorized regulatory authorities, including but not limited to the National Institute of Health, national Cancer Institute, and the FDA. Every reasonable effort will be made to maintain confidentiality during study monitoring.

B. INTERNAL AUDITS

Internal auditing of investigator-initiated protocols occurs at least annually to evaluate compliance with the protocol and the principles of GCP. The PI agrees to allow the auditing team direct access to all relevant documents and to allocate his/her time and the time of the study team to the auditors in order to discuss findings and any relevant issues.

Audits are designed to protect the rights and well-being of human research subjects. Audits may be routine or directed (for cause). Routine audits are selected based upon risk metrics generally feared towards high subject enrollment, studies with limited oversight or monitoring, investigator-initiated Investigational Drugs or Devices, federal-funded studies, high degree of risk (based upon adverse events, type of study, or vulnerable populations), Phase I studies, or studies that involved Medicare populations. Directed audits occur at the directive of the IRB or an authorized CINJ Institutional Official.

Five randomly selected patient charts or at least 10% of accrual to date, whichever is greater, is audited on an annual basis prior to the yearly review by the IRB. In general, previously audited cases are not reviewed during annual audits. The audits examine research studies/clinical trials methodology, processes, and systems to assess whether the research is conducted according to the protocol approved by the RBHS IRB. The primary purpose of the audit/review is to verify that the standards for safety of human subjects in clinical trials and the quality of data produced by the clinical trial research are met. The audit/review will serve as a quality assurance measure, internal to the institution. Additional goals of such audits are to detect random and systemic errors occurring during the conduct of clinical research and to emphasize “best practices” in the research/clinical trials environment. Any study that requires a re-audit will be re-audited in six months or after five patients have been enrolled, whichever occurs first. Each CINJ Network institution with patient enrollment is audited annually.

C. SPECIAL (FOR CAUSE) AUDITS

Situations may arise necessitating an audit at times other than those described above. Under the guidance of HROC, the Executive Director of OHRS would organize an audit team.

D. AUDIT CRITERIA

The purpose of the audits is (1) to ensure that documentation of clinical research studies is comprehensive and accurate; (2) to verify adherence to the protocol approved by the SRB and IRB; (3) to ensure that all Federal and institutional guidelines regarding clinical research are strictly followed; and (4) to ensure patient safety by

verifying appropriate reporting of adverse events. All discrepancies, omissions, or queries are recorded on the audit forms.

The audit team reviews each of the following areas that are independently assessed at each audit:

1. regulatory processes (including IRB approvals, amendments, continuing reviews, and consents)
2. consent completion and documentation
3. notification of subjects of new information that may affect their willingness to participate in the clinical trial and documentation
4. protocol compliance (eligibility, assignment to randomization arm if applicable, treatment administration, data verification including responses)
5. adverse event reporting (timeliness and thoroughness) and follow-up
6. drug accountability (for blinded trials, the Research Pharmacy maintains blinding and does not disclose during an audit)
7. data quality (attributable, legible, contemporaneous, accurate)

Each area is reviewed for major and lesser deficiencies. A major deficiency is defined as a variance from protocol-specific procedures that makes the resulting data questionable (i.e., factors having a significant impact on eligibility, treatment or reporting of toxicity, response, etc.). Improper consent form procedures are also considered a major deficiency. A lesser deficiency is a deficiency that is judged to not have significant impact on outcome or interpretation of the study and is not listed as a major deficiency.

E. AUDIT RESULTS/ACTIONS TAKEN

1. Audit Results
   The final assessment of the audit is categorized into one of the following categories:

   - Acceptable
     No deficiencies identified; or few lesser deficiencies (less than 50% of the cases reviewed) identified; or major deficiencies identified during the audit that were addressed and/or corrected prior to the audit for which documentation exists and no further action is required by the PI.

   - Acceptable - Needs Follow-Up
     Multiple lesser deficiencies (greater than 50% of the cases reviewed) identified; or major deficiencies identified during the audit not corrected and/or addressed prior to the audit but deemed answerable. This requires a prompt response (less than 14 days) by the PI.

   - Unacceptable
     Multiple major deficiencies (greater than 50% of the cases reviewed) identified; or a single, flagrant major deficiency identified; or multiple lesser deficiencies (greater than 50% of the cases reviewed) of a recurring nature found in a majority of patient cases reviewed.

2. Actions Taken
   Feedback: The results of the audit are discussed in detail with the principal investigator at an exit interview, which is convened following the audit. A written audit report is provided to the principal investigator, the HROC, the EDSMC and the IRB. HROC follow-up includes review of audit findings at the next convened meeting following completion of the written report. The audit results are discussed, and the status of the corrective action plan is reviewed.

3. Audit Resolutions:

   Audit results are reviewed by the HROC. An acceptable – needs follow-up rating requires a response from the principal investigator and may require a corrective plan to be submitted to the HROC within 14 days from the date of the written audit report. Corrective action plans (CAP) outlining the resolution to the discrepancies (e.g., data integrity, missing information, scientific misconduct, etc.) found during an audit is developed by

the principal investigator in collaboration with the OHRS manager of the area found to be deficient in the audit. The Manager of Quality Assurance and Data Monitoring and the Chair of HROC administratively review the corrective action plan for acceptance, and these are reviewed at the next full HROC meeting. Failure to file a required corrective action plan within the required timeframe results in HROC placing a hold on accrual of the principal investigator's audited trial until discrepancies are resolved.

Any unacceptable rating from audit results in the requirement of a CAP addressing all deficiencies within 14 days of the exit interview and a repeat audit within 6 months. Additionally, depending on the severity of the deficiencies identified in the audit, an unacceptable rating could result in an immediate suspension by HROC in enrollment and further review regarding termination of the audited protocol(s). Corrective action plans outlining the resolution to the discrepancies found during an audit are developed by the principal investigator in collaboration with the OHRS manager of the area found to be deficient in the audit. Failure to file a required corrective action plan in the required timeframe results in HROC immediately suspending the accrual of the principal investigator's audited trial until all deficiencies are resolved and the corrective action plan is reviewed and accepted by the HROC. The Chair of HROC is responsible for immediately notifying the Center Director, EDSMC, the IRB, and the Office of the Associate Dean for Research in the event of suspension or termination. As per university policy, the Office of the Dean for Research will contact the sponsoring agency, including the NCI and all NCI program directors responsible for grants related to the clinical trials.

F. MULTI-CENTER TRIALS

Only hospitals that have American College of Surgeons Commission on Cancer-approved programs and have dedicated research personnel may participate. Pre-study evaluation site visits have been conducted at each site in accordance with IRB recommendations. Each RWJBH and other affiliate institution investigator must be certified in the conduct of clinical research by completing a web-based course in the "Protection of Human Research Participants Training Course" given by the IRB, CITI training, or by the NIH. Proof of this certification must be on file in the OHRS before participation in any clinical trial. Each CINJ Network institution obtains IRB approval from their institution or from a central IRB, when appropriate, to participate in the CINJ multi-center trial. The OHRS is the central reporting entity that is responsible for preparing annual summary reports of adverse events and study progress for distribution to the CINJ partner site institutions and their IRBs.

When a patient is identified for protocol entry at an off-site location for a CINJ investigator-initiated multi-center trial, the local research staff verifies eligibility and works with the DSG team to verify eligibility and enroll patient. Enrollments are entered in OnCore®.

Local investigators and/or their designees collect all protocol-required data and report them at protocol-specified time intervals to the OHRS on paper or electronic case report forms in OnCore® designated for the study. They are required to document frequency, severity, and duration of toxicities. All toxicities are also entered in OnCore® for HROC review. Source document verification occurs during monitoring visits at Statewide institutions.

Audits are conducted on-site at Statewide sites in the same manner as internal audits. The HROC and the EDSMC review results of these audits. Audit reports are forwarded to the IRB.

VIII. **PROCEDURES OF THE EXTERNAL DATA AND SAFETY MONITORING COMMITTEE**

A. MEETINGS

The EDSMC reviews the status of investigator-initiated trials, including toxicity, quarterly. All deliberations of the EDSMC are strictly confidential.

B. RECOMMENDATIONS FROM THE EDSMC

The EDSMC has the obligation to ensure optimal conduct of clinical trial research. The EDSMC is responsible for ensuring that the following procedures are in place: accurate tracking of patient accrual, ongoing reviews of patient eligibility, timely medical review and assessment of individual patient data, prompt and accurate reporting of serious or unexpected adverse events.

All recommendations from the EDSMC are made to the Center Director and copied to the Associate Director for Clinical Research of CINJ. Recommendations from the EDSMC are discussed at the appropriate meetings of the HROC, SRB, and other committees as necessary. The IRB is also notified of the recommendations of the EDSMC. The principal investigator(s) are apprised of all recommendations made by the EDSMC.

If the EDSMC recommends a study change for patient safety reasons, the change is implemented as quickly as possible after review by the appropriate CINJ committees, as well as the IRB.

C. RELEASE OF OUTCOME DATA

In general, outcome data is not made available to individuals outside of the EDSMC until accrual has ceased, all patients have concluded their assigned treatment, and the protocol-specified primary endpoint has been reached. The EDSMC is made aware of any communication of analysis results that do not meet these requirements.

D. CONFIDENTIALITY PROCEDURES

Deliberations and recommendations of the EDSMC are strictly confidential and are only made accessible to CINJ Employees on a need to know basis.

EDSMC members are responsible for disclosing any potential, real or perceived, conflicts of interest. Individuals who serve on the EDSMC are responsible for disclosing significant financial interests that would reasonably appear to be affected by their research or educational activities and any significant financial interests in entities whose financial interests would reasonably appear to be affected by their participation in an EDSMC.

IX. **INSTITUTIONAL REVIEW BOARD APPROVAL OF THE DATA AND SAFETY MONITORING PLAN**

The June 1, 2020 version of this DSM Plan was submitted to the Rutgers Biomedical Health Sciences IRB for their files. This version, dated December 5, 2022, will be submitted to the IRB for their files following NCI review and approval.

DSMP Appendix 1

Component Groups of the Rutgers Cancer Institute of New Jersey
Data and Safety Monitoring System: Reporting Responsibilities and Committee Relationships

CINJ Committees and Boards	Procedures	Monitoring
Principal Investigators and Disease Specific Groups (DSGs)	- Minimum of monthly meetings. - Investigators, OHRS, and Research Pharmacy personnel.	- Patient evaluation and enrollment. - Review of serious adverse events and dose-limiting toxicities for phase I studies. - Efficacy evaluation and reporting.
Scientific Review Board (SRB)	- Twice monthly meetings. - Receives recommendations from HROC concerning study progress, significant audit results or other issues affecting study continuation.	- Reviews protocols for scientific merit and statistical validity. - Review of protocol amendments that affect patient safety and/or the scientific conduct of the study. - Evaluates issues presented by the HROC. - Terminates studies due to problems or lack of adequate patient enrollment.
Human Research Oversight Committee (HROC)	- Twice monthly meetings. - Regular agenda. - Provides all meeting minutes, correspondence, and reports to the EDSMC.	- Patient enrollment. - SAE Summary Reports. - Protocol Deviation Reports. - Response reviews. - Audit reports and investigator responses.
External Data and Safety Monitoring Committee (EDSMC)	- Receives information from HROC. - Annual site visit to CINJ. - Immediate notification of serious problems.	- Reviews information received on a quarterly basis. - Determines adequacy of the CINJ data and safety monitoring procedures.
Office of Human Research Services (OHRS)	- Training prior to study activation. - Central regulatory repository for all CINJ trials. - Central patient registration and data management. - SAE report preparation and submission. - Prepares audit plan, audit reports.	- Eligibility verification. - Nursing care and monitoring of CINJ research patients. - Prompt data collection and review. - Monitoring of Statewide and external collaborating sites. - Review of SAEs with PI. - Conducts quality assurance audits.
Rutgers/ Institutional Review Board (IRB)	- Meetings four times a month. - Regular meetings of IRB staff and OHRS Regulatory staff. - Receive reports from OHRS, HROC, and SRB.	- Receipt and review of reports (e.g., Statewide study evaluation, audit, SAE, protocol deviation, etc.). - Informed of all protocol decisions.

DSMP Appendix 2

Rutgers Cancer Institute of New Jersey
Data and Safety Monitoring Plan

Summary of Changes to the Data and Safety Monitoring Plan (version December 5, 2022):

1. Throughout the DSM Plan, the version date has been updated.
2. Table of Contents: Added new section IV. Institutional Clinical Trial Risk Assessment and Monitoring Requirements
3. Page 3, Introduction and Background: clarified that CINJ is a Consortium Center with Princeton and this DSM plan applies to CINJ and its consortium member.
4. Page 5, Section 1. Introduction: Flow diagram has been updated to reflect the current review processes of trials within PRMS.
5. Page 6, B. Disease Specific Groups: clarified the role of DSGs in the PRMS
6. Page 7, C. Scientific Review Board: reworded the role of SRB in data monitoring
7. Page 11, IV. Institutional Clinical Trial Risk Assessment and Monitoring Requirements. Added section to define how SRB assigns level of risk to investigator initiated trials.
8. Page 15. VII. Quality Control and Quality Assurance Program: Added an introductory paragraph on role of the Quality Assurance Specialist in monitoring investigator-initiated trials.
9. Appendix 3 – Membership of Scientific Review Board has been updated.
10. Appendix 4 – Membership of Human Research Oversight Committee has been updated.
11. Appendix 5 – DSH Leadership has been updated.
12. Appendix 6 – Membership of External Data and Safety Monitoring Committee has been updated.

DSMP Appendix 3

Membership of the Scientific Review Board (SRB)

MEMBER	POSITION	AREA OF EXPERTISE
Lyudmyla Berim, MD.	Associate Professor, Medicine	Clinical Investigations – Gastrointestinal Malignancies
Andrea Dragan, MS. (*ex-officio)*	Director of Quality Assurance and Evaluation	Humans Subjects Protection
Carolyn Heckman, PhD.	Associate Professor, Medicine	Population Science
Wen Wei Hu, PhD.	Associate Professor, Radiation Oncology	Basic Science, Radiation Biology
Salma Jabbour, MD. (Chair)	Professor, Radiation Oncology	Clinical Investigations – Radiation Oncology
Aliza Leiser, MD.	Associate Professor, Gynecologic Oncology	Clinical Investigations – Gynecologic Malignancies
Hao Liu, PhD.	Professor, Biometrics Director, Biometrics Shared Resources	Biostatistics/Biometrics
Shou-En Lu, PhD.	Associate Professor, Biometrics	Biostatistics/Biometrics
Malcolm Mattes, MD.	Associate Professor, Radiation Oncology	Clinical Investigations – Radiation Oncology
Anupama Nehra, MD.	Associate Professor, Medicine Chief and Clinical Director, (Newark)	Clinical Investigations – Medical Oncology
Jacqueline Norrell, DNP, APN	Advanced Practice Nurse	Oncology Nursing
Nisha Ohri, MD.	Assistant Professor, Radiation Oncology	Clinical Investigations - Radiation Oncology
Coral Omene, MD.	Associate Professor, Medicine	Clinical investigations, breast malignancies
Neil Palmisiano, MD. (Co-Chair)	Associate Professor, Deputy Director Phase I Director and Co-Medical Director, OHRS	Clinical Investigations – Hematologic Malignancies
Daniel Pearson, MA.	Community Outreach Specialist	Community Outreach and Engagement (COE)
Aubrey Reichard-Eline, BS.	Patient Advocate	Research Advocate
Jaya Satagopan, PhD.	Professor, Associate Dean, School of Public Health	Epidemiology, Cancer Prevention and Control
Dorinda Sparacio, MS.	Patient Advocate	Cancer Survivor, Research Advocate
Sarah Weiss, MD.	Associate Professor, Medicine Director, Melanoma/Cutaneous Oncology	Clinical Investigations - Melanoma

DSMP Appendix 4

Membership of the Human Research Oversight Committee (HROC)	
Patrick Boland, MD. (Co-Chair)	Assistant Professor of Medicine
V. Michael Colucci, RN.	Manager, Quality Assurance and Data Monitoring, Office of Human Research Services
Andrea Dragan, MPH. *(ex-officio)*	Director of Quality Assurance and Evaluation, Human Subjects Protection Program
Brett Ecker, MD.	Surgical Oncologist, RWJBH
Mridula George, MD.	Assistant Professor of Medicine
Eugenia Girda, MD	Assistant Professor of Gynecology and Reproductive Sciences
Karen Jackson	Research Study Manager, Regulatory Affairs, Office of Human Research Services
Dirk Moore, PhD. (Chair)	Assistant Professor of Biometrics, School of Public Health; Biostatistician
Biren Saraiya, MD.	Assistant Professor of Medicine
Dale Schaar, MD.	Associate Professor of Medicine
Mansi Shah, MD.	Assistant Professor of Medicine

DSMP Appendix 5

DSG	Leader	Day	Time
Breast Cancer	Deborah Toppmeyer, MD.	Every other Tuesday	12:30 PM
Cancer Prevention	Katie Devine, PhD.	1st Wednesday of every month	9:00 AM
Cellular Therapies	Christian Hinrichs, MD.	Thursdays	8:30 AM
Gastrointestinal Cancers	Howard Hochster, MD.	Mondays	12:30 PM
Genitourinary Cancers	Biren Saraiya, MD.	Wednesdays	1:00 PM
Gynecologic Cancers	Aliza Leiser, MD.	2nd Wednesday of each month	8:00 AM
Hematologic Malignancies	Matthew Matasar, MD.	Thursdays	3:00 PM
Lung and SCCHN Cancers	Missak Haigentz, MD.	3rd Thursday every month	9:00 AM
Melanoma/Sarcoma	Sarah Weiss, MD.	Every other Tuesday	8:00 AM
Neuro-Oncology	Michael Salacz, MD.	3rd Friday of every month	1:00 PM
Phase I	Sanjay Goel, MD.	Fridays	10:30 AM
Pediatric Oncology	Peter Cole, MD.	Fridays	9:00 AM
Precision Medicine	Shridar Ganesan, MD., PhD.	Trials managed by individual DSGs	
Radiation Oncology	Salma Jabbour, MD.	1st Wednesday of every month	5:00 PM

DSMP Appendix 6

Membership of the External Data and Safety Monitoring Committee (EDSMC)	
Richard Goldberg, MD. (Chair)	President, MedStar Medical Group
M. Tish Knobf, RN., PhD.	Professor, Yale University School of Nursing
Antoinette Tan, MD.	Associate Professor, Department of Medical Oncology, Co-Director of Phase I Program, Levine Cancer Institute